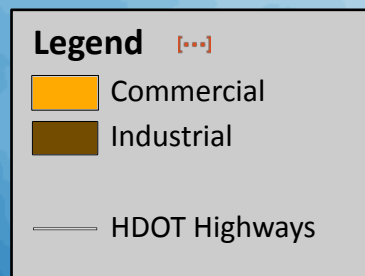
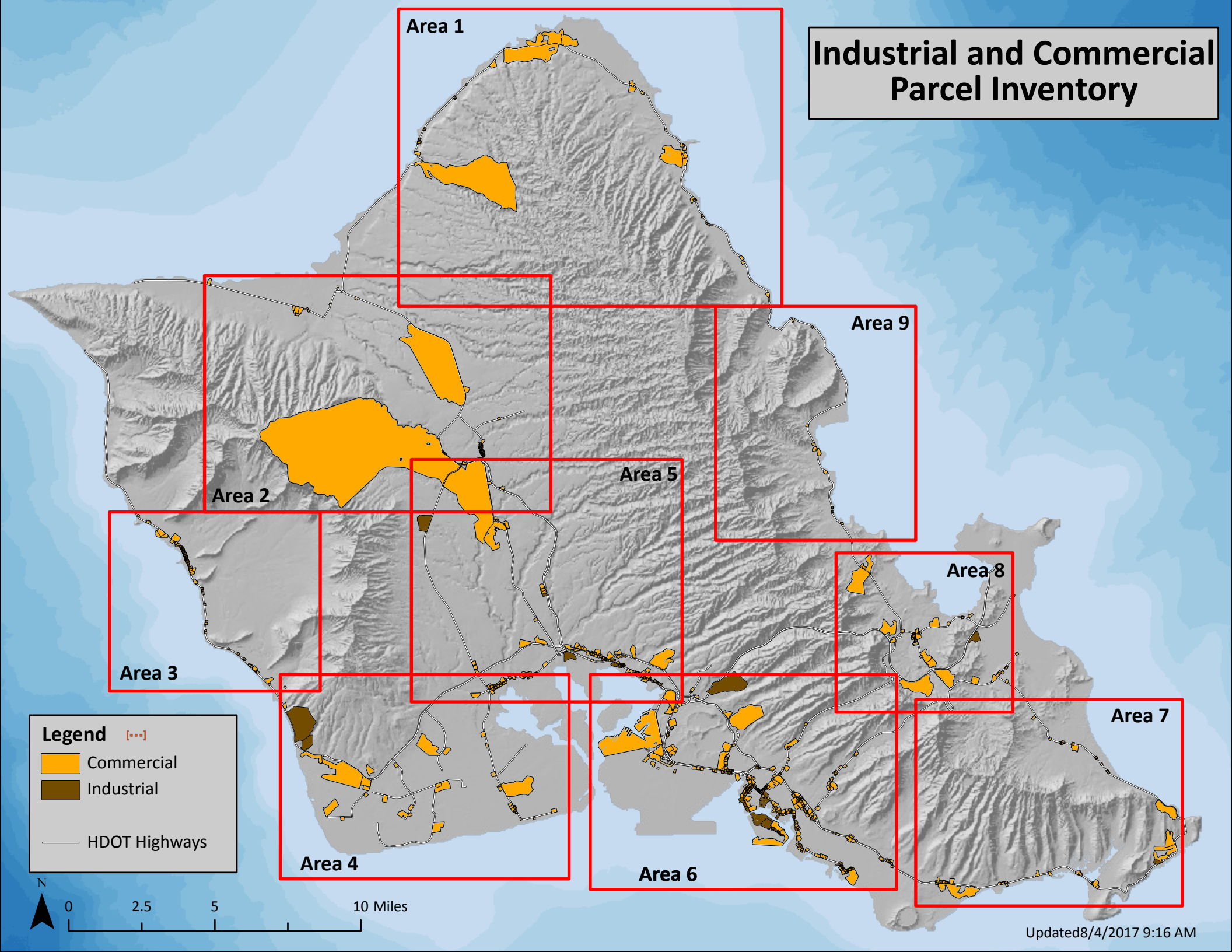
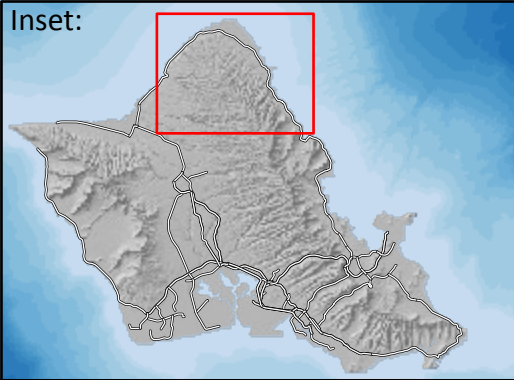


Industrial and Commercial Parcel Inventory



Updated 8/4/2017 9:16 AM






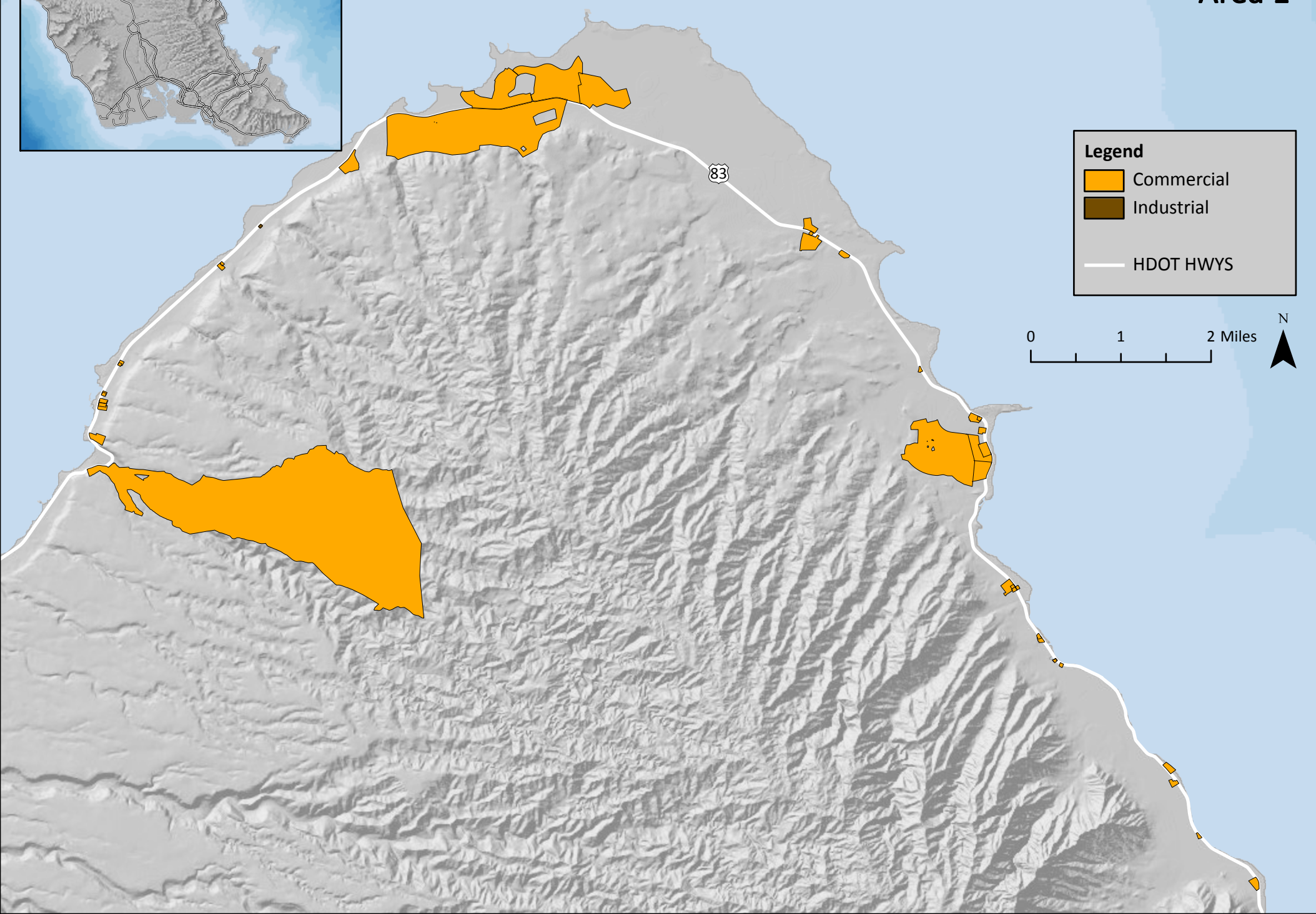
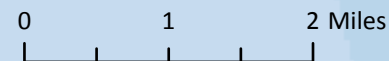


Industrial and Commercial Parcel Inventory

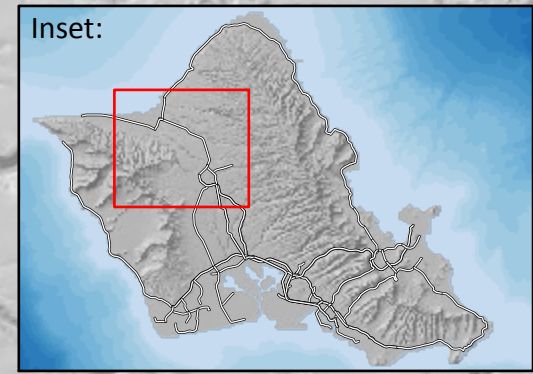
Area 1

Legend




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-  Industrial
-  HDOT HWYS

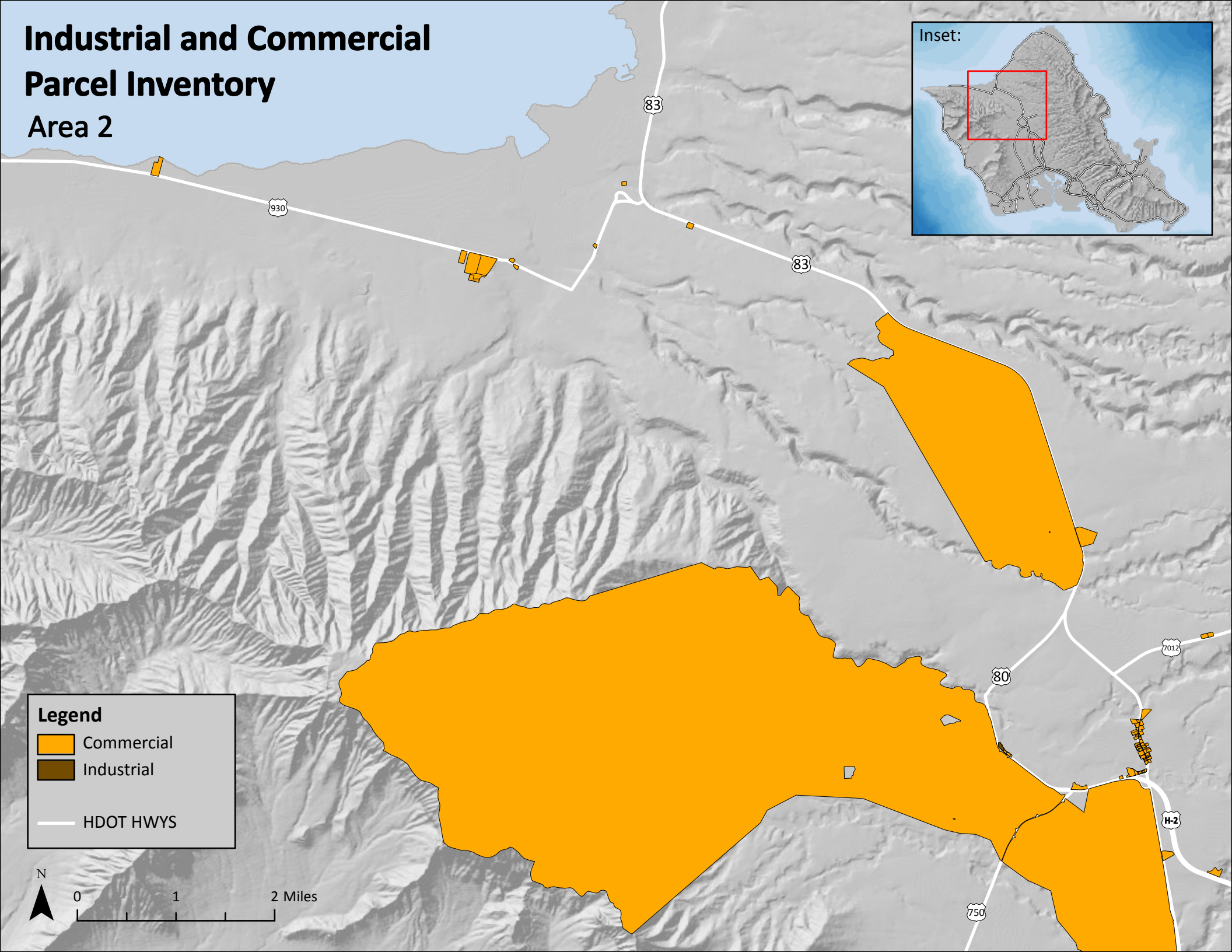


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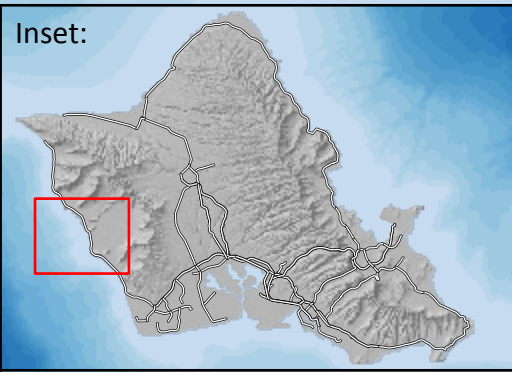
Legend

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-  Industrial
-  HDOT HWYS






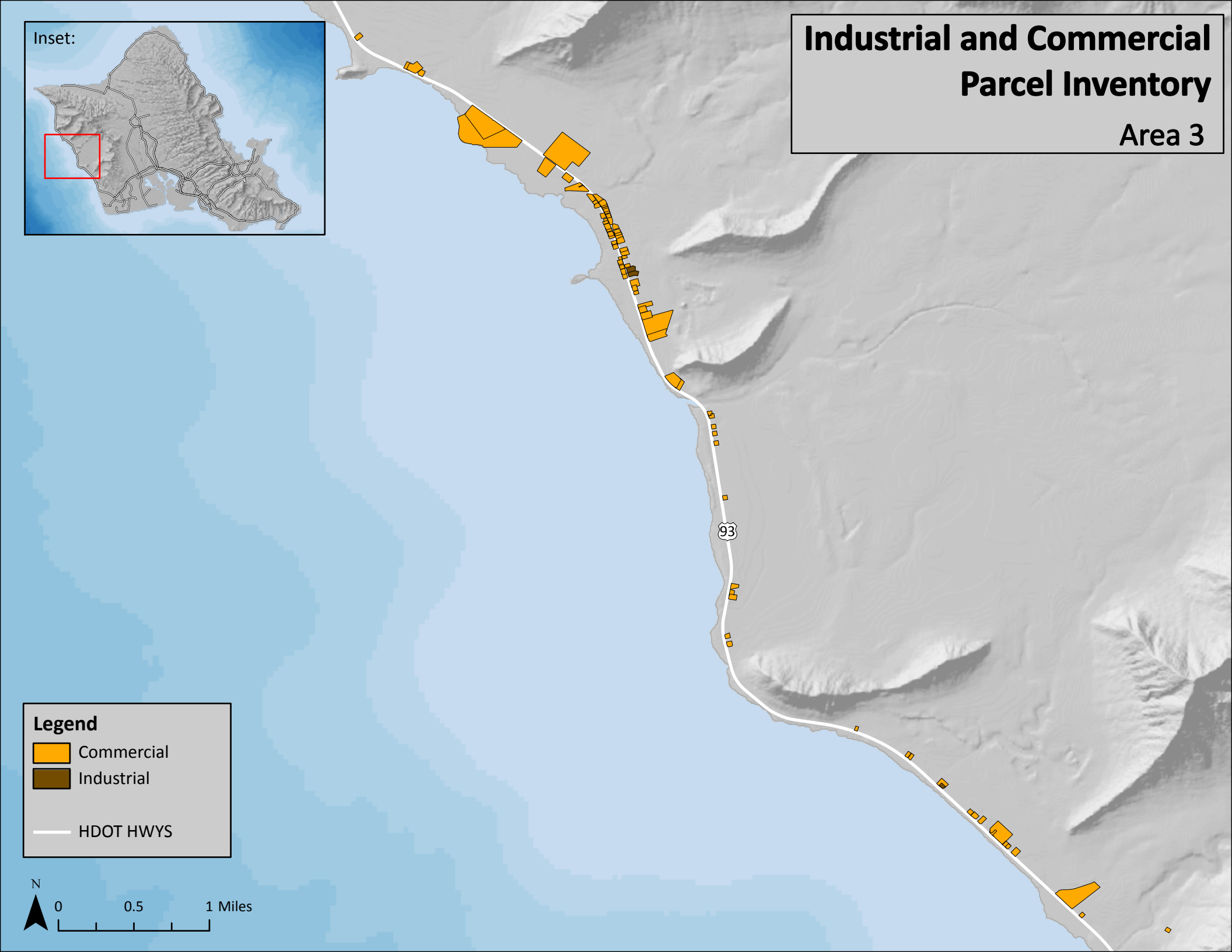
Industrial and Commercial Parcel Inventory

Area 3



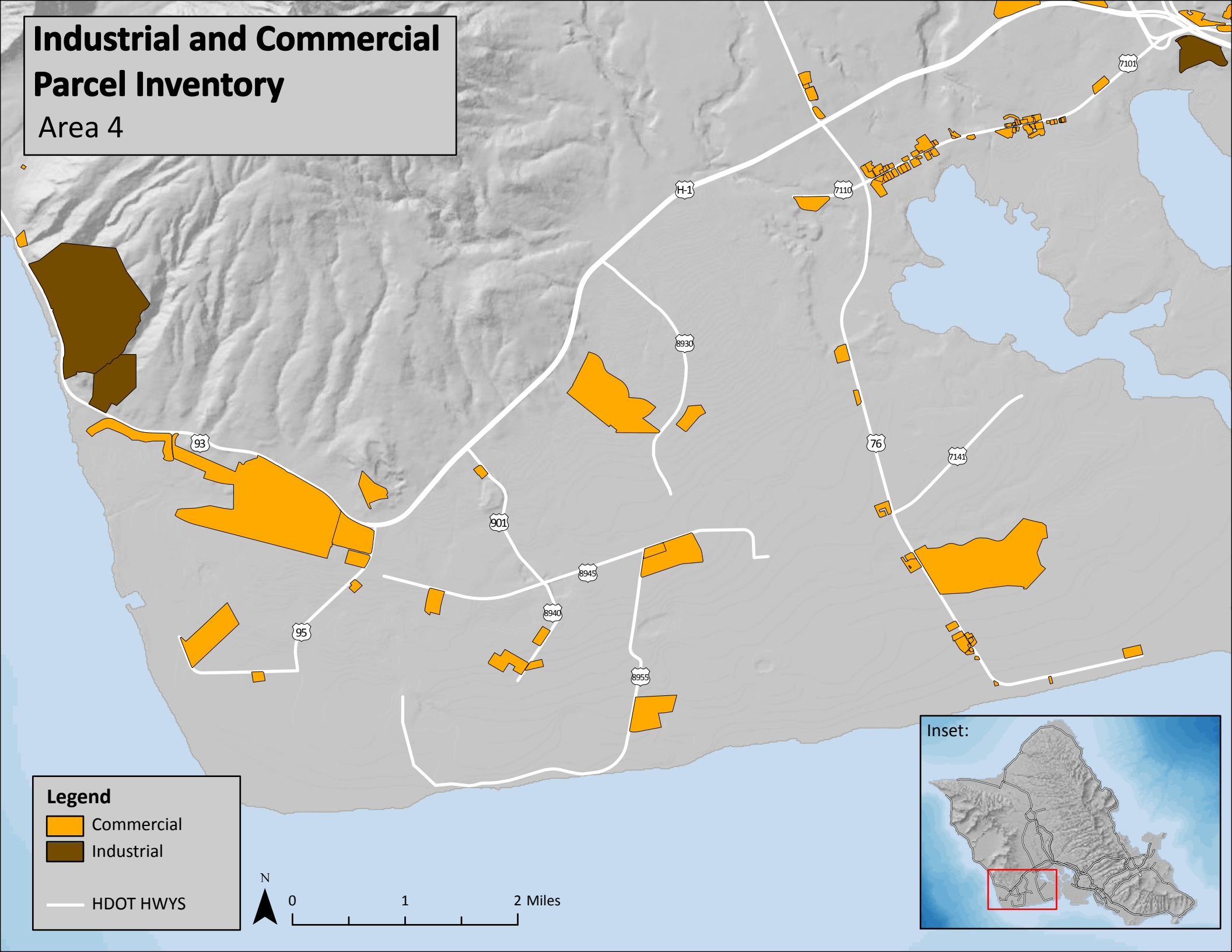
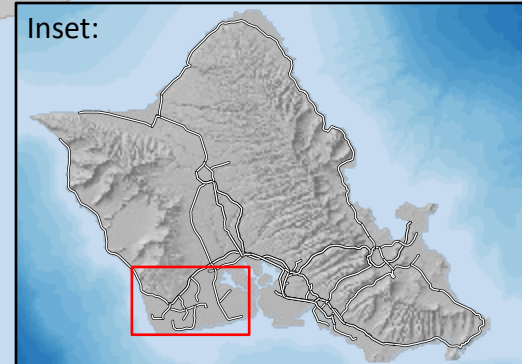
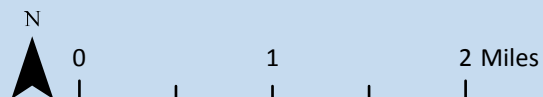
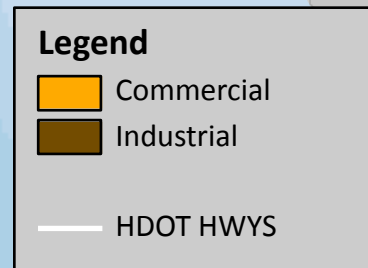
Legend

-  Commercial
-  Industrial
-  HDOT HWYS



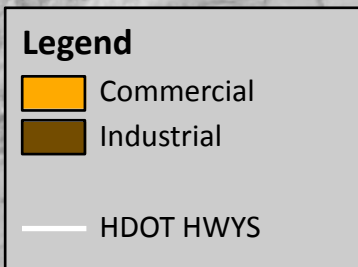
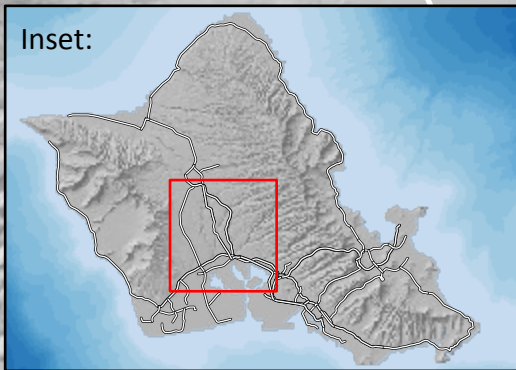
Industrial and Commercial Parcel Inventory

Area 4



Industrial and Commercial Parcel Inventory

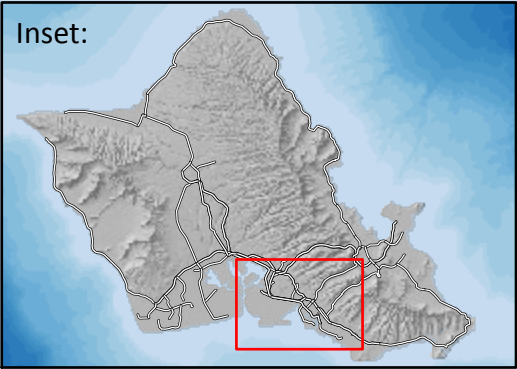
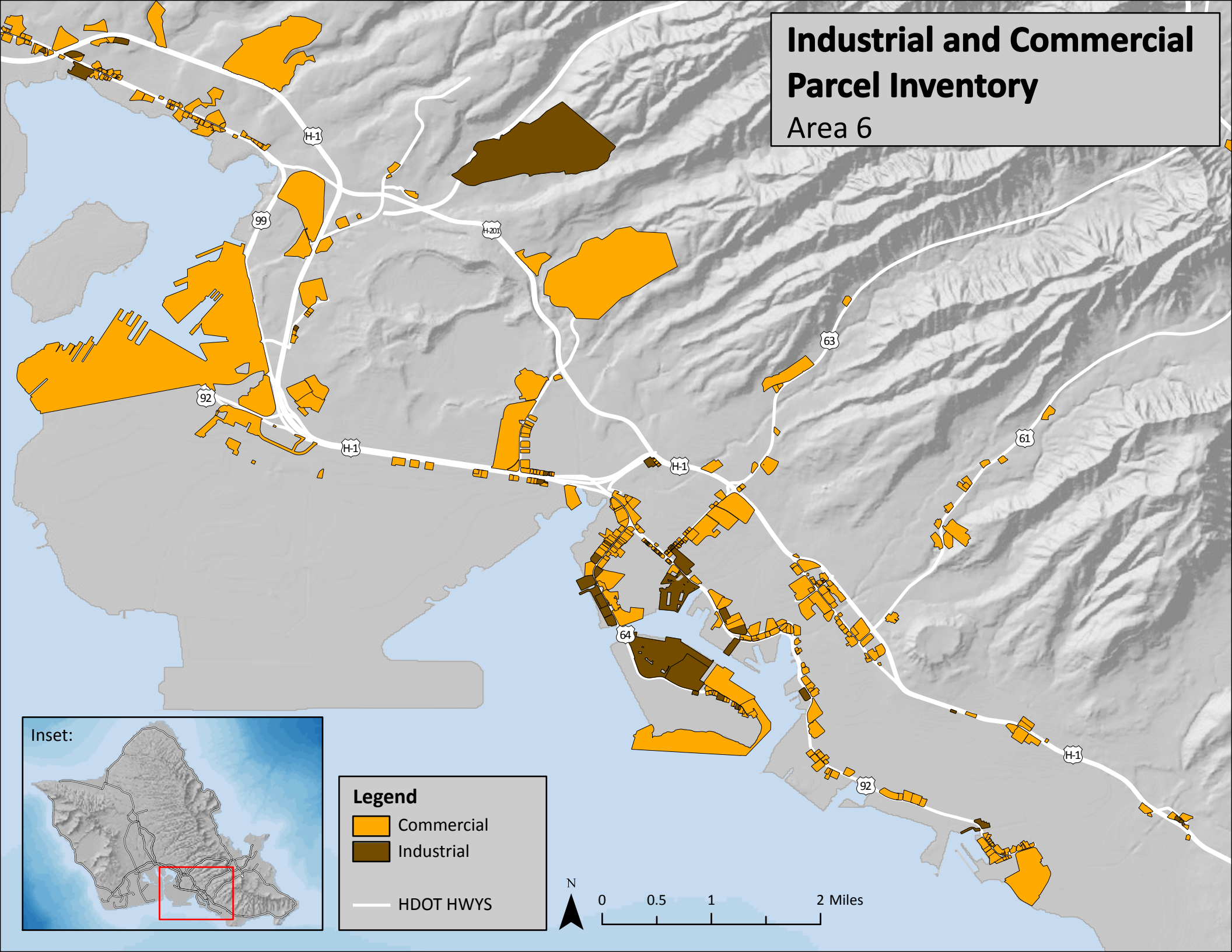
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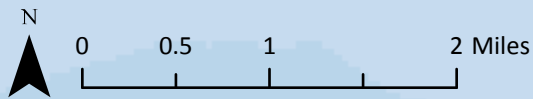


Industrial and Commercial Parcel Inventory Area 6



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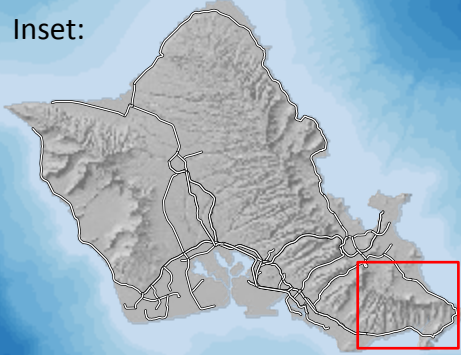
- Commercial
- Industrial
- HDOT HWYS



Industrial and Commercial Parcel Inventory

Area 7

Inset:



Legend

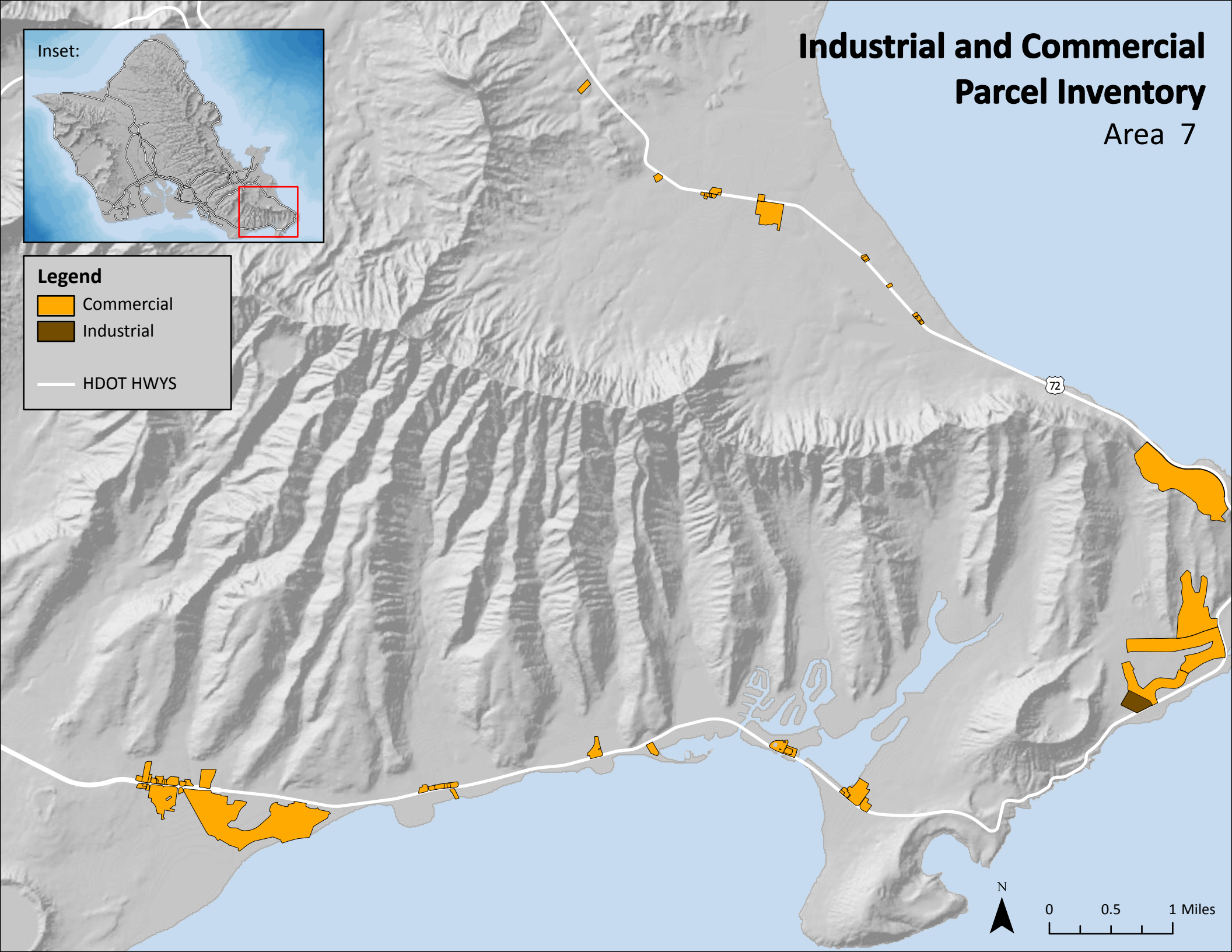
-  Commercial
-  Industrial

 HDOT HWYS

72

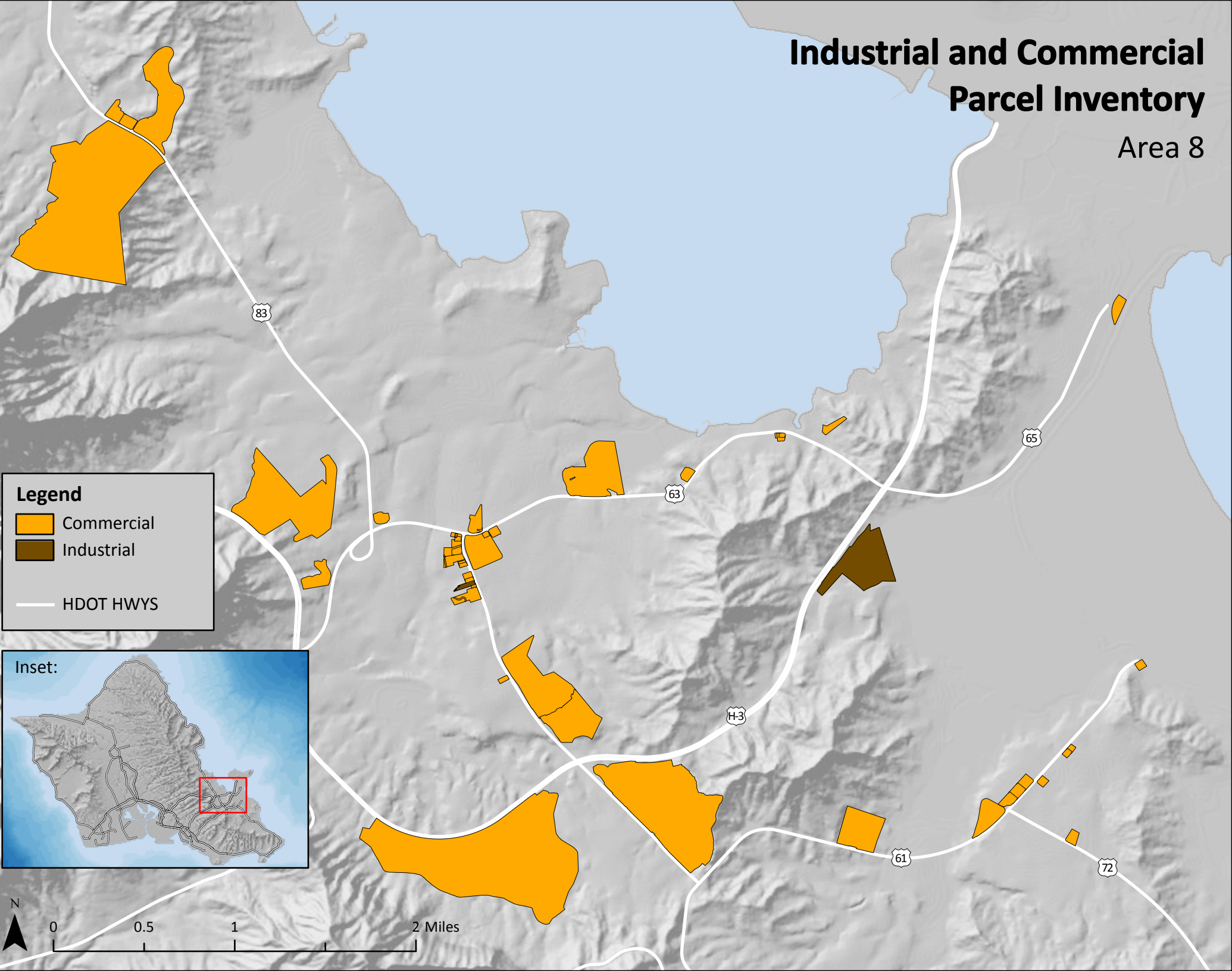
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0 0.5 1 Miles



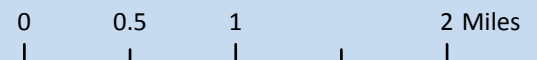
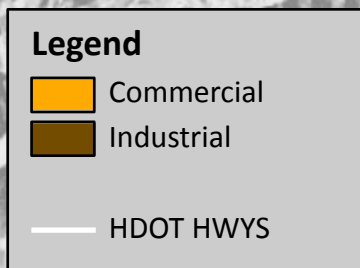
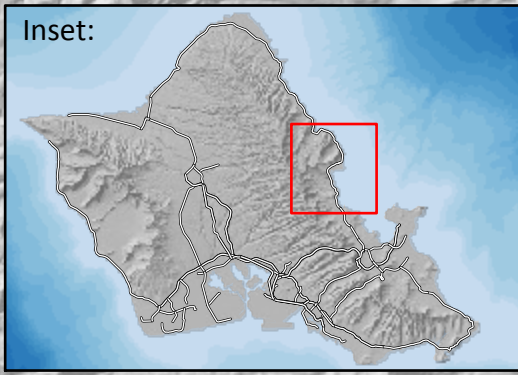
Industrial and Commercial Parcel Inventory

Area 8



Industrial and Commercial Parcel Inventory

Area 9



Commercial Facilities Inventory

As of June 30, 2017

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
11005030	Fuelman Inc	770 Mapunapuna Street	Honolulu	HI	96819	Naomi Edmunds	Moanalua	6	5172	Petroleum Products, NEC	A6
11010011	Navy Exchange	4725 Bougainville Drive	Honolulu	HI	96818	Ralph Wakumoto	Halawa	6	5261 5311 5411 5531 5712 5731 5812 5999 7221 7231 7241 7538 7542	Retail Nurseries And Garden Stores Department Stores Grocery Stores Auto And Home Supply Stores Furniture Stores Radio, Television, And Electronic Stores Eating Places Miscellaneous Retail Stores, NEC Photographic Studios, Portrait Beauty Shops Barber Shops General Automotive Repair Shops Carwashes	A6
12013007	Airgas Gaspro Dillingham	2305 Kamehameha Highway	Honolulu	HI	96819	Jerry M. Matsunaka	Kalihi	6	4932 5984 5999	Gas And Other Services Combined Liquefied Petroleum Gas Dealers Miscellaneous Retail Stores, NEC	A6
15008020	Jiroichi Otani	225 N. Nimitz Highway	Honolulu	HI	96817	Scott C. Ballentyne	Nuuanu	6	5146 5147	Fish And Seafoods Meats And Meat Products	A6
15041133	Bob Sakamoto Welding	1052 Ulupono Street	Honolulu	HI	96819	Robert M. Sakamoto	Nuuanu	6	7692	Welding Repair	A6
16028056	Kamehameha Shopping Center	1620 N. School Street	Honolulu	HI	96817	David Wunsch	Kapalama	6	5311	Department Stores	A6
21059003	Cutter Mazda	222 Ahui Street	Honolulu	HI	96813	Sze Quek Clarence Ng	Ala Wai	6	5511	New And Used Car Dealers	A6
23038001	GGP Ala Moana LLC	1450 Ala Moana Boulevard	Honolulu	HI	96814	Joe Francher	Ala Wai	6	5311 5411 5812 5813 7542 7549	Department Stores Grocery Stores Eating Places Drinking Places Carwashes Automotive Services, NEC	A6
55006030	Polynesian Cultural Center	55-370 Kamehameha Highway	Laie	HI	96762	Daniel Briskin	Waiiele	6	7999	Amusement And Recreation, NEC	A1
74003062	Wahiawa Automotive	58 S. Kamehameha Highway	Wahiawa	HI	96786	Tamra Kobashigawa	Kaukonahua	6	7538	General Automotive Repair Shops	A2
86001045	West Oahu Mall	86-120 Farrington Highway	Waianae	HI	96792	Irene Hendershot Erika Enomoto-Tanuvasa	Mailili	6	5812	Eating Places	A3
94007054	Waikale Center 1	94-795 Lumiaina Street	Waipahu	HI	96797	Pamela Wilson	Kapakahi	6	5211 5251 5261 5812	Lumber And Other Building Materials Hardware Stores Retail Nurseries And Garden Stores Eating Places	A5
94047010	Waipahu Town Center	94-030 Farrington Highway	Waipahu	HI	96797	JaNay L. Wyss	Waikale	6	5541 5812 6411 6531 7231 7514 7542 8021 8041	Gasoline Service Stations Eating Places Insurance Agents, Brokers, And Service Real Estate Agents And Managers Beauty Shops Passenger Car Rental Carwashes Offices And Clinics Of Dentists Offices And Clinics Of Chiropractors	A5
94127026	Tony Group Autoplex Car Wash	94-1299 Ka Uka Boulevard	Waipahu	HI	96797	Jared Ito	Waiawa	6	5511 7538 7542	New And Used Car Dealers General Automotive Repair Shops Carwashes	A5
94146012	Wendy's Kunia	94-625 Kupuohi Street	Waipahu	HI	96797	Trevor Takamori	Waikale	6	5812 7538	Eating Places General Automotive Repair Shops	A5

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
95021012	Mililani Shopping Center	95-221 Kipapa Drive	Mililani	HI	96789	Geri DelaCruz	Waikele	6	5013 5411 5499 5731 5812 5813 5999 6022 7997	Motor Vehicle Supplies And New Parts Grocery Stores Miscellaneous Food Stores Radio, Television, And Electronic Stores Eating Places Drinking Places Miscellaneous Retail Stores, NEC State Commercial Banks Membership Sports And Recreation Clubs	A5
97024034	Pearl Highlands Center	1000 Kamehameha Highway Suite 205C	Pearl City	HI	96782	Clive L. Cabral	Waiawa	6	5331	Variety Stores	A5
98006020	Pearl City Taco Bell	98-376 Kamehameha Highway	Pearl City	HI	96782	Andrea Bridges	Waimalu	6	5812	Eating Places	A6
98006021	Jack in the Box						Waimalu	6	5812	Eating Places	A6
98016051	Pearlridge Uptown Mall	98-115 Kaonoʻhi Street	Aiea	HI	96701	Kendall Doi	Kalauao	6	5311 5731 5812 5813 7231	Department Stores Radio, Television, And Electronic Stores Eating Places Drinking Places Beauty Shops	A6
99076007	Stadium Mall	4510 Salt Lake Boulevard	Honolulu	HI	96818	Douglas Taylor	Halawa	6	5812 5944 6311 6321 7231 7241 7291 7299 7534 7539 7999 8021 8721	Eating Places Jewelry Stores Life Insurance Accident And Health Insurance Beauty Shops Barber Shops Tax Return Preparation Services Miscellaneous Personal Services Tire Retreading And Repair Shops Automotive Repair Shops, NEC Amusement And Recreation, NEC Offices And Clinics Of Dentists Accounting, Auditing, And Bookkeeping	A6
11005009	Ken's Auto Fender	2833 Kilihaʻu Street	Honolulu	HI	96819	Odie Jimenez	Moanalua	5	7532	Top And Body Repair And Paint Shops	A6
11010004	Navy Housing Nimitz	3375 Salt Lake Boulevard	Honolulu	HI	96818	Jennifer Chang	Keehi	5	5541 7997	Gasoline Service Stations Membership Sports And Recreation Clubs	A6
11010022	Moanalua Shopping Center 1	930 Valkenburgh Street	Honolulu	HI	96818	Ralph Wakumoto	Manuwai	5	4813 5499 5541 5621 5812 5943 5945 7216 7231 8021 8211 8351 8661	Telephone Communication, Except Radio Miscellaneous Food Stores Gasoline Service Stations Women's Clothing Stores Eating Places Stationery Stores Hobby, Toy, And Game Shops Drycleaning Plants, Except Rugs Beauty Shops Offices And Clinics Of Dentists Elementary And Secondary Schools Child Day Care Services Religious Organizations	A6
11010023	Moanalua Shopping Center 2	930 Valkenburgh Street	Honolulu	HI	96818	Ralph Wakumoto	Manuwai	5	4813 5499 5541 5621 5812 5943 5945 7216 7231 8021 8211 8351 8661	Telephone Communication, Except Radio Miscellaneous Food Stores Gasoline Service Stations Women's Clothing Stores Eating Places Stationery Stores 5945 Drycleaning Plants, Except Rugs Beauty Shops Offices And Clinics Of Dentists Elementary And Secondary Schools Child Day Care Services Religious Organizations	A6

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
11010034	Moanalua Shopping Center 3	930 Valkenburgh Street	Honolulu	HI	96818	Ralph Wakumoto	Manuwai	5	4813 5499 5541 5621 5812 5943 5945 7216 7231 8021 8211 8351 8661	Telephone Communication, Except Radio Miscellaneous Food Stores Gasoline Service Stations Women's Clothing Stores Eating Places Stationery Stores Hobby, Toy, And Game Shops Drycleaning Plants, Except Rugs Beauty Shops Offices And Clinics Of Dentists Elementary And Secondary Schools Child Day Care Services Religious Organizations	A6
12021034	American Carpet One	302 Sand Island Access Road	Honolulu	HI	96819	Aaron Okamoto	Kalihi	5	5713	Floor Covering Stores	A6
13022001	Kalihi Valley Homes	2250 Kalena Drive	Honolulu	HI	96819	Kevin Kinningham	Kalihi	5	6513	Apartment Building Operators	A6
15010001	Kmart on Nimitz Highway	500 N. Nimitz Highway	Honolulu	HI	96817	Grant Tolentino	Nuuanu	5	5311	Department Stores	A6
15010007	City Mill on Nimitz Highway	660 N. Nimitz Highway	Honolulu	HI	96817	Frank Suster	Nuuanu	5	5231	Paint, Glass, And Wallpaper Stores	A6
15013013	Zippy's Nimitz 1	634 N. Nimitz Highway	Honolulu	HI	96817	Norman Jose	Nuuanu	5	5812	Eating Places	A6
15013019	Zippy's Nimitz 2	634 N. Nimitz Highway	Honolulu	HI	96817	Norman Jose	Nuuanu	5	5812	Eating Places	A6
15039012	Pacific Fishing & Supply	540 Nimitz Highway	Honolulu	HI	96817	Khang Dang	Nuuanu	5	5941	Sporting Goods And Bicycle Shops	A6
15039013	Liliha Bakery	550 N. Nimitz Highway	Honolulu	HI	96817	Susan Bumanglag	Nuuanu	5	5812	Eating Places	A6
17023001	Kauluwela II Housing	430 N. Vineyard Boulevard	Honolulu	HI	96817	Thomas F. Kaimuloo	Nuuanu	5	6513	Apartment Building Operators	A6
17023008	Liliha Square	1409 Liliha Street	Honolulu	HI	96817	Chris Mercer	Nuuanu	5	5411 5812 6011 6513 7241	Grocery Stores Eating Places Federal Reserve Banks Apartment Building Operators Barber Shops	A6
17032025	Moon Garden Restaurant	578 North Vineyard Boulevard	Honolulu	HI	96817	Eric So	Nuuanu	5	5812 7539 8641	Eating Places Automotive Repair Shops, NEC Civic And Social Associations	A6
17033044	Liliha Pho & Grill	1502 Liliha Street	Honolulu	HI	96817		Nuuanu	5	5812	Eating Places	A6
21005003	YMCA Nuuanu	1441 Pali Highway	Honolulu	HI	96813	Sherwin Duquez	Nuuanu	5	8641 8661	Civic And Social Associations Religious Organizations	A6
21018044	Aloha Gas Station - Vineyard	215 S. Vineyard Boulevard	Honolulu	HI	96813	Richard Connor / Frankie Stevenson	Nuuanu	5	5541	Gasoline Service Stations	A6
21019014	The Pacific Club	1451 Queen Emma Street	Honolulu	HI	96813	Benji	Nuuanu	5	7997	Membership Sports And Recreation Clubs	A6
21027002	Federal Building	300 Ala Moana Boulevard	Honolulu	HI	96813	Jr. Nacion	Nuuanu	5	9199 9211	General Government, NEC Courts	A6
21029001	One Waterfront Plaza	500 Ala Moana Boulevard	Honolulu	HI	96813	Steven Sullivan	Nuuanu	5	5461 5812 5813 6021 7231 7241 8011 8093 8099 9441	Retail Bakeries Eating Places Drinking Places National Commercial Banks Beauty Shops Barber Shops Offices And Clinics Of Medical Doctors Specialty Outpatient Clinics, NEC Health And Allied Services, NEC Administration Of Social And Manpower Programs	A6
22021010	Community Church of Honolulu	2345 Nuuanu Avenue	Honolulu	HI	96817	Ardís Gomes	Nuuanu	5	8661	Religious Organizations	A6
23001005	Ward Warehouse	1050 Ala Moana Boulevard	Honolulu	HI	96814	Douglas Kai	Ala Wai	5	5411 5541	Grocery Stores Gasoline Service Stations	A6
23005006	Ward Center	1200 Ala Moana Boulevard	Honolulu	HI	96814	Robert Sugiyama	Ala Wai	5	5311 5812 5813	Department Stores Eating Places Drinking Places	A6
24008003	Arcadia Retirement Residence	1434 Punahou Street	Honolulu	HI	96822	Albert Torres	Makiki	5	8361	Residential Care	A6

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
26012002	Wailana at Waikiki	1860 Ala Moana Boulevard	Honolulu	HI	96815	Manuel Cabral	Ala Wai	5	5812 5947 6513 7389 8011	Eating Places Gift, Novelty, And Souvenir Shop Apartment Building Operators Business Services, NEC Offices And Clinics Of Medical Doctors	A6
26012010	Discovery Bay Center	1778 Ala Moana Boulevard	Honolulu	HI	96815	William I. Samaritano Terry Kashigi	Ala Wai	5	5136 5812 5813 6513 7299 7514 7999 8011	Men's And Boy's Clothing Eating Places Drinking Places Apartment Building Operators Miscellaneous Personal Services Passenger Car Rental Amusement And Recreation, NEC Offices And Clinics Of Medical Doctors	A6
35017009	Shell Hunakai St.	4202, 4204 Waiālae Avenue	Honolulu	HI	96816	Alex Chu	Waialaenui	5	5541 7542	Gasoline Service Stations Carwashes	A7
36008052	Aina Haina McDonalds	820 Hind Drive	Honolulu	HI	96821	Jason Souki	Wailupe	5	5812 6021	Eating Places National Commercial Banks	A7
39017011	Hawaii Kai Town Center	6700 Kalanianaʻole Highway	Honolulu	HI	96825	Ricardo DeGuzman	Kamilonui	5	7521	Automobile Parking	A7
41004007	Serg's Mexican Kitchen Nalo	41-859 Kalanianaʻole Highway	Waimanalo	HI	96795	Keith Ward	Kahawai	5	5812	Eating Places	A7
41014004	The Oceanic Institute	41-202 Kalanianaʻole Highway	Waimanalo	HI	96795	Harry Ho	Waimanalo	5	7999 8733	Amusement And Recreation, NEC Noncommercial Research Organizations	A7
41014011	The Oceanic Institute	41-202 Kalanianaʻole Highway	Waimanalo	HI	96795	Harry Ho	Waimanalo	5	7999 8733	Amusement And Recreation, NEC Noncommercial Research Organizations	A7
45039029	Burger King Kaneohe 1	45-630 Kamehameha Highway	Kaneohe	HI	96744	Flor Ryan	Kaneohe	5	5812	Eating Places	A8
45039037	Car Quest Auto Parts Kaneohe	45-618 Kamehameha Highway	Kaneohe	HI	96744	Mark Luria	Kaneohe	5	5013	Motor Vehicle Supplies And New Parts	A8
45076050	Koolau Plaza	45-556 Kamehameha Highway	Kaneohe	HI	96744	Jason Ishizuka	Kaneohe	5	5461 5812 7241	Retail Bakeries Eating Places Barber Shops	A8
47011006	7-Eleven Kahaluu	47-515 Kamehameha Highway	Kaneohe	HI	96744	Jordan Nakayama	Kahaluu	5	5411 5541	Grocery Stores Gasoline Service Stations	A9
54004022	Hauula Kai Center	54-316 Kamehameha Highway	Hauula	HI	96717	Cedric Kanoa	Kaipapau	5	5411 5812	Grocery Stores Eating Places	A1
54018063	North Shore Tacos	54-296 Kamehameha Highway	Hauula	HI	96717	Alex Melo Shane Paley	Kaipapau	5	5812	Eating Places	A1
55006005	BYU Hawaii	55-220 Kulanui Street	Lāie	HI	96762	Braden Sika	Wāialele	5	8221	Colleges And Universities	A1
55006028	Polynesian Cultural Center	55-370 Kamehameha Highway	Lāie	HI	96762	Daniel Briskin	Wāialele	5	5812 7999 5812	Eating Places Amusement And Recreation, NEC Eating Places	A1
59011016	Foodland Pūpūkea	59-720 Kamehameha Highway	Haleiwa	HI	96712	Krishna Arnobit	Kalunawaikaala	5	5411 5499	Grocery Stores Miscellaneous Food Stores	A1
64003008	Dole Plantation	64-1550 Kamehameha Highway	Wahiawa	HI	96786	Carleen Sadanaga	Poamoho	5	7999	Amusement And Recreation, NEC	A2
85012009	McDonald's Wāianae	85-770 Farrington Highway	Wāianae	HI	96792	Shendale	Kaupuni	5	5812	Eating Places	A3
86015066	No. 1 Chinese Bbq	86-003 Farrington Highway	Wāianae	HI	96792	Ka'ohe Arai	Mailiili	5	5812	Eating Places	A3
91115011	Ewa Beach Shopping Center	91-919 Fort Weaver Road	Ewa Beach	HI	96706	Rachel Dowell	Kaloi	5	0742 5411 5731 5812 5999 6021 7215 7231 7538	Veterinary Services, Specialties Grocery Stores Radio, Television, And Electronic Stores Eating Places Miscellaneous Retail Stores, NEC National Commercial Banks Coin-Operated Laundries And Cleaning Beauty Shops General Automotive Repair Shops	A4
94014001	Aloha Gas Station Waipahu	94-780 Farrington Highway	Waipahu	HI	96797	Jordan Nakayama	Kapakahi	5	5411 5541 5812 7542	Grocery Stores Gasoline Service Stations Eating Places Carwashes	A5

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
94019001	Waipahu Professional Center	94-801 Farrington Highway	Waipahu	HI	96797	Linda Black	Kapakahi	5	0742 4812 5013 5411 5812 7231 7299 7335 7841 8021 8041	Veterinary Services, Specialties Radiotelephone Communication Motor Vehicle Supplies And New Parts Grocery Stores Eating Places Beauty Shops Miscellaneous Personal Services Commercial Photography Video Tape Rental Offices And Clinics Of Dentists Offices And Clinics Of Chiropractors	A5
94028029	Waipahu Shopping Plaza	94-300 Farrington Highway	Waipahu	HI	96797	Marilyn Patoc	Waikele	5	5411 5812 5944 6021 7215 7231 7241 7291 8021	Grocery Stores Eating Places Jewelry Stores National Commercial Banks Coin-Operated Laundries And Cleaning Beauty Shops Barber Shops Tax Return Preparation Services Offices And Clinics Of Dentists	A5
94047008	Don Quijote Waipahu	94-144 Farrington Highway	Waipahu	HI	96797	Max Martin	Waikele	5	5331	Variety Stores	A5
94047009	Union 76 Waipahu	94-206 Leoku Street	Waipahu	HI	96797	Ray Davis	Waikele	5			A5
94047037	Waipahu Town Center 2	94-060 Farrington Highway	Waipahu	HI	96797	Carol Brack	Waikele	5	5912	Drug Stores And Proprietary Stores	A5
94048019	Hawthorne Pacific Corp.	94-031 Farrington Highway	Waipahu	HI	96797	Richard Lentes	Waikele	5	5082 5083 5084 5261 5511 7353 7538 7542 7699	Construction And Mining Machinery Farm And Garden Machinery Industrial Machinery And Equipment Retail Nurseries And Garden Stores New And Used Car Dealers Heavy Construction Equipment Rental General Automotive Repair Shops Carwashes Repair Services, NEC	A5
94048025	Hawthorne Pacific Corp. - 2	94-031 Farrington Highway	Waipahu	HI	96797	Richard Lentes	Waikele	5	5082 5083 5084 5261 5511 7353 7538 7542 7699	Construction And Mining Machinery Farm And Garden Machinery Industrial Machinery And Equipment Retail Nurseries And Garden Stores New And Used Car Dealers Heavy Construction Equipment Rental General Automotive Repair Shops Carwashes Repair Services, NEC	A5
94127014	Tony Group Autoplex	94-1299 Ka Uka Boulevard	Waipahu	HI	96797	Jared Ito	Waiawa	5	5511 7538	New And Used Car Dealers General Automotive Repair Shops	A5
97023008	Stuart Plaza Investments	941 Kamehameha Highway	Pearl City	HI	96782	Mark C. Johnson	Waiawa	5	0782 1751 5411 5813 6321 7231 7299 7361 7841	Lawn And Garden Services Carpentry Work Grocery Stores Drinking Places Accident And Health Insurance Beauty Shops Miscellaneous Personal Services Employment Agencies Video Tape Rental	A6
97024028	Pearl Highlands Center	1000 Kamehameha Highway Suite 205C	Pearl City	HI	96782	Clive Cabral	Waiawa	5	5331	Variety Stores	A6
97024033	Pearl Highlands Center	1000 Kamehameha Highway Suite 205C	Pearl City	HI	96782	Clive L. Cabral	Waiawa	5	5331	Variety Stores	A5

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
97031021	Pearl City Shopping Center	826 Kamehameha Highway	Pearl City	HI	96782	Ken Williams	Waimalu	5	5411 5541 5812 5912 5945 6021 6411 7231 7933 8021	Grocery Stores Gasoline Service Stations Eating Places Drug Stores And Proprietary Stores Hobby, Toy, And Game Shops National Commercial Banks Insurance Agents, Brokers, And Service Beauty Shops Bowling Centers Offices And Clinics Of Dentists	A6
98005023	Zippy's Waiau	450 Kamehameha Highway	Pearl City	HI	96782	Baron Miyamoto	Waimalu	5	5411 5621 5651 5812 5945 6411 7231	Grocery Stores Women's Clothing Stores Family Clothing Stores Eating Places Hobby, Toy, And Game Shops Insurance Agents, Brokers, And Service Beauty Shops	A6
98015003	Mobile Car Audio	98-265 Kamehameha Highway	Aiea	HI	96701	Tracie Lung	Kalauao	5	1711 5731 7542	Plumbing, Heating, Air-Conditioning Radio, Television, And Electronic Stores Carwashes	A6
98016029	Sears/Pearlridge Shopping Center	98-100 Kamehameha Highway	Aiea	HI	96701	Kendall Doi	Kalauao	5	5311 5812 7538	Department Stores Eating Places General Automotive Repair Shops	A6
98018023	Wally Ho's Garage & Grill	98-390 Kamehameha Highway	Aiea	HI	96701	Wallace K. Ho	Aiea	5	5812 7539	Eating Places Automotive Repair Shops, NEC	A6
98059009	Sears Distribution Center	98-600 Kamehameha Highway	Pearl City	HI	96782	Eric Encee	Waimalu	5	5311 5722 8661	Department Stores Household Appliance Stores Religious Organizations	A6
99003061	Aloha Stadium	99-500 Salt Lake Boulevard	Aiea	HI	96820	Shelli Shoji	Halawa	5	6512 7941	Nonresidential Building Operators Sports Clubs, Managers, And Promoters	A6
11005004	Premier Automotive	2781 Kili Hau Street	Honolulu	HI	96819	Faith Caldera	Moanalua	4	5511	New And Used Car Dealers	A6
11064039	Pacific Transfer 1	2739 Kili Hau Street	Honolulu	HI	96819	Alex Mogilewicz	Moanalua	4	7521	Automobile Parking	A6
11064040	Pacific Transfer 2	2739 Kili Hau Street	Honolulu	HI	96819	Alex Mogilewicz	Moanalua	4	7521	Automobile Parking	A6
12021026	New Hope Oahu	290 Sand Island Access Road	Honolulu	HI	96819	Brian Wong	Kalihi	4	8661	Religious Organizations	A6
12022002	Honolulu Cookie Company	255 Sand Island Access Road	Honolulu	HI	96819	Kaleo Kaulina	Kalihi	4	5699 7641 7699 8711 8721 8999	Miscellaneous Apparel And Accessories Reupholstery And Furniture Repair Repair Services, NEC Engineering Services Accounting, Auditing, And Bookkeeping Services, NEC	A6
12022027	Y. Hata & Co	285 Sand Island Access Road	Honolulu	HI	96819	Dave Kroen	Kalihi	4	5141	Groceries, General Line	A6
13016044	Jikoen Hongwanji Hall	1731 North School Street	Honolulu	HI	96819	Reverend Shindo Nishiyama	Kapalama	4	8661	Religious Organizations	A6
13026047	Ono's Convenience Store	1912 Kalihi Street	Honolulu	HI	96819	Ernest Lum	Kalihi	4	5411 6513	Grocery Stores Apartment Building Operators	A6
15041322	Hawaii Masons Training Center	1188 Sand Island Parkway	Honolulu	HI	96819	Patrick Coronas	Nuuanu	4	1741	Masonry And Other Stonework	A6
15041337	CK Roofing	1076 Sand Island Parkway	Honolulu	HI	96819	Keith Lee	Nuuanu	4	1761	Roofing, Siding, And Sheetmetal Work	A6
16008005	Hawaii First Samoan Assembly of God	1420 Palama Street	Honolulu	HI	96817	Etuati Lafaelle	Kapalama	4	8661	Religious Organizations	A6
17006005	Kaheihemalie (Queen's Medical Center Entity)	1374 Nuuanu Avenue	Honolulu	HI	96817	Ken Hansen	Nuuanu	4	8093	Specialty Outpatient Clinics, NEC	A6
17026054	Waena Apartments	1332 Aala Street	Honolulu	HI	96817	Ernie Martinez	Nuuanu	4	6513	Apartment Building Operators	A6
17032026	Vineyard Apartments	585 Walpa Lane	Honolulu	HI	96817	Susan DeCorte	Nuuanu	4	6513	Apartment Building Operators	A6
17033005	Liliha Professional Building	1520 Liliha Street	Honolulu	HI	96817	Al Serafin	Nuuanu	4	8062	General Medical And Surgical Hospitals	A6
21056001	Ward Plaza	238 Ward Avenue	Honolulu	HI	96813	Douglas Kai	Ala Wai	4	5331	Variety Stores	A6
21056007	Cutter Dodge Ala Moana	900 Ala Moana Boulevard	Honolulu	HI	96813	Clarence Ng	Ala Wai	4	5511	New And Used Car Dealers	A6
26007015	Canterbury Place	418 Ena Road	Honolulu	HI	96815	Tommie Masuda	Ala Wai	4	5812 6513	Eating Places Apartment Building Operators	A6
26007019	Cheeseburger Waikiki	1945 Kalakaua Avenue	Honolulu	HI	96815	Allen Brooks	Ala Wai	4	5812	Eating Places	A6

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
26007026	Inn on the Park	1920 Ala Moana Boulevard	Honolulu	HI	96815	Kevin Hisaur	Ala Wai	4	6513	Apartment Building Operators	A6
26007027	Doubletree Alana Hotel	1956 Ala Moana Boulevard	Honolulu	HI	96815	Clinton Yamashita	Ala Wai	4	7011	Hotels And Motels	A6
26009002	Grand Waikikian	1811 Ala Moana Boulevard	Honolulu	HI	96814	Charlie Pedrido	Ala Wai	4	7011	Hotels And Motels	A6
26010006	Hawaii Prince Hotel Waikiki	100 Holomoana Street	Honolulu	HI	96815	Mark Lee	Ala Wai	4	7011	Hotels And Motels	A6
26011021	Big Surf	1690 Ala Moana Boulevard	Honolulu	HI	96815	Maxine Shea	Ala Wai	4	7011	Hotels And Motels	A6
26011022	Ala Wai Terrace	1684 Ala Moana Boulevard	Honolulu	HI	96815	Troy Green	Ala Wai	4	6513	Apartment Building Operators	A6
26012005	Ramada Plaza Waikiki	1830 Ala Moana Boulevard	Honolulu	HI	96815	Rick Valcourt	Ala Wai	4	5812 7011	Eating Places Hotels And Motels	A6
26012007	Pomaikai	1804 Ala Moana Boulevard	Honolulu	HI	96813	Jack Chessir	Ala Wai	4	6513	Apartment Building Operators	A6
28012013	1717 Clark Street	1717 Clark Street, 1737 Clark Street	Honolulu	HI	96822	David Young	Ala Wai	4	6513	Apartment Building Operators	A6
36002035	Honolulu Waldorf School	5257 Kalanianaʻole Highway	Honolulu	HI	96821	Edward Freitas	Wailupe	4	8661	Religious Organizations	A7
36005092	Holy Nativity Church and School	5286 Kalanianaʻole Highway	Honolulu	HI	96821	Reverend Michael Sen	Wailupe	4	8211 8661	Elementary And Secondary Schools Religious Organizations	A7
36008051	Aina Haina Professional Building	850 West Hind Drive	Honolulu	HI	96821	Jason Souki	Wailupe	4	8011	Offices And Clinics Of Medical Doctors	A7
36008056	Holy Nativity Church and School Playground	5286 Kalanianaʻole Highway	Honolulu	HI	96821	Reverend Michael Sen	Wailupe	4	8211	Elementary And Secondary Schools	A7
36011001	Longs Drugs Aina Haina	5156 Kalanianaʻole Highway	Honolulu	HI	96821	Jason Kagawa	Wailupe	4	5912	Drug Stores And Proprietary Stores	A7
38001051	Holy Trinity Church	5919 Kalanianaʻole Highway	Honolulu	HI	96821	Dennis Koshko	Kuliouou	4	8211 8661	Elementary And Secondary Schools Religious Organizations	A7
45035008	Hawaiian Memorial Park Cemetery	45-425 Kamehameha Highway	Kaneohe	HI	96744		Kaneohe	4	6553	Cemetery Subdividers And Developers	A8
45039018	Kin Wah Chop Suey	45-588 Kamehameha Highway	Kaneohe	HI	96744	Henry T. Iida	Kaneohe	4	5812	Eating Places	A8
45042017	Koolau Golf Course	45-550 Kionaole Road	Kaneohe	HI	96744	Ken Terao	Kaneohe	4	7992	Public Golf Courses	A8
45060064	Windward City Chevron	45-462 Kaneohe Bay Drive	Kaneohe	HI	96744	Austin Hirayama	Kaneohe	4	5411 5541	Grocery Stores Gasoline Service Stations	A8
47071001	Valley of the Temples	47-200 Kahekili Highway	Kaneohe	HI	96744	Ben Bugarin	Ahuimanu	4	6553	Cemetery Subdividers And Developers	A8
59011027	Pupukea Service	59-680 Kammehameha Highway	Haleiwa	HI	96712	Michael T Yoshikawa	Kalunawaikaala	4	7538	General Automotive Repair Shops	A1
59011069	North Shore Grill	59-710 Kamehameha Highway	Haleiwa	HI	96712	Chett Naylor	Kalunawaikaala	4	5812	Eating Places	A1
67005083	North Shore Equipment Rental	67-456 Goodale Ave.	Waialua	HI	96791	Gary Park	Kaukonahua	4	7353 7359	Heavy Construction Equipment Rental Equipment Rental And Leasing, NEC	A2
73001033	Aloha Termite and Pest Control	217 S. Kamehameha Highway	Wahiawa	HI	96786	Tammy Murray	Kaukonahua	4	7342	Disinfecting And Pest Control Services	A5
73002074	Surfers Church Café	47 S Kamehameha Highway	Wahiawa	HI	96786	Tom Bauer	Kaukonahua	4	5812	Eating Places	A2
73009003	Kawahi Apartments	730 Wilikina Drive	Wahiawa	HI	96786	Trina Castro	Kaukonahua	4	6513	Apartment Building Operators	A5
74004022	Aloha Petroleum Wahiawa	150 N. Kamehameha Highway, 133, 137 Mango Street	Wahiawa	HI	96786	Richard Connor	Kaukonahua	4	5541	Gasoline Service Stations	A2
74004032	Naru's Place	38 N. Kamehameha Highway	Wahiawa	HI	96786	William Alana	Kaukonahua	4	5411 5812	Grocery Stores Eating Places	A2
86001005	Waianae Mall	86-120 Farrington Highway	Waianae	HI	96792	Irene Hendershot Erika Enomoto-Tanuvasa	Mailili	4	5211 5531 5812 5912 6029 7538 8661	Lumber And Other Building Materials Auto And Home Supply Stores Eating Places Drug Stores And Proprietary Stores Commercial Banks, NEC General Automotive Repair Shops Religious Organizations	A3
94014014	Ekahi Urgent Care	94-750 Farrington Highway	Waipahu	HI	96797	Charlie Sonido	Kapakahi	4	8011	Offices And Clinics Of Medical Doctors	A5
94014058	Times Supermarket Waipahu	94-766 Farrington Highway	Waipahu	HI	96797	Alan Haida	Kapakahi	4	5411	Grocery Stores	A5
94015021	Mahalo Gas Station Waipahu	94-767 Farrington Highway	Waipahu	HI	96797	Dudley Uranaka	Kapakahi	4	5411 5541 7538	Grocery Stores Gasoline Service Stations General Automotive Repair Shops	A5
94047033	First Hawaiian Bank	94-205 Leoku Street	Waipahu	HI	96797	Bernie Lalau	Waikele	4	6022	State Commercial Banks	A5
94049058	Oriental Furniture Outlet	94-303 Farrington Highway	Waipahu	HI	96797	Nancy Hsu	Waikele	4	5712	Furniture Stores	A5

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94146016	Times Supermarket Kunia	94-615 Kupuohi Street	Waipahu	HI	96797	Ed Sulliban	Waikele	4	5411 5812	Grocery Stores Eating Places	A5
95021014	Chevron Mililani	95-130 Kamehameha Highway	Mililani	HI	96789	Gina Dela Cruz	Waikele	4	5541 7549	Gasoline Service Stations Automotive Services, NEC	A5
97019012	Pearl City Plaza	701 Kamehameha Highway	Honolulu	HI	96782	Desiree Lee	Waimalu	4	5411 5722 5812 5813 5993 6099 7374 7538 8661	Grocery Stores Household Appliance Stores Eating Places Drinking Places Tobacco Stores And Stands Functions Related To Depository Banking Data Processing And Preparation General Automotive Repair Shops Religious Organizations	A6
97022022	Tesoro Pearl City 1	922 Kamehameha Highway	Pearl City	HI	96782	Regina Dayton	Waiawa	4	5541	Gasoline Service Stations	A6
98006024	Cars 4 Less 2	402 Kamehameha Highway	Pearl City	HI	96782	Louie Astuto	Waimalu	4	7532	Top And Body Repair And Paint Shops	A6
98006027	Cars 4 Less	406 Kamehameha Highway	Pearl City	HI	96782	Louie Astuto	Waimalu	4	5521	Used Car Dealers	A6
98006028	Hawaii Auto Electric	406B Kamehameha Highway	Pearl City	HI	96782	Myron Araki	Waimalu	4	7539	Automotive Repair Shops, NEC	A6
98006030	Genki Sushi Waiiau 2	98-430 Kamehameha Highway	Pearl City	HI	96782	Carol Ginoza	Waimalu	4	5812	Eating Places	A6
98018038	Kentucky Fried Chicken Alea	98-316 Kamehameha Highway	Alea	HI	96701	Steve Johnson	Kalauao	4	5812	Eating Places	A6
98059008	Waiiau Gardens Kai Unit G-II	98-1388 D Hinu Place	Pearl City	HI	96782	Wayne Kirito	Waimalu	4	6513	Apartment Building Operators	A6
98059016	Extra Space Storage	98-710 Kuahao Place	Pearl City	HI	96782	Kimberly Thomas	Waimalu	4	8999	Services, NEC	A6
99071046	Ed And Don's Of Hawaii	4462 Malaai Street	Honolulu	HI	96818	Julie Marcello	Halawa	4	5441	Candy, Nut, And Confectionery Stores	A6
99071059	Bougainville Flooring Superstore	4478 Malaai Street	Honolulu	HI	96818	Rocky Rapada	Halawa	4	5023 5713	Homefurnishings Floor Covering Stores	A6
99072041	Diagnostic Laboratory Services	99-859 Iwaiwa Street	Alea	HI	96701	Chris Gongora	Halawa	4	8071	Medical Laboratories	A6
11005011	Infiniti of Honolulu 2	2845 Kilihau Street	Honolulu	HI	96817	Bill Mickelsen	Moanalua	3	5511	New And Used Car Dealers	A6
11005031	Armstrong Produce	802 Mapunapuna Street	Honolulu	HI	96819	Russel Soma	Moanalua	3	5148	Fresh Fruits And Vegetables	A6
11007045	99 Ranch Parking Lot	2850 Paa Street	Honolulu	HI	96819	Ben Viray	Moanalua	3	7521 8322	Automobile Parking Individual And Family Services	A6
11012005	Tripler Hospital / Military Facilities						Moanalua	3	8062	General Medical And Surgical Hospitals	A6
11064029	U-Haul	2722 Kilihau Street	Honolulu	HI	96819	Rodney Doronio	Moanalua	3	7513	Truck Rental And Leasing, Without Drivers	A6
12013017	Hy-Pac Storage	2150 North Nimitz Highway	Honolulu	HI	96819	Brent Suzaki	Kalihi	3	8999	Services, NEC	A6
12021015	Various Businesses						Kalihi	3	1711 1761 1793 4731 7342	Plumbing, Heating, Air-Conditioning Roofing, Siding, And Sheetmetal Work Glass And Glazing Work Freight Transportation Arrangement Disinfecting And Pest Control Services	A6
12021017	Grapac Properties	238 Sand Island Access Road	Honolulu	HI	96819	Molly Roberts	Kalihi	3	5122	Drugs, Proprietarys, And Sundries	A6
12022020	Hawaiian Sun Products Inc	259 Sand Island Access Road	Honolulu	HI	96819	Kent Kurihara	Kalihi	3	5149	Groceries And Related Products, NEC	A6
12022028	Matheson Tri-Gas	231, 233 Sand Island Access Road	Honolulu	HI	96819	Paul	Kalihi	3	5169	Chemicals And Allied Products, NEC	A6
12022029	Conrad Enterprises Inc	301 Sand Island Access Road	Honolulu	HI	96819	Curtis Sasaki	Kalihi	3	5112	Stationery And Office Supplies	A6
12025074	Tropic Roofing						Kalihi	3	5033	Roofing, Siding, And Insulation	A6
12025075	HiRose Electric						Nuuanu	3	7521	Automobile Parking	A6
15013010	Lowe's Iwilei 1	411 Pacific Street	Honolulu	HI	96817	Kim Suman Bushman	Kapalama	3	5211	Lumber And Other Building Materials	A6
15013012	Lowe's Iwilei 2	411 Pacific Street	Honolulu	HI	96817	Kim Suman Bushman	Kapalama	3	5211	Lumber And Other Building Materials	A6
15020013	Nimitz Center						Kapalama	3	5993	Tobacco Stores And Stands	A6
15032005	Matson						Kapalama	3	4731	Freight Transportation Arrangement	A6
15033009	D. Otani Produce	1321 Hart Street	Honolulu	HI	96817	Matt Otani	Kapalama	3	5148	Fresh Fruits And Vegetables	A6

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15039001	West Marine Center	443 N. Nimitz Highway	Honolulu	HI	96817	Lloyd T. Sueda	Nuuanu	3	5431	Fruit And Vegetable Markets	A6
17031037	Hele Vineyard Blvd. 2	1311 Palama Street	Honolulu	HI	96817	Lorraine Taniyan-Makimoto	Kapalama	3	5411 5541	Grocery Stores Gasoline Service Stations	A6
17031062	Hele Vineyard Blvd. 1	1311 Palama Street	Honolulu	HI	96817	Lorraine Taniyan-Makimoto	Kapalama	3	5411 5541	Grocery Stores Gasoline Service Stations	A6
17032046	Utilities / Pub Service						Nuuanu	3	9631	Regulation, Administration Of Utilities	A6
21004028	Nuuanu Square	1365 Nuuanu Avenue	Honolulu	HI	96813	Gail McElrath	Nuuanu	3	5812 6099 6531 7212 7231 7299	Eating Places Functions Related To Depository Banking Real Estate Agents And Managers Garment Pressing And Cleaners' Agents Beauty Shops Miscellaneous Personal Services	A6
21022040	Celtic Catholic Church						Nuuanu	3	8661	Religious Organizations	A6
22002031	Honpa Hongwanji Hawaii Betsuin / Pacific Buddhist Academy	1742 Lusitana Street	Honolulu	HI	96813	David Miyamoto	Nuuanu	3	8211	Elementary And Secondary Schools	A6
28011004	Kapiolani Medical Ctr. for Women and Children	1319 Punahou Street , 1637 Bingham Street	Honolulu	HI	96826		Ala Wai	3	8069	Specialty Hospitals, Except Psychiatric	A6
35017003	Assagio Kahala	4346 Waialaе Avenue	Honolulu	HI	96816	Mark Frees	Waialaenui	3	5812 5999 7231 7389	Eating Places Miscellaneous Retail Stores, NEC Beauty Shops Business Services, NEC	A7
41022001	Auto Repair Waimanalo						Waimanalo	3	7538	General Automotive Repair Shops	A7
47004030	Hokuloa-INCR A&C						Ahuimanu	3	6531	Real Estate Agents And Managers	A8
55006039	Best Inn / McDonlads / Chevron						Wailele	3	7011	Hotels And Motels	A1
74001016	McDonald's Wahiawa 1	114 S. Kamehameha Highway	Wahiawa	HI	96786	Carmello Javier Tracy Kono	Kaukonahua	3	5812	Eating Places	A2
74001019	McDonald's Wahiawa 2	114 S. Kamehameha Highway	Wahiawa	HI	96786	Carmello Javier Tracy Kono	Kaukonahua	3	5812	Eating Places	A2
85008049	Valentina's Parking Lot	85-923 Farrington Highway	Waianae	HI	96792	Colleen Hanabusa	Kaupuni	3	5812	Eating Places	A3
85012005	McKinney Building						Kaupuni	3	7241 8661	Barber Shops Religious Organizations	A3
85012008	W. Hardware & Lumber	85-780 Farrington Highway	Waianae	HI	96792	Atom Yamaki	Kaupuni	3	5211	Lumber And Other Building Materials	A3
85028042	Waianae Intermediate						Kaupuni	3	5941	Sporting Goods And Bicycle Shops	A3
91017105	Kroc's Center	91-3257 Kualakai Parkway	Ewa Beach	HI	96706	Skip Bowen	Kaloi	3	8322	Individual And Family Services	A4
91043160	Zippy's Ewa Beach	91-1717 Fort Weaver Road	Ewa Beach	HI	96706	Baron Miyamoto	Honouliuli	3	5411 5541 5812 6062 7231	Grocery Stores Gasoline Service Stations Eating Places State Credit Unions Beauty Shops	A4
92043004	Wet N Wild	400 Farrington Highway	Kapolei	HI	96707	Scott Loos	Kaloi	3	7996 7999	Amusement Parks Amusement And Recreation, NEC	A5
92043005	Hawaiian Waters Adventure Park						Kaloi	3	7996	Amusement Parks	A4
94014022	Atlas Cargo						Kapakahi	3	4731	Freight Transportation Arrangement	A5
94015014	Walpahu Auto Center	94-729 Farrington Highway	Walpahu	HI	96803	Van Peterson	Kapakahi	3	5511	New And Used Car Dealers	A5
94127030	Kaiser Permenente Walpio	94-1480 Moaniani Street	Walpahu	HI	96797	Tony Moiso	Waiawa	3	8011	Offices And Clinics Of Medical Doctors	A5
97019027	Da Motorsports						Waimalu	3	5571	Motorcycle Dealers	A6
97029034	Zippy's Pearl City	806 Kamehameha Highway	Pearl City	HI	96782	Kevin Pacheco	Waimalu	3	5812	Eating Places	A6
98010006	Car Stereo Express	98-072 Kamehameha Highway	Aiea	HI	96701	Steve Ahmed	Waimalu	3	5731 7622	Radio, Television, And Electronic Stores Radio And Television Repair	A6
98021041	Elite Car Stereo & Security	379 Kamehameha Highway	Pearl City	HI	96782	Robert Hasam	Waimalu	3	5731 6531	Radio, Television, And Electronic Stores Real Estate Agents And Managers	A6
98059017	Shioi Construction Inc.	98-720 Kuahao Place	Pearl City	HI	96782	Gail Okamura	Waimalu	3	1521 5085 7352	Single-Family Housing Construction Industrial Supplies Medical Equipment Rental	A6
99002023	Radford High						Halawa	3	8211	Elementary And Secondary Schools	A6
99057074	Hawaiian Association for Retarded Citizens						Halawa	3	8322	Individual And Family Services	A6

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11002004	Military Facilities						Manuwai	2	9531	Accounting, Auditing, And Bookkeeping	A6
11004059	JN Truck Center	3003 N. Nimitz Highway	Honolulu	HI	96819	Joe Fasciolla	Keehi	2	5511 5947	New And Used Car Dealers Gift, Novelty, And Souvenir Shop	A6
11004060	JN Rental	3033 N. Nimitz Highway	Honolulu	HI	96819	Joe Fasciolla	Keehi	2	7514	Passenger Car Rental	A6
11004063	JN Chevrolet	2999 N. Nimitz Highway	Honolulu	HI	96819	Joe Fasciolla	Keehi	2	5511	New And Used Car Dealers	A6
11004075	Aloha Kia 1	2830 Koapaka Street	Honolulu	HI	96819	Cathy Luke	Keehi	2	5511 7538	New And Used Car Dealers General Automotive Repair Shops	A6
11005005	United Truck Rental 1	2808 Kili Hau Street	Honolulu	HI	96819	Jeff Shinagawa	Moanalua	2	7513	Truck Rental And Leasing, Without Drivers	A6
11005016	Polynesian Adventure Tours	2880 Kili Hau Street	Honolulu	HI	96819		Moanalua	2	4789	Transportation Services, NEC	A6
11005023	Industrial Hardware Hawaii					Orlando Abad	Moanalua	2	5211	Lumber And Other Building Materials	A6
11005025	Airport Financial Center / Bank of Hawaii						Moanalua	2	6022	State Commercial Banks	A6
11005034	Produce Center Development Parking Lot						Moanalua	2	7521	Automobile Parking	A6
11005036	Prime Construction	830 Mapunapuna Street	Honolulu	HI	96819	Kenneth Higuchi	Moanalua	2	1521 5231 5812 7538	Single-Family Housing Construction Paint, Glass, And Wallpaper Stores Eating Places General Automotive Repair Shops	A6
11010003	Military Housing A						Manuwai	2	9531	Housing Programs	A6
11010017	Radford Terrace	702 Puuloa Road	Honolulu	HI	96818		Moanalua	2	6513	Apartment Building Operators	A6
11010021	Cycle City Parking						Moanalua	2	5571	Motorcycle Dealers	A6
11010027	Pearl Harbor Elementary School	1 Moanalua Ridge	Honolulu	HI	96818	Joni	Manuwai	2	8211	Elementary And Secondary Schools	A6
11012033	Kaiser Moanalua Center	3288 Moanalua Road	Honolulu	HI	96819	Tony Moiso	Moanalua	2	8069	Specialty Hospitals, Except Psychiatric	A6
11015002	Ohana Honolulu Airport Hotel	3401 North Nimitz Highway	Honolulu	HI	96819	Cathy Luke	Manuwai	2	5812 7011	Eating Places Hotels And Motels	A6
11015004	Toshiba	590 Paiea Street	Honolulu	HI	96819	Cathy Luke	Keehi	2	5734	Computer And Software Stores	A6
11016001	Ei's Auto Body and Paint	2702 Waiwai Loop	Honolulu	HI	96819	Ei Ranon	Moanalua	2	7532	Top And Body Repair And Paint Shops	A6
11016035	Audi Hawaii	2760 Waiwai Loop	Honolulu	HI	96819	Josh Zaret	Keehi	2	5511 7538	New And Used Car Dealers General Automotive Repair Shops	A6
11016036	Car Quest Honolulu	2736 Waiwai Loop	Honolulu	HI	96819	Alan Takahashi	Moanalua	2	5531	Auto And Home Supply Stores	A6
11063011	Moanalua High School						Keehi	2	8221	Colleges And Universities	A6
12001010	Chevron Kalihi St.	1715 N . King Street	Honolulu	HI	96819	Sandy Hiu	Kapalama	2	5411 5541	Grocery Stores Gasoline Service Stations	A6
12002083	Medical Building Kalihi Street						Kapalama	2	8011	Offices And Clinics Of Medical Doctors	A6
12002104	Corner Store						Kapalama	2	5411	Grocery Stores	A6
12002106	Seafarers International Union						Kapalama	2	8631	Labor Organizations	A6
12003021	Thermal Engineering Corporation						Kapalama	2	8711	Engineering Services	A6
12003046	Vacant Warehouse						Kapalama	2			A6
12003047	Kukui Meat Market	428 Kalihi Street	Honolulu	HI	96819	Jonathan Lee	Kapalama	2	5421	Meat And Fish Markets	A6
12003069	Libby Manapua Shop	410 Kalihi Street	Honolulu	HI	96819	Cassandra Ambriz	Kapalama	2	5812	Eating Places	A6
12003085	Vacant Lot						Kapalama	2			A6
12003101	Aloha Petroleum Kalihi St	1701 Dillingham Boulevard	Honolulu	HI	96819	Richard Connor	Kapalama	2	5411 5541	Grocery Stores Gasoline Service Stations	A6
12004005	Lex Brodies	333 Kalihi Street	Honolulu	HI	96819	Scott D. Williams	Kapalama	2	5531	Auto And Home Supply Stores	A6
12004010	Hawaiian Sun East	1614 Republican Street	Honolulu	HI	96819	Rick Sugimoto	Kapalama	2	5149	Groceries And Related Products, NEC	A6
12004011	Hawaiian Sun West	1618 Republic Street	Honolulu	HI	96819	Rick Sugimoto	Kapalama	2	5149	Groceries And Related Products, NEC	A6
12004012	Slim's Power Tools						Kapalama	2	5072	Hardware	A6
12004014	Slim's Power Tools Offices						Kapalama	2	8741	Management Services	A6

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
12005001	Industrial brake	344 Kalihi Street	Honolulu	HI	96819	Walter T. Yonekura	Kapalama	2	5013	Motor Vehicle Supplies And New Parts	A6
12005003	Vertical Technologies						Kapalama	2	3531	Construction Machinery	A6
12005004	Bentos & Things / Saato Crafts	322 Kalihi Street	Honolulu	HI	96819	Sheng Tu Wu	Kapalama	2	5812	Eating Places	A6
12005031	Hawaii's Interior Design						Kapalama	2	8999	Services, NEC	A6
12005035	Platinum Detailing	1804 Republican Street	Honolulu	HI	96819	Alex Lee	Kapalama	2	7542	Carwashes	A6
12005036	Painters Warehouse Inc.	1812 Republican Street	Honolulu	HI	96819	Tusi Tupuola	Kapalama	2	5198	Paints, Varnishes, And Supplies	A6
12005038	Club 77						Kapalama	2	5813	Drinking Places	A6
12008004	Zimmer Gallery						Kapalama	2	8999	Services, NEC	A6
12008008	Air Masters						Kalihi	2	1711	Plumbing, Heating, Air-Conditioning	A6
12013006	Foremost Dairy	2277 Kamehameha Highway	Honolulu	HI	96819	Gavin Lai	Kalihi	2			A6
12013012	76 Gas Station/Carl's Jr.	2140 North Nimitz Highway	Honolulu	HI	96819	Cheryl Gonzalez	Kalihi	2	5541 5812	Gasoline Service Stations Eating Places	A6
12013013	Helping Hands Hawaii						Kalihi	2	8322	Individual And Family Services	A6
12013020	First Hawaiian Bank	2323, 2339 Kamehameha Highway	Honolulu	HI	96819	Jerry M. Matsunaka	Kalihi	2	6099	Functions Related To Depository Banking	A6
12016001	Honey and Royal Jelly						Kalihi	2	5441	Candy, Nut, And Confectionery Stores	A6
12016003	Simply Ono	2337 North King Street	Honolulu	HI	96819	Cara Stevens	Kalihi	2	5812	Eating Places	A6
12016004	Abandoned Building						Moanalua	2			A6
12016025	Window Tinting						Moanalua	2			A6
12021009	Aloha Power Equipment	2230 Alahao Place	Honolulu	HI	96819	Mike Ward	Kalihi	2	5021 5075 5411 5713 5949 8351	Furniture Warm Air Heating And Air Conditioning Grocery Stores Floor Covering Stores Sewing, Needlework, And Piece Goods Child Day Care Services	A6
12021024	Sofos Realty Corporation	2290 Alahao Place	Honolulu	HI	96819	Cherish Manuel	Kalihi	2	1521 1731 5421 5714 7623 7699	Single-Family Housing Construction Electrical Work Meat And Fish Markets Drapery And Upholstery Stores Refrigeration Service And Repair Repair Services, NEC	A6
12021025	XPEDX	2280 Alahao Place	Honolulu	HI	96819	Kalani Gouveia	Kalihi	2	4731 5111	Freight Transportation Arrangement Printing And Writing Paper	A6
12021037	Access Road						Kalihi	2	7521	Automobile Parking	A6
12021047	Moku One LLC / Parking Lot						Kalihi	2	1611	Highway And Street Construction	A6
12022006	LA Image Hawaii / Penny's Drive In	209 Sand Island Access Road	Honolulu	HI	96815	Sam Vance	Kalihi	2	5812 7929	Eating Places Entertainers And Entertainment Groups	A6
12022014	Sand Island Chop Suey / Subway	197 Sand Island Access Road	Honolulu	HI	96815	Janet Chung	Kalihi	2	5812	Eating Places	A6
12022017	Global Auto Repair / Napa Auto Parts	231 Sand Island Access Road	Honolulu	HI	96819	Terry Shigemoto	Kalihi	2	5013	Motor Vehicle Supplies And New Parts	A6
12022024	Hawaii Oil Spill Response Center						Kalihi	2	4959	Sanitary Services, NEC	A6
12022026	76 Gas Station						Kalihi	2	5541	Gasoline Service Stations	A6
12022030	American Electric						Kalihi	2	1731	Electrical Work	A6
12023003	Allied Building Products Corporation	2206 Pahounui Drive	Honolulu	HI	96819	Jeff Rapoza	Kalihi	2	5065	Electronic Parts And Equipment, NEC	A6
12023004	Kilgos 1						Kalihi	2	5082	Construction And Mining Machinery	A6
12023006	Kilgos 2						Kalihi	2	5082	Construction And Mining Machinery	A6
12023068	McKesson	2380 Pahounui Drive	Honolulu	HI	96819	Odie Jimenez	Kalihi	2	5122	Drugs, Proprietarys, And Sundries	A6

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
12024014	Sand Island Center		Honolulu	HI	96819	Tina Fujrua	Kalihi	2	4812 5531 5551 5712 5812 5921 5941 7699	Radiotelephone Communication Auto And Home Supply Stores Boat Dealers Furniture Stores Eating Places Liquor Stores Sporting Goods And Bicycle Shops Repair Services, NEC	A6
12024015	RUI Building Supply						Kalihi	2	1522	Residential Construction, NEC	A6
12025002	Kapalama Military Reservation						Kalihi	2			A6
12025017	University of Hawaii Marine Center						Kapalama	2	8221	Colleges And Universities	A6
12025036	Servco Pacific Inc	2101 C Auiki Street	Honolulu	HI	96803	Ebi Kobayashi	Kalihi	2	5511	New And Used Car Dealers	A6
12025108	Military HQ						Kalihi	2			A6
13005017	Church of Jesus Christ of Latter Day Saints						Kapalama	2	8661	Religious Organizations	A6
13005020	KFC Kalihi	1702 N. King Street	Honolulu	HI	96819	Terry Shim	Kapalama	2	5812	Eating Places	A6
13008004	Kalihi Waena Elementary						Kalihi	2	8221	Colleges And Universities	A6
13031001	Jehovah's Witnesses Kalihi	2075, 2077 Kamehameha IV Road	Honolulu	HI	96819	Greg Oki	Kalihi	2	8661	Religious Organizations	A6
14022014	DOR Materials Testing & Research Branch						Kalihi	2	9229	Public Order And Safety, NEC	A6
15001001	Hawaii Public Housing						Kapalama	2	6513	Apartment Building Operators	A6
15008004	Flora Dec 1	373 N. Nimitz Highway	Honolulu	HI	96817	Sidney Hamada	Nuuanu	2	5945	Hobby, Toy, And Game Shops	A6
15008006	Salvation Army						Nuuanu	2	8331	Job Training And Related Services	A6
15008015	Flora Dec 2	373 N. Nimitz Highway	Honolulu	HI	96817	Sidney Hamada	Nuuanu	2	5945	Hobby, Toy, And Game Shops	A6
15010003	Gentry PacificDesign Center Parking Lot						Nuuanu	2	7521	Automobile Parking	A6
15010011	Gentry PacificDesign Center Parking Lot						Nuuanu	2	7521	Automobile Parking	A6
15012012	Best Buy						Kapalama	2	5731	Radio, Television, And Electronic Stores	A6
15013003	Hilo Hattie's 1	700 N. Nimitz Highway	Honolulu	HI	96817	John Desjardins	Nuuanu	2	5651	Family Clothing Stores	A6
15013004	Hilo Hattie's 2	700 N. Nimitz Highway	Honolulu	HI	96817	John Desjardins	Nuuanu	2	5651	Family Clothing Stores	A6
15013018	Hilo Hattie's 3	700 N. Nimitz Highway	Honolulu	HI	96817	John Desjardins	Nuuanu	2	5651	Family Clothing Stores	A6
15025002	Kalihi Kai Elementary / Kalakaua Middle School						Kapalama	2	8211	Elementary And Secondary Schools	A6
15028051	Pittsburg Paints	425 Kalihi Street	Honolulu	HI	96819	B.A. Keawe-Aiko	Kapalama	2	5198	Paints, Varnishes, And Supplies	A6
15028052	Kalei Eggs Retail Outlet						Kapalama	2	5499	Miscellaneous Food Stores	A6
15028053	Associated Producers Corporation Farm Fresh Island Eggs						Kapalama	2	5144	Poultry And Poultry Products	A6
15028060	The Video Store						Kapalama	2	5735 7841	Record And Prerecorded Tape Stores Video Tape Rental	A6
15028061	Chun Wah Kam Noodle Factory	505 Kalihi Street	Honolulu	HI	96819	Gary Chang	Kapalama	2	5812	Eating Places	A6
15028062	RZKS						Kapalama	2			A6
15028071	Bank of Hawaii Parking Lot						Kapalama	2	7521	Automobile Parking	A6
15028072	Bank of Hawaii 1						Kapalama	2	6022	State Commercial Banks	A6
15028073	Bank of Hawaii 2						Kapalama	2	6022	State Commercial Banks	A6
15028075	Kalihi Kai Elementary						Kapalama	2	8211	Elementary And Secondary Schools	A6
15035008	Chevron Honolulu Transportation Terminal	933 N Nimitz Highway	Honolulu	HI	96817	Todd Osterberg	Kapalama	2	5172	Petroleum Products, NEC	A6
15041003	State of Hawaii Anuenue Fisheries Research Center						Nuuanu	2	9641	Regulation Of Agricultural Marketing	A6

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15041059	Rolloffs Hawaii Inc. / Recycling Center	1130 Sand Island Parkway	Honolulu	HI	96819	Linda Henriques	Nuuanu	2	8999	Services, NEC	A6
15041082	Wong's Meat Market	1200 Sand Island Parkway	Honolulu	HI	96819	Dale Gouvea	Nuuanu	2	5147	Meats And Meat Products	A6
15041088	Commercial Plumbing Properties	1024 Sand Island Parkway	Honolulu	HI	96819	Randy Hera	Nuuanu	2	1711 1771	Plumbing, Heating, Air-Conditioning Concrete Work	A6
15041100	Project Plus Inc.	1017 Mikole Street	Honolulu	HI	96819	Rodney Kim	Nuuanu	2	1541	Industrial Buildings And Warehouses	A6
15041127	Jayar Construction Inc.	1176 Sand Island Parkway	Honolulu	HI	96819	Aaron Yahiku	Nuuanu	2	1542	Nonresidential Construction, NEC	A6
15041140	Iniki Enterprises	1040 Sand Island Parkway	Honolulu	HI	96819	Cheryl Ford	Nuuanu	2	1795	Wrecking And Demolition Work	A6
15041257	Performance Landscapers	1082 Sand Island Parkway	Honolulu	HI	96819	Matt Lyum	Nuuanu	2	0782	Lawn And Garden Services	A6
15041282	Division 16	1088 Sand Island Parkway	Honolulu	HI	96819	Louis Munarriz	Nuuanu	2	5063	Electrical Apparatus And Equipment	A6
15041333	Sub Com, TYCO international LTD						Nuuanu	2	7382	Security Systems Services	A6
16021005	Farrington High School						Kapalama	2	8211	Elementary And Secondary Schools	A6
16024001	Bishop Museum	1525 Bernice Street	Honolulu	HI	96817	Wayne Castro	Kapalama	2	8412	Museums And Art Galleries	A6
16024003	Kalihi Palama Public Library						Kapalama	2	8011	Offices And Clinics Of Medical Doctors	A6
16024004	Kalihi YMCA	1335 Kalihi Street	Honolulu	HI	96817	Alfredo Queyquep	Kapalama	2	7999	Amusement And Recreation, NEC	A6
16024038	Kalihi Palama Public Library Parking Lot						Kapalama	2	7521	Automobile Parking	A6
17002003	Sports Bar	80 North Nimitz Highway	Honolulu	HI	96817	Tina Tran	Nuuanu	2	5812 5813	Eating Places Drinking Places	A6
17002011	M. Kawahara Building						Nuuanu	2	5148	Fresh Fruits And Vegetables	A6
17002013	Pay Parking Lot						Nuuanu	2	7521	Automobile Parking	A6
17002027	Harbor Village Building	901 River Street	Honolulu	HI	96817	Shirley Fludd	Nuuanu	2	5812 6513 7219	Eating Places Apartment Building Operators Laundry And Garment Services, NEC	A6
17006003	Vineyard Chapel						Nuuanu	2	8661	Religious Organizations	A6
17006013	Vineyard Chapel Parking						Nuuanu	2	8661	Religious Organizations	A6
17006032	Zippy's Maunakea	59 N. Vineyard Boulevard	Honolulu	HI	96817	Baron Miyamoto	Nuuanu	2	5812	Eating Places	A6
17023038	Salvation Army The	296 N. Vineyard Boulevard	Honolulu	HI	96817	Barry Vanderbrub	Nuuanu	2	8322	Individual And Family Services	A6
17023041	Kauluwela Elementary						Nuuanu	2	8211	Elementary And Secondary Schools	A6
17026013	CP II Kukui Gardens LLC						Nuuanu	2	6513	Apartment Building Operators	A6
17026053	CP Kukui Gardens LLC 1	408 North Beretania Street	Honolulu	HI	96817	Sarah Propernick	Nuuanu	2	6513	Apartment Building Operators	A6
17029001	Agmata Building	511 N. Vineyard Boulevard	Honolulu	HI	96817	Yong Chun Mah	Nuuanu	2	5411 5812 5921 5932 5949 7241 7299	Grocery Stores Eating Places Liquor Stores Used Merchandise Stores Sewing, Needlework, And Piece Goods Barber Shops Miscellaneous Personal Services	A6
17029002	Aldersgate United Methodist Church						Nuuanu	2	8661	Religious Organizations	A6
17029003	Hawaii Public Housing Authority						Nuuanu	2	6513	Apartment Building Operators	A6
17031040	Vineyard Court Apartments	810 N. Vineyard Boulevard	Honolulu	HI	96817		Kapalama	2	6513	Apartment Building Operators	A6
17032001	Liliha Seafood	1408 Liliha Street	Honolulu	HI	96817	Richard Flebbe	Nuuanu	2	5812 8071	Eating Places Medical Laboratories	A6
17032020	Central Pacific Properties						Nuuanu	2	6531	Real Estate Agents And Managers	A6
17032021	Liliha Sunrise	1432B, 1436, 1438, 1440 Liliha Street	Honolulu	HI	96817	Ka'ohe Arai	Nuuanu	2	5992 6513 7378 8399	Florists Apartment Building Operators Computer Maintenance And Repair Social Services, NEC	A6
17032082	On Tong Society						Nuuanu	2	8399	Social Services, NEC	A6

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17033045	Liliha Pet Store						Nuuanu	2	5999	Miscellaneous Retail Stores, NEC	A6
17045001	Palama Settlement	810 N. Vineyard Boulevard	Honolulu	HI	96817	Duval Dutro	Kapalama	2	8322	Individual And Family Services	A6
18006019	Nuuanu Wood	2434 Pali Highway	Honolulu	HI	96817	Kim Becker	Nuuanu	2	6513	Apartment Building Operators	A6
18007050	Utility Substation-Nioloa Place	10 Nioloa Place	Honolulu	HI	96817		Nuuanu	2	4911	Electric Services	A6
18007082	Temple Emanu-El	2550 Pali Highway	Honolulu	HI	96817	Richard Field	Nuuanu	2	8661	Religious Organizations	A6
18009007	Seventh-Day Adventist Headquarters						Nuuanu	2	8661	Religious Organizations	A6
18009019	Korean Consulate General						Nuuanu	2	9111	Executive Offices	A6
18009026	Taipei Economim & Cultural Office						Nuuanu	2	9111	Executive Offices	A6
18011041	Tenrikyo Mission Headquarters						Nuuanu	2	8661	Religious Organizations	A6
19010040	Toho No Hikari	3510 Nuuanu Pali Drive	Honolulu	HI	96817	Jody Kanemaru	Nuuanu	2	8661	Religious Organizations	A6
21002026	Queen's Court	800 Bethel Street	Honolulu	HI	96817	Kim Becker	Nuuanu	2	5713 6411 8712 8742	Floor Covering Stores Insurance Agents, Brokers, And Service Architectural Services Management Consulting Services	A6
21004001	Safeway Supermarket						Nuuanu	2	5411	Grocery Stores	A6
21005004	Queen Emma Gardens						Nuuanu	2	6513	Apartment Building Operators	A6
21005005	Harris United Methodist Church	20 S. Vineyard Boulevard	Honolulu	HI	96813	Mona-Rey Kino	Nuuanu	2	8351 8661	Child Day Care Services Religious Organizations	A6
21013006	Topa Financial Center						Nuuanu	2	8399	Social Services, NEC	A6
21014003	Pacific Guardian Center	735 Bishop Street	Honolulu	HI	96813	Douglas Umi Kai	Nuuanu	2	6411 7379 7521 8111 8742	Insurance Agents, Brokers, And Service Computer Related Services, NEC Automobile Parking Legal Services Management Consulting Services	A6
21014004	Pacific Guardian Center						Nuuanu	2	6531	Real Estate Agents And Managers	A6
21015063	Enterprise Parking Lot						Nuuanu	2	7521	Automobile Parking	A6
21018049	Family Programs Hawaii						Nuuanu	2	8322	Individual And Family Services	A6
21020001	Royal Elementary						Nuuanu	2	8211	Elementary And Secondary Schools	A6
21055004	Automart USA	604 Ala Moana Boulevard	Honolulu	HI	96813	Michael Keppel	Nuuanu	2	5511	New And Used Car Dealers	A6
21056002	Cutter Mazda Ala Moana	800 Ala Moana Boulevard	Honolulu	HI	96816	Guy Tsurumaki	Ala Wai	2	5511	New And Used Car Dealers	A6
21056003	OfficeMax	770 Ala Moana Boulevard	Honolulu	HI	96813	Scotty Fernandez	Ala Wai	2	5112	Stationery And Office Supplies	A6
21056004	Jaguar Ala Moana	744 Ala Moana Boulevard	Honolulu	HI	96813	John T. Marion	Ala Wai	2	5511	New And Used Car Dealers	A6
21059004	Acura of Honolulu East	777 Ala Moana Boulevard	Honolulu	HI	96813	Rueben Lactaoen	Ala Wai	2	5511	New And Used Car Dealers	A6
21059011	Cutter Chevrolet Ala Moana	711 Ala Moana Boulevard	Honolulu	HI	96813	Terry Bennet	Nuuanu	2	5511	New And Used Car Dealers	A6
22022003	Hawaii Baptist Academy	2429 Pali Highway	Honolulu	HI	96817	Glenn Bento	Nuuanu	2	8211	Elementary And Secondary Schools	A6
22022019	Hawaii Baptist New Middle School	2425 Pali Highway	Honolulu	HI	96817	Glenn Bento	Nuuanu	2	8211	Elementary And Secondary Schools	A6
23005001	Hokua	1288 Ala Moana Boulevard	Honolulu	HI	96814	Bob Cope	Ala Wai	2	5812 6513	Eating Places Apartment Building Operators	A6
24007001	Shriners Hospital For Children	1226 Punahou Street	Honolulu	HI	96814	Stephen Boyer	Makiki	2	8069	Specialty Hospitals, Except Psychiatric	A6
26007020	Island Hostel						Ala Wai	2	7011	Hotels And Motels	A6
26009003	Grand Waikikian Shops						Ala Wai	2	5441	Candy, Nut, And Confectionery Stores	A6
26009004	ABC Store Grand Waikikian	1825 Ala Moana Boulevard	Honolulu	HI	96815	Roy Toguchi	Ala Wai	2	5411 5812 5932 7299	Grocery Stores Eating Places Used Merchandise Stores Miscellaneous Personal Services	A6
26009006	Kobe Japanese Steak House	1841 Ala Moana Boulevard	Honolulu	HI	96815	Sonja Hayslip	Ala Wai	2	5812	Eating Places	A6

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26010002	Ilikai Marina / Outback Steak House / Red lobster / Chart House						Ala Wai	2	5812 7011	Eating Places Hotels And Motels	A6
26011012	Tradewinds Hotel Alley Lot						Ala Wai	2	7011	Hotels And Motels	A6
26011015	Tradewinds Hotel, Inc.						Ala Wai	2	7011	Hotels And Motels	A6
26011017	Marina Tower Waikiki						Ala Wai	2	7011	Hotels And Motels	A6
26011023	Harbor View Plaza	1676 Ala Moana Boulevard	Honolulu	HI	96815	David Barker	Ala Wai	2	6513	Apartment Building Operators	A6
26012009	Park Plaza						Ala Wai	2	6513 7011	Apartment Building Operators Hotels And Motels	A6
27028016	AAA Saw Shop / Cake Works						Ala Wai	2	5812	Eating Places	A6
27029005	Swedish Motors Inc.	1130 Kapahulu Avenue	Honolulu	HI	96826	Bert Yamashiro	Manoa-Palolo	2	7538	General Automotive Repair Shops	A6
27029013	Mopeds Plus	3065 Kapiolani Boulevard	Honolulu	HI	96826	Peter Wong	Manoa-Palolo	2	7699	Repair Services, NEC	A6
32007019	SKC Properties	1029 Kapahuu Avenue	Honolulu	HI	96816	Marsha Nakamura	Manoa-Palolo	2	8021 8042 8062	Offices And Clinics Of Dentists Offices And Clinics Of Optometrists General Medical And Surgical Hospitals	A6
32041055	Waialae Chevron	4117 Waialae Avenue	Honolulu	HI	96816	Barney Robinson	Waialaenui	2	5411 5541	Grocery Stores Gasoline Service Stations	A7
32041057	Times Supermarket Kahala	4117 Waialae Avenue	Honolulu	HI	96816	Jerry Goya	Waialaenui	2	5411 7212	Grocery Stores Garment Pressing And Cleaners' Agents	A7
33012001	Ocean View Cemetery						Waialaenui	2	6553	Cemetery Subdividers And Developers	A7
33012110	Public Storage Kahala	4100 Waialae Avenue	Honolulu	HI	96816	Tiffany Iwasaki	Waialaenui	2	5999	Miscellaneous Retail Stores, NEC	A7
35016001	Kahala Mall	4211 Waialae Avenue	Honolulu	HI	96816	Richard McDonald	Waialaenui	2	5311 5411 5611 5621 5632 5651 5661 5731 5812 5912 5941 5942 5943 5945 7241 7299	Department Stores Grocery Stores Men's And Boys' Clothing Stores Women's Clothing Stores Women's Accessory And Specialty Stores Family Clothing Stores Shoe Stores Radio, Television, And Electronic Stores Eating Places Drug Stores And Proprietary Stores Sporting Goods And Bicycle Shops Book Stores Stationery Stores Hobby, Toy, And Game Shops Barber Shops Miscellaneous Personal Services	A7
35017006	Kahala Hydroponics / Animal Hospital / Super Cuts						Waialaenui	2	5261 7231	Retail Nurseries And Garden Stores Beauty Shops	A7
35017008	Kahala Square West	4210 Waialae Avenue	Honolulu	HI	96816	Lelani Lowman	Waialaenui	2	7231	Beauty Shops	A7
35017010	Zippy's Kahala	4134 Waialae Avenue	Honolulu	HI	96816	Baron Miyamoto	Waialaenui	2	5812	Eating Places	A7
35023001	Waialae Country Club	4997 Kalaha Avenue	Honolulu	HI	96816	Dave Nakama	Wailupe	2	7997	Membership Sports And Recreation Clubs	A7
35025001	Aloha Quality Gasoline Kahala	4339 Waialae Avenue	Honolulu	HI	96816	Jane McKee	Waialaenui	2	5411 5541	Grocery Stores Gasoline Service Stations	A7
36008050	Aina Haina Library						Wailupe	2	8011	Offices And Clinics Of Medical Doctors	A7
37010053	Kings Cathedral	5728 Kalaniana'ole Highway	Honolulu	HI	96821	Joe Paikai	Niu	2	5812 7991 8661	Eating Places Physical Fitness Facilities Religious Organizations	A7
39010005	Hawaii Kai Golf Course						Koko Crater	2	7992	Public Golf Courses	A7
39010006	Hawaii Kai Golf Course						Koko Crater	2	7992	Public Golf Courses	A7
39010023	Hawaii Kai Golf Course						Koko Crater	2	7992	Public Golf Courses	A7
39040040	Church of Jesus Christ of Latter- Day Saints						Kamiloiki	2	8661	Religious Organizations	A7
39048009	Koko Marina Center	7912 Kalaniana'ole Highway	Honolulu	HI	96825	Suzie Setzier	Kamiloiki	2	5812 5813 5912 5999 7231 7832 8011	Eating Places Drinking Places Drug Stores And Proprietary Stores Miscellaneous Retail Stores, NEC Beauty Shops Motion Picture Theaters, Except Drive-In Offices And Clinics Of Medical Doctors	A7

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39048010	Chevron Koko Marina	7170 Kalanianaʻole Highway	Honolulu	HI	96825	Rachelle Madden	Kamiloiki	2	5411 5541 7542	Grocery Stores Gasoline Service Stations Carwashes	A7
41004005	Point Break Surf Shop	41-849 Kalanianaʻole Highway	Waimanalo	HI	96795	Jane McKee	Kahawai	2	5411 5541 5941	Grocery Stores Gasoline Service Stations Sporting Goods And Bicycle Shops	A7
41004006	Keneke's Full Svc Catering	41-855 Kalanianaʻole Highway	Waimanalo	HI	96795	Jill Lao	Kahawai	2	4311 5731 5812	U.S. Postal Service Radio, Television, And Electronic Stores Eating Places	A7
41006030	Waimanalo Assembly of God						Kahawai	2	8661	Religious Organizations	A7
41007036	Mel's Market Waimanalo						Kahawai	2	5411	Grocery Stores	A7
41007037	McDonalds Waimanalo	41-1033 Kalanianaʻole Highway	Waimanalo	HI	96795	Victor Lim	Kahawai	2	5812	Eating Places	A7
41009012	Waimanalo Elementary & Intermediate						Kahawai	2	8211	Elementary And Secondary Schools	A7
41009275	Waimanalo Town Center	41-1537 Kalanianaʻole Highway	Waimanalo	HI	96795	Richard Howard	Waimanalo	2	5812	Eating Places	A7
41009277	Conoco Phillips 76	41-1577 Kalanianaʻole Highway	Waimanalo	HI	96795	Betsy Acevedo	Waimanalo	2	5541	Gasoline Service Stations	A7
41018020	Glenn's Flowers & Plants	41-511 Flamingo Street	Waimanalo	HI	96795	Glenn Miyashita	Waimanalo	2	0181	Ornamental Nursery Products	A7
41022084	L&L Drive-Inn Waimanalo	41-1610 Kalanianaʻole Highway	Waimanalo	HI	96795	Frank H.C. Kam	Waimanalo	2	5812	Eating Places	A7
42006004	Castle Medical Center	640, 642 Ulukahiki Street	Kailua	HI	96734	Larry Coffin	Kawainui	2	8062	General Medical And Surgical Hospitals	A8
42032113	Aloha Petroleum Uluoa	1247 Kailua Road	Kailua	HI	96734	Richard Connor	Kawainui	2	5411 5541	Grocery Stores Gasoline Service Stations	A8
42033050	Koolau Farmers Garden Center	1127 Kailua Road	Kailua	HI	96734	Elton Hara	Kaelepulu	2	5261	Retail Nurseries And Garden Stores	A8
42033051	Tesoro Kailua	1143 Kailua Road	Kailua	HI	96734	William Russel	Kawainui	2	5541	Gasoline Service Stations	A8
42038024	Windward Boats	789 Kailua Road	Kailua	HI	96734	Sally Hitchcock	Kaelepulu	2	5551	Boat Dealers	A8
42098003	Norfolk Parcel 33, Kalanianaʻole Hwy	42-103 Aleka Place	Kailua	HI	96734		Kaelepulu	2			A7
44013029	Honseiji Temple	44-668 Kaneohe Bay Drive	Kaneohe	HI	96744	Shoka Kimura	Kawa	2	8661	Religious Organizations	A8
44019082	Angle's Market	44-748, 748A Kaneohe Bay Drive	Kaneohe	HI	96744	Barry Kim	Kawa	2	5411 5812 7992	Grocery Stores Eating Places Public Golf Courses	A8
44019085	Bay Drive Market						Kawa	2	5411 5812	Grocery Stores Eating Places	A8
45023002	Koolaupoko District Court Building	45-691 Keaahala Road	Kaneohe	HI	96744	Walter Ozawa	Keaahala	2	8062 8361 9211	General Medical And Surgical Hospitals Residential Care Courts	A8
45025029	Fathers of Sacred Hearts						Kaneohe	2	8661	Religious Organizations	A8
45026075	Koolau Baptist Academy						Kaneohe	2	8221	Colleges And Universities	A8
45030031	Kaneohe Bay Community of Christ						Kawa	2	8661	Religious Organizations	A8
45030037	Bayview Golf Park	45-285 Kaneohe Bay Drive	Kaneohe	HI	96744	Michael Nekoba	Kawa	2	7992	Public Golf Courses	A8
45036022	Windward Worship Center						Kawa	2	5411 5812	Grocery Stores Eating Places	A8
45039005	Kaiser Permanente Koolau Clinic	45-602 Kamehameha Highway	Kaneohe	HI	96744	Ross Lee	Kaneohe	2	8011	Offices And Clinics Of Medical Doctors	A8
45039019	Island Mini Mart	45-596 Kamehameha Highway	Kaneohe	HI	96744	Richard Connor	Kaneohe	2	5411	Grocery Stores	A8
45039025	Zia's Caffe / VCA Kaneohe Animal Hospital	45-612 Kamehameha Highway	Kaneohe	HI	96744	Mark Lunia	Kaneohe	2	5812	Eating Places	A8
45039027	Aloha Gas Station & Mini Mart / Wayne's Flooring	45-620 Kamehameha Highway	Kaneohe	HI	96744	Richard Connor	Kaneohe	2	5541 5713	Gasoline Service Stations Floor Covering Stores	A8
45039034	Burger King Kaneohe 4	45-630 Kamehameha Highway	Kaneohe	HI	96744	Flor Ryan	Kaneohe	2	5812	Eating Places	A8
45039035	Burger King Kaneohe 3	45-630 Kamehameha Highway	Kaneohe	HI	96744	Flor Ryan	Kaneohe	2	5812	Eating Places	A8
45039036	Burger King Kaneohe 2	45-630 Kamehameha Highway	Kaneohe	HI	96744	Almalyn Abante	Kaneohe	2	5812	Eating Places	A8
45049017	Servco Windward	45-655 Kamehameha Highway	Kaneohe	HI	96744	Fred Valmoja	Kaneohe	2	5511	New And Used Car Dealers	A8

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
45060061	Windward City Shopping Center	45-480 Kaneohe Bay Drive	Kaneohe	HI	96744	Austin Hirayama	Kaneohe	2	5411 5651 5812 6011	Grocery Stores Family Clothing Stores Eating Places Federal Reserve Banks	A8
45076051	Yamashiro Building Supply	45-552A Kamehameha Highway	Kaneohe	HI	96744	Dwight Yamashiro	Kaneohe	2	5211 5521 7538	Lumber And Other Building Materials Used Car Dealers General Automotive Repair Shops	A8
47004026	McDonald's Restaurant Koolau Center	47-250 Hui Iwa Street	Kaneohe	HI	96744	Susan Smith	Ahuimanu	2	5812	Eating Places	A8
47004037	Consolidated Theaters						Ahuimanu	2	7832	Motion Picture Theaters, Except Drive-In	A8
47014082	Kunimura Property	47-705 Kamehameha Highway	Kaneohe	HI		Ronald Kunimura	Kaalaea	2	8999	Services, NEC	A9
48003016	Commercial Fruit Stand						Waikane	2	5812	Eating Places	A9
48005001	Our Lady of Mt. Carmel Church						Waikane	2	8661	Religious Organizations	A9
48005008	Olomana Orchids	48-464 Kamehameha Highway	Kaneohe	HI	96744	Peter Neifert	Hakipuu	2	0181	Ornamental Nursery Products	A9
48009006	Waiahole Nursery and Garden Center	48-190 Kamehameha Highway	Kaneohe	HI	96744	Kathrine Hurd	Waianu	2	0181	Ornamental Nursery Products	A9
49001017	Coral Kingdom	49-130 Kamehameha Highway	Kaneohe	HI	96744	Paul Yip	Hakipuu	2	5812 5947	Eating Places Gift, Novelty, And Souvenir Shop	A9
51011044	7-Eleven Kaawa, Aloha Petroleum Kaaawa	51-484 Kamehameha Highway	Kaaawa	HI	96730	Jane Mckee	Makaua	2			A9
53001052	Tropic'aina Bar and Grill	53-134 Kamehameha Highway	Hauula	HI	96717	Evaldo Ferrera Alan Huie	Punaluu	2	5812 5813	Eating Places Drinking Places	A1
53004026	Ching's Punaluu Store	53-356 Kamehameha Highway	Hauula	HI	96717	Patrick Ching	Punaluu	2	5411 5812	Grocery Stores Eating Places	A1
53006049	Kaya Store	53-534 Kamehameha Highway	Hauula	HI	96717	Beverly Hashimoto	Halehaa	2	5812 7538	Eating Places General Automotive Repair Shops	A1
54002006	Rainbow Castle						Maakua	2	5947	Gift, Novelty, And Souvenir Shop	A1
54002008	7-Eleven Hauula	54-138 Kamehameha Highway	Hauula	HI	96717		Kaipapau	2	5411	Grocery Stores	A1
54004023	Tamura's Parking Lot						Kaipapau	2	7521	Automobile Parking	A1
54009006	Ching Jong Leong Store						Waipuhi	2	5947	Gift, Novelty, And Souvenir Shop	A1
54009018	Convinient Mart Hauula						Waipuhi	2	5411	Grocery Stores	A1
54009034	Convenient Mart Hauula						Waipuhi	2	7299	Miscellaneous Personal Services	A1
55006026	Chevron Laie	55-396 Kamehameha Highway	Laie	HI	96762	Jeffrey Tyau	Wallele	2	5411 5541	Grocery Stores Gasoline Service Stations	A1
55009012	Cackle Fresh Egg Farm Outlet						Kahawainui	2	5499	Miscellaneous Food Stores	A1
55014001	Laie Village Center						Wallele	2	5013 5411 5541 5812 6021 7231	Motor Vehicle Supplies And New Parts Grocery Stores Gasoline Service Stations Eating Places National Commercial Banks Beauty Shops	A1
55014006	Ohana Auto Service	55-510 Kamehameha Highway	Laie	HI	96762	Jeffrey Tyau	Wallele	2			A1
55014014	Church of Jesus Christ Latter Day Saints						Wallele	2	8661	Religious Organizations	A1
56002030	Giovanni's Shrimp Truck	56-505 Kamehameha Highway	Kahuku	HI	96731	Troy Nitsche	Oio	2	5411 5812	Grocery Stores Eating Places	A1
56003040	Turtle Bay Golf Course						Oio	2	7997	Membership Sports And Recreation Clubs	A1
56006003	Kahuku High & Intermediate						Malaekahana	2	8211	Elementary And Secondary Schools	A1
56006014	Hawaiian Electric						Malaekahana	2	9631	Regulation, Administration Of Utilities	A1
56006026	St. Roch Catholic Church						Malaekahana	2	8661	Religious Organizations	A1
57001016	Turtle Bay Golf Course						Oio	2	7997	Membership Sports And Recreation Clubs	A1
57001021	Kahuku Land Farms	57-146 Kamehameha Highway	Kahuku	HI	96731	Ralph Makaiiau	Kawela	2	0115 0161 0179	Corn Vegetables And Melons Fruits And Tree Nuts, NEC	A1
57001022	Turtle Bay Golf Course	57-049 Kuilima Drive	Kahuku	HI	96731	Travis Joerger	Kawela	2	7997	Membership Sports And Recreation Clubs	A1

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58001051	Crawford's Convalescent Home						Paumalu	2	8051	Skilled Nursing Care Facilities	A1
59004013	Saints Peter & Paul Catholic Church						Kalunawaikaala	2	8661	Religious Organizations	A1
59008006	Public Service						Kalunawaikaala	2			A1
59008007	Sunset Beah Christian School						Kalunawaikaala	2	8211	Elementary And Secondary Schools	A1
59011026	Pupukea Service / Pupukea Grill	59-674 Kamehameha Highway	Haleiwa	HI	96712	Deann Sakuoka	Kalunawaikaala	2	5963	Direct Selling Establishments	A1
59011068	North Shore Realty / North Shore Dentistry						Kalunawaikaala	2	8021	Offices And Clinics Of Dentists	A1
59011070	North Shore Surf Shop						Kalunawaikaala	2	5941	Sporting Goods And Bicycle Shops	A1
59013020	Sunset Chevron	59-186 Kamehameha Highway	Haleiwa	HI	96712	In Chul Kang	Paumalu	2	5411 5541	Grocery Stores Gasoline Service Stations	A1
59014016	HECO						Paumalu	2	9631	Regulation, Administration Of Utilities	A1
61002002	Waimea Valley Adventure Park	59-864 Kamehameha Highway	Haleiwa	HI	96712	Randy Hoopai	Waimea	2	5812 5947 8422	Eating Places Gift, Novelty, And Souvenir Shop Botanical And Zoological Gardens	A1
61003001	Burger Subdivision 1	61-110 Tutu Street	Haleiwa	HI	96712	Leonord Leong	Waimea	2	1531	Operative Builders	A1
61003032	Burger Subdivision 2	61-110 Tutu Street	Haleiwa	HI	96712	Leonord Leong	Waimea	2	1531	Operative Builders	A1
64003001	Dole Packing Plant	64-1551 Kamehameha Highway	Wahiawa	HI	96786	Anthony Franks	Poamoho	2	0179 5148	Fruits And Tree Nuts, NEC Fresh Fruits And Vegetables	A2
65005006	Board of Water Supply Waialua	64-205 Kamehameha Highway	Waialua	HI	96791		Helemano	2	4941	Water Supply	A2
66032105	Paalaa Kai Corner						Kiikii	2	5411 5461	Grocery Stores Retail Bakeries	A2
67002011	Eric's Service	67-016 Farrington Highway	Waialua	HI	96791	Finney L. Bryant	Kaukonahua	2	5541 7513	Gasoline Service Stations Truck Rental And Leasing, Without Drivers	A2
67002026	Industrial Commercial						Waialua	2	8661	Religious Organizations	A2
68003037	Mokuleia Polo Farm	68-609 Farrington Highway	Waialua	HI	96791	Michael K. Dailey	Pahole	2	7948	Racing, Including Track Operation	A2
71001018	Hoala School						Kaukonahua	2	8211	Elementary And Secondary Schools	A2
71006001	Whitmore Aloha Petroleum	1210 Aheae Avenue	Wahiawa	HI	96786	Richard Connor	Poamoho	2	5411 5541 5812 8661	Grocery Stores Gasoline Service Stations Eating Places Religious Organizations	A2
71006077	Whitmore Community Center						Poamoho	2			A2
73001002	Tire City Hawaii	160 Wilikina Drive	Wahiawa	HI	96786	Royal Miller	Kaukonahua	2	5521 5531 7538	Used Car Dealers Auto And Home Supply Stores General Automotive Repair Shops	A5
73001006	Castaneda, Frank, and Katsuko	14 Wilikina Drive	Wahiawa	HI	96786	Frank Castaneda	Kaukonahua	2	4812 8999	Radiotelephone Communication Services, NEC	A5
73001007	KC's Barber Style & Shiatsu						Kaukonahua	2	7241	Barber Shops	A5
73001008	Camouflage Shop Inc.						Kaukonahua	2	5611	Men's And Boys' Clothing Stores	A5
73001009	Let's Roll						Kaukonahua	2	5993	Tobacco Stores And Stands	A5
73001011	K C's Barber Styling & Shiatsu						Kaukonahua	2	7241 7299	Barber Shops Miscellaneous Personal Services	A5
73001028	El Palenque	177 S. Kamehameha Highway	Wahiawa	HI	96786	Miriam Olivas	Kaukonahua	2	5812 5932	Eating Places Used Merchandise Stores	A5
73001029	Napa Auto Parts	189 S. Kamehameha Highway	Wahiawa	HI	96786	Eric Hirao	Kaukonahua	2	5531	Auto And Home Supply Stores	A5
73002001	Papa Johns Wahiawa	153 S. Kamehameha Highway	Wahiawa	HI	96786	Patrick Law	Kaukonahua	2	5812	Eating Places	A5
73002034	Luna Group Property	95 S Kamehameha Highway	Wahiawa	HI	96786	Peter Nelson	Kaukonahua	2	5999 7212 7231 7299	Miscellaneous Retail Stores, NEC Garment Pressing And Cleaners' Agents Beauty Shops Miscellaneous Personal Services	A2
73002036	KAC Building Group	71 Kamehameha Highway	Wahiawa	HI	96786	Byung Choi	Kaukonahua	2	5812 7299	Eating Places Miscellaneous Personal Services	A2
73002037	Surfers Church	63 S. Kamehameha Highway	Wahiawa	HI	96786	Gloria Canada	Kaukonahua	2	5812 6513 8611	Eating Places Apartment Building Operators Business Associations	A2
73002039	Molly's Smokehouse	23 S Kamehameha Highway	Wahiawa	HI	96786	Howard Teruya	Kaukonahua	2	5812 7231 8661	Eating Places Beauty Shops Religious Organizations	A2

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73004003	Midas Wahiawa	24 N. Kamehameha Highway	Wahiawa	HI	96786	Nakamoto, Sharyn Shelley TR	Kaukonahua	2	7533	Auto Exhaust System Repair Shops	A2
73004007	Wahiawa Mall	70 Kukui Streey	Wahiawa	HI	96786	Tim Wolf	Kaukonahua	2	5736 5812 5813 7231 7999	Musical Instrument Stores Eating Places Drinking Places Beauty Shops Amusement And Recreation, NEC	A2
73004011	Jiffy Mart Wahiawa	119 N. Kamehameha Highway	Wahiawa	HI	96786	Richard Connor	Kaukonahua	2	5541	Gasoline Service Stations	A2
73004016	Colortyme						Kaukonahua	2	7359	Equipment Rental And Leasing, NEC	A2
73005001	Golden Coin Bake Shop & Restaurant	211 Hiwi Place	Wahiawa	HI	96786	Bruce Yokochi	Kaukonahua	2	5461 5812	Retail Bakeries Eating Places	A2
73005007	Tamura Parking Lot						Kaukonahua	2	7521	Automobile Parking	A2
73005011	Tamura Parking Lot						Kaukonahua	2	7521	Automobile Parking	A2
73012005	Liberty Tax						Kaukonahua	2	7291	Tax Return Preparation Services	A2
74001011	Judy LLC	174 S. Kamehameha Highway	Wahiawa	HI	96786	Grant Kamisugi	Kaukonahua	2			A5
74001013	Taco Bell Wahiawa	142 S. Kamehameha Highway	Wahiawa	HI	96786	George Illoreta	Kaukonahua	2	5812	Eating Places	A2
74001014	L&L Drive-Inn Wahiawa	138 S. Kamehameha Highway	Wahiawa	HI	96786	Xing Chen	Kaukonahua	2	5812	Eating Places	A2
74003045	George S Wada Trustees	90 S Kamehameha Highway	Wahiawa	HI	96786	Mitch Barnes	Kaukonahua	2	5411 5812 7219 7231 7922	Grocery Stores Eating Places Laundry And Garment Services, NEC Beauty Shops Theatrical Producers And Services	A2
74004021	Zippy's Wahiawa	100 N. Kamehameha Highway	Wahiawa	HI	96786	Baron Miyamoto	Kaukonahua	2	5812	Eating Places	A2
74005020	7-Eleven Wahiawa	202 N. Kamehameha Highway	Wahiawa	HI	96786	Chuck Jones	Kaukonahua	2	5411 5541	Grocery Stores Gasoline Service Stations	A2
76001002	Army National Guard Recruiting						Waikale	2	9711	National Security	A5
77001001	Wheeler Army Air Field / Community of Homes						Kaukonahua	2	6513	Apartment Building Operators	A5
84011018	Surf Shop Farrington Hwy						Kamaileunu	2	5941	Sporting Goods And Bicycle Shops	A3
84011022	Makaha Clinic	84-1150 Farrington Highway	Waianae	HI	96792	Glen Wong	Kamaileunu	2	5812 8063	Eating Places Psychiatric Hospitals	A3
84014006	Landmark Missionary Baptist Church						Makaha	2	8661	Religious Organizations	A3
85002012	Honolulu Community Action Program INC						Kaupuni	2			A3
85002018	Waianae High 2						Kaupuni	2	8211	Elementary And Secondary Schools	A3
85002042	Waianae Public Library						Kaupuni	2	8231	Libraries	A3
85008015	Waianae Commerical Center	85-979 Farrington Highway	Waianae	HI	96792	Sam Gilbert	Kaupuni	2	5499 5812 6531 8721	Miscellaneous Food Stores Eating Places Real Estate Agents And Managers Accounting, Auditing, And Bookkeeping	A3
85008016	Waianae Chinese Kitchen	85-993 Farrington Highway	Waianae	HI	96792	Sherman Louie	Kaupuni	2	5812 5932 7342	Eating Places Used Merchandise Stores Disinfecting And Pest Control Services	A3
85008017	Aloha Petroleum Lualualei Homestead Rd	85-997 Farrington Highway	Waianae	HI	96792	Richard Connor	Maililiili	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
85008018	Ono Polynesian Market	85-998 Farrington Highway	Waianae	HI	96792	Kanoe Laa	Maililiili	2	5411	Grocery Stores	A3
85008047	NAPA Auto Parts Bay View St.	85-909 Farrington Highway	Waianae	HI	96792	Linda	Kaupuni	2	5531	Auto And Home Supply Stores	A3
85008054	Waianae Eye Clinic						Kaupuni	2	8011	Offices And Clinics Of Medical Doctors	A3
85008055	Barbecue Kai Restaurant	85-973 Farrington Highway	Waianae	HI	96792	Annie Huang	Kaupuni	2	5812	Eating Places	A3
85010001	Jack in the Box Waianae	85-950 Farrington Highway	Waianae	HI	96792	Tom King	Kaupuni	2	5812	Eating Places	A3
85010002	K & W Inspection Station	85-942 Farrington Highway	Waianae	HI	96792		Kaupuni	2	5812	Eating Places	A3
85010004	Waianae Dental						Kaupuni	2	8021	Offices And Clinics Of Dentists	A3
85010005	Golden House Restaurant	85-880 Farrington Highway	Waianae	HI	96792	Ho Kit Wong	Kaupuni	2	2396 5812	Automotive And Apparel Trimmings Eating Places	A3

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85010006	Hale Nalu Surf Shop						Kaupuni	2	5941	Sporting Goods And Bicycle Shops	A3
85010008	Dansen's Auto Repair	85-850 Farrington Highway	Waianae	HI	96792	Dansen Carvalho	Kaupuni	2	7538	General Automotive Repair Shops	A3
85010058	Davide Carolina MD						Kaupuni	2	8011	Offices And Clinics Of Medical Doctors	A3
85011009	Aloha Petroleum Army Street	85-803 Farrington Highway	Waianae	HI	96792	Richard Connor	Kaupuni	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
85011014	West Coast Roofing Inc.	85-841 Farrington Highway	Waianae	HI	96792	Manual Madeira	Kaupuni	2	1711 1761 4812 5421 5812 5944 5992 6531 8021 8661	Plumbing, Heating, Air-Conditioning Roofing, Siding, And Sheetmetal Work Radiotelephone Communication Meat And Fish Markets Eating Places Jewelry Stores Florists Real Estate Agents And Managers Offices And Clinics Of Dentists Religious Organizations	A3
85011018	Waianae Store 1	85-863 Farrington Highway	Waianae	HI	96792	Kris Okimoto	Kaupuni	2	5411	Grocery Stores	A3
85011019	First Physical & Functional Rehab						Kaupuni	2	8049	Offices Of Health Practitioner	A3
85011023	Shell'z Ohana Realty						Kaupuni	2	6531	Real Estate Agents And Managers	A3
85012001	Aloha Petroleum Plantation Rd.	85-830 Farrington Highway	Waianae	HI	96792	Richard Connor	Kaupuni	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
85012002	Waianae Veterinary Clinic						Kaupuni	2	0742	Veterinary Services, Specialties	A3
85012004	Laundromat						Kaupuni	2	7215	Coin-Operated Laundries And Cleaning	A3
85012006	Adjacent McKinney Building						Kaupuni	2	8211	Elementary And Secondary Schools	A3
85012010	Taco Bell Waianae	85-752 Farrington Highway	Waianae	HI	96792	Duane Kaplan	Kaupuni	2	5812	Eating Places	A3
85013005	Foster Realty						Kaupuni	2	6531	Real Estate Agents And Managers	A3
85013014	Waianae United Methodist Church						Kaupuni	2	8661	Religious Organizations	A3
85013036	Gas Station						Kaupuni	2	5541	Gasoline Service Stations	A3
85013037	KFC Waianae	85-54 Kaupuni Street	Waianae	HI	96792	Suzanne Devera	Kaupuni	2	5812	Eating Places	A3
85015001	Waianae High 1						Kaupuni	2	8211	Elementary And Secondary Schools	A3
85018018	Aloha Petroleum Makaha Valley Road	85-010 Farrington Highway	Waianae	HI	96792	Richard Connor	Kamaleunu	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
86001022	Waianae Corporate Yard	86-220 Farrington Highway	Waianae	HI	96792	Lance Hernandez	Mailili	2			A3
86001040	Waianae Coast Community Mental Health Center	86-226 Farrington Highway	Waianae	HI	96792	Alvina Kaupuiki	Mailili	2	8093	Specialty Outpatient Clinics, NEC	A3
86001056	Tesoro Waianae	86-88 Farrington Highway	Waianae	HI	96792	Roaxanne Remo	Mailili	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
86001059	Jan Properties	86-78 Farrington Highway	Waianae	HI	96792	Ann Nishioka	Mailili	2	5812 6141 6411 7514 8021	Eating Places Personal Credit Institutions Insurance Agents, Brokers, And Service Passenger Car Rental Offices And Clinics Of Dentists	A3
86015067	Shave Ice						Mailili	2	5812	Eating Places	A3
86017045	Tamura Super Market	86-35 Analipo Street	Waianae	HI	96792	Karl Nashiro	Mailili	2	5411	Grocery Stores	A3
86017047	Tamura's Supermarket Waianae 1	86-32 Farrington Highway	Waianae	HI	96792	Carl Nashiro	Mailili	2	5411	Grocery Stores	A3
87008012	Pacific Shopping Mall	87-2070 Farrington Highway	Waianae	HI	96792	Mark Johnson	Ulehawa	2	5411 5531 5541 5812 6011 7231	Grocery Stores Auto And Home Supply Stores Gasoline Service Stations Eating Places Federal Reserve Banks Beauty Shops	A3
87008059	Fastop Waianae	87-2130 Farrington Highway	Waianae	HI	96792	Darlene Higa	Ulehawa	2	4812 5541	Radiotelephone Communication Gasoline Service Stations	A3
87008091	McDonald's Restaurants	87-2070 Farrington Highway	Waianae	HI	96792	Mark Johnson	Ulehawa	2	5812	Eating Places	A3

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87011001	D T Automotive	87-166 Farrington Highway	Waianae	HI	96792	Derrick Tolentino	Maillili	2	7538	General Automotive Repair Shops	A3
87011043	Maile Deli						Maillili	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
87020011	Union 76 Maili	87-890 Farrington Highway	Waianae	HI	96792	Dan Del Mondo	Maillili	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
87020015	Money Mart						Maillili	2	6099	Functions Related To Depository Banking	A3
87023057	HI 5 Recycling						Maillili	2	5093	Scrap And Waste Materials	A3
87023076	Aloha Gas Station Maillili	87-718 Farrington Highway	Waianae	HI	96792	Lena Villanueva	Maillili	2	5411 5541	Grocery Stores Gasoline Service Stations	A3
87024001	Maile Pasteles	87-680 Farrington Highway	Waianae	HI	96792	Elmer B. Clark	Maillili	2	5014 5411	Tires And Tubes Grocery Stores	A3
87026003	Aloha Petroleum Auyoung Hmstd. Rd.	87-1926 Farrington Highway	Waianae	HI	96792	Richard Connor	Ulehawa	2	5411 5541 5812	Grocery Stores Gasoline Service Stations Eating Places	A3
87031010	KFC Waianae	87-1978 Farrington Highway	Waianae	HI	96792	Edna E Kekauoha	Ulehawa	2	5812	Eating Places	A3
87031064	Aloha Petroleum Maaloa St.	87-1942 Farrington Highway	Waianae	HI	96792	Richard Connor	Ulehawa	2	5411 5541 7542	Grocery Stores Gasoline Service Stations Carwashes	A3
87033015	Mike's Bake Shop	87-1650 Farrington Highway	Waianae	HI	96792	Un Sok Kim	Ulehawa	2	7992	Public Golf Courses	A3
87033017	Child & Family Service						Ulehawa	2	8322	Individual And Family Services	A3
87035007	Maile commercial Center	87-1784 B Farrington Highway	Waianae	HI	96792	Elaine Saigusa	Ulehawa	2	5421 5531 5993 7291 8011	Meat And Fish Markets Auto And Home Supply Stores Tobacco Stores And Stands Tax Return Preparation Services Offices And Clinics Of Medical Doctors	A3
87044008	Nanakuli Super	87-2090 Farrington Highway	Waianae	HI	96792	Kris Okimoto	Ulehawa	2	5411	Grocery Stores	A3
87044009	Food Giant	87-2102 Farrington Highway	Waianae	HI	96792	Kris Okimoto	Ulehawa	2	5411	Grocery Stores	A3
89005084	Hawaii Telcom INC						Nanakuli	2	4899	Communication Services, NEC	A3
89017050	First Hawaiian Bank						Nanakuli	2	6022	State Commercial Banks	A4
91001006	Ewa Beach Golf Club	91-50 Fort Weaver Road	Ewa Beach	HI	96706	Nathan Lingard	Kaloi	2	5812 7992	Eating Places Public Golf Courses	A4
91002001	Burger King Ewa Beach	91-914 Fort Weaver Road	Ewa Beach	HI	96706	Rachel Scheer	Kaloi	2	5812	Eating Places	A4
91002297	Ewa Beach Office Center LLC	91-902 Fort Weaver Road	Ewa Beach	HI	96706	Ramon Chavez	Kaloi	2	5812 6411 7231 8011 8021 8699	Eating Places Insurance Agents, Brokers, And Service Beauty Shops Offices And Clinics Of Medical Doctors Offices And Clinics Of Dentists Membership Organizations, NEC	A4
91010121	Hawaii Prince Golf Club						Kaloi	2	7992	Public Golf Courses	A4
91013003	Barbers Point Elementary						Kaloi	2	8211	Elementary And Secondary Schools	A4
91013024	R&KA Equipment / Hawaiian Home Lands						Kaloi	2			A4
91013040	Kalaeloa Raceway Park	Undefined					Kaloi	2			A4
91013050	Department of Defense / National Guard						Kaloi	2	9711	National Security	A4
91013099	(Coral Sea Road 8955)						Kaloi	2	5172 7999	Petroleum Products, NEC Amusement And Recreation, NEC	A4
91013100	Oahu SPCA / John Deer						Kaloi	2	5082 5083 5084 7353	Construction And Mining Machinery Farm And Garden Machinery Industrial Machinery And Equipment Heavy Construction Equipment Rental	A4
91014017	Horizon	91-310 Hanua Street	Kapolei	HI	96707	Keith Numazu	Makaiwa	2	4953	Refuse Systems	A4
91015022	Kapolei Commons	4450 Kapolei Parkway	Kapolei	HI	96707		Kaloi	2	5311 5812 5999 6011 7231	Department Stores Eating Places Miscellaneous Retail Stores, NEC Federal Reserve Banks Beauty Shops	A4

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
91015027	Oahu Publications Inc						Kaloi	2	2741	Miscellaneous Publishing	A4
91016001	Kapolei Costco	287 Kamokila Boulevard	Kapolei	HI	96707		Kaloi	2	5311	Department Stores	A4
91016179	West Oahu Detention Basin						Kaloi	2			A4
91016204	Kapolei Costco	4589 Kapolei Parkway	Kapolei	HI	96707	John Heine	Kaloi	2	5399 5541	Miscellaneous General Merchandise Gasoline Service Stations	A4
91017016	Kahi Mohala Hospital	91-2301 Fort Weaver Road	Ewa Beach	HI	96706	David Ellis	Honouliuli	2	8063	Psychiatric Hospitals	A5
91017056	Hawaii Hospice Center	91-2141 Fort Weaver Road	Ewa Beach	HI	96706	Ramon Miranda	Honouliuli	2	8059	Nursing And Personal Care, NEC	A5
91017057	Hawaii Medical Center West	91-2141 Fort Weaver Road	Ewa Beach	HI	96706	Ramon Miranda	Honouliuli	2	8062	General Medical And Surgical Hospitals	A5
91024032	Church						Kaloi	2	8661	Religious Organizations	A4
91025062	Owner: Hawaiian Telcom						Kaloi	2	9631	Regulation, Administration Of Utilities	A4
91034004	Aloha Petroleum Ewa Mart	91-831 Fort Weaver Road	Ewa Beach	HI	96706	Richard Connor	Kaloi	2	5411 5541	Grocery Stores Gasoline Service Stations	A4
91034025	7-11 Papipi Road	91-916 Makule Road	Ewa Beach	HI	96706	Ryan Fujitani	Kaloi	2	5411 5541	Grocery Stores Gasoline Service Stations	A4
91056003	Ko Olina Golf Course	92-1220 Alliinui Drive #2	Kapolei	HI	96707	Richard Song	Makalwa	2	7992	Public Golf Courses	A4
91061060	Long's Ewa Beach	91-1401 Fort Weaver Road	Ewa Beach	HI	96706	Peter Gomez	Kaloi	2	5812 5912 5944 7231 7241 7841	Eating Places Drug Stores And Proprietary Stores Jewelry Stores Beauty Shops Barber Shops Video Tape Rental	A4
91106008	Straub Kapolei Family Health						Kaloi	2	8011	Offices And Clinics Of Medical Doctors	A4
91115001	KFC Ewa Beach	91-1001 Kaimalie Street	Ewa Beach	HI	96706	Bill Ching	Kaloi	2	5812 7231 8021 8041	Eating Places Beauty Shops Offices And Clinics Of Dentists Offices And Clinics Of Chiropractors	A4
91115010	Public Storage Kuhina St.	91-923 Fort Weaver Road	Ewa Beach	HI	96706	Wayne Olivares	Kaloi	2	8999	Services, NEC	A4
91115012	Chevron Ewa Beach	91-909 Fort Weaver Road	Ewa Beach	HI	96706	Rachel Scheer	Kaloi	2	5541 6512	Gasoline Service Stations Nonresidential Building Operators	A4
91149052	Laulani Village 2	91-1119 Keaunui Drive	Ewa Beach	HI	96706	Jason Souki	Kaloi	2	4812 5411	Radiotelephone Communication Grocery Stores	A4
91149065	Laulani Village 1	91-1123 KEAUNUI DR	Ewa Beach	HI	96706	Jason Souki	Kaloi	2	4813 5812 6282 7231 7291	Telephone Communication, Except Radio Eating Places Investment Advice Beauty Shops Tax Return Preparation Services	A4
92049012	Appears to be commercial, labeled agricultural						Makaiwa	2			A4
94002014	Kunia Wells	94-553 Kunia Road	Waipahu	HI	96797		Waikele	2	4941	Water Supply	A5
94005076	Waipahu Wells 3 GAC	94-801 Kamehameha Highway	Waipahu	HI	96797		Kapakahi	2	4941	Water Supply	A5
94007055	Waikele Golf Course						Kapakahi	2	7992	Public Golf Courses	A5
94011057	Chevron	94-485 Farrington Highway	Waipahu	HI	96797	Richard	Waikele	2	5541	Gasoline Service Stations	A5
94011099	Midas Waipahu	94-709 Farrington Highway	Waipahu	HI	96797	Godo Villegas	Kapakahi	2	7549	Automotive Services, NEC	A5
94014006	Bank of Hawaii Parking Lot						Kapakahi	2	7521	Automobile Parking	A5
94014019	Carlton Chang Waipahu Property	94-666, -668, -670, -672, -674 Farrington Highway	Waipahu	HI	96797	Carlton KC Chang	Kapakahi	2	1752 5941 5999 6531 7216 7231	Floor Laying And Floor Work, NEC Sporting Goods And Bicycle Shops Miscellaneous Retail Stores, NEC Real Estate Agents And Managers Drycleaning Plants, Except Rugs Beauty Shops	A5
94019003	Waipahu Market	94-861 Farrington Highway	Waipahu	HI	96797	Sue Hwang	Kapakahi	2	5411 5461 5812	Grocery Stores Retail Bakeries Eating Places	A5

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94019010	808 Bodyworks	94-879 Farrington Highway	Waipahu	HI	96797	Clifford KaNEChika	Kapakah	2	5722 5812 7231 7291	Household Appliance Stores Eating Places Beauty Shops Tax Return Preparation Services	A5
94019011	Tanioka's Seafood & Catering	94-903 Farrington Highway	Waipahu	HI	96797	Melvin Tanioka	Kapakah	2	5411 5421 5812	Grocery Stores Meat And Fish Markets Eating Places	A5
94019012	Dolphin Lounge	94-911 Farrington Highway	Waipahu	HI	96797	Moniqui Yu	Kapakah	2	5499 5813	Miscellaneous Food Stores Drinking Places	A5
94027002	Leeward Drive-Inn	94-209 Pupukahi Street	Waipahu	HI	96797	John Ha	Waikele	2	5812	Eating Places	A5
94028001	Waipahu Office Plaza	94-210 Pupukahi Street	Waipahu	HI	96797	Marilyn Labayog	Waikele	2	6011 6411 7231 7291 8011 8049 8111	Federal Reserve Banks Insurance Agents, Brokers, And Service Beauty Shops Tax Return Preparation Services Offices And Clinics Of Medical Doctors Offices Of Health Practitioner Legal Services	A5
94028030	Aloha Petroleum Leokane	94-264 Farrington Highway	Waipahu	HI	96797	Richard Connor	Waikele	2	5411 5541	Grocery Stores Gasoline Service Stations	A5
94036071	The Church of Jesus Christ of Latter-Day Saints						Kapakah	2	8661	Religious Organizations	A5
94047001	Waipahu Square	94-210 Leokane Street	Waipahu	HI	96797	Jeff Engel	Waikele	2	5812 5813 5921 5992 5999 7231	Eating Places Drinking Places Liquor Stores Florists Miscellaneous Retail Stores, NEC Beauty Shops	A5
94047029	Waipahu Town Center, Parcel 029	94-050 Farrington Highway	Waipahu	HI	96797	Carol Brack	Waikele	2	5812 6022	Eating Places State Commercial Banks	A5
94047032	Zippy's Waipahu	94-180 Farrington Highway	Waipahu	HI	96797	Baron Miyamoto	Waikele	2	5812	Eating Places	A5
94047034	McDonald's Parking Lot						Waikele	2	7521	Automobile Parking	A5
94047035	Waipahu Town Center 1	94-060 Farrington Highway	Waipahu	HI	96797	Carol Brack	Waikele	2	8699	Membership Organizations, NEC	A5
94048044	Aloha Kia Waipahu Center	94-081 Farrington Highway	Waipahu	HI	96797		Waikele	2	5511 7538	New And Used Car Dealers General Automotive Repair Shops	A5
94048045	Aloha Kia Waipahu Sales Center	94-097 Farrington Highway	Waipahu	HI	96797	Jason Akeo	Waikele	2	5511	New And Used Car Dealers	A5
94048046	Cuter, Pontiac, Buick, GMC	94-119 Farrington Highway	Waipahu	HI	96797	Troy Chong	Waikele	2	5511	New And Used Car Dealers	A5
94048068	Cutter Buick GMC Waipahu	94-149 Farrington Highway	Waipahu	HI	96797	Charnell Kainoa	Waikele	2	5511 7538	New And Used Car Dealers General Automotive Repair Shops	A5
94048069	Lex brodies Waipahu	94-169 Farrington Highway	Waipahu	HI	96797	Scott D Williams	Waikele	2	5531 5541 7538	Auto And Home Supply Stores Gasoline Service Stations General Automotive Repair Shops	A5
94049011	Cutter Ford Waipahu		Waipahu	HI	96797	Eric Cheigh	Waikele	2	5511	New And Used Car Dealers	A5
94049014	Walgreens Waipahu	94-223 Farrington Highway	Waipahu	HI	96797	Craig Murobayashi	Waikele	2	5912	Drug Stores And Proprietary Stores	A5
94049018	Leeward Self Storage	94-299 Farrington Highway	Waipahu	HI	96797	David Williams	Waikele	2	5014 8999	Tires And Tubes Services, NEC	A5
94106001	Kunia Shopping Center	94-673 Kupuohi Street	Waipahu	HI	96797	Geralyn Dela Cruz	Waikele	2	5812 5944 5945 6531 7216 7231 7291 7299 8021 8299	Eating Places Jewelry Stores Hobby, Toy, And Game Shops Real Estate Agents And Managers Drycleaning Plants, Except Rugs Beauty Shops Tax Return Preparation Services Miscellaneous Personal Services Offices And Clinics Of Dentists Schools And Educational Services	A5
94128002	Paradise Beverages Maintenance Facility	94-1450 Moaniani Street	Waipahu	HI	96797	Josh Alifua	Waiawa	2	5181	Beer And Ale	A5
94128008	Paradise Beverages Inc	94-1450 Moaniani Street	Waipahu	HI	96797	Josh Alifua	Waiawa	2	5181	Beer And Ale	A5
95001035	Mililani Golf Course	95-176 Kuahelani Avenue	Mililani	HI	96789	Darryl Lamberg	Waikele	2	5812 5941 7992 7999	Eating Places Sporting Goods And Bicycle Shops Public Golf Courses Amusement And Recreation, NEC	A5

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
95008048	Fastop Convenience Store	95-26 Kamehameha Highway	Mililani	HI	96789	Darlene A Higa	Waikele	2	5411 5541 5812 7231	Grocery Stores Gasoline Service Stations Eating Places Beauty Shops	A5
95009002	Waipio Grace Brethren Church						Waikele	2	8661	Religious Organizations	A5
95021013	Mililani Auto Detailing	95-140 Kamehameha Highway	Mililani	HI	96789	Troy Keithley	Waikele	2	7542 7549	Carwashes Automotive Services, NEC	A5
95046013	Wikao Street	Wikao Street	Mililani Town	HI	96789		Waikele	2			A5
95046037	Trinity Church Central Oahu	95-388 Wikao Street	Mililani Town	HI	96789	Pat Mamaclay	Waikele	2	8351 8661	Child Day Care Services Religious Organizations	A5
96003022	Hawaii Laborers Training Program	96-138 Farrington Highway	Pearl City	HI	96782	Francis Taua	Waiawa	2	8631	Labor Organizations	A5
96004006	RHS Lee Waiawa Lot						Waiawa	2	1541 1542 5211	Industrial Buildings And Warehouses Nonresidential Construction, NEC Lumber And Other Building Materials	A5
97019011	Plumbers & Fitters Training Center						Waimalu	2	8631	Labor Organizations	A6
97019013	Pearl City Glass Shop	659 Kamehameha Highway	Pearl City	HI	96782	Mark Kakazu	Waimalu	2	7536 7538	Automotive Glass Replacement Shops General Automotive Repair Shops	A6
97022006	7-Eleven Pearl City	897 Kamehameha Highway	Pearl City	HI	96782	Sharon Jore	Waimalu	2	5411 5541	Grocery Stores Gasoline Service Stations	A6
97022023	Tesoro Pearl City 2	922 Kamehameha Highway	Pearl City	HI	96782	Regina Dayton	Waiawa	2	5541	Gasoline Service Stations	A6
97024035	Century Park Plaza						Waiawa	2	6513	Apartment Building Operators	A5
97029028	Joy of Christ Lutheran Church						Waimalu	2	8661	Religious Organizations	A6
97031029	Chevron Pearl City	866 Kamehameha Highway	Pearl City	HI	96782	Glen Hobbs	Waimalu	2	5541	Gasoline Service Stations	A6
97031030	First Hawaiian Bank Pearl City	1045 Waimano Home Road	Pearl City	HI	96782	Kiyoshi Kirby	Waimalu	2	6011	Federal Reserve Banks	A6
97034001	Chevron Pearl City 2	777 Kamehameha Highway	Pearl City	HI	96782	Rachelle Madden	Waimalu	2	5541 7539	Gasoline Service Stations Automotive Repair Shops, NEC	A6
97034002	Pearl City Business Plaza	803 Kamehameha Highway	Pearl City	HI	96782	Reuben Wong	Waimalu	2	5621 5812 5813 7241 7291 8041 8049	Women's Clothing Stores Eating Places Drinking Places Barber Shops Tax Return Preparation Services Offices And Clinics Of Chiropractors Offices Of Health Practitioner	A6
98003032	Hawaii Auto Detail	593 Kamehameha Highway	Pearl City	HI	96782	Ben Tongson	Waimalu	2	5932 7542 7922	Used Merchandise Stores Carwashes Theatrical Producers And Services	A6
98005001	Public Service						Waimalu	2	9631	Regulation, Administration Of Utilities	A6
98006004	Hawaii Self Storage Pearl City	338 Kamehameha Highway	Pearl City	HI	96782	Kaleo Pilana	Waimalu	2	8999	Services, NEC	A6
98006017	D&J Fujimoto LLC	350 Kamehameha Highway	Pearl City	HI	96782	Darryl Fujimoto	Waimalu	2	7538	General Automotive Repair Shops	A6
98006029	Genki Sushi Waiiau 1	98-430 Kamehameha Highway	Pearl City	HI	96782	Carol Ginoza	Waimalu	2	5812	Eating Places	A6
98008029	Burger King	98-1214 Kaahumanu Street	Pearl City	HI	96782	Orlando Ignacio	Waimalu	2	5812	Eating Places	A6
98009012	Cutter Ford, Inc.	98-015 Kamehameha Highway	Aiea	HI	96701	Kale Kippen	Waimalu	2	5511	New And Used Car Dealers	A6
98009020	Industrial Commercial	98-33 Kamehameha Highway	Aiea	HI	96701	Steve Nariyoshi	Waimalu	2	5611 7539 7699	Men's And Boys' Clothing Stores Automotive Repair Shops, NEC Repair Services, NEC	A6
98010003	Territorial Savings Bank						Waimalu	2	6022	State Commercial Banks	A6
98011034	Pearl Country Club	98-535 Kaonohi Street	Aiea	HI	96701	Howard Hamada	Kalauao	2	5812 5941 7992 7999	Eating Places Sporting Goods And Bicycle Shops Public Golf Courses Amusement And Recreation, NEC	A6

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98014003	Pearl Kai Shopping Center	98-199 Kamehameha Highway	Pearl City	HI	96782	Garrett Littman	Kalauao	2	4812 5812 5813 5941 5944 6512 7212 7231 7299 7378	Radiotelephone Communication Eating Places Drinking Places Sporting Goods And Bicycle Shops Jewelry Stores Nonresidential Building Operators Garment Pressing And Cleaners' Agents Beauty Shops Miscellaneous Personal Services Computer Maintenance And Repair	A6
98014005	Slumber World Alea	98-107 Kamehameha Highway	Aiea	HI	96701	Kent Kolto	Waimalu	2	5021	Furniture	A6
98014006	Pearl Kai Shopping Center 3	98-159 Kamehameha Highway	Aiea	HI	96701	Garrett Littman	Kalauao	2	4812 5411 5461 5712 5813 5941 5999 7538 7549	Radiotelephone Communication Grocery Stores Retail Bakeries Furniture Stores Drinking Places Sporting Goods And Bicycle Shops Miscellaneous Retail Stores, NEC General Automotive Repair Shops Automotive Services, NEC	A6
98014007	Pearl Kai Shopping Center 2	98-199 Kamehameha Highway	Aiea	HI	96701	Garrett Litman	Kalauao	2	5499 5812 7299	Miscellaneous Food Stores Eating Places Miscellaneous Personal Services	A6
98014010	Lex Brodies Alea	98-115 Kamehameha Highway	Aiea	HI	96701	Barney Grigg	Kalauao	2	5531	Auto And Home Supply Stores	A6
98014012	Chevron Pearlridge	98-121 Kamehameha Highway	Aiea	HI	96701	Rachelle Madden	Kalauao	2	5541	Gasoline Service Stations	A6
98014019	Waimalu Shell	98-135 Kamehameha Highway	Aiea	HI	96701	George Williamson	Kalauao	2	5541	Gasoline Service Stations	A6
98014020	Firestone Alea	98-141 Kamehameha Highway	Aiea	HI	96701	Troy Ribaca	Kalauao	2	5531	Auto And Home Supply Stores	A6
98014022	McDonald's 1 Waimalu	98-147 Kamehameha Highway	Aiea	HI	96701	Terry Tanaka	Kalauao	2	5812	Eating Places	A6
98014030	McDonald's 2 Waimalu	98-147 Kamehameha Highway	Aiea	HI	96701	Terry Tanaka	Kalauao	2	5812	Eating Places	A6
98015045	Pearl Kai Shopping Center 1	98-199 Kamehameha Highway	Aiea	HI	96701	Garrett Littman	Kalauao	2	5094 5812 5912 7231 7291	Jewelry And Precious Stones Eating Places Drug Stores And Proprietary Stores Beauty Shops Tax Return Preparation Services	A6
98016032	American Savings Bank						Kalauao	2	6022	State Commercial Banks	A6
98016047	Sumida Farms	98-160 Kamehameha Highway	Aiea	HI	96701	David Sumida	Kalauao	2	0191	General Farms, Primarily Crop	A6
98018024	Best Auto Group	98-360 Kamehameha Highway	Aiea	HI	96701	Ann Konn	Kalauao	2	5511	New And Used Car Dealers	A6
98021001	Fukushima Auto Center	98-259 Kaluamoi Place	Pearl City	HI	96782	Joe Okabe	Waimalu	2	7532	Top And Body Repair And Paint Shops	A6
98021042	Mom's Soul Food	98-371 Kamehameha Highway	Pearl City	HI	96782	C.C. Davis	Waimalu	2	5812	Eating Places	A6
98021071	Pearl Harbor Transmission	391 Kamehameha Highway	Pearl City	HI	96782	Paul Giovanetti	Waimalu	2	7537	Automotive Transmission Repair Shops	A6
98060002	Newtown Driving Range	98-330 Kaahale Street	Aiea	HI	96701	Ka'ohe Arai	Waimalu	2	5812 5941 7999	Eating Places Sporting Goods And Bicycle Shops Amusement And Recreation, NEC	A6
99001008	Military Housing B						Halawa	2	9531	Housing Programs	A6
99002035	Chevron Mapunapuna	4561 Salt Lake Boulevard	Honolulu	HI	96818	Glen Hobbs	Halawa	2	5311 5411 5499 5531 5541 5943	Department Stores Grocery Stores Miscellaneous Food Stores Auto And Home Supply Stores Gasoline Service Stations Stationery Stores	A6
99041012	Dixie Grill	99-016 Nalopaka Place	Aiea	HI	96701	Clinton Ho	Aiea	2	5812 7299	Eating Places Miscellaneous Personal Services	A6
99055013	The Church of Jesus Christ of Latter-Day Saints						Halawa	2	8661	Religious Organizations	A6
99071006	Slumber World 1	4296 Malaai Street	Honolulu	HI	96818	Ed Nakeno	Halawa	2	5712	Furniture Stores	A6
99071007	Slumber World 2	4296 Malaai Street	Honolulu	HI	96818	Ed Nakeno	Halawa	2	5712	Furniture Stores	A6
99071008	Slumber World 3	4296 Malaai Street	Honolulu	HI	96818	Ed Nakeno	Halawa	2	5712	Furniture Stores	A6
99076014	Crosspointe	400 Mananai Place	Honolulu	HI	96818	Samantha Kawelo	Halawa	2	6513	Apartment Building Operators	A6
99076025	Crosspointe	400 Mananai Place	Honolulu	HI	96818	Samantha Kawelo	Halawa	2	6513	Apartment Building Operators	A6

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99076027	Crosspointe	400 Mananal Place	Honolulu	HI	96818	Samantha Kawelo	Halawa	2	6531	Real Estate Agents And Managers	A6
11003004	Keehi Lagoon Memorial	2685 N Nimitz Highway	Honolulu	HI	96819	Bob Frietas	Moanalua	1	8641	Civic And Social Associations	A6
11004076	Aloha Kia 2	2841 North Nimitz Highway	Honolulu	HI	96819	Cathy Luke	Keehi	1	5511 7538	New And Used Car Dealers General Automotive Repair Shops	A6
11005006	United Truck Rental 2	2815 Kilihau Street	Honolulu	HI	96819	Jeff Shinagawa	Moanalua	1	7513	Truck Rental And Leasing, Without Drivers	A6
11005007	United Truck Rental 3	2821 Kilihau Street	Honolulu	HI	96819	Jeff Shinagawa	Moanalua	1	7513	Truck Rental And Leasing, Without Drivers	A6
11005008	United Truck Rental 4	2829 Kilihau Street	Honolulu	HI	96819	Jeff Shinagawa	Moanalua	1	7513	Truck Rental And Leasing, Without Drivers	A6
11005039	Island Lighting Company	2965 Mokumoa Street	Honolulu	HI	96819	Garret Kanai	Moanalua	1	5063	Electrical Apparatus And Equipment	A6
11010009	Cycle City Center	2908 Kamehameha Highway	Honolulu	HI	96818	George Baily	Keehi	1	5571 7521 8999	Motorcycle Dealers Automobile Parking Services, NEC	A6
11014074	Best Western	3230 Koapaka Street	Honolulu	HI	96819	Cathy Luke	Keehi	1	7011	Hotels And Motels	A6
11016038	Okimoto Property	2726 Waiwai Loop	Honolulu	HI	96819	Bruce Okimoto	Moanalua	1	2511 5712	Wood Household Furniture Furniture Stores	A6
12003049	Libby Manapua Shop Parking Lot	1710 Kalani Street	Honolulu	HI	96819	Cassandra Ambriz	Kapalama	1			A6
12005002	Pacific Construction Company	334 A. Kalihi Street	Honolulu	HI	96819	Marc Titcomb	Kapalama	1	1541 1542	Industrial Buildings And Warehouses Nonresidential Construction, NEC	A6
12005016	Car Audio Specialists	321 Mokauea Street	Honolulu	HI	96819	Nohea M. Santimer	Kapalama	1	5712 5731 7622	Furniture Stores Radio, Television, And Electronic Stores Radio And Television Repair	A6
12005034	Unlimited Design LLC	1734 Republican Street	Honolulu	HI	96819	Patrick Kwong	Kapalama	1	3993 6531	Signs And Advertising Specialties Real Estate Agents And Managers	A6
12005039	Central Pacific Rebuilders	1828 Republican Street	Honolulu	HI	96819	Cortni Mechaney	Kapalama	1	5531	Auto And Home Supply Stores	A6
12008011	Da Wing Trading LLC	2008 Republican Street	Honolulu	HI	96819	Harry Kwan	Kalihi	1	2434 5712	Wood Kitchen Cabinets Furniture Stores	A6
12023001	Pella Windows & Doors, Clock & Trophy Shop	214 Sand Island Access Road	Honolulu	HI	96819	Albert Young	Kalihi	1	5211 5999 8742	Lumber And Other Building Materials Miscellaneous Retail Stores, NEC Management Consulting Services	A6
13031002	Watch Tower Bible and Tract	2055 Kamehameha IV Road	Honolulu	HI	96819	Greg Oki	Kalihi	1	8661	Religious Organizations	A6
15008001	215 N. King Street	215 N. King Street	Honolulu	HI	96817	Dan Daoang	Nuuanu	1	6513	Apartment Building Operators	A6
15008014	Discount Furniture Warehouse	345A N. Nimitz Highway	Honolulu	HI	96817	Rochelle Ericson	Nuuanu	1	5712	Furniture Stores	A6
15028063	Monarch Seafood	515 Kalihi Street	Honolulu	HI	96817	Thomas Mukaigawa	Kapalama	1	5812	Eating Places	A6
15041077	Sand Island Business Association	1115 Makepono Street	Honolulu	HI	96819	Sheri Man	Nuuanu	1	8399	Social Services, NEC	A6
15041253	International Express 1	1093 Makepono Street	Honolulu	HI	96819	Ritchie Mudd	Nuuanu	1	7521	Automobile Parking	A6
15041255	International Express 2	1093 Makepono Street	Honolulu	HI	96819	Ritchie Mudd	Nuuanu	1	7521	Automobile Parking	A6
17002016	Lanakila Marine Services, Inc.	132 N. Nimitz Highway	Honolulu	HI	96817	Brighton Yee (JuJu)	Nuuanu	1	5091 5551 7699	Sporting And Recreation Goods Boat Dealers Repair Services, NEC	A6
17007021	Kuan Yin Temple	170 N. Vineyard Boulevard	Honolulu	HI	96817	Merle Chong	Nuuanu	1	8661	Religious Organizations	A6
17023043	Liliha Public Library	1515 Liliha Street	Honolulu	HI	96817	Janet Yap	Nuuanu	1	8231	Libraries	A6
17032022	Lung Kong Kung Shaw Society	1430 A Liliha Street	Honolulu	HI	96817	Barbara Chong	Nuuanu	1	5932 5992 7999	Used Merchandise Stores Florists Amusement And Recreation, NEC	A6
17032023	First Hawaiian Bank	1420 Liliha Street	Honolulu	HI	96817	Bernie Lalau	Nuuanu	1	6029	Commercial Banks, NEC	A6
17033001	C&J Telecommunications	1468 Liliha Street	Honolulu	HI	96817	Raynette Tinay	Nuuanu	1	4813	Telephone Communication, Except Radio	A6
21002016	Harbor Court						Nuuanu	1	6513 6531	Apartment Building Operators Real Estate Agents And Managers	A6
21016015	Harbor Square	700 Richards Street	Honolulu	HI	96813	Bryan Grayling	Nuuanu	1	6513 7371	Apartment Building Operators Custom Computer Programming Services	A6
21055001	Porsche Hawaii	724 Ala Moana Boulevard	Honolulu	HI	96814	David Pederson	Ala Wai	1	5511 5941	New And Used Car Dealers Sporting Goods And Bicycle Shops	A6
21055002	Jackson Volvo Ala Moana	704 Ala Moana Boulevard	Honolulu	HI	96813	Debbie Tesoro	Nuuanu	1	5511	New And Used Car Dealers	A6

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21055003	303 Keawe Street	303 Keawe Street	Honolulu	HI	96813		Nuuanu	1	4812 7231	Radiotelephone Communication Beauty Shops	A6
21055009	Automart USA Parking Lot	604 Ala Moana Boulevard	Honolulu	HI	96813	Michael Keppel	Nuuanu	1	7521	Automobile Parking	A6
21055021	Six Eighty Ala Moana	680 Ala Moana Boulevard	Honolulu	HI	96813		Nuuanu	1	5812 6513	Eating Places Apartment Building Operators	A6
21059006	Acura of Honolulu West	767 Ala Moana Boulevard	Honolulu	HI	96813	Rueben Lactaoen	Ala Wai	1	5511	New And Used Car Dealers	A6
21059013	Enterprise Rent-A-Car	669 Ala Moana Boulevard	Honolulu	HI	96813	Daniel Gatewood	Nuuanu	1	7514	Passenger Car Rental	A6
22044037	Children Justice Center	3019 Pali Highway	Honolulu	HI	96813	Susan Okoga	Nuuanu	1	8351	Child Day Care Services	A6
23001001	Ward Center East Parking Lot	1140 Ala Moana Boulevard	Honolulu	HI	96814	Douglas Kai	Ala Wai	1	7521	Automobile Parking	A6
23001004	Ward Center West Parking Lot	1122 Ala Moana Boulevard	Honolulu	HI	96814	Douglas Kai	Ala Wai	1	7521	Automobile Parking	A6
23005004	IBM Ala Moana	1240 Ala Moana Boulevard	Honolulu	HI	96814	Douglas Kai	Ala Wai	1	7389	Business Services, NEC	A6
23006001	AOAO 1350 Ala Moana Blvd	1350 Ala Moana Boulevard	Honolulu	HI	96814	David Park	Ala Wai	1	6513	Apartment Building Operators	A6
23006003	Nauru Tower	1330 Ala Moana Boulevard	Honolulu	HI	96814	Emilio Alvarez	Ala Wai	1	6513 6531	Apartment Building Operators Real Estate Agents And Managers	A6
24008004	Maryknoll High School	1402, 1420 Punahou Street	Honolulu	HI	96822	Lester Oshiro	Makiki	1	8211	Elementary And Secondary Schools	A6
24009006	Jodo Mission of Hawaii	1429 Makiki Street	Honolulu	HI	96814	Rev. Yubun Narashiba	Makiki	1	6512 6531 8661	Nonresidential Building Operators Real Estate Agents And Managers Religious Organizations	A6
24011114	A Quick Stor of Hawaii	1227 Lunalilo Street	Honolulu	HI	96814	Charles Saromines	Ala Wai	1	8999	Services, NEC	A6
26005001	Fort DeRussy	2007 Kalakaua Avenue	Honolulu	HI	96815	Mark Rugenstein	Ala Wai	1	7011 7521 7999 8299 8412 8661	Hotels And Motels Automobile Parking Amusement And Recreation, NEC Schools And Educational Services Museums And Art Galleries Religious Organizations	A6
26010007	Ilikai Apartment Building	1777 Ala Moana Boulevard	Honolulu	HI	96815	John Popovich	Ala Wai	1	6513 6531	Apartment Building Operators Real Estate Agents And Managers	A6
26010011	The Modern Hotel and Restaurant	1775 Ala Moana Boulevard	Honolulu	HI	96816	Lance Underbrook	Ala Wai	1	5812 5813 7011	Eating Places Drinking Places Hotels And Motels	A6
26011013	ABC Store Hobron	1732 Ala Moana Boulevard	Honolulu	HI	96815	Roy Toguchi	Ala Wai	1	5411	Grocery Stores	A6
26011020	The Equus	1696 Ala Moana Boulevard	Honolulu	HI	96815	Jennifer Lynch	Ala Wai	1	6531 7011	Real Estate Agents And Managers Hotels And Motels	A6
27028003	AOAO Waialae Place	2845 Waialae Avenue	Honolulu	HI	96826	Donald Botasi	Manoa-Palolo	1	6513	Apartment Building Operators	A6
28024037	Hawaiian Humane Society	2700 Waialae Avenue	Honolulu	HI	96826	Keoni Vaughn	Ala Wai	1	8699	Membership Organizations, NEC	A6
28028007	Public Storage Waialae	2888 Waialae Avenue	Honolulu	HI	96826	Gloria Paet	Manoa-Palolo	1	8999	Services, NEC	A6
35016004	Blockbuster Video	4137 Waialae Avenue	Honolulu	HI	96816	Brie Andrade	Waialaenui	1	7841	Video Tape Rental	A7
35017001	Petland	4400 Kalaniana'ole Highway	Honolulu	HI	96821	Wally Austin	Waialaenui	1	5999	Miscellaneous Retail Stores, NEC	A7
35017004	Kahala Towers	4300 Waialae Avenue	Honolulu	HI	96816	Nathan Schlupp	Waialaenui	1	6513	Apartment Building Operators	A7
35017005	Golden Duck Kahala	4230 Waialae Ave	Honolulu	HI	96816		Waialaenui	1	5812	Eating Places	A7
35017007	Kahala Square East	4218 Waialae Avenue	Honolulu	HI	96816	Lellani Lowman	Waialaenui	1	1799 7231 8011 8071 8211 5812 7212	Special Trade Contractors, NEC Beauty Shops Offices And Clinics Of Medical Doctors Medical Laboratories Elementary And Secondary Schools Eating Places Garment Pressing And Cleaners' Agents	A7
35017043	Start of the Sea Church	4470 Aliioka Street	Honolulu			Lance Klock	Waialaenui	1	8221 8661	Colleges And Universities Religious Organizations	A7
39017041	Hawaii Kai Executive Plaza	6700 Kalaniana'ole Highway	Honolulu	HI	96821	Ricardo DeGuzman	Kamilonui	1	6411 8049	Insurance Agents, Brokers, And Service Offices Of Health Practitioner	A7
39017042	Hawaii Kai Executive Plaza Parking Lot	6700 Kalaniana'ole Highway	Honolulu	HI	96821	Ricardo DeGuzman	Kamilonui	1	7521	Automobile Parking	A7
39048008	24 Hour Fitness Hawaii Kai	7912 Kalaniana'ole Highway	Honolulu	HI	96825	Suzie Setzier	Kamiloiki	1	7991	Physical Fitness Facilities	A7

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39048048	First Hawaiian Bank Hawaii Kai	7110 Kalanianaʻole Highway	Honolulu	HI	96825	Suzie Setzier	Kamiloiki	1	6011	Federal Reserve Banks	A7
41004004	7-Eleven Wailea Street	41-849 Kalanianaʻole Highway	Waimanalo	HI	96795	Ryan Fujitani	Kahawai	1	5411	Grocery Stores	A7
41004044	Bobby's Waimanalo Market	41-867 Kalanianaʻole Highway	Waimanalo	HI	96795	Chris Hirayasu	Kahawai	1	5411	Grocery Stores	A7
41007035	Naturally Hawaiian Gallery and Gifts	41-1025 Kamehameha Highway	Waimanalo	HI	96795	Patrick Ching	Kahawai	1	5947 5999	Gift, Novelty, And Souvenir Shop Miscellaneous Retail Stores, NEC	A7
41009279	Waimanalo Health Center	41-1347 Kalanianaʻole Highway	Waimanalo	HI	96795	Randy Gillespie	Kahawai	1	8011	Offices And Clinics Of Medical Doctors	A7
41022003	7-Eleven Hughes Road 2	41-1540 Kalanianaʻole Highway	Waimanalo	HI	96795	Ryan Fujitani	Waimanalo	1	5411	Grocery Stores	A7
41022004	7-Eleven Hughes Road 1	41-1540 Kalanianaʻole Highway	Waimanalo	HI	96795	Ryan Fujitani	Waimanalo	1			A7
41022005	Waimanalo Feed Supply	41-1560 Kalanianaʻole Highway	Waimanalo	HI	96795	Stan Kodama	Waimanalo	1	5191	Farm Supplies	A7
41022007	Shima's Supermarket	41-606 Kalanianaʻole Highway	Waimanalo	HI	96795	Shawn Aweau	Waimanalo	1	5411	Grocery Stores	A7
42014004	Le Jardin Academy Inc.	917 Kalanianaʻole Highway	Kailua	HI	96734	Jeanell Adams	Kawainui	1	8221	Colleges And Universities	A8
42031143	Hawaiian Electric Co. Ulupii St.	1387 Ulupii Street	Kailua	HI	96734	Markham Lee	Kawainui	1	4911	Electric Services	A8
42051002	First Baptist Windward						Kawainui	1	8661	Religious Organizations	A8
42051003	Christ Church Uniting Disciples	1300 Kailua Road	Kailua	HI	96734	Paul Belanger	Kawainui	1	6531 8011 8021 8111	Real Estate Agents And Managers Offices And Clinics Of Medical Doctors Offices And Clinics Of Dentists Legal Services	A8
42051004	Castle Medical Center Parking Lot	640 Ulukahiki Street	Kailua	HI	96734		Kawainui	1	7521	Automobile Parking	A8
44019083	Lani Properties Group	44-707 Puamohala Street	Kaneohe	HI	96744	Vladimir Korolev	Kawa	1	6531	Real Estate Agents And Managers	A8
44023001	Pali Palms Plaza	970 N. Kalaheo Avenue	Kailua	HI	96734	Bill Ching	Kawainui	1	6531 8011 8021 8111	Real Estate Agents And Managers Offices And Clinics Of Medical Doctors Offices And Clinics Of Dentists Legal Services	A8
45034013	Hawaiian Memorial Park Cemetery North	45-425 Kamehameha Highway	Kaneohe	HI	96744		Kawa	1	6553	Cemetery Subdividers And Developers	A8
45035010	Hawaii Pacific University Windward	45-45 Kamehameha Highway	Kailua	HI	96734	E. Rick Stepien	Kaneohe	1	8221	Colleges And Universities	A8
45039021	Windward Eye Care / Family Dentistry	45-600 Kamehameha Highway	Kaneohe	HI	96744	Isaac Akuna	Kaneohe	1	8011	Offices And Clinics Of Medical Doctors	A8
45049025	Windward Chevrolet	45-467 Kaneohe Bay Drive	Kaneohe	HI	96744	Marc T. Lum	Kaneohe	1	5511	New And Used Car Dealers	A8
45060045	Calvary Episcopal Church & Preschool	45-435 Aumoku Street	Kaneohe	HI	96744	Nella Sword	Kaneohe	1	8351 8661	Child Day Care Services Religious Organizations	A8
45076043	King Windward Nissan 1	45-568 Kamehameha Highway	Kaneohe	HI	96744	Frank M. Ratajczyk	Kaneohe	1	5511	New And Used Car Dealers	A8
45076044	King Windward Nissan 2	45-568 Kamehameha Highway	Kaneohe	HI	96744	Frank M. Ratajczyk	Kaneohe	1	5511	New And Used Car Dealers	A8
47014014	RRR Recycling Services Hawaii	47-703 Kamehameha Highway	Kaneohe	HI	96744	Mikki	Kaalaea	1	9511	Air, Water, And Solid Waste Management	A9
47026001	Hygienic Store	47-528 Kamehameha Highway	Kaneohe	HI	96744	Myong Cha Kim	Kahaluu Segment	1	5411 5812 8661	Grocery Stores Eating Places Religious Organizations	A9
47041012	Island Wide Solar	47-671 Kamehameha Highway	Kaneohe	HI	96744	Yvonne Nielson	Halemoa	1	4931	Electric And Other Services Combined	A9
51005010	Fine Ass Chocolate and Coffee / Crouching Lion Inn	51-666 Kamehameha Highway	Kaaawa	HI	96730	Zondre Watson	Makaua	1	5812	Eating Places	A9
53008002	Punaluu Condo	53-567 Kamehameha Highway	Hauula	HI	96717	Kevin Aisup	Halehaa	1	6531	Real Estate Agents And Managers	A1
54012004	Hauula Korean BBQ	54-295 Kamehameha Highway	Hauula	HI	96717	Yong Song	Kaipapau	1	5411 5812	Grocery Stores Eating Places	A1
59011017	Sea Maids	59-53 Pahoe Road	Haleiwa	HI	96712	Susan Nilmi	Kalunawaikaala	1	5621 5941 5947	Women's Clothing Stores Sporting Goods And Bicycle Shops Gift, Novelty, And Souvenir Shop	A1
59011034	North Shore Dentistry	59-712A Kamehameha Highway	Haleiwa	HI	96712	Susan Nilmi	Kalunawaikaala	1	6531 8021	Real Estate Agents And Managers Offices And Clinics Of Dentists	A1
62007017	North Shore Tattoo	66-590 Kamehameha Highway	Haleiwa	HI	96712	Edmont P D'Ascoli	Helemano	1	7231 7299 7999 8041 9512	Beauty Shops Miscellaneous Personal Services Amusement And Recreation, NEC Offices And Clinics Of Chiropractors Land, Mineral, And Wildlife Conservation	A2

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
73001001	Pacific Island Auto Sales	116 Wilikina Drive	Wahiawa	HI	96786	James Perry	Kaukonahua	1	5521	Used Car Dealers	A5
73001012	Thai Food Mart	76 Wilikina Drive	Wahiawa	HI	96786	Buhachi & Yoshiko Furumizo Trust	Kaukonahua	1	5441 5812	Candy, Nut, And Confectionery Stores Eating Places	A5
73001018	Wahiawa Business Center	203 Kamehameha Highway	Wahiawa	HI	96786		Kaukonahua	1	5531 7231	Auto And Home Supply Stores Beauty Shops	A5
73001022	Top Value Auto	168 Wilikina Drive	Wahiawa	HI	96786	Stanley Ma	Kaukonahua	1	7521	Automobile Parking	A5
73002002	Walgreens Wahiawa Parking Lot	135 S. Kamehameha Highway	Wahiawa	HI	96786	Patrick Law	Kaukonahua	1	7521	Automobile Parking	A5
73002003	Walgreens Wahiawa	135 S. Kamehameha Highway	Wahiawa	HI	96786	Patrick Law	Kaukonahua	1	5912	Drug Stores And Proprietary Stores	A2
73002073	Surfer's Church	55 S. Kamehameha Highway	Wahiawa	HI	96786	Tom Bauer	Kaukonahua	1	8661	Religious Organizations	A2
73002088	Club Texas	35 S. Kamehameha Highway	Wahiawa	HI	96786	Joel Criz	Kaukonahua	1	5813	Drinking Places	A2
73004045	SN Realty	64 Kukui Street	Wahiawa	HI	96786	Soon Ae Shin	Kaukonahua	1	6531	Real Estate Agents And Managers	A2
73008065	Cox's Auto Sales					Sachiko Cox	Kaukonahua	1	5521	Used Car Dealers	A5
73012007	Michael's Barber Shop	1656 Wilikina Drive	Wahiawa	HI	96786	Peter Bulanow	Kaukonahua	1	7212 7219 7241	Garment Pressing And Cleaners' Agents Laundry And Garment Services, NEC Barber Shops	A2
73012008	H & R Block Wahiawa	1652 Wilikina Drive	Wahiawa	HI	96786	Peter Bulanow	Kaukonahua	1	7291	Tax Return Preparation Services	A2
73012010	Aloha Scuba	1640 Wilikina Drive	Wahiawa	HI	96786	Mark Kantelis	Kaukonahua	1	5941	Sporting Goods And Bicycle Shops	A2
73012013	New Life Christian Baptist	1640 Wilikina Drive	Wahiawa	HI	96786		Kaukonahua	1	8661	Religious Organizations	A5
74001009	Avocado Pawn Shop	190 S. Kamehameha Highway	Wahiawa	HI	96786	Min Ho Yang	Kaukonahua	1	5921 5932	Liquor Stores Used Merchandise Stores	A5
74001012	Taco Bell Wahiawa Parking Lot	162 S. Kamehameha Highway	Wahiawa	HI	96786	George Iloreta	Kaukonahua	1	5812 8322	Eating Places Individual And Family Services	A2
74001026	OOGP	505 Avocado Street	Wahiawa	HI	96786	Alexander Kaloi	Kaukonahua	1	5048	Ophthalmic Goods	A5
74003048	Military Auto Sales Hawaii	10 S. Kamehameha Highway	Wahiawa	HI	96786	Samuel Chen	Kaukonahua	1	5521	Used Car Dealers	A2
74003058	New Life Body Of Christ Church	74 S Kamehameha Highway	Wahiawa	HI	96786	Ruqayyah Singletary	Kaukonahua	1	8611	Business Associations	A2
74003064	Kimball Development Group LLC	70 Kamehameha Highway	Wahiawa	HI	96786	John Kimball	Kaukonahua	1	6141 8661	Personal Credit Institutions Religious Organizations	A2
74004031	Nu-Image	10 N. Kamehameha Highway	Wahiawa	HI	96786	Thomas K. Santos	Kaukonahua	1	5621 5731 7299 7622	Women's Clothing Stores Radio, Television, And Electronic Stores Miscellaneous Personal Services Radio And Television Repair	A2
74004065	Car Audio & Security Specialists	36 N. Kamehmeha Highway	Wahiawa	HI	96786	Dirar Rashid	Kaukonahua	1	5531	Auto And Home Supply Stores	A2
85008048	Valentina's Ristorante	85-915 Farrington Highway	Waianae	HI	96792	Slevina Kiyadu	Kaupuni	1	5812	Eating Places	A3
85011013	Waianae Law	85-033 Farrington Highway	Waianae			Anson O. Rego	Kaupuni	1	8111	Legal Services	A3
85011016	Waianae Store 3	85-863 Farrington Highway	Waianae	HI	96792	Kris Okimoto	Kaupuni	1	5411	Grocery Stores	A3
85011017	Waianae Store 2	85-867 Farrington Highway	Waianae	HI	96792	Kris Okimoto	Kaupuni	1	7251	Shoe Repair And Shoeshine Parlors	A3
85012003	Waianae Express	85-810, 810A, 810B, 812, 814 Farrington Highway	Waianae	HI	96792	Mrs. Kwak	Kaupuni	1	5411	Grocery Stores	A3
85012007	Waianae Cleaners	85-784 Farrington Highway	Waianae	HI	96792	Robert LeStronge	Kaupuni	1	7216	Drycleaning Plants, Except Rugs	A3
85013013	Hawaiian Telcom Waianae	85-677 Farrington Highway	Waianae	HI	96792	Harlen Hashimoto	Kaupuni	1	4813	Telephone Communication, Except Radio	A3
86018020	Church Waianae	86-72 Farrington Highway	Waianae	HI	96792	Herbert Souza Jr.	Maillili	1	8211 8661	Elementary And Secondary Schools Religious Organizations	A3
86018027	Tamura's Parking Lot	86-35 Analipo Street	Waianae	HI	96792	Karl Nashiro	Maillili	1	7521	Automobile Parking	A3
87011040	Bliss	87-132 Farrington Highway	Waianae	HI	96792	Francis Kawashima	Maillili	1	5932 8322	Used Merchandise Stores Individual And Family Services	A3
87011081	Mailli Sunset Parking Lot	87-70 Farrington Highway	Waianae	HI	96792	Dave Hinterrieter	Maillili	1	7521	Automobile Parking	A3
87011082	Mailli Sunset 1	87-70 Farrington Highway	Waianae	HI	96792	Dave Hinterrieter	Maillili	1	5812 7231 7299	Eating Places Beauty Shops Miscellaneous Personal Services	A3
87011083	Mailli Sunset 2	87-060 Farrington Highway	Waianae	HI	96792	Dave Hinterrieter	Maillili	1	5812 7299 8661	Eating Places Miscellaneous Personal Services Religious Organizations	A3

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87013054	Mailli Pink Market	87-368 Farrington Highway	Waianae	HI	96792	Young Do	Mallili	1	5411	Grocery Stores	A3
91002131	Calvary Chapel / West Oahu	91-928 Fort Weaver Road	Ewa Beach	HI	96706	Felix Tan	Kaloi	1	8661	Religious Organizations	A4
91013097	Tamura's Kapolei	91-1051 Enterprise Ave	Kapolei	HI	96707	Mike Nitta	Kaloi	1	5411	Grocery Stores	A4
91014026	Vacant Lot Malakole Street	91-550 Malakole Street	Kapolei	HI	96707	Mary Emerson	Makaiwa	1	8999	Services, NEC	A4
91015026	Kapolei Commons	4450 Kapolei Parkway	Kapolei	HI	96707	Aina Nui Corp	Kaloi	1	5311 5812 5999 6011 7231	Department Stores Eating Places Miscellaneous Retail Stores, NEC Federal Reserve Banks Beauty Shops	A4
91015030	Kapolei Commons	4450 Kapolei Parkway	Kapolei	HI	96707	Aina Nui Corp	Makaiwa	1	5311 5812 5999 6011 7231	Department Stores Eating Places Miscellaneous Retail Stores, NEC Federal Reserve Banks Beauty Shops	A4
91017058	Child & Family Services	91-1821 Fort Weaver Road	Ewa Beach	HI	96706	Diane Reece	Honouliuli	1	8063 8069 8093 8211 8361	Psychiatric Hospitals Specialty Hospitals, Except Psychiatric Specialty Outpatient Clinics, NEC Elementary And Secondary Schools Residential Care	A5
91034024	Bank of Hawaii Ewa Beach	91-771 Papipi Road	Ewa Beach	HI	96706	Peter Hayasw	Kaloi	1	6021	National Commercial Banks	A4
91075033	Hawaii Self Storage Kapolei	2009 Lauwiliwili Street	Kapolei	HI	96707	Leroy Perreira	Makaiwa	1	8999	Services, NEC	A4
94010101	West Oahu Christian Church Lot	94-219 Waikele Road	Waipahu	HI	96797	Dennis Nagatani	Waikele	1	8661	Religious Organizations	A5
94011056	St. Joseph Church & School	94-651 Farrington Highway	Waipahu	HI	96797	Corazon Tubana	Kapakahi	1	8211 8661	Elementary And Secondary Schools Religious Organizations	A5
94011072	Waipahu Physical Therapy 1	94-689 Farrington Highway	Waipahu	HI	96797	Thomas Tan	Kapakahi	1	8049	Offices Of Health Practitioner	A5
94011073	Waipahu Physical Therapy 2	94-689 Farrington Highway	Waipahu	HI	96797	Thomas Tan	Kapakahi	1	8049	Offices Of Health Practitioner	A5
94014007	Bank of Hawaii Waipahu	94-712 Farrington Highway	Waipahu	HI	96846	Karen N. Yamamoto	Kapakahi	1	6021	National Commercial Banks	A5
94014008	Bank of Hawaii Waipahu Parking Lot 1	94-712 Farrington Highway	Waipahu	HI	96846	Karen N. Yamamoto	Kapakahi	1			A5
94014017	Hitachi Midtown Radio	94-688 Farrington Highway	Waipahu	HI	96797	Karen N. Yamamoto	Kapakahi	1	5722	Household Appliance Stores	A5
94014073	Bank of Hawaii Waipahu Parking Lot 2	94-712 Farrington Highway	Waipahu	HI	96797	Karen N. Yamamoto	Kapakahi	1			A5
94015020	Waipahu Psychic Studio	94-779 Farrington Highway	Waipahu	HI	96797	Ireno Viernes Junior	Kapakahi	1	7999	Amusement And Recreation, NEC	A5
94015022	Servco Pacific Waipahu West	94-729 Farrington Highway	Waipahu	HI	96797	Van Peterson	Kapakahi	1	5511	New And Used Car Dealers	A5
94015023	Servco Pacific Waipahu East	94-729 Farrington Highway, Honolulu, HI 96803	Honolulu	HI	96803	Van Peterson	Kapakahi	1	5511	New And Used Car Dealers	A5
94017007	Animal Clinic Waipahu	94-810 Moloalo Street	Waipahu	HI	96797	Edwin Ohta	Kapakahi	1	0742 5231 5722 5941 7699 8299	Veterinary Services, Specialties Paint, Glass, And Wallpaper Stores Household Appliance Stores Sporting Goods And Bicycle Shops Repair Services, NEC Schools And Educational Services	A5
94019006	Car Audio Tech Waipahu	94-871 Farrington Highway	Waipahu	HI	96797	Corwin K. Taketa	Kapakahi	1	5731 7299 8011	Radio, Television, And Electronic Stores Miscellaneous Personal Services Offices And Clinics Of Medical Doctors	A5
94019056	Club Ruby	94-839 Farrington Highway	Waipahu	HI	96797	Thomas Kiyabu	Kapakahi	1	5411 5813	Grocery Stores Drinking Places	A5
94027127	West Oahu Christian Church	94-420 Farrington Highway	Waipahu	HI	96797	Dennis Nagatani	Waikele	1	8661	Religious Organizations	A5
94048027	Aloha Kia Waipahu	94-074 Leonui St.	Waipahu	HI	96797	Howard Finley	Waikele	1	5511	New And Used Car Dealers	A5
94049020	Waipahu Medical Center	94-307 Farrington Highway	Waipahu		96797		Waikele	1	8011 8021 8093 8099	Offices And Clinics Of Medical Doctors Offices And Clinics Of Dentists Specialty Outpatient Clinics, NEC Health And Allied Services, NEC	A5
94049060	Cutter Dodge Waipahu	94-245 Farrington Highway	Waipahu	HI	96797	Peter K Hepa III	Waikele	1	5181 5511	Beer And Ale New And Used Car Dealers	A5

TMK	Facility Name	Street Address	City	State	Zip Code	Storm Water Contact	Watershed	Priority	SIC Code	SIC Description	Area Map
95009040	Jungle Juice Market	95-20 Waihau Street	Mililani	HI	96789	Yong B. Suh	Waikele	1	5411 5921 5932 7215 7241	Grocery Stores Liquor Stores Used Merchandise Stores Coin-Operated Laundries And Cleaning Barber Shops	A5
95021010	Hawaiian Telcom Inc.	95-275 Kipapa Drive	Mililani	HI	96789	Harlan Hashimoto	Waikele	1	4813 4841 7375	Telephone Communication, Except Radio Cable And Other Pay Television Services Information Retrieval Services	A5
95021017	Fairview Plaza	95-119 Kamehameha Highway	Mililani	HI	96789		Waikele	1	5411 7997	Grocery Stores Membership Sports And Recreation Clubs	A5
97020069	Pearl City Jehovah's Witness	897 2nd Street, Pearl City	Pearl City	HI	96782	Roy Yanagihara	Waiawa	1	8661	Religious Organizations	A6
97022001	Leeward Health Center	870 Fourth Street	Pearl City	HI	96782		Waimalu	1	6324 9211	Hospital And Medical Service Plans Courts	A6
97022008	Cutter Dodge Service Center	905 Kamehameha Highway	Pearl City	HI	96782	Dan Kawamoto	Waiawa	1	5511 7538 7542	New And Used Car Dealers General Automotive Repair Shops Carwashes	A6
97022010	Tesoro 2-Go	910 Kamehameha Highway	Pearl City	HI	96782	Norman Stewart	Waiawa	1	5411	Grocery Stores	A6
97022021	Cutter Dodge Sales Center	905 Kamehameha Highway	Pearl City	HI	96782	Joseph Isales	Waiawa	1	5511	New And Used Car Dealers	A6
97023018	Public Storage Pearl City	989 Kamehameha Highway	Pearl City	HI	96782	Tiare Maulupe	Waiawa	1	8999	Services, NEC	A6
97031023	Pearl City Hair Styling	880 Kamehameha Highway	Pearl City	HI	96782	Chaz-zoy Davenport	Waimalu	1	7231 7291	Beauty Shops Tax Return Preparation Services	A6
97034028	Industrial Commercial	765 Kamehameha Highway	Pearl City	HI	96782	Rod Bruno	Waimalu	1	8661	Religious Organizations	A6
98009014	Tony Hyundai 1	98-069 Kamehameha Highway	Aiea	HI	96701	Michael Koga	Waimalu	1	5511	New And Used Car Dealers	A6
98009015	Tony Hyundai 2	98-073 Kamehameha Highway	Aiea	HI	96701	Michael Koga	Waimalu	1	5511	New And Used Car Dealers	A6
98009016	Tony Hyundai 3	98-075 Kamehameha Highway	Aiea	HI	96701	Michael Koga	Waimalu	1	5511	New And Used Car Dealers	A6
98010002	Nutrishop	98-080 Kamehameha Highway	Aiea	HI	96701	Cherish Manuel	Waimalu	1			A6
98010009	Red Diamond Tattoo	98-064 Kamehameha Highway	Aiea	HI	96701	Ryoma Uno	Waimalu	1	6163 7231 7299	Loan Brokers Beauty Shops Miscellaneous Personal Services	A6
98015044	Citi Financial	98-199 Kamehameha Highway	Aiea	HI	96701	Garrett Littman, PCCP/LDC Pearl Kai	Kalauao	1	6021	National Commercial Banks	A6
98018021	Go Bananas Parking Lot	98-390 Kamehameha Highway	Aiea	HI	96701	Clinton Ho	Aiea	1	5521 6411 7379 7521 8049	Used Car Dealers Insurance Agents, Brokers, And Service Computer Related Services, NEC Automobile Parking Offices Of Health Practitioner	A6
98018027	Best Auto Group West	98-350 Kamehameha Highway	Aiea	HI	96701	Bob Homodi	Kalauao	1	5511	New And Used Car Dealers	A6
98018039	Tamura's Aiea	98-302 Kamehameha Highway	Aiea	HI	96701	Richard Howard	Kalauao	1	5411 5812	Grocery Stores Eating Places	A6
98021059	Shaka Auto Sales	425 Kamehameha Highway	Pearl City	HI	96782	Michael Hirokawa	Waimalu	1	5521 6411 7379 8049	Used Car Dealers Insurance Agents, Brokers, And Service Computer Related Services, NEC Offices Of Health Practitioner	A6
98022080	Takahashi Property	98-104 Kanuku Street	Aiea	HI	96701	Mark Takahashi	Waimalu	1	6519	Real Property Lessors, NEC	A6
67002009	Waialua High and Intermediate School						Kaukonahua		8211	Elementary And Secondary Schools	A2
67002010	Waialua High and Intermediate School						Kiikii		8211	Elementary And Secondary Schools	A2
67002029	Waialua High and Intermediate School						Kaukonahua		8211	Elementary And Secondary Schools	A2
67002030	Waialua High and Intermediate School	67-595C Kahui Street	Waialua	HI	96791	Virg Basilio	Kaukonahua		8211	Elementary And Secondary Schools	A2
87017065	87-1454 Farrington Highway	87-1454 Farrington Highway	Waianae	HI	96792	Fred Calleon	Ulehawa				A3
89002001	Nanakuli Village Center	89-102 Farrington Highway	Waianae	HI	96792		Nanakuli		6513	Apartment Building Operators	A4
15041042	U.S. Coast Guard	400 Sand Island Parkway Road	Honolulu	HI	96819	Richard McMillan	Nuuanu		9621	Regulation, Administration Of Transportation	A6

Appendix C

Revised Audit Work Plan, November 2016

State of Hawaii Department of Transportation

Office of Environmental Compliance



Revised Audit Work Plan

State Project No. OSC-15-01

November 2016

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List of Acronyms

ACR	Annual Compliance Report
AWPC	Audit Work Plan Commencement
BMP	best management practice
CD	Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC)
CFR	Code of Federal Regulations
DOH	Department of Health
EPA	United States Environmental Protection Agency
HAR	Hawaii Administrative Rules
HARP	Hazard Appraisal and Recognition Plan
HDOT	State of Hawaii Department of Transportation
MEP	maximum extent practicable
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PEAR	Program Element Audit Report
PM	Project Manager
QA	quality assurance
QC	quality control
SWMPP	Storm Water Management Program Plan

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Section 1: Introduction, Purpose, and Goals

Under Paragraph 10.d of the Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC) entered on 5 November 2014 (CD) with the United States Environmental Protection Agency (EPA) and the State of Hawaii (State) Department of Health (DOH), the State of Hawaii Department of Transportation (HDOT) is required to perform compliance audits of Municipal Separate Storm Sewer System (MS4)¹ permits issued to HDOT's Airports, Highways, and Harbors Divisions (referred to herein as the singular "MS4 Permit Audit"). Specific requirements for the MS4 Permit Audit are defined in Appendix A of the CD and included in Appendix A of this document. The MS4 Permit Audit will be conducted in accordance with this Audit Work Plan (AWP) by Kennedy/Jenks Consultants (Kennedy/Jenks), the selected independent third-party audit firm.

This AWP was conditionally approved by EPA & DOH on 31 October 2016. As memorialized in the conditional approval letter, HDOT will begin the audit on 15 March 2017. This date is hereafter referred to as the AWP Commencement date (AWPC). This AWP includes project milestones with defined dates in some cases (e.g., "15 April 2017") while other dates may be specified relative to the AWPC (e.g., "30 days after AWPC"). All "days" in this AWP refer to calendar days as opposed to business days.

The defined purpose of the MS4 Permit Audit is to assess HDOT's current regulatory and administrative compliance with its MS4 permits, DOH National Pollutant Discharge Elimination System (NPDES) General Permit Coverage Authorizing Discharges of Storm Water and Certain Non-Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Hawaii Small MS4 General Permit), applicable Storm Water Management Program Plans (SWMPs), and the CD.

The defined goals of the MS4 Permit Audit focus on meeting the requirements listed in Appendix A of the CD, including:

- Evaluating compliance with HDOT MS4 permits and the CD
- Identifying information gathered during the MS4 Permit Audit that may be used to promote information and technology transfer between HDOT Divisions
- Identifying Potential Violations (areas where the evaluation found the permittee not in compliance with a specific permit requirement or SWMP commitment) and Deficiencies (items which, if not corrected, may be anticipated to lead to Potential Violations) in HDOT's stormwater programs and assisting with timely self-correction of identified Potential Violations and Deficiencies by HDOT.

¹ The MS4 refers to the conveyance system in addition to the jurisdiction(s) which own/operate the system.

In addition to meeting the CD requirements and EPA & DOH expectations, the overarching goal of the MS4 Permit Audit is to develop internal trust and collaboration within HDOT. The Audit Team will seek HDOT-wide opportunities for improvement rather than focusing on minor issues of non-compliance.

Reporting requirements of the MS4 Permit Audit are defined in Appendix A Section D.7. of the CD and include:

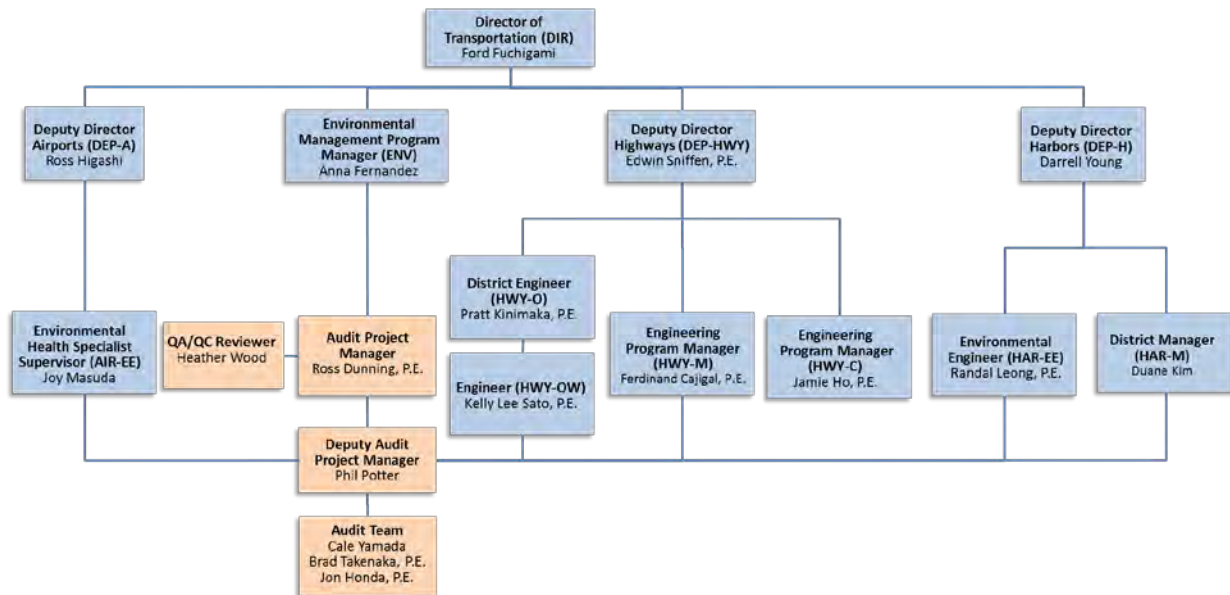
- A specific statement of the procedures followed, HDOT sites and activities visited, and all materials reviewed during the MS4 Permit Audit
- Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and providing recommendations to modify, streamline, or augment them in accordance with what has been learned during the MS4 Permit Audit, as appropriate.
- Identification of Potential Violations and Deficiencies and of MS4 permit conditions, applicable SWMPPs, the CD, and/or other applicable regulations, and providing recommendations for improvements as found to be appropriate
- Identification of best practices and opportunities for information/technology transfer to be applied across the three HDOT Divisions
- An analysis of the practices implemented for each HDOT Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report will clearly describe impediments identified.

In accordance with requirements defined in Appendix A of the CD, EPA's *MS4 Program Evaluation Guidance* (hereinafter EPA (2007) guidance) was consulted in the development of this AWP. The audit protocols included herein are intended to promote consistency among regulated facilities when conducting environmental audits and to validate that the MS4 Permit Audit is conducted in a thorough and comprehensive manner. Program evaluation worksheets (included in Appendix B) were developed to guide the Audit Team while performing the MS4 Permit Audit. Each worksheet addresses a separate program element, and includes key questions derived from the EPA (2007) guidance document recommended to be considered during an MS4 evaluation. While this AWP is based on the EPA (2007) guidance for auditing small MS4s, HDOT has adapted the guidance to focus some aspects of the audit process to reflect the unique nature of HDOT operations.

Section 2: Audit Team and HDOT Personnel

Figure 2-1 provides an organizational chart defining the Audit Team and HDOT staff that will be involved in the MS4 Permit Audit.

Figure 2-1 Organizational Chart



Additional information describing key MS4 Permit Audit personnel is provided below.

HDOT Project Manager – Anna Fernandez

In her role as Environmental Program Manager, Anna Fernandez reports directly to the HDOT Director. She serves as the HDOT Project Manager (PM) for this project. In this role, she administers and manages Kennedy/Jenks in performing the MS4 Permit Audit and their contact with HDOT leaders and stakeholders.

Deputy Director(s)

Deputy Directors report directly to the HDOT Director. They are responsible for facilitating the Audit Team's access to HDOT personnel and facilities within their respective Divisions as appropriate. The following Deputy Directors will be directly involved in the MS4 Permit Audit process:

Airports (DEP-A) – Ross Higashi
Highways (DEP-HWY) – Edwin Sniffen, P.E.
Harbors (DEP-H) – Darrell Young

MS4 Permit Coordinator(s)

MS4 Permit Coordinators are those HDOT personnel responsible for managing compliance with the MS4 permit for each Division, district, or designated MS4 permitted area. The following MS4 Permit Coordinators will be directly involved in the MS4 Permit Audit process:

Airports (AIR-EE) – Joy Masuda (Environmental Health Specialist Supervisor)
Oahu Highways (HWY-OW) – Kelly Lee Sato, P.E. (Engineer)
Maui Highways (HWY-M) – Ferdinand Cajigal, P.E. (Engineering Program Manager)
Oahu Harbors (HAR-EE) – Randal Leong, P.E. (Environmental Engineer)
Maui Harbors (HAR-M) – Duane Kim (District Manager)

Additional Key MS4 Permit Audit Personnel

The following key staff will also be consulted throughout the MS4 Permit Audit Process:

District Engineer (HWY-O) - Pratt Kinimaka, P.E.
Engineering Program Manager (HWY-C) - Jamie Ho, P.E.

Audit Project Manager – Ross W. Dunning, P.E. / Principal (Kennedy/Jenks)

Ross is a Principal of Kennedy/Jenks and leads their companywide stormwater practice. He has assisted many Western U.S. Port authorities for almost 20 years with development of strategies and stormwater management plans to address Clean Water Act and NPDES regulations. He is Kennedy/Jenks' point of contact for the HDOT PM, and manages the Audit Team to verify that MS4 Permit Audit procedures and reports meet CD requirements and are on schedule. The Audit PM is responsible for updating this Audit Work Plan (with the approval of the HDOT PM), producing schedules, preparing audit reports, and maintaining audit records.

Lead Quality Assurance/Quality Control (QA/QC) Reviewer: Heather Wood
(Kennedy/Jenks)

Heather is the former Director of Sustainability for the Port of Virginia, responsible for development of their environmental programs and permit compliance (including NPDES). Heather is also the former Chair of the American Association of Port Authorities Environmental Committee. She is Kennedy/Jenks' Ports and Harbors Sector Leader. In her role as the Lead QA/QC Reviewer, she will direct the review of MS4 Permit Audit work products, including draft and final audit reports, by qualified Kennedy/Jenks staff.

Deputy Audit Project Manager – Phil Potter (Kennedy/Jenks)

Phil is based in Kennedy/Jenks' Honolulu office and leads the firm's stormwater practice in Hawaii. For over 8 years, he has assisted municipal clients including the HDOT Highways Oahu District and the City and County of Honolulu with development and implementation of their NPDES compliance programs. In his role as the Deputy Audit PM, Phil is responsible for assisting the Audit PM in the execution of the Audit Work Plan and will directly coordinate with the HDOT MS4 Permit Coordinators and other stakeholders.

Auditors – Cale Yamada; Brad Takenaka, P.E.; Jon Honda P.E. (Kennedy/Jenks)

Cale, Brad, and Jon are experienced stormwater professionals in Kennedy/Jenks' Honolulu office. Among their many stormwater projects, they currently assist the City and County of Honolulu with ongoing development and implementation of its municipal stormwater program including, but not limited to, providing periodic MS4 program compliance inspections for hundreds of City and County industrial facilities throughout the island of Oahu.

Auditors are responsible for performing inspections of HDOT facilities and documentation, and performing interviews with HDOT employees responsible for MS4 program implementation and management in order to assess compliance with applicable MS4 program and CD requirements. Auditors are also responsible for coordinating with the Audit PM and Deputy Audit PM regarding any Potential Violations and Deficiencies identified. Hereinafter, the "Audit Team" refers to the Kennedy/Jenks' staff introduced above.

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Section 3: Audit Notes and Guidelines

This Section addresses various topics intended to guide the Audit Team in completing the MS4 Permit Audit in a safe and efficient manner.

3.1 Health, Safety, and Site Access Considerations

Prior to initiating onsite evaluations (see Section 5.2), the Audit PM will lead the Audit Team in developing a Hazard Appraisal and Recognition Plan (HARP), following Kennedy/Jenks' standard safety program. The HARP describes how to identify and analyze safety risks associated with field activities, operations, and facilities; approaches for mitigating identified risks; and processes for documenting and reporting accidents, near misses, and potentially unsafe conditions which may be encountered in the field. The HARP is a "living document" which will be updated as appropriate throughout the term of the MS4 Permit Audit. The Audit Team will wear appropriate personal protective equipment (hard hat, safety vest, safety shoes, protective eyewear, and hearing protection as appropriate) while performing the onsite evaluations.

Harbors Facilities

At this time, no special security clearances or requirements are defined to be necessary at Harbors facilities and/or project sites, as long as the Audit Team is escorted by personnel with valid Transportation Worker Identification Credentials (TWIC) and documentation of Maritime Security (MARSEC) Facility Security Awareness training certification. Active loading or unloading of cargo may necessitate additional safety requirements at certain pier locations.

Airports Facilities

At this time, Airports Division facilities to be evaluated are anticipated to be outside secured air operations areas; therefore, no special requirements or clearances are defined to be necessary. Adequate notice will be provided to the Airports Division MS4 Permit Coordinator to arrange security escort as found to be necessary.

Highways Facilities

At this time, there are no defined security restrictions to access Oahu District or Maui District Highway facilities as the Audit Team will be escorted by HDOT personnel at all times.

3.2 Quality Control Procedures

The Audit PM is responsible for ensuring that Kennedy/Jenks' effort and deliverables meet their company's professional mandate to consistently perform work in a technically correct manner, meeting the standard of care for their profession. The standard of care is defined to represent the watchfulness, attention, caution, prudence, and skill that other qualified professionals in the same or similar circumstances would exercise.

Kennedy/Jenks' quality assurance (QA) program includes processes and procedures developed over their near century-old history to achieve and maintain a rigorous level of quality, planning,

application, and verification. Its quality control (QC) program implements this process and QC reviewers will continuously monitor their effort and work products on this project to meet contract and CD requirements, Kennedy/Jenks' QA/QC standards, and HDOT's expectations.

3.3 Photographs

Digital photographs collected and archived during the course of the MS4 Permit Audit will be managed in accordance with EPA's *Digital Camera Guidance for EPA Civil Inspections and Investigations* (2006). Photographs taken will be organized into photograph logs with each photograph numbered with the date and time included. A brief photograph caption will identify the facility or site name, describe what is depicted in the photograph, the location, direction, and other pertinent data (e.g., the location within the facility or site) as appropriate.

3.4 "Maximum Extent Practicable" Concept

Unlike NPDES industrial wastewater permits which typically contain specific end-of-pipe effluent limits based on water quality standards or available treatment technology, HDOT's MS4 permits include programmatic requirements involving the implementation of BMPs in order to reduce pollutants discharged to the "maximum extent practicable" (MEP). In addition, HDOT's permits allow flexibility in the types of BMPs and activities implemented to meet permit requirements. There is also added complexity in evaluating several similar permits applicable to the very different operations conducted at HDOT Highways, Airports, and Harbors facilities. This makes it challenging to assess the true effectiveness of HDOT's several MS4 stormwater programs and how they may be integrated.

Per EPA (2007) guidance, HDOT is considered a non-traditional MS4 permittee, and as such, the evaluation of its MS4 programs will be specific to their particular circumstances and applicable permit requirements. Some HDOT MS4 permits contain broad requirements that outline the basic SWMPP components the permittee is required to implement, giving the permittee the flexibility to develop a program to meet these broad requirements. Other MS4 permits are more prescriptive and specify in detail the minimum activities and best management practices (BMPs) for each program element.

Given these inherent operational differences and challenges, each HDOT permittee has traditionally applied different approaches to comply with specific permit requirements based on MS4-specific traits or issues. For example, EPA regulations require permittees to develop "procedures for site inspection and enforcement" for addressing construction activities. Few MS4 permits specify how the permittee should inventory their active construction projects or track enforcement activities. A permittee with only a few construction projects a year may be able to use a paper system to inventory and track construction projects. A permittee with hundreds or thousands of construction projects would likely need a database or similar electronic tracking system to ensure it was implementing the program to a level considered to meet MEP.

It is relatively straightforward to assess whether HDOT has developed certain programs and conducted various activities that are called for and within the timeframes specified in each of the permits under consideration, as well as activities or programs specified under SWMPPs or other documents prepared by HDOT. The challenge for the Audit Team and HDOT is to assess

whether the programs and activities implemented have or will constitute MEP. EPA (2007) guidance will assist with this determination, but is not definitive. Determination requires application of the Audit Team's best professional judgment.

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Section 4: Audit Structure and Schedule

For each of the six program elements required to be reviewed by the CD, Kennedy/Jenks will review the six permitted MS4 programs concurrently, developing six Program Element Audit Reports (Final PEARs) that represent the culmination of the auditing efforts across the three HDOT Divisions.

Appendix A of the CD defines various project milestones and deadlines, described for ease of reference below:

Table 4-1 CD Appendix A Deadlines

Program Element	Evaluation Complete: ^(a)	Draft PEAR to HDOT: ^(d)	HDOT Review of Draft PEAR: ^(e)	Final PEAR to HDOT: ^(f)
PEAR #1: Post-Construction Runoff Control / Permanent Best Management Practices	3 Months (90 Days) ^(b) After AWPC ^(c) 13 June 2017	135 Days After AWPC 28 July 2017	165 Days After AWPC 27 August 2017	210 Days After AWPC 11 October 2017
PEAR #2: Construction Site Runoff Control	9 Months (270 Days) After AWPC 10 December 2017	315 Days After AWPC 24 January 2017	345 Days After AWPC 23 February 2017	390 Days After AWPC 9 April 2018
PEAR #3: Public Outreach / Public Involvement	15 Months (450 Days) After AWPC 8 June 2018	495 Days After AWPC 23 July 2018	525 Days After AWPC 22 August 2018	570 Days After AWPC 8 October 2018
PEAR #4: Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Programs	21 Months (630 Days) After AWPC 5 December 2018	675 Days After AWPC 19 January 2019	705 Days After AWPC 18 February 2019	750 Days After AWPC 4 April 2019
PEAR #5: Pollution Prevention / Good Housekeeping	27 Months (810 Days) After AWPC 3 June 2019	855 Days After AWPC 18 July 2019	885 Days After AWPC 17 August 2019	930 Days After AWPC 1 October 2019
PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability	33 Months (990 Days) After AWPC 30 November 2019	1035 Days After AWPC 14 January 2020	1065 Days After AWPC 13 February 2019	1110 Days After AWPC 29 March 2020

Notes:

- (a) "Evaluation" as referenced in CD Appendix A Section B.5. is defined in this AWP to represent the conclusion of the Post-Onsite Evaluation Review Period (See Section 5.2.3) for PEARs #1, 2, 4, and 5. For PEARs #3 and 6, no onsite evaluation is required and therefore "evaluation" is defined to represent the date of conclusion of the Records Review period. Please refer to Appendix C for more detail.

- (b) "Months" are based on 30-day months in this AWP.
- (c) AWPC = Audit Work Plan Commencement (15 March 2017)
- (d) Pursuant to CD Appendix A Section D.2., Kennedy/Jenks will complete a draft audit report and transmit it to HDOT within 45 days of completing an audit of a program element (defined in this AWP as the conclusion of "evaluation", as discussed in Note (a)).
- (e) Pursuant to CD Appendix A Section D.3., HDOT will review the draft PEAR to correct any factual inaccuracies within 30 days of receipt.
- (f) Pursuant to CD Appendix A Section D.4., Kennedy/Jenks will complete a final PEAR within 120 days of completing an audit of a program element (defined in this AWP as the conclusion of "evaluation", as discussed in Note (a)).

Section 5: Program Element Audits

Each program element audit will follow a similar schedule and structure, discussed generally in this section. The Program Element Audits will occur over a 37-month period depicted graphically below (Figure 5-1):

Figure 5-1 Program Element Audit Schedule

	2017												2018												2019												2020			
PEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
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Appendices B1 - B6 list the basic information anticipated to be reviewed for each MS4 program element to be audited. The Audit Team will utilize worksheets provided in Appendices B1 - B6 to collect and track information for each MS4 permit and element. References to Appendices C1 - C6 are also included, defining specific schedules for each of the six PEARs. Each Program Element Audit will include three phases (Pre-Audit, Onsite Evaluation, and Reporting), detailed in the following sections.

5.1 Pre-Audit

This Section describes the first phase of each Program Element Audit.

5.1.1 Notice of Audit

The Audit Team will schedule events, confirm appropriate participants, and begin planning the upcoming program element audit with the HDOT PM prior to initiating each Program Element Audit (Appendices C1 - C6 Item 1). The HDOT PM will coordinate with the MS4 Permit Coordinators to provide the following for each of the six MS4 permits:

- Facility or Division-specific SWMPPs
- Recent Annual Reports
- Documentation of required training, inspection reports, legal enforcement correspondence, if any, etc.
- Relevant memoranda of understanding with adjacent or contributing agencies, municipalities, etc.
- Organizational charts specifically listing HDOT staff with MS4 permit authority and responsibility.

The HDOT PM will coordinate with the MS4 Permit Coordinators to identify individuals and stakeholders that should be engaged during the MS4 Permit Audit.

5.1.2 Records Request

The Audit Team will review those sections of the NPDES permits, SWMPPs, guidance documents, the CD, etc. pertinent to the each individual audit element. Based on this review, the Audit Team will develop a records request and submit it to the HDOT PM (Appendices C1 - C6 Item 2). Where documentation is required (completed forms, logs, sign-in sheets, etc.), the Audit Team will request a subset of relevant records for verification. Electronic records are preferred, but physical copies of hard copy records are also acceptable. The HDOT PM will work with the MS4 Permit Coordinators to acquire and provide requested records to the Audit Team (Appendices C1 - C6 Item 3).

5.1.3 Records Review

The Audit Team will compare the program element requirements and commitments identified in the NPDES permits, SWMPPs, CD, annual reports, etc. and the records obtained in the record review (Appendices C1 - C6 Item 4). This review will be informed to the extent appropriate by the interview questionnaire provided in Appendices B1 - B6. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators may be conducted during this period.

5.2 Onsite Evaluation

This Section describes the second phase of each Program Element Audit.

5.2.1 Pre-Onsite Evaluation Conference Call

The Audit Team and HDOT PM will contact each MS4 Permit Coordinator to confirm schedules, address questions and security concerns, confirm personnel safety equipment needed, and organize training and orientation briefings that may be required (Appendices C1 - C6 Item 5).

5.2.2 Onsite Evaluation

For work planning purposes, it is assumed that onsite evaluations for each Program Element will be conducted over the course of five (5) days (except for PEAR #4, which requires an extra day). Detailed activity descriptions and schedules are included in Appendices C1 - C6 (Item 6). It should be noted that following EPA (2007) guidance, PEAR #3 and PEAR #6 do not require onsite evaluations². The onsite evaluations for each Program Element are tentatively scheduled during the following time periods (Table 5-1):

² Although no on-site evaluation is required for PEAR #3 (Public Outreach / Public Involvement Program), the Audit Team will endeavor to identify and attend events such as Harbors' tenant outreach in order to gain a well-rounded understanding of this program.

Table 5-1 Tentative On-Site Evaluation Dates

PEAR	On-Site Evaluation
PEAR #1: Post-Construction / Permanent Best Management Practices	Tuesday 30 May 2017 to Monday 5 June 2017
PEAR #2: Construction Site Runoff Control	Monday 27 November 2017 to Friday 1 December 2017
PEAR #3: Public Outreach / Public Involvement Program	[none required]
PEAR #4: Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program	Monday 19 November 2018 to Wednesday 28 November 2018
PEAR #5: Pollution Prevention / Good Housekeeping Program	Monday 20 May 2019 to Friday 24 May 2019
PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability	[none required]

5.2.3 Post-Onsite Evaluation Review Period

Following the Onsite Evaluations, the Audit Team will review the findings of the Pre-Audits and Onsite Evaluations and address final evaluation-related tasks that may have been noted (Appendices C1 - C6 Item 7). This review period completes the evaluation of the program element, as referenced in CD Appendix A Section B.5.

5.3 Reporting

This Section describes the third phase of each Program Element Audit.

5.3.1 Draft PEARs

Pursuant to the CD, the Audit Team will prepare draft PEARs documenting the procedures followed, sites and activities visited, materials reviewed, and a summary of major findings from the program element audits of the six HDOT NPDES permits (Appendices C1 - C6 Item 8). The PEARs will be structured so that they may be easily incorporated into each Division's Annual Compliance Report (ACR) (see Section 7).

The Audit Team will endeavor to draw defensible conclusions based on the NPDES permit requirements and conditions, the SWMPP developed to meet the permit goals, measurable achievement of those goals, and the Audit Team's best professional judgment interpretation of compliance with the NPDES regulations.

EPA (2007) guidance describes that, in some cases, it may not be possible to assess compliance with a program component because of the limitations of the MS4 program evaluation process. If this is found to be the case, the draft PEAR for the program element will state that this is the case and provide as much supporting information as possible. Similarly, if there were no findings of note for a particular SWMPP or NPDES component, this fact will be stated in the PEAR.

If the Audit Team identifies what may be a Potential Violation or Deficiency at any point during the Pre-Audit, Onsite Evaluation, or Reporting periods, actions will be taken in accordance with the decision tree defined in Section 6 for the Audit Team, HDOT PM, and MS4 Permit Coordinators to follow. The draft PEAR will describe the two findings as follows:

- Findings reviewed per Section 6 and found to be Potential Violations, reported to DOH/EPA and addressed via Corrective Actions.
- Findings found to be Deficiencies, for which recommendations for improvement will be included.

Each draft PEAR will identify BMPs and opportunities for information/technology transfer that may be considered for application across the three HDOT Divisions. The draft PEARS will also analyze the practices implemented for each HDOT Division's program elements and assess whether identified best practices can be universally implemented across the three HDOT Divisions. If best practices cannot be universally implemented, the draft PEAR report will describe identified impediments (such as legal barriers). The draft PEAR will also identify positive program elements considered to exceed the NPDES requirements and SWMPP. Finally, the draft PEAR will include a retrospective analysis of activities that are considered to be potentially outmoded, ineffective, insufficient, or excessively burdensome. Recommendations to modify, streamline, or expand them in accordance with what has been learned will be listed.

The Audit Team will complete the draft PEAR within 45 days of the completion of the evaluation for each program element. The Audit Team will provide five (5) copies of the draft PEAR and one electronic file copy in Word (Version 2007 or earlier) to the HDOT PM.

5.3.2 HDOT Review

Upon receipt, the HDOT PM will distribute copies of the draft PEARS to the appropriate MS4 Permit Coordinators, who will be responsible for reviewing the reports and distributing the reports to key personnel for their review. The MS4 Permit Coordinators will submit to the HDOT PM a consolidated written request for clarification and corrections to the draft PEAR for their respective permit as found to be necessary (Appendices C1 - C6 Item 9). The HDOT PM will then submit the consolidated requests and corrections to the Audit PM (Appendices C1 - C6 Item 10).

5.3.3 Final Audit Report

Upon receipt of the consolidated requests and corrections, the Audit Team will make appropriate changes to the draft PEARS and submit the final PEARS (Appendices C1 - C6 Item 11).

For PEARs #1 - 5, the Final PEAR is scheduled to be submitted approximately 25 days in advance of the CD deadline. This is intended to afford additional time for the Divisions in each subsequent Program Element Audit. The CD is structured such that, if followed strictly, only 60 calendar days are afforded for Steps 1 to 7 of PEARs #2 - 6. For example, Final PEAR #1 is due at 210 days following AWPC and the evaluation of PEAR #2 is due at 270 days following AWPC. By reducing the time it takes Kennedy/Jenks to write the Final PEAR, an additional 25 days are afforded to the Divisions to fulfill the records request for the subsequent audit (Appendices C2 - C6 Item 3).

The Audit Team will provide five (5) copies of the final PEARs and one electronic file copy in Word (Version 2007 or earlier) to the HDOT PM.

5.3.4 Post-Audit Report Review

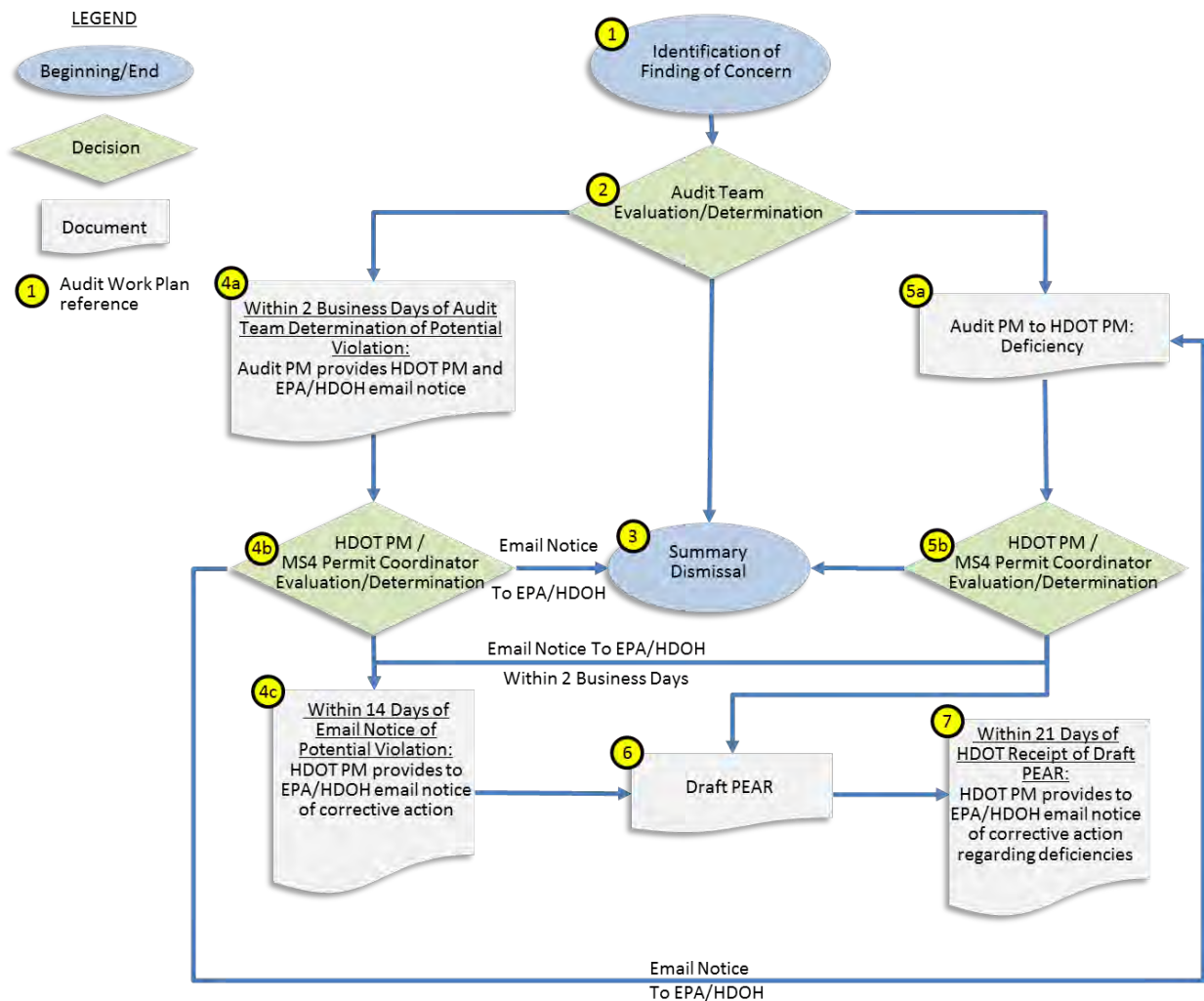
The HDOT PM and Audit PM will meet after the submission of each PEAR to discuss QC procedures and potential improvements to be made prior to the subsequent PEAR.

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Section 6: Potential Violations and Deficiencies

If at any point during the Pre-Audit, Onsite Evaluation or Reporting Periods the Audit Team identifies what may represent a Potential Violation or Deficiency (hereinafter “Finding of Concern”), the Audit Team, HDOT PM, and MS4 Permit Coordinators will follow the decision tree shown on Figure 6-1.

Figure 6-1 Potential Violation and Deficiency Decision Tree



① 6.1 Identification of Finding of Concern

② 6.2 Audit Team Consultation

Upon identification of a Finding of Concern, the Audit Team will consult internally to assess whether the Finding of Concern may represent a Potential Violation, a Deficiency, or whether it summarily merits dismissal.

Potential Violation - The Audit Team will categorize the Finding of Concern as a Potential Violation if it meets the EPA (2007) guidance definition of an “area where the evaluation found the permittee not in compliance with a specific permit requirement or SWMPP commitment”. These occurrences would follow the procedures listed in Section 6.3.

Deficiency – The Audit Team will categorize the Finding of Concern as a Deficiency if it meets the Consent Decree definition of an “item which, if not corrected, will lead to potential violations”¹. These occurrences would follow the procedures listed in Section 6.4.

③ Summary Dismissal – The Audit Team will dismiss the Finding of Concern if it does not meet either the definition of a Potential Violation or a Deficiency. No further action will be required.

¹ EPA (2007) guidance further elaborates that deficiencies are areas of concern impeding effective program implementation. They are typically areas where the permit or SWMPP does not describe specifically how the permittee should conduct an activity, yet the evaluator believes the permittee may consider altering how they conduct the activity to meet water quality goals. Deficiencies can also be areas where future permit violations could result if the permittee continues on its present path. The Audit Team will look for opportunities to enhance program elements (e.g. recommending that MS4 Coordinators perform required annual reviews earlier in the year, thereby allowing time for self-correction).

6.3 Potential Violation Decision Tree

4a Notification: Audit PM to HDOT PM and EPA & DOH

If the Finding of Concern is categorized by the Audit Team as a Potential Violation, the Audit PM will notify the HDOT PM and EPA & DOH via email¹ within 2 business days of making the determination using the form presented in Appendix D1. Additionally, the HDOT PM will be notified via telephone. These notifications will include the following information:

1. Specific details of the Potential Violation
2. Related photographs, if any
3. Applicable regulatory references [i.e., NPDES permit, SWMPP, Hawaii Administrative Rules (HAR), or Code of Federal Regulations (CFR) references, as applicable].

4b Evaluation/Determination

The HDOT PM will consult with the appropriate MS4 Permit Coordinator to further investigate the factual accuracy of the Potential Violation determination. Based on that consultation, the Potential Violation may be summarily dismissed (if found to be factually inaccurate) or re-categorized as a Deficiency (if incorrectly categorized as a Potential Violation). Both of these scenarios would be accompanied by email notification from the HDOT PM to EPA & DOH using the form presented in Appendix D2. The time required for this consultation is included in the 14-day timeline described in Item 4c, below.

4c Determination of Potential Violation

If the Finding of Concern is confirmed to be a Potential Violation, the HDOT PM will then work with the appropriate MS4 Permit Coordinator to assess suitable corrective actions.

Unless otherwise agreed upon with EPA & DOH, HDOT will correct the Potential Violation within 14 days of initial Audit Team email notification to EPA & DOH (see Item 4a above). Email notification of the Corrective Action will be provided to EPA & DOH by the HDOT PM using the forms presented in Appendix D2 and Appendix D3. The Consent Decree allows HDOT the option to request an extension to this reporting deadline. In order for EPA & DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA & DOH.

¹ Per EPA & DOH request, Connor Adams (EPA) and Matthew Kurano (DOH) will be copied on all email notifications to EPA & DOH.

6.4 Deficiency Decision Tree

5a Notification: Audit PM to HDOT PM

If a Finding of Concern is categorized as a Deficiency, the Audit PM will notify the HDOT PM via telephone and email and include the following information:

1. Specific details of the Deficiency
2. Related photographs, if any
3. Applicable regulatory references (i.e., NPDES permit, SWMPP, HAR, or CFR references, as applicable).

5b Evaluation/Determination

The HDOT PM will consult with the appropriate MS4 Permit Coordinator to further investigate the factual accuracy of the Deficiency determination. Based on that consultation, the Deficiency may be summarily dismissed (if found to be factually inaccurate) or re-categorized as a Potential Violation (if incorrectly categorized as a Deficiency). The latter scenario will be accompanied by an email notification to EPA & DOH within 2 business days of making the determination using the form presented in Appendix D2.

6 Deficiency

If the finding is confirmed to be a Deficiency, this finding (along with confirmed Potential Violations) will be documented in the appropriate draft PEAR. The HDOT PM will work with the appropriate MS4 Permit Coordinator to assess the appropriate corrective actions.

7 Unless otherwise agreed upon with EPA & DOH, HDOT will correct Deficiencies within 21 days of receiving the draft PEAR (Appendices C1 - C6 Item 8). Email notification of the Corrective Action will be provided to EPA & DOH by the HDOT PM using the form included in Appendix D3. The CD allows HDOT the option to request an extension to this reporting deadline. In order for EPA & DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA & DOH.

Section 7: Annual Compliance Report

Due to the differences in Division operations, not all portions of each PEAR will be applicable to all MS4 permittees. As such, the PEARs will be structured so that they may be easily incorporated into each Division's Annual Compliance Report (ACR). The HDOT PM will work with each permittee to ensure that the appropriate PEAR content is included in each individual ACR. Each ACR will include a detailed summary of actions taken as a result of the audit reports and dates at which corrective actions, if warranted, were taken.

Additionally, pursuant to CD Appendix A Section D.5., the HDOT PM will submit each original draft and final PEAR to EPA & DOH at the same time that ACRs are submitted. Within the draft and final PEAR, an authorized HDOT official will certify that, to the best of the official's knowledge and information, the MS4 Permit Audit was conducted in accordance with this AWP. If items have not been corrected, HDOT will provide a schedule for implementing corrective measures.

References

- United States Environmental Protection Agency. 2005. Small SM4 Stormwater Program Overview. December. Accessed online at <<https://www3.epa.gov/npdes/pubs/fact2-0.pdf>>.
- United States Environmental Protection Agency. 2006. Digital Camera Guidance for EPA Civil Inspections and Investigations. July. Accessed online at <<https://www.epa.gov/sites/production/files/2013-09/documents/digitalcameraguide.pdf>>.
- United States Environmental Protection Agency. 2007. *MS4 Program Evaluation Guidance*. Accessed online at <https://www3.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf>.

Appendix A

Consent Decree Sections Pertaining to Audit
(10.d Page and Appendix A)

Divisions. HDOT shall ensure that HDOT Office of Environmental Compliance staff have the training and professional qualifications, sufficient to assess compliance, to identify actual or potential non-compliance, and to identify and require implementation of remedies.

d. The HDOT Office of Environmental Compliance staff shall perform audits of each operational division of HDOT in accordance with Appendix A.

11. Stormwater Management Plan (SWMP)

a. Modification of Stormwater Management Plan Elements

i. HDOT-Harbors shall modify the 2009 SWMPs for Honolulu Harbor and Kalaeloa Barbers Point Harbor to integrate changes described below. The modified SWMPs shall be provided to EPA and HDOH no later than 90 days of entry of the Consent Decree. HDOT-Harbors may choose to develop one SWMP for both Harbors.

ii. Within 90 days of entry of the Consent Decree, HDOT-Harbors shall post the SWMPs on HDOT-Harbors' stormwater management website. HDOT-Harbors shall solicit comments from Tenants and the public, through a variety of mechanisms. HDOT-Harbors shall provide a schedule for receipt of comments, not to exceed 45 days. Among other mechanisms, HDOT-Harbors shall solicit comments on the SWMP by publishing notices regarding its availability for review and comment in one local newspaper. HDOT-Harbors shall continue to maintain records of comments received as described in SWMP Section 3.2.

APPENDIX A

ENVIRONMENTAL COMPLIANCE AUDITS

A. General Provisions

1. This Appendix provides details of the NPDES MS4 compliance audits required by Paragraph 10.d of the Consent Decree. The audits shall include evaluation of common stormwater program elements at each of HDOT's three divisions (Airports, Highways and Harbors), as stated in Paragraph A.3 below, throughout the state on a per element schedule. The audits shall be completed to fulfill the following goals:
 - a. Determine compliance with the federal regulations and state MS4 permits and regulations and this Consent Decree (see Paragraph A.2, below);
 - b. Ensure information gathered during the audits is used to promote information and technology transfer between divisions; and
 - c. Identify deficiencies and potential violations that are discovered by the third party auditor and allow for timely self-correction of the deficiencies and potential violations by HDOT.
2. The audits shall be designed to assess current regulatory and administrative compliance with the following items throughout each of HDOT's divisions:
 - a. The Hawaii NPDES General Permit Authorizing Discharges of Storm Water and Certain Non-Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Hawaii Small MS4 General Permit), Hawaii Administrative Rules, chapter 11-55, Appendix K;
 - b. NPDES permit, Permit No. HI S000001, MS4 Permit for the HDOT-Highways, Oahu District;
 - c. NPDES Permit, Permit No. HIS000005, MS4 Permit for the HDOT-Airports, Honolulu International Airport;
 - d. Applicable Storm Water Management Plans (SWMPs); and
 - e. This Consent Decree.
 - f. Future NPDES MS4 permits and SWMPs issued to HDOT. This obligation shall not delay or prevent termination of the Consent Decree.
3. The audits shall include, but not be limited to, an evaluation of the following MS4 Program Elements as they relate to compliance at each of HDOT's three divisions:
 - a. Public Education/Outreach and Participation/Involvement
 - b. Illicit Discharge Detection and Elimination (including commercial/tenant oversight programs)
 - c. Construction Site Runoff Control
 - d. Post-Construction Runoff Control/ Permanent BMPs
 - e. Pollution Prevention/ Good Housekeeping
 - f. An analysis of how Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability impact MS4 compliance
4. HDOT shall audit Program Elements for the Harbors, Airports and Highways Divisions in accordance with the schedule defined in the Work Plan described in Paragraph B.1, below.

5. The audits shall be conducted by a qualified third party environmental consulting firm retained by HDOT and selected by a committee consisting of representatives of the HDOH and HDOT. The selection committee shall choose an audit firm which is experienced with environmental auditing and the permits and regulations described in Paragraph A.2, above.
6. The requirements of this Appendix related to the consulting firm's qualifications, authority to conduct the audits, and production of the HDOT Audit Reports (Audit Reports) shall be incorporated in any contract relating to the audits entered into by HDOT and the selected consulting firm to the extent allowed by State Procurement Code.
7. Any violations by HDOT discovered through the execution of the Environmental Compliance Audit detailed in this Appendix are neither "voluntarily discovered" within the terms of EPA's revised *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations Policy* (Audit Policy) nor voluntarily disclosed to EPA under EPA penalty policies. Accordingly, any such violations are ineligible for penalty mitigation or other favorable treatment under the Audit Policy.
8. HDOT agrees not to attempt to use any state audit and/or privilege laws to restrict EPA's or HDOH's ability to review the Audit Reports at HDOT facilities to determine if the audits have been properly completed and HDOT has corrected any uncorrected non-compliance, potential violation, or deficiency as per its certification (see Paragraph F below). Also, HDOT agrees not to attempt to use any state audit and/or privilege laws to restrict EPA's or HDOH's ability to obtain, review and/or use the Audit Reports in any action to enforce the audit provisions of the Consent Decree. Neither information contained in the Audit Reports, nor underlying information upon which the Audit Reports relied, that indicates regulatory violations at any HDOT facility, shall be claimed as confidential business information by HDOT or its consulting firm.

B. Procurement of Services/Audit Work Plan

1. HDOT shall advertise a Request for Qualifications from third party audit firms to conduct the audits. Advertisement for the Request for Qualifications shall not exceed forty-five (45) days.
2. Within thirty (30) days of the end of the Request for Qualifications period, the HDOT and HDOH selection committee shall conduct the professional services selection of an audit firm and provide the recommendation to the Director.
3. Within fifteen (15) days of the selection committee recommendation to the Director of Transportation, or another length of time agreed to by EPA and HDOH, HDOT shall notify the potential audit firm with a letter of selection, pending negotiation of fees.
4. Within thirty (30) days or another length of time agreed to by EPA and HDOH, HDOT shall, as approved by the Director of Transportation, award the selected audit firm and proceed to process the contract for the audit work. Within seven (7) days of each milestone, HDOT shall notify EPA and HDOH by email that the following milestones were completed:
 - a. Request for Qualifications advertisement;
 - b. Awarding of contract between HDOT and the selected audit firm;
 - c. Notice to Proceed on the Audit.
5. On or before September 16, 2016, HDOT shall submit a draft audit work plan (Audit Work Plan) to EPA and HDOH for review and approval. In developing the Audit Work Plan, HDOT shall consult EPA's guidance on auditing small MS4s:

http://www.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf The Audit Work Plan shall include the following audit schedule and describe each task necessary to accomplish the Audit Scope with targeted time frames for the consulting firm to complete:

- a. 3 months after the Audit Work Plan is approved: Evaluation of Post Construction/Permanent BMP programs for all three HDOT divisions;
 - b. 9 months after the Audit Work Plan is approved: Evaluation of Construction Site Runoff Control programs for all three HDOT divisions;
 - c. 15 months after the Audit Work Plan is approved: Evaluation of Public Outreach/Public Involvement for all three HDOT divisions;
 - d. 21 months after the Audit Work Plan is approved: Evaluation of Illicit Discharge Detection and Elimination, Industrial Commercial Activities/Tenant Programs for all three HDOT Divisions;
 - e. 27 months after the Audit Work Plan is approved: Evaluation of Pollution Prevention/Good Housekeeping for all three HDOT Divisions;
 - f. 33 months after the Audit Work Plan is approved: Evaluation of Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability for all three HDOT divisions.
6. The Audit Work Plan shall include, but is not limited to: the minimum documents to be reviewed (e.g. SWMPs, training records, inspection reports, etc.), minimum number of field verifications, as necessary, for each program element evaluated, deliverables (notices of potential violations, draft and final audit reports), and reporting deadlines.
 7. EPA, after consultation with HDOH, may reject the draft Audit Work Plan in whole or in part. If EPA rejects the Audit Work Plan or any portion of it, EPA shall identify the reason(s) in writing to HDOT for such rejection and may require HDOT to redraft the Audit Work Plan in its entirety or part. EPA shall provide any comments to HDOT within forty-five (45) days.
 8. If EPA and HDOH reject the Audit Work Plan in whole or part, HDOT shall resubmit a revised Audit Work Plan within one hundred and twenty (120) days. After submission of the revised Audit Work Plan, EPA, after consultation with HDOH, shall provide any comments to HDOT within forty-five (45) days. HDOT will review all comments and make all required modifications to the revised Audit Work Plan. If EPA does not provide written comments, the revised Audit Work Plan shall be deemed approved by EPA and HDOH.

C. Audits

1. HDOT shall take all appropriate measures to facilitate the audit firm in performing the audits in accordance with the approved Audit Work Plan.
2. HDOT shall grant the audit firm full access to and unrestricted review of all HDOT records, documents and information that the audit firm requires to complete the audits.

D. Reporting/Audit Reports

1. HDOT shall require the audit firm to provide preliminary written notice of any potential violations identified in any audit to HDOT, EPA and HDOH within 2 business days following an audit of a program element in Paragraph B.1, above.
2. HDOT shall require the audit firm to complete a draft audit report to HDOT within 45 days of completing an audit of a program element.
3. HDOT shall review the draft audit report to correct any factual inaccuracies within 30 days after receiving the draft audit report.
4. HDOT shall require the audit firm to complete a final audit report within 120 days, or another length of time agreed to by EPA and DOH, of completing an audit of a program element.
5. HDOT shall submit original draft and final audit reports to EPA and HDOH with the Annual Compliance Report (ACR).
6. HDOT shall provide a detailed summary of any actions taken as a result of the audit reports and dates at which those actions were taken with the ACR.
7. The HDOT Audit Reports shall contain:
 - a. A specific statement of the procedures followed, HDOT sites and activities visited and all materials reviewed during the audits;
 - b. Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and recommendations to modify, streamline, or expand them in accordance with what has been learned;
 - c. An identification of deficiencies (items which, if not corrected, will lead to potential violations) and potential violations with the applicable SWMPs, this Consent Decree, and/or applicable permit and regulations, and recommendations for improvement;
 - d. Identification of best practices and opportunities for information/technology transfer to be applied across all divisions; and
 - e. An analysis of the practices implemented for each Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report shall clearly describe the identified impediments.
8. HDOT shall correct any deficiency or potential violation identified in the Audit Reports or otherwise discovered by HDOT as part of the audit process set forth herein within the time frames identified in Paragraph E below.

E. Corrections of Potential Violations and Deficiencies

1. HDOT shall correct any potential violations within 14 days of notification as described in D.1 of this Appendix, or another period of time agreed to by EPA and DOH. In order for EPA and DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA and HDOH.
2. HDOT shall correct any deficiencies within 21 days of receiving the draft Audit Report, or another period of time agreed to by EPA and HDOH. In order for EPA and HDOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA and HDOH.
3. If HDOT corrects any violation discovered through the Audit process within the time frames described above, it shall not be subject any related stipulated penalties under Paragraph 30.

4. Notwithstanding anything in E.3 of this Appendix, the United States and HDOH reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree or to obtain penalties or injunctive relief under the Act or its implementing regulations, or under other federal or State laws, regulations, or permit conditions, if HDOH or EPA independently discovers a violation of a permit, law, or statute.
5. Similarly, United States and HDOH, reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree or to obtain penalties or injunctive relief under the Act or its implementing regulations, or under other federal or State laws, regulations, or permit conditions, if an activity or violation poses an immediate threat to human health or the environment.

F. Certifications

1. HDOT shall provide the following information and certifications to EPA and HDOH regarding completion of each audit and correction of any non-compliance or potential violation identified in the Audit Reports or otherwise discovered by HDOT as part of the audit process within an Environmental Compliance Audit section of the ACR. An authorized HDOT official shall certify that, to the best of the official's knowledge and information, the audits were conducted in accordance with the Work Plan described above, the Audit Reports are submitted to HDOT, EPA and HDOH in the ACR as described above, and all items of non-compliance identified in the Audit Reports have been corrected or steps have been taken to correct them. If all items have not been corrected, HDOT must include a schedule for correcting the issue.

Appendix B

PEAR 1 through 6 Guiding Questions

B1: PEAR #1 – Post-Construction /
Permanent Best Management Practices

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Overall Approach						
A1	Discuss the process chronologically in the order that a project would occur. Walk us through the process as if we were a developer proposing a project.						
B	Laws/Rules/Regulations/Policies						
B1	What legal authority does the permittee have to require post-construction BMPs on development sites and to ensure maintenance?						
B2	Does the permittee’s legal authority address post-construction requirements for all projects disturbing one acre or more?						
B3	Does the legal authority require site design, source control, and stormwater treatment BMPs?						
B4	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
B5	What procedures for alternative compliance (i.e., planning-level BMPs and other non-structural controls) are allowed?						
B6	Does the legal authority authorize the permittee to require stormwater management plans to address post-construction impacts?						
B7	Do the laws/rules/regulations/policies outline the contents of an approvable plan and responsibilities for operation and maintenance of approved BMPs?						
C	Post-Construction BMP Standards						
C1	What technical guidance (e.g., BMP manual) does the permittee use as the standard for design and selection of post-construction BMPs? Note: It is not necessary to do a thorough review of the manual or standards used by the permittee.						
C2	Are project proponents required to follow a technical guidance manual?						
C3	Does the guidance provide siting and use criteria for the BMPs to ensure proper and adequate BMPs are being selected and implemented?						
C4	Does the guidance provide siting and use criteria for BMP selection based on the development context (i.e., BMP selection appropriate for ultra urban-areas versus those more appropriate for more rural settings with larger parcels)?						
C5	Are pollutants of concern that are typically generated by the proposed development type considered when selecting or approving BMPs?						
C6	Does the technical manual provide guidance on sizing, performance, and location of BMPs?						
C7	When was the BMP manual last updated?						
C8	Does the permittee have different requirements or standards for different types of developments (e.g., specific post-construction requirements for gas stations or automobile repair facilities)?						
C9	Does the permittee have design manuals related to land-efficient site designs (e.g. better site design, better models for large retailers)?						
C10	Does the permittee promote source control and site design standards to reduce the generation of pollutants in addition to treatment BMPs?						
C11	Does the permittee include in standards and manuals specifications for innovative site design practices, such as low-impact development and other techniques that manage runoff on-site?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
C12	Are project applicants encouraged or required to use vegetative BMPs that promote infiltration, such as swales, biofiltration practices, etc., where possible?						
C12	Does the permittee offer financial incentives to support post-construction stormwater goals (e.g., programs to support redevelopment, such as enterprise zones, or stormwater utility credits)?						
D	Plan Review and Approval Procedures						
D1	Which Division/District is responsible for post-construction stormwater plan review?						
D2	How many plan reviewers are there?						
D3	How many plans submitted for review (private and public projects) each year?						
D4	What is the project size threshold for the permittee to require post-construction BMPs?						
D5	Does the permittee apply standard conditions that incorporate post-construction installation and maintenance requirements into its plan review process?						
D6	Do plan reviewers use specific criteria or a checklist when reviewing plans?						
D7	Does the permittee consider pollutants of concern or whether the project discharges to a 303(d) listed impaired water when determining which BMPs are required?						
D8	Does the permittee consider such regional concerns as smart growth initiatives, watershed master plans, and other larger-scale planning efforts to ensure that each new development and redevelopment plan is consistent with the goals of these initiatives?						
D9	For up to three sets of post-construction plans provided by permittee:						
D9a	Are adequate BMPs included on plans, details, and drawings?						
D9b	What types of standard conditions or notes are included?						
D9c	Are maintenance requirements specified?						
D9d	Do the location of BMPs hinder maintenance?						
D10	What types of projects must be reviewed by the permittee for post-construction stormwater controls?						
D11	Does the permittee have a process to identify priority projects identified in the MS4 NPDES permit?						
D12	What types of standards or technical guidance do the permittee’s reviewers use to review projects?						
D13	Does the permittee condition improvements to existing developments with requirements for post-construction stormwater controls? How are these redevelopment requirements triggered?						
E	Post-Construction BMP Inventory						
E1	How does the permittee track the installation and maintenance of post-construction BMPs?						
E2	Is your post-construction BMP inventory managed in a database and/or linked to GIS?						
E3	What information is collected?						
F	BMP Inspection & Maintenance						
F1	Does the permittee require maintenance agreements for all projects with post-construction BMPs?						
F2	Are as-built inspections conducted at the conclusion of a project to ensure the BMP has been built properly? What Division/District is responsible for this?						
F3	Do staff conduct these inspections or are they self-certified?						
F4	Does the permittee inspect private facilities or require inspections by owner/operators?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
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F5	If the permittee performs the inspections, how often are they performed?						
F6	If owner/operators are required to inspect and maintain their BMPs, how is this authorized? Through a MOU? Through conditions of approval? Through another type of agreement?						
F7	How does the permittee ensure inspections are occurring? Reminder notices? Inspection reports?						
F8	Who is responsible for structural stormwater BMP maintenance (public and private)? Permittee? Owner?						
G	Enforcement						
G1	How does the permittee require proper maintenance and repair after the inspection?						
G2	What types of enforcement actions are provided by laws/rules/regulations/policies (e.g., notices of violation, abatement)?						
G3	Is the permittee’s enforcement authority limited (e.g., limits on the dollar amount of fines, inability to issue civil penalties)?						
G4	How many enforcement actions have been taken in the past year due to lack of BMP maintenance?						
H	Public Construction Projects						
H1	For staff:						
H1a	Are plan reviewers trained on post-construction BMPs and requirements?						
H1b	What type of training do staff performing “as built” and post-construction inspections receive?						
H1c	How often are the trainings conducted?						
H1d	How many staff have been trained?						
H1e	What type of training or education does the permittee provide to developers and engineers on post-construction requirements?						
H2	For developers and plan designers:						
H2a	What types of educational materials have been developed and distributed to developers and designers regarding post-construction BMPs and application requirements?						
H2b	How are the materials distributed? At the permit desk? During inspections?						
H2c	What type of training does the permittee provide or advertise to local developers and designers?						
H2d	How often is this training conducted?						
H2e	How many developers and designers have been trained?						
H2f	Are they required to attend?						
I	Consent Decree Questions						
I1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
I1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
I2a	Have deficiencies or potential violations been identified?						
I2b	What are recommendations for correcting these deficiencies or potential violations?						
I4	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						

Appendix B1: PEAR #1 – Post-Construction / Permanent Best Management Practices

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
15	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
16	If best practices cannot be universally implemented, what are the identified impediments?						

B2: PEAR #2 – Construction Site Runoff Control

Appendix B2: PEAR #2 – Construction Site Runoff Control

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Laws/Rules/Regulations/Policies						
A1	What legal authority does the permittee have to require erosion and sediment control BMPs on construction sites and to ensure compliance?						
A2	Does the permittee’s legal authority address stormwater quality for all projects disturbing at least 1 acre?						
A3	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
A4	Does the legal authority authorize the permittee to require erosion and sediment control plans?						
B	Construction Site Inventory						
B1	How does the permittee track construction projects?						
B2	Is the following information collected?						
B2a	The number and status (active/inactive/completed) of construction sites						
B2b	The number, frequency, results, and follow-up actions resulting from inspections						
B2c	The actions taken to resolve the issues and dates when compliance was achieved.						
B2d	The number and type of enforcement actions taken at sites in violation						
B2e	Complaints submitted by the public						
B3	Does the inventory include construction sites disturbing less than 1 acre?						
B4	What is the threshold for tracking projects?						
B5	Does the inventory track which sites have submitted an NOI for coverage under a state/EPA construction general permit?						
B6	How is the inventory updated? How often?						
B7	Does the permittee prioritize projects for more frequent or targeted inspections? If yes, based on what criteria?						
C	Construction Requirements and BMPs						
C1	What technical guidance (e.g., BMP manual or fact sheets) does the permittee use as the standard for design and selection of nonstructural and structural construction BMPs?						
C2	Are project applicants required to follow these technical manuals?						
C3	Does the guidance set minimum operation and maintenance requirements for BMPs?						
C4	Does the guidance include installation requirements for the BMPs?						
C5	Does the guidance provide proper siting and use criteria for BMPs to ensure that adequate BMPs are being selected and implemented?						
C6	Does the permittee provide guidance as to recommended BMPs to be used?						
C7	Does the permittee have different requirements or standards for different times of the year (i.e., during the rainy season vs. the dry season)?						
D	Plan Review Procedures						
D1	Does the permittee hold pre-application meetings on any construction project? Are stormwater and erosion and sediment control requirements addressed at these meetings?						
D2	What is the permittee’s threshold for plan review? (For example, does the permittee review plans for all projects disturbing greater than 1 acre, or do they use another threshold?)						

Question Number	Question	Airports		Harbors		Highways	
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		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
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D3	Does the permittee apply standard conditions that incorporate erosion and sediment control requirements into its plan review process?						
D4	Do the plan reviewers verify whether the project applicant has submitted an NOI to the state or EPA? Is evidence of NOI submission required before a plan can be approved or a local permit issued?						
D5	Do plan reviewers use specific criteria or a checklist when reviewing plans?						
D6	Does the permittee consider during the review process whether the construction project discharges to a TMDL/impaired water?						
D7	For up to two construction plans provided:						
D7a	Are adequate BMPs included on plans?						
D7b	What types of standard conditions or notes are included?						
D7c	Are maintenance requirements specified?						
D7d	Are BMPs addressing other construction activities, such as materials storage and waste disposal, incorporated into the construction plans?						
D7e	Do the plans include notes addressing the prohibition of non-stormwater discharges?						
D7f	Were comments provided by the permittee to the project proponent reasonable and appropriate?						
E	Construction Site Inspections						
E1	Does the permittee adequately inspect the following phases of construction?						
E1a	Clearing and grubbing and site preparation						
E1b	Mass grading and public infrastructure/utility construction						
E1c	Building construction and final grading						
E1d	Final stabilization						
E2	What group is charged with erosion and sediment control inspections?						
E3	Do the inspectors use a checklist or inspection form during each inspection?						
E4	How many inspectors does the permittee use to verify erosion and sediment control compliance at construction sites?						
E5	Does this number appear adequate to assess active construction occurring in the permitted area? Compare this to the total number of construction sites that need to be inspected at any one time (number of inspections per construction site per year). Consider project durations and phasing, local conditions (e.g., dry vs. wet seasons), and additional duties assigned to inspectors.						
E6	Does the permittee have an established prioritization process for establishing inspection frequency? If so, on what factors is the prioritization based (i.e., size, proximity to water body, sensitive areas)?						
E7	How often are sites inspected?						
E8	Does the permittee target inspections during and immediately after wet weather events? If so:						
E8a	What size rain event triggers an inspection?						
E8b	How soon after a rain event?						
E9	Is there an established rainy season for the area? Are sites inspected prior to the start of the rainy season to determine preparedness?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
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F	Program Support and Resources						
F1	Does the program have a dedicated source of funding to support plan review staff and inspectors?						
G	Enforcement						
G1	What types of enforcement actions are provided for in applicable laws/rules/regulations/policies (e.g., notices of violation, “stop work” orders, fines)?						
G2	Is use of these actions outlined in an established, escalating enforcement policy?						
G3	Review with the permittee statistics on enforcement of construction site erosion and sediment controls.						
G3a	How many enforcement actions are taken per year?						
G3b	Are follow-up inspections conducted to verify compliance?						
G4	Are there limitations on the permittee’s enforcement authority (e.g., limits on the dollar amount of fines, inability to issue civil penalties)?						
G5	Do staff feel that their enforcement authority is adequate to achieve compliance on construction projects?						
H	Training and Education						
H1	For staff:						
H1a	What type of training do construction inspectors receive? Are plan reviewers trained on erosion and sediment control BMPs and requirements?						
H1b	How often is training conducted?						
H1c	How many staff have been trained?						
H1d	What type of follow-up is conducted by the permittee to verify that the training is effective?						
H2	For construction operators:						
H2a	What types of educational materials have been developed and distributed to construction operators?						
H2b	How are the educational materials distributed?						
H2c	What type of training does the permittee provide or advertise to local construction operators?						
H2d	How often is this training conducted? How many construction site operators have been trained?						
H2e	Are contractors and developers required to attend?						
H2f	Are training sessions held in cooperation with other local permittees or regional authorities?						
I	Public Construction Projects						
I1	Do RFPs or contracts include language specifying stormwater requirements?						
I2	Are inspection and maintenance requirements specified in the contract?						
I3	What oversight does the permittee implement to ensure the contractor is implementing all requirements appropriately and adequately?						
I4	What penalties are in place to require compliance from the permittee’s contractors?						
J	Consent Decree Questions						
J1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
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		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
J1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
J2a	Have deficiencies or potential violations been identified?						
J2b	What are recommendations for correcting these deficiencies or potential violations?						
J3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
J4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
J5	If best practices cannot be universally implemented, what are the identified impediments?						

B3: PEAR #3 – Public Outreach / Public Involvement

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Goals and Objectives						
A1	Does the permittee have a strategy document for education and participation?						
A2	Does the document include specific goals?						
A3	On what are the goals based?						
A4	Are the goals measurable? How?						
B	Message Development						
B1	Have specific messages been developed for stormwater outreach?						
B2	On what are the messages based? Pollutants of concern? General awareness? Problem target audience? All of the above?						
B3	Are different messages used for different target audiences (i.e., children, homeowners, industry, etc.) or is one central message used for all?						
B4	Do the messages encourage participation in stormwater-related activities?						
B5	Do the messages educate about behavior changes that the audience can make to contribute to a solution?						
B6	Have messages been developed specific to reducing illicit discharges with information about how to report them to the appropriate authorities?						
B7	Have messages been developed to educate pesticide, fertilizer, and herbicide applicators (including homeowners) about ways to reduce stormwater pollution?						
C	Target Audiences						
C1	Has the permittee identified target audiences for outreach efforts? How are these target audiences selected? What are the target audiences?						
C2	What land use groups (i.e., industry, commercial businesses) has the permittee targeted?						
C3	Have certain ethnic groups or nationalities been identified as audiences to be targeted based on an evaluation of local demographics?						
C4	Have the target groups been reevaluated based on evaluation of the strategy and progress that has been made?						
C5	For Phase I permittees: have they targeted pesticide, herbicide, and fertilizer applicators (including homeowners) and construction site operators for outreach?						
C6	For Phase II permittees: have they targeted industries or commercial businesses of concern for outreach?						
D	Message Packaging						
D1	Does the permittee have a variety of written educational materials?						
D2	Does the permittee have a variety of other packages (i.e., Web site, presentations, displays) for educational materials?						
D3	Did the permittee produce the education and outreach materials in the different languages that are spoken in the community?						
D4	Do the permittee's materials explain stormwater issues in easy-to-understand terms?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
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E	Distribution Mechanisms						
E1	Does the permittee track distribution of materials to measure effectiveness?						
E2	Is the permittee focused solely on distribution or is an effort made to evaluate the impact of the messages?						
E3	Does the permittee use a variety of distribution mechanisms to target various audiences?						
F	Evaluation Methods						
F1	How does the permittee evaluate the effectiveness of the outreach strategy?						
F2	Has the permittee conducted a public awareness survey?						
F3	Which outreach materials have been the most effective in soliciting public involvement and participation? Changing audience behaviors? Increasing general stormwater awareness?						
F4	Have any changes been made to the outreach strategy or materials based on an evaluation of effectiveness?						
G	Public Participation Activities						
G1	What opportunities does the permittee give to the public to review and comment on any changes to the SWMP, such as public comment via a Web site, a public meeting, or a stormwater advisory group?						
G2	What volunteer opportunities (i.e., stream cleanups, storm drain stenciling) does the permittee coordinate or publicize to encourage the public to participate in stormwater-related activities?						
G3	Does the permittee sponsor or promote any of the following activities?						
G3a	Beach/stream/lake cleanups						
G3b	Volunteer stream monitoring						
G3c	Stream clean-ups or equivalent activities						
G3d	Stormwater citizen panel						
H	Consent Decree Questions						
H1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
H1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
H2a	Have deficiencies or potential violations been identified?						
H2b	What are recommendations for correcting these deficiencies or potential violations?						
H3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
H4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
H5	If best practices cannot be universally implemented, what are the identified impediments?						

B4: PEAR #4 – Illicit Discharge Detection and
Elimination (IDDE) Program Element and
Industrial Commercial Activities/Tenant (I/C) Program

Appendix B4: PEAR #4 – Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Legal Authority (IDDE)						
A1	Does the permittee have laws/rules/regulations/policies to prohibit illicit discharges and dumping to the MS4?						
A2	What exclusions are included in laws/rules/regulations/policies?						
A3	What enforcement mechanisms are authorized in the event of an illicit discharge being detected?						
A4	Has an enforcement escalation plan been developed?						
B	Mapping (IDDE)						
B1	Does the permittee have a map showing storm drain pipes, outfalls, and storm drain inlets?						
B2	Is the map readily available to the personnel who would respond to an illicit discharge incident?						
B3	Does the permittee have a map of the storm drain system showing the locations of outfalls and municipally maintained structural stormwater controls?						
C	Field Screening (IDDE)						
C1	How are field screening areas identified?						
C2	Are areas of the MS4 prioritized based on incidents of illicit discharges, land use, dumping reports, etc.?						
C3	How often are field screening areas evaluated?						
C4	Are outfalls inspected during dry weather to identify any potential dry-weather discharges? What does the inspection include?						
C5	If dry-weather flows are present, are they being sampled to determine potential sources of pollutants? For what parameters?						
C6	Does the permittee have a database (or other method) to track locations of illicit discharges, spills, and illegal dumping?						
C7	Does the database track dry-weather monitoring or screening data?						
D	Investigation of Potential Illicit Discharges (IDDE)						
D1	Does the permittee have a procedure for tracing the source of an active illicit discharge?						
D2	Who performs the investigations?						
D3	Are these procedures written in a document or plan?						
D4	What equipment does the permittee use to find illicit discharges?						
D5	Does the permittee have equipment to videotape storm drains, or can it quickly contract out this work?						
D6	How are investigations tracked?						
D7	Has an enforcement response plan been adopted for use when an illicit discharge source has been located?						
E	Spill Response and Prevention (IDDE)						
E1	Does the permittee have a clear set of procedures in place that details who is responsible for responding to spills and emergency situations?						
E2	Do field staff have spill containment supplies in their vehicles, and are they trained to contain minor spills?						

Appendix B4: PEAR #4 – Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
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E3	Is a contractor or other entity available for larger spills?						
E4	Does the permittee have the ability to collect cleanup and abatement costs from the responsible party?						
E5	How are spills and spill response tracked to ensure adequate reporting?						
F	Public Awareness and Reporting Program (IDDE)						
F1	Does the permittee prioritize subwatersheds or neighborhoods and assign resources for educational efforts based on frequency and types of illicit discharge incidents?						
F2	Is there a general phone number or “hotline” in the phone book or Web site that people can call to report a spill or dumping?						
F3	What types of public outreach materials are available to publicize public reporting?						
F4	Does the permittee track the number of public calls or complaints reporting illicit discharges?						
G	Preventing Sanitary Sewer Discharges (IDDE)						
G1	Has the permittee conducted any studies or evaluations to determine whether sanitary sewers are contributing pollutants to the MS4?						
G2	What is the extent of infiltration and inflow into the sanitary sewer system? How is this impacting discharge from the MS4?						
G3	If the permittee also operates a sanitary sewer system, do they have procedures to prevent sewage spills and SSOs to the MS4?						
H	Education and Training (IDDE)						
H1	What type of training do field staff (e.g., storm sewer maintenance crews, street sweepers) receive on spill response and IDDE?						
H2	Are staff generally educated about what illicit discharges are and how to report them?						
I	Legal Authority (I/C)						
I1	Does the Phase I permittee have the authority to require industrial and commercial facilities to implement stormwater BMPs?						
I2	Does the Phase I permittee have the authority to conduct inspections and enforce requirements?						
I3	What laws/rules/regulations/policies provide this legal authority?						
I4	What types of facilities are covered under this legal authority?						
I5	Who (e.g., specific staff, Division/District, etc.) has the authority to enforce the laws/rules/regulations/policies and/or inspect the facilities?						
I6	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
J	Facility Inventory (I/C)						
J1	Has the permittee completed an inventory of industrial/commercial facilities discharging to the stormwater system?						
J2	What types of facilities are included on the inventory?						
J3	What sources were used to create the inventory?						
J3A	Facilities that filed NOIs for EPA MSGP or state industrial general permit coverage?						
J3B	Significant industrial users within the pretreatment program?						

Question Number	Question	Airports		Harbors		Highways	
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J3C	Business licenses?						
J3D	Phone book?						
J3E	“Windshield” survey?						
J4	Does the inventory include all the industrial/commercial facilities subject to the industrial general permit?						
J5	Does the permittee periodically check to see if new facilities that must be covered by an industrial stormwater general permit have filed an NOI?						
J6	What is the process for notifying the permitting authority of non-filers?						
J7	If applicable, does the inventory include all the facilities specified as required in the MS4 NPDES permit?						
J8	How is the inventory updated? How often?						
J9	What information is maintained about the facilities?						
J10	How is the inventory maintained and stored?						
J11	Does the permittee prioritize the facilities?						
J12	Is the prioritization based on facility type, past inspection or enforcement results, proximity to receiving waters, potential pollutant sources on-site, and so forth?						
J13	Is the prioritization used to determine frequency of inspections?						
J14	Has the permittee mapped the locations of prioritized facilities to cross-reference reports of dumping, illicit discharges, or other water quality issues?						
K	Standards, BMPs and Outreach (I/C)						
K1	Has the permittee adopted standards or BMPs that industrial/commercial facilities are required to implement (e.g., all car dealerships must install a wash rack plumbed to the sanitary sewer)?						
K2	Are the requirements for new developments only or are they triggered by improvements of existing facilities? Are there schedules for implementing retrofits?						
K3	Are these standards applicable to existing facilities, new facilities, or both?						
K4	Does the permittee refer facility operators to specific stormwater BMP or standards guidance documents?						
K5	What type of educational program has been developed for industrial and commercial facility operators?						
K6	What type of brochures, handouts, or guidance on BMPs is provided to these facilities by the permittee?						
K7	When is this information provided? During inspections? During training events? During professional organization presentations?						
L	Staff Training (I/C)						
L1	What type of training do the industrial and commercial inspectors receive?						
L2	How often?						
L3	If additional inspectors are used (e.g., food safety inspectors for restaurant inspections, pretreatment inspectors), are they trained specifically on stormwater BMPs and requirements? By whom?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
M	Inspections (I/C)						
M1	Who performs inspections and for what types of facilities (e.g., health inspectors for restaurants, pretreatment inspectors for industrial facilities with a pretreatment permit)						
M2	How often are industrial and commercial facilities inspected? How is the frequency determined?						
M3	Does the permittee’s industrial/commercial inspector(s) use a standard checklist during inspections?						
M4	Is a report written after the inspection? How is the inspection documented in the file?						
M5	Does the permittee verify NPDES permit coverage for facilities?						
M6	For industrial facilities, does the inspector review the SWPPP and monitoring data during the inspection?						
M7	Does the permittee refer non-filers to the permitting authority?						
M8	Do inspectors provide educational materials during inspections? What types?						
M9	If multiple Divisions/Districts perform inspections, how is information transferred or cataloged?						
N	Program Support and Resources (I/C)						
N1	Does the program have a dedicated source of funding to support inspectors?						
O	Enforcement (I/C)						
O1	In instances of noncompliance, do the inspection staff use a formalized, approved enforcement escalation procedure?						
O2	How was the enforcement escalation procedure developed? Is it used? Is it effective?						
O3	Who is authorized to apply various enforcement procedures (e.g., NOVs, fines)?						
O4	What types of penalties are readily available to the inspection staff?						
O5	What is the most common method of gaining compliance (e.g., NOVs, fines, abatement)?						
O6	Can the permittee describe a recent non-compliance issue at an industrial/commercial facility? If so, how was compliance achieved?						
O7	At what point are non-compliance cases referred to the NPDES permitting authority? How many have been referred in the last 12 months?						
P	Consent Decree Questions						
P1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
P1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
P2a	Have deficiencies or potential violations been identified?						
P2b	What are recommendations for correcting these deficiencies or potential violations?						
P3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
P4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
P5	If best practices cannot be universally implemented, what are the identified impediments?						

B5: PEAR #5 – Pollution Prevention / Good Housekeeping Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Infrastructure Mapping and Characterization						
A1	Does the permittee have a map showing all inlets, outfalls, storm drain conduits, stormwater management facilities, and receiving water bodies?						
A2	Does this map include catch basins and structural stormwater controls?						
A3	Is the map readily available and used by maintenance field staff when performing maintenance activities?						
A4	Is the map in hard copy format only or is it also in a geographic information system (GIS)?						
A5	Are infrastructure assets or components named or numbered to better track necessary maintenance and repairs?						
A6	Is information regarding stormwater infrastructure maintained in a database or mapping system? What types of data are maintained?						
A6a	Type of structure or asset						
A6b	Location (address, latitude/longitude)						
A6c	Photo						
A6d	Date built						
A6e	Date last inspected						
A6f	Date last cleaned/maintained						
B	Catch Basin Cleaning						
B1	Does the permittee have a schedule for routine maintenance or cleaning of catch basins?						
B1a	How many are cleaned and how often?						
B1b	Has the permittee targeted certain areas for more frequent maintenance?						
B1c	Does the permittee set goals for how many basins are inspected and cleaned each year?						
B1d	How does the permittee track and record cleaning and maintenance needs?						
B1e	What information is documented? Does the permittee track which catch basins are cleaned, how much material is removed, and so forth?						
B1f	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency? Are they used to identify areas for targeted outreach?						
B2	What are the permittee's procedures for disposing of waste removed from catch basins or storm drains?						
B2a	Does the permittee flush material that could potentially discharge to surface water?						
B2b	If the material is removed using a wet vacuum, how is the material dewatered? How is the decanted water disposed?						
B3	Does the permittee have a schedule for routine maintenance or inspection of storm drain pipes?						
B4	What are the permittee's maintenance procedures for cleaning clogged storm drain pipes?						
C	Stormwater Management Structures						
C1	Are catch basins and other inlet structures marked so that the public knows they drain to surface waters?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
C2	Has the permittee inventoried the type and location of public stormwater management structures in its jurisdiction? How are the data collected and stored?						
C2a	Pump stations						
C2b	Drainage structures (debris basins, detention basins, regional ponds, etc.)						
C2c	Structural treatment controls						
C2d	Open channels						
C3	How is vegetation maintained in grassed swales, rain gardens, pond perimeters, and other vegetated stormwater controls?						
C4	Has the permittee mapped private stormwater management structures?						
C5	How often are these facilities inspected?						
C6	Are the stormwater management structures regularly maintained by the permittee?						
C6a	Are records kept of material and debris removed during maintenance?						
C6b	How is maintenance conducted? Are chemicals used to maintain vegetation and pests?						
C7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency? Are they used to identify areas for targeted outreach based on type and volume of materials removed?						
D	Street Sweeping						
D1	Does the permittee regularly sweep streets? Public parking lots?						
D2	What is the schedule for street sweeping?						
D3	Are areas scheduled for sweeping based on aesthetics only or is consideration given for reducing impacts on the stormwater management infrastructure and surface water?						
D4	What types of sweepers are used? Wet or dry?						
D5	How is street-sweeping debris disposed? If the debris is dewatered, how is this done? How is the decanted water disposed?						
D6	Are records kept of the amount of debris collected?						
D7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency?						
E	Public Streets, Roads and Highway Maintenance						
E1	What types of public streets, roads, and highways operation and maintenance practices and procedures are performed by the permittee?						
E2	Are BMPs used by field crews to minimize stormwater impacts during road maintenance or repair activities?						
E3	What types of BMPs are used? Discuss BMPs used for such activities as:						
E3a	Ditch cleaning						
E3b	Sidewalk repair						
E3c	Asphalt patching						
E3d	Curb and gutter repair						
E3e	Street striping						

Question Number	Question	Airports		Harbors		Highways	
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E3f	Sign painting						
E3g	Maintaining dirt and gravel roads (preventing erosion, dust control)						
F	Facility Inventory						
F1	Does the permittee have an inventory of public facilities? At a minimum, this list should include the following, as applicable:						
F1a	Public works yards						
F1b	Public transit facilities						
F1c	Wastewater and domestic water treatment plants						
F1d	Sanitary sewer system overflow locations						
F1e	Public parks/open areas						
F1f	Public parking lots						
F1g	Public buildings						
F1h	Landfills and hazardous waste disposal sites, transfer locations, or storage facilities						
F2	Have the facilities been inspected and assessed for water quality impacts?						
F3	Are any facilities required to apply for coverage under a general industrial permit? Do these facilities have SWPPPs?						
G	Chemical and Hazardous Material Use and Disposal						
G1	What types of chemicals or hazardous materials are used by the permittee?						
G2	Where are these materials stored?						
G3	Has the permittee implemented an alternative materials program to reduce the use of hazardous materials?						
G4	Has the permittee implemented an inventory reduction program to reduce the quantity of chemicals and hazardous materials stored and used?						
G5	Does the permittee have a household hazardous waste collection center for the public?						
G5a	Are records of the quantity of materials collected maintained by type of material?						
G5b	How does the permittee notify the public of these sites?						
G6	Does the permittee have special household hazardous waste collection days?						
G7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize maintenance frequency? Are they used to identify areas of targeted outreach?						
H	Pesticide, Herbicide and Fertilizer Application and Management						
H1	What kind of program has been established to address pollutants associated with the application of pesticides, herbicides, and fertilizer at public facilities?						
H2	Are the permittee's fertilizer/pesticide applicators certified? Are permits or other certifications required?						
H3	Where are the chemicals stored? Are appropriate procedures and secondary containment followed?						
H4	Is there a pesticide/fertilizer application plan?						
H5	Does the permittee practice integrated pest management (IPM) or use alternatives to pesticides?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
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H6	How does the permittee implement alternative landscaping to minimize the use of fertilizers and pesticides?						
H7	What types of educational activities does the permittee conduct for applicators?						
H8	What types of BMPs are used during application of pesticides in public rights-of-way?						
H9	What types of BMPs are used during application of pesticides at municipal facilities such as parks?						
I	Municipal Staff						
I1	Have standard operating procedures or their equivalent been developed to ensure that municipal field staff integrate stormwater quality BMPs into their daily activities?						
I2	Have BMPs or standards been officially adopted by the permittee for use by municipal field staff?						
I3	What reference materials or guidance documents are provided to field staff regarding BMP specifications and details?						
I4	How does the permittee ensure that staff are fulfilling their responsibilities as outlined in standard operating procedures? Do managers provide oversight on a regular basis?						
J	Contracted Services Staff						
J1	Does the permittee require contractors to incorporate stormwater quality BMPs into their activities?						
J2	How are BMPs required? Are the requirements outlined in requests for proposals? Are they included in contracts?						
J3	Have BMPs or standards been officially adopted by the permittee for use by contractual staff?						
J4	What reference materials or guidance documents are provided to contractual staff regarding BMP specifications and details?						
J5	How does the permittee ensure that contractors are fulfilling their responsibilities as outlined in their contracts? Are inspections performed? Are periodic reports submitted?						
K	Training and Education						
K1	What type of general stormwater training is provided to staff that are not involved in field activities? How often?						
K2	How are new employees trained?						
K3	What types of activity-specific training is provided to field staff? Is information on specific BMPs provided?						
K4	Is any training provided to contract staff?						
L	Consent Decree Questions						
L1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
L1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
L2a	Have deficiencies or potential violations been identified?						
L2b	What are recommendations for correcting these deficiencies or potential violations?						
L3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
L4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
L5	If best practices cannot be universally implemented, what are the identified impediments?						

B6: PEAR #6 – Staffing, Funding, Organizational Structure,
Availability of Resources, and Storm Water Program Sustainability

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	SWMP Planning Documents						
A1	Has a SWMP Plan been developed? If so, when? Last revised?						
A2	Is there a schedule for revision of the SWMP plan?						
A3	Is there an additional MS4-wide document, plan, or program? Who developed it?						
A4	How were internal and external stakeholders included in the development or revision of the SWMP plan?						
B	Staff Inventory and Organization						
B1	Does the permittee have a person designated to lead and coordinate the stormwater program and activities?						
B2	Does the SWMP planning document include an organization chart listing responsible parties for each SWMP component?						
C	Performance Standards or Goals						
C1	Has the permittee established measurable goals or performance standards for program components?						
C2	If performance standards have been established, are they measurable or are they essentially BMP recommendations with level of service (i.e., number of miles swept) requirements?						
C3	Does the permittee attempt to quantify or assess a program or a BMP’s water quality impact or effectiveness as opposed to merely tracking level of service?						
D	Prioritization of Resources						
D1	Has the permittee identified specific pollutants of concern for its local water bodies?						
D2	Are these pollutants of concern consistent with priorities identified in the 303(d)-listed impairments for local water bodies?						
D3	Are these pollutants of concern consistent with any water quality monitoring data or studies conducted by the permittee or another agency?						
D4	Has the permittee developed strategies to specifically address those pollutants?						
D5	How does the permittee decide on program priorities? Are these reassessed periodically?						
D6	Does the SWMP include a schedule of activities?						
D7	Does the MS4 discharge to a water body on the state’s list of impaired waters?						
D7a	What pollutants are identified on the list?						
D7b	Has stormwater been identified as a source?						
D7c	Does the SWMP specifically address this pollutant?						
D7d	Does the SWMP identify BMPs specifically for sources or discharges to the listed water body						
D8	Has a TMDL been developed for a water body to which the MS4 discharges and for which stormwater has been identified as a pollutant source?						
D8a	What pollutants are addressed in the TMDL?						
D8b	Does the TMDL specifically address (or include wasteload allocations for) stormwater?						
D8c	Has the corrective action plan or other planning to address TMDLs been reviewed for integration with the SWMP?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
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D8d	Does the permittee’s stormwater program address the pollutants of concern identified in the TMDL?						
D9	Is the permittee participating in any watershed planning efforts?						
D10	Have any goals been developed based on watershed issues, strategies, or challenges?						
D11	Has the permittee established a set of indicators or parameters to assess progress toward meeting the goal(s) of the watershed plan?						
D12	Is the permittee’s stormwater program implemented on a watershed basis?						
E	Assessment and Evaluation of Programs						
E1	Does the permittee regularly measure progress against the established performance standards and goals?						
E2	Are the goals quantifiable?						
E3	Is the permittee analyzing data in the annual report to identify program activities that may need to change to address problem areas?						
E4	Has the SWMP been altered based on this evaluation?						
F	Assessment and Evaluation of BMPs						
F1	Is the permittee able to track both structural BMPs and non-structural BMPs and activities?						
F2	Has the permittee set measurable goals or performance standards to evaluate individual BMPs and activities or suites of BMPs that address a particular pollutant source?						
F3	Is there a process to evaluate or revise individual BMPs and suites of BMPs when receiving water outcomes or endpoints are not being met?						
F4	Do assessments evaluate impacts of BMPs on ground water?						
F5	Is the permittee analyzing data in the annual report to identify individual BMPs or suites of BMPs that may need to change to address problem areas?						
G	Assessment and Evaluation of Water Quality						
G1	Has the permittee documented environmental, water quality, stream corridor, habitat, or other types of improvements?						
G2	Has the permittee estimated reductions in pollutant loadings from the MS4 or other quantifiable water quality benefits expected as the result of the municipal stormwater program?						
H	Dry & Wet Weather Outfall Screening and Monitoring (If Applicable)						
H1	Does the permittee conduct dry or wet weather screening at outfalls to characterize stormwater flows from the MS4?						
H2	Does the permittee have written screening procedures?						
H3	What is the permittee’s schedule for screening the sites?						
H4	Are parts of the permit area prioritized for screening based on incidents of illicit discharges, land use, dumping reports, etc.?						
H5	What parameters are being tested?						
H6	How does the permittee prioritize sites for follow-up (e.g., magnitude and nature of suspected discharge)?						

Question Number	Question	Airports		Harbors		Highways	
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H7	Who conducts the sampling? What kind of training have sampling personnel received?						
H8	What type of records are kept?						
H8a	Analytical results						
H8b	Date and duration (in hours) of the storm events sampled (rainfall data)						
H8c	Rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff (rainfall data)						
H8d	Duration (in hours) of the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (rainfall data)						
H8e	Estimate of the total flow of the discharge sampled (stage and velocity)						
H9	What analytical methods are used (i.e., 40 CFR Part 136)?						
H10	What are the results of the initial sampling and analysis?						
H11	Has the permittee made any changes to the monitoring program based on past results and experience?						
H12	How have monitoring results been used to assess program components?						
H13	Are monitoring data used to estimate pollutant loads for a TMDL?						
I	Biological Monitoring (If Applicable)						
I1	Does the permittee perform biological sampling?						
I2	Has a plan been developed to conduct biological sampling? If so, does the plan include the following:						
I2a	Identification of sampling stations and rationale for selection						
I2b	Location of known major MS4 outfalls discharging to water bodies in which sampling stations were chosen						
I2c	Land use activities near sampling stations						
I2d	Frequency of monitoring						
I3	Who conducts biological sampling and what training have they received?						
I4	Has the permittee made any changes to the monitoring program based on past results and experience?						
I5	How have monitoring results been used to assess program components?						
J	Ambient Monitoring (If Applicable)						
J1	Does the permittee conduct ambient monitoring to characterize water quality conditions in receiving waters?						
J2	How were the sampling sites selected?						
J3	Is sampling conducted both during dry weather and wet weather?						
J4	What is the frequency of sampling?						
J5	What parameters are analyzed? What sampling and analytical methods have been used?						
J6	Does the permittee have a written protocol or procedures for this sampling program?						
J7	Who conducts the sampling and what training have they received?						
J8	Has the permittee made any changes to the monitoring program based on past results and experience?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
J9	How have monitoring results been used to assess program components?						
J10	Are monitoring data used to estimate pollutant loads for a TMDL?						
K	Data Collection and Reporting						
K1	What reporting requirements are included in the MS4 NPDES permit?						
K2	For co-permittees or Phase II permittees that rely on other entities to implement required elements of the program, how are data provided or reported?						
K3	How are the required data collected, tracked, and reported?						
K3a	Is there a database?						
K3b	Are there reporting forms?						
K4	Are there internal reporting deadlines within the municipal program structure?						
K5	Are the appropriate data being collected by the permittee to be able to measure effectiveness and determine if performance standards are being met?						
K6	How are data disseminated to those who use them, if at all?						
L	Consent Decree Questions						
L1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
L1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
L2a	Have deficiencies or potential violations been identified?						
L2b	What are recommendations for correcting these deficiencies or potential violations?						
L3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
L4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
L5	If best practices cannot be universally implemented, what are the identified impediments?						

Appendix C

PEAR 1 through 6 Schedule

C1: PEAR #1 – Schedule for Post-Construction /
Permanent Best Management Practices

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

1. Notice of Audit

- Within 7 Days of AWPC
- Within 7 Days of Last Milestone
- By Wednesday 22 March 2017

2. Records Request

- Within 14 Days of AWPC
- Within 7 Days of Last Milestone
- By Wednesday 29 March 2017

3. Fulfillment of Records Request

- Within 43 Days of AWPC
- Within 29 Days of Last Milestone
- By Thursday 27 April 2017

4. Records Review Complete

- Within 57 Days of AWPC
- Within 14 Days of Last Milestone
- By Thursday 11 May 2017

5. Pre-Onsite Evaluation Conference Call

- Within 64 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 18 May 2017

6. Completion of Onsite Evaluation

- Within 82 Days of AWPC
- Within 18 Days of Last Milestone
- By Monday 5 June 2017

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaheo Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
76 Days After AWPC	77 Days After AWPC	79 Days After AWPC	82 Days After AWPC	76 Days After AWPC	78 Days After AWPC
Tuesday 30 May 2017	Wednesday 31 May 2017	Friday 2 June 2017	Monday 5 June 2017	Tuesday 30 May 2017	Thursday 1 June 2017
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>BMP 1: OGG CONRAC, location tentative</i>	<i>BMP 1: Pervious pavement and bioswale systems, NDWP New Employee Parking Lots at Elliott St.</i>	<i>BMP 1: Alaska Marine Lines, Pier 29</i>	<i>BMP 1: GLP Asphalt Facility</i>	[BMPs will be inspected only if they are installed by this time] <i>See Records Request. No BMPs to inspect. Meeting only.</i>	<i>BMP 1: University Ave. Bioswales, In median of H-1 ramps to University Ave. on makai side of freeway</i>
<i>BMP 2: Wash rack, location tentative</i>	<i>BMP 2: Contech CDS 2025 System and FloGuard drop inlet filtration insert, NDWP Diamondhead Site Improvements, GSE Lot fronting Hardstand 3</i>	<i>BMP 2: Matson Auto Facility, Pier 32</i>	[Additional BMPs will be inspected only if they are installed by this time] <i>Spencer Yim confirmed via phone on 4-18-17 that no additional BMPs have been installed.</i>		<i>BMP 2: Fort Weaver Rd. CDS Units, Fort Weaver Rd., Ewa</i>
[An additional BMP will be inspected only if one is installed by this time]	<i>BMP 3: Bioswale system, Kalewa St Storage Lots 1-6, Corner of Lagoon and Kalewa St.</i>	<i>BMP 3: HC&D Facility, Pier 60</i> <i>Replaced with UH Marine Center Pier 35, per 4-18-17 Call with Spencer Yim</i>			<i>BMP 3: Luluku Storm Water Treatment System, H-3/Likelike interchange, Kaneohe</i>
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) The Audit Team will then verify that up to three (3) structural and source control BMPs approved by each permittee and subject to post-construction requirements were installed and are being maintained properly in the field. Approved plans and inspection records for each BMP will have been reviewed ahead of the onsite evaluation (during the records review period). The BMPs identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 90 Days of AWPC
- **Consent Decree Deadline: Within 90 Days of AWPC**
- Within 8 Days of Last Milestone
- By Tuesday 13 June 2017

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 135 Days of AWPC
- **Consent Decree Deadline: Within 135 Days of AWPC**
- Within 45 Days of Last Milestone
- By Friday 28 July 2017

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 162 Days of AWPC
- Within 27 Days of Last Milestone
- By Thursday 24 August 2017

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 163 Days of AWPC¹
- **Consent Decree Deadline: Within 165 Days of AWPC**
- Within 1 Days of Last Milestone
- By Friday 25 August 2017

11. Completion of Final PEAR

- Within 183 Days of AWPC²
- **Consent Decree Deadline: 210 Days of AWPC**
- Within 20 Days of Last Milestone
- By Thursday 14 September 2017

¹ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

² The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C2: PEAR #2 – Schedule for Construction Site Runoff Control

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

1. Notice of Audit

- Within 190 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 21 September 2017

2. Records Request

- Within 197 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 28 September 2017

3. Fulfillment of Records Request

- Within 226 Days of AWPC
- Within 29 Days of Last Milestone
- By Friday 27 October 2017

4. Records Review Complete

- Within 239 Days of AWPC
- Within 13 Days of Last Milestone
- By Thursday 9 November 2017

5. Pre-Onsite Evaluation Conference Call

- Within 246 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 16 November 2017

6. Completion of Onsite Evaluation

- Within 261 Days of AWPC
- Within 15 Days of Last Milestone
- By Friday 1 December 2017

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
257 Days After AWPC	258 Days After AWPC	260 Days After AWPC	261 Days After AWPC	257 Days After AWPC	259 Days After AWPC
Monday 27 November 2017	Tuesday 28 November 2017	Thursday 30 November 2017	Friday 1 December 2017	Monday 27 November 2017	Wednesday 29 November 2017
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>Construction Site #1: OGG Consolidated Rent A Car Facility, Kahului Airport, Near Hemaloa St and Keolani Pl.</i>	<i>Construction Site #1: HNL Consolidated Rent A Car Facility, Rent-A-Car Lots, Corner of Aolele, Rodgers, Paiea St.</i>	<i>Construction Site #1: New Kapalama Container Yard, Kapalama, Honolulu Harbor</i>	[Unable to forecast construction projects; will be re-contacted by Kennedy/Jenks Consultants closer to the date]	<i>Construction Site #1: Kuihelani Highway Resurfacing</i>	[Unable to forecast construction projects; will be re-contacted by Kennedy/Jenks Consultants closer to the date]
<i>Construction Site #2: OGG Vehicle Washrack Installation, AOA side, Near Cargo Building and Triturator</i>	<i>Construction Site #2: HNL NDWP IIT Mauka Extension, Mauka Interisland Terminal, Existing Commuter Air Terminal</i>	<i>Construction Site #2: Piers 24-29 Utilities</i>		[An additional construction site will be inspected only if one is active at this time]	
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) The Audit Team will then accompany construction inspectors as they conduct up to two (2) inspections. The purpose of the field evaluation is to assess the permittee's construction inspection program—how knowledgeable the inspectors are about stormwater requirements and BMPs, how thorough of an inspection they conduct, and how they handle problems identified at construction sites. The construction sites identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 268 Days of AWPC¹
- **Consent Decree Deadline: Within 270 Days of AWPC**
- Within 7 Days of Last Milestone
- By Friday 8 December 2017

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 313 Days of AWPC²
- **Consent Decree Deadline: Within 315 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 22 January 2018

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 338 Days of AWPC
- Within 25 Days of Last Milestone
- By Friday 16 February 2018

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 342 Days of AWPC²
- **Consent Decree Deadline: Within 345 Days of AWPC**
- Within 4 Days of Last Milestone
- By Tuesday 20 February 2018

11. Completion of Final PEAR

- Within 362 Days of AWPC³
- **Consent Decree Deadline: 390 Days of AWPC**
- Within 20 Days of Last Milestone
- By Monday 12 March 2018

¹ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

² The deadline is ahead of the CD Deadline due to the required shift in the #7 deadline.

³ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C3: PEAR #3 – Schedule for Public Outreach / Public Involvement

Appendix C3: Schedule for PEAR #3 - Public Outreach / Public Involvement Program

1. Notice of Audit

- Within 369 Days of AWPC
- Within 7 Days of Last Milestone
- By Monday 19 March 2018

2. Records Request

- Within 377 Days of AWPC
- Within 8 Days of Last Milestone
- By Tuesday 27 March 2018

3. Fulfillment of Records Request

- Within 420 Days of AWPC
- Within 43 Days of Last Milestone
- By Wednesday 9 May 2018

4. Records Review Complete

- Within 450 Days of AWPC
- **Consent Decree Deadline: Within 450 Days of AWPC**
- Within 30 Days of Last Milestone
- By Friday 8 June 2018

For this Program Element, the end of the records review period represents the completion of evaluation. No onsite evaluation will occur for this program element. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators may be conducted during the records review period. If requested by the Audit Team or MS4 Permit Coordinator, an in-person meeting may be scheduled during this period.

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.

Appendix C3: Schedule for PEAR #3 - Public Outreach / Public Involvement Program

5. – 7. Not Applicable (See #4)

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 495 Days of AWPC
- **Consent Decree Deadline: Within 495 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 23 July 2018

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 523 Days of AWPC
- Within 28 Days of Last Milestone
- By Monday 20 August 2018

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 525 Days of AWPC
- **Consent Decree Deadline: Within 525 Days of AWPC**
- Within 2 Days of Last Milestone
- By Wednesday 22 August 2018

11. Completion of Final PEAR

- Within 545 Days of AWPC¹
- **Consent Decree Deadline: 570 Days of AWPC**
- Within 20 Days of Last Milestone
- By Tuesday 11 September 2018

¹ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C4: PEAR #4 – Schedule for Illicit Discharge Detection and
Elimination (IDDE) Program Element and
Industrial Commercial Activities/Tenant (I/C) Program

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

1. Notice of Audit

- Within 552 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 18 September 2018

2. Records Request

- Within 559 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 25 September 2018

3. Fulfillment of Records Request

- Within 583 Days of AWPC
- Within 24 Days of Last Milestone
- By Friday 19 October 2018

4. Records Review Complete

- Within 597 Days of AWPC
- Within 14 Days of Last Milestone
- By Friday 2 November 2018

5. Pre-Onsite Evaluation Conference Call

- Within 604 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 9 November 2018

6. Completion of Onsite Evaluation

- Within 623 Days of AWPC
- Within 19 Days of Last Milestone
- By Wednesday 28 November 2018

The table below provides a preliminary schedule for the onsite evaluation period.

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaheo Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit HI 4KE349	Individual Permit HI S000005	Small MS4 Permit HI 03KB482	Small MS4 Permit HI 03KB488	Small MS4 Permit HI 14KE352	Individual Permit HI S000001
614 Days After AWPC Monday 19 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Near baseyard, Keolani Place <i>Outfall #2:</i> Sampling #G, Basin G 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> UPS, 9682 Hemaloa Pl. <i>I/C Facility #2:</i> ASIC-HFFC, 761 Kaonawai Pl. 4pm – 5pm I/C Debrief Meeting [See Note (d)]	616 Days After AWPC Wednesday 21 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Near Iolana Place, Off Lagoon Drive <i>Outfall #2:</i> Aolewa Place, Near Access A 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> UPS, 128 Mokeua Pl. <i>I/C Facility #2:</i> United Airlines, 110 Lauhoe Pl. 4pm – 5pm I/C Debrief Meeting [See Note (d)]	621 Days After AWPC Monday 26 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> SDDH035050, Pier 38 <i>Outfall #2:</i> SDDH0517960, Pier 51 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> Young Brothers Maintenance Facility, Pier 39 <i>I/C Facility #2:</i> Matson Maintenance Facility, Piers 52-53 4pm – 5pm I/C Debrief Meeting [See Note (d)]	622 Days After AWPC Tuesday 27 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> SDDBP043660, Pier P-4 [Outfall #1 is the only accessible outfall at this harbor, due to safety concerns] 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> Marisco <i>I/C Facility #2:</i> Grace Pacific 4pm – 5pm I/C Debrief Meeting [See Note (d)]	615 Days After AWPC Tuesday 20 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Outlet No. 1 <i>Outfall #2:</i> DP3 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH [I/C Program not evaluated, as Maui Highways does not have an I/C Program] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> First Hawaiian Bank, 94-205 Leoku St., Waipahu, HI <i>I/C Facility #2:</i> CM Recycling, 204 Sand Island Access Rd., Honolulu, HI 4pm – 5pm I/C Debrief Meeting [See Note (d)]	623 Days After AWPC Wednesday 28 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> PID 304162 Jarrett White Rd., north of Mahiole St., <i>Outfall #2:</i> PID 301831, Kaahele St., north of Moanalua Rd. 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> First Hawaiian Bank, 94-205 Leoku St., Waipahu, HI <i>I/C Facility #2:</i> CM Recycling, 204 Sand Island Access Rd., Honolulu, HI 4pm – 5pm I/C Debrief Meeting [See Note (d)]

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meetings. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) Illicit Discharge Detection and Elimination (IDDE) Program: The Audit Team will accompany inspectors in the field as they conduct up to two (2) dry-weather outfall screenings. The outfalls identified in this Appendix are preliminary and are subject to modification.

(c) Industrial/Commercial (I/C) Program: The Audit Team will accompany inspectors in the field as they inspect up to two (2) industrial/commercial facilities. The facilities identified in this Appendix are preliminary and are subject to modification.

(d) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 630 Days of AWPC
- **Consent Decree Deadline: Within 630 Days of AWPC**
- Within 7 Days of Last Milestone
- By Wednesday 5 December 2018

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 674 Days of AWPC¹
- **Consent Decree Deadline: Within 675 Days of AWPC**
- Within 44 Days of Last Milestone
- By Friday 18 January 2019

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 700 Days of AWPC
- Within 26 Days of Last Milestone
- By Wednesday 13 February 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 702 Days of AWPC²
- **Consent Decree Deadline: Within 705 Days of AWPC**
- Within 2 Days of Last Milestone
- By Friday 15 February 2019

11. Completion of Final PEAR

- Within 723 Days of AWPC³
- **Consent Decree Deadline: 750 Days of AWPC**
- Within 21 Days of Last Milestone
- By Friday 8 March 2019

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

² The deadline is ahead of the CD Deadline due to the required shift in the #8 deadline.

³ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C5: PEAR #5 – Schedule for Pollution Prevention /
Good Housekeeping Program

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

1. Notice of Audit

- Within 730 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 15 March 2019

2. Records Request

- Within 737 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 22 March 2019

3. Fulfillment of Records Request

- Within 762 Days of AWPC
- Within 25 Days of Last Milestone
- By Tuesday 16 April 2019

4. Records Review Complete

- Within 776 Days of AWPC
- Within 14 Days of Last Milestone
- By Tuesday 30 April 2019

5. Pre-Onsite Evaluation Conference Call

- Within 783 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 7 May 2019

6. Completion of Onsite Evaluation

- Within 800 Days of AWPC
- Within 17 Days of Last Milestone
- By Friday 24 May 2019

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
796 Days After AWPC	797 Days After AWPC	799 Days After AWPC	800 Days After AWPC	796 Days After AWPC	798 Days After AWPC
Monday 20 May 2019	Tuesday 21 May 2019	Thursday 23 May 2019	Friday 24 May 2019	Monday 20 May 2019	Wednesday 22 May 2019
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>Facility #1:</i> OGG Baseyard, Keolani Pl.	<i>Facility #1:</i> HNL Baseyard, 2919 Aolele St.	<i>Facility #1:</i> Sand Island Baseyard, 48 Sand Island Access Road	<i>Facility #1:</i> Kalaeloa Storage Facility	<i>Facility #1:</i> HWY-M Kahului Baseyard, 650 Palapapa Dr.	<i>Facility #1:</i> Kakoi Baseyard, 727 Kakoi St.
<i>Facility #2:</i> ARFF Station, Onsite	<i>Facility #2:</i> Crash Fire Station 2, off Lagoon Drive	[DOT-HAR only operates one maintenance facility at Honolulu Harbor]	[DOT-HAR only operates one maintenance facility at Kalaeloa Harbor]	<i>Facility #2:</i> HAR-M Kahului Harbor, 103 Ala Luina St.	<i>Facility #2:</i> Windward Baseyard, 45-889 Pookela St.
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) After the Kickoff Meeting, the Audit Team will conduct a walk-through of up to two (2) permittee owned or operated facilities (maintenance yards, chemical storage facilities, etc.) with a facility supervisor and/or other key staff to verify that activities are performed as described in the SWMPP. The facilities identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 810 Days of AWPC
- **Consent Decree Deadline: Within 810 Days of AWPC**
- Within 10 Days of Last Milestone
- By Tuesday 3 June 2019

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 855 Days of AWPC
- **Consent Decree Deadline: Within 855 Days of AWPC**
- Within 45 Days of Last Milestone
- By Thursday 18 July 2019

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 882 Days of AWPC
- Within 27 Days of Last Milestone
- By Wednesday 14 August 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 884 Days of AWPC¹
- **Consent Decree Deadline: Within 885 Days of AWPC**
- Within 2 Day of Last Milestone
- By Friday 16 August 2019

11. Completion of Final PEAR

- Within 905 Days of AWPC²
- **Consent Decree Deadline: 930 Days of AWPC**
- Within 21 Days of Last Milestone
- By Friday 6 September 2019

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

² The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C6: PEAR #6 – Schedule for Staffing, Funding, Organizational Structure,
Availability of Resources, and Storm Water Program Sustainability

Appendix C6: Schedule for PEAR #6 - Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

1. Notice of Audit

- Within 912 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 13 September 2019

2. Records Request

- Within 919 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 20 September 2019

3. Fulfillment of Records Request

- Within 961 Days of AWPC
- Within 42 Days of Last Milestone
- By Friday 1 November 2019

4. Records Review Complete

- Within 989 Days of AWPC¹
- **Consent Decree Deadline: Within 990 Days of AWPC**
- Within 28 Days of Last Milestone
- By Friday 29 November 2019

For this Program Element, the end of the records review period represents the completion of evaluation. No onsite evaluation will occur for this program element. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators will be conducted during the records review period. If requested by the Audit Team or MS4 Permit Coordinator, an in-person meeting may be scheduled during this period.

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.

5. – 7. Not Applicable (See #4)

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

Appendix C6: Schedule for PEAR #6 - Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 1034 Days of AWPC²
- **Consent Decree Deadline: Within 1035 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 13 January 2020

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 1058 Days of AWPC
- Within 24 Days of Last Milestone
- By Thursday 6 February 2019

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 1064 Days of AWPC²
- **Consent Decree Deadline: Within 1065 Days of AWPC**
- Within 6 Days of Last Milestone
- By Wednesday 12 February 2020

11. Completion of Final PEAR

- Within 1108 Days of AWPC³
- **Consent Decree Deadline: 1110 Days of AWPC**
- Within 44 Days of Last Milestone
- By Friday 27 March 2020

² The deadline is ahead of the CD Deadline due to the required shift in the #4 deadline.

³ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

Appendix D

Notices to EPA & DOH

D1: Draft Notice of Potential Violation

State of Hawaii Department of Transportation
MS4 Permit Audit
Draft Notice of Potential Violation

Potential Violation Tracking #: _____

Determination of Potential Violation Date: _____

Potential Violation Notification Date: _____
(Today's Date)

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Description of Attached Photographs (if applicable):

Applicable Regulatory References

NPDES Permit No.: _____

SWMPP: _____

Hawaii Administrative Rules (HAR): _____

Code of Federal Regulations (CFR): _____

D2: Final Notice of Potential Violation

State of Hawaii Department of Transportation
MS4 Permit Audit
Final Notice of Potential Violation

Potential Violation Tracking #: _____

Determination of Potential Violation Date: _____

Potential Violation Notification Date: _____
(Today's Date)

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Description of Attached Photographs (if applicable):

Applicable Regulatory References

NPDES Permit No.: _____

SWMPP: _____

Hawaii Administrative Rules (HAR): _____

Code of Federal Regulations (CFR): _____

Result of HDOT PM Review:

- ☐ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: _____
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed
 - o Email Notice sent to EPA/DOH on: _____

D3: Notice of Corrective Action

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: _____ Potential Violation Notification Date: _____
(from Notice of Potential Violation Form)

Corrective Action Notification Date: _____
(Today's Date)

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

HDOT Receipt of Draft PEAR Date: _____

Corrective Action Notification Date: _____
(Today's Date)

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

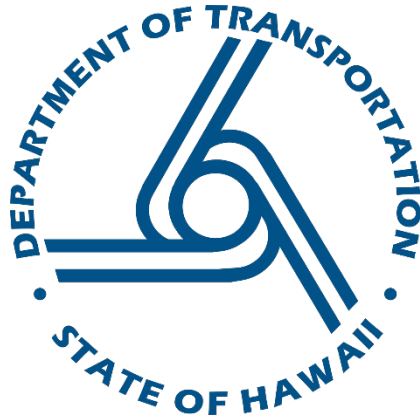
SECTION C

Description of Corrective Action

Description of Attached Photographs (if applicable):

Attachment 19.b

PEAR #5 Draft and Final Reports



DRAFT Program Element
Audit Report (PEAR) No. 5

Pollution Prevention / Good
Housekeeping Program
Part 1 of 2

State Project No. OSC-15-01

July 2019

Prepared by
Kennedy/Jenks Consultants, Inc.

Prepared for
State of Hawaii
Department of Transportation
Office of Environmental Compliance
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List of Acronyms

AWP	Audit Work Plan
BAT	Best Available Technology
BCT	Best Conventional Pollutant Control Technology
BMP	best management practice
CD	Consent Decree
DOH	State of Hawaii Department of Health
DMR	discharge monitoring report
EPA	United States Environmental Protection Agency
HAR	Hawaii Administrative Rules
HDOT	State of Hawaii Department of Transportation
I/C	Industrial Commercial Activities/Tenant
IDDE	Illicit Discharge Detection and Elimination
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit
PEAR	Program Element Audit Report
PM	Project Manager
SWMPP	Stormwater Management Program Plan
SWPCP	Stormwater Pollution Control Plan

Section 1: Introduction

Under Paragraph 10.d of the Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC) entered on 5 November 2014 (CD) with the United States Environmental Protection Agency (EPA) and the State of Hawaii Department of Health (DOH), the State of Hawaii Department of Transportation (HDOT) was required to perform compliance audits of Municipal Separate Storm Sewer System (MS4) permits issued to HDOT's Airports, Highways, and Harbors Divisions (referred to herein as the singular "MS4 Permit Audit"). The ongoing MS4 Permit Audit is being conducted in accordance with an Audit Work Plan (AWP) approved by EPA and DOH on 31 October 2016 and provided as Appendix C of this report. The MS4 Permit Audit consists of individual audits of six program elements:

1. Post-Construction Runoff Control / Permanent Best Management Practices (BMPs)
2. Construction Site Runoff Control
3. Public Outreach / Public Involvement
4. Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program
5. Pollution Prevention / Good Housekeeping Program
6. Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

This Program Element Audit Report (PEAR) 5 documents procedures and findings of the Pollution Prevention / Good Housekeeping Program element.

Section 2: Methods (CD Appendix A Section D.7.a.)

As required in CD Appendix A Section D.7.a., this section includes a specific statement of the procedures followed, HDOT sites and activities visited, and materials reviewed during the MS4 Permit Audit. Additional details on specific dates can be found in Appendix A. Additional permit-specific details can be found in Appendices B1 through B6. The Audit Team reviewed the individual program element for the six permitted MS4 programs concurrently, developing a PEAR that represents the culmination of the auditing efforts across the three HDOT Divisions. The MS4 Permit Audit included three phases (Pre-Audit, On-Site Evaluation, and Reporting), detailed in the following sections.

2.1 Pre-Audit

2.1.1 Notice of Audit

The Audit Team began by providing a Notice of Audit to the MS4 Permit Coordinators via email. The Audit Team requested that the MS4 Permit Coordinators review two key documents.

First, the Audit Team created a table of Governing Regulations applicable to PEAR 5, which included sections of the federal regulations, HDOT's MS4 permits, and the CD. This table was used by the Audit Team in conjunction with the guiding questions in Appendix B of the AWP to informally track the results from the evaluation. The MS4 Permit Coordinators provided comments on this table.

Second, the Audit Team developed a draft list of documents to be reviewed to generate the Records Request. The Audit Team asked the MS4 Permit Coordinators to confirm that the Audit Team had identified the most updated and suitable documents. The Audit Team finalized this list of documents based on feedback from the MS4 Permit Coordinators. This list is provided in Section 1 of Appendices B1 through B6.

2.1.2 Records Request

The Audit Team reviewed the key documents and identified those sections relevant to PEAR 5 (provided in Section 2 of Appendices B1 through B6). Based on this review, the Audit Team developed a Records Request that was shared with the MS4 Permit Coordinators.

2.1.3 Records Review

The MS4 Permit Coordinators responded to the Records Request and the Audit Team completed an initial review of the records received. The Audit Team next sent Requests for Clarification. The Audit Team also conducted teleconferences with certain MS4 Permit Coordinators during this timeframe. MS4 Permit Coordinators provided additional information and records in response to this second request. The Audit Team then completed their review of records received.

2.2 On-Site Evaluation

2.2.1 Pre-On-Site Evaluation Conference Call

The Audit Team and HDOT Project Manager (PM) contacted the MS4 Permit Coordinators to confirm schedules, address questions and security concerns, and confirm personnel safety equipment needed.

2.2.2 On-Site Evaluation

During the On-Site Evaluation, the Audit Team visited several maintenance baseyards at the Airports Division on Oahu, Highways Maui District on Maui, and Highways Oahu District on Oahu. Additional details on specific sites visited during the On-Site Evaluations and associated photographs can be found in Sections 3 and 4, respectively, of Appendices B1 through B6.

2.2.3 Post-On-Site Evaluation Review Period

Following the On-Site Evaluations, the Audit Team reviewed the findings of the Pre-Audits and On-Site Evaluations and addressed final evaluation-related tasks that were noted. This review period completed the evaluation of the program element, as referenced in CD Appendix A, Section B.5.

2.3 Reporting

2.3.1 Draft PEAR

Pursuant to the CD, the Audit Team prepared a draft PEAR 5 and transmitted it to the HDOT PM, who distributed copies of the draft PEAR to the appropriate MS4 Permit Coordinators. The MS4 Permit Coordinators reviewed the draft PEAR and distributed the report to key personnel for their review (at the discretion of the MS4 Permit Coordinators). The MS4 Permit Coordinators submitted to the HDOT PM a consolidated written request for clarification and corrections to the draft PEAR for their respective permit. The HDOT PM then submitted the consolidated requests and corrections to the Audit PM.

2.3.2 Final PEAR

The Audit Team made appropriate changes to the draft PEAR and submitted the final PEAR.

Section 3: Key Findings (CD Appendix A Section D.7.b. – e.)

As required in CD Appendix A Section D.7.b. – e., this section details key findings of the MS4 Permit Audit for PEAR 5.

Compliance with several program components could not be determined, as discussed below:

1. Highways Oahu District and Airports Division - Reference to Best Available Technology currently available (BAT) / Best Conventional Pollutant Control Technology (BCT).

Part B.4 of Highways Oahu District's and Airports Division's individual permits states that "discharge of pollutants from the Permittee's Industrial facilities/activities shall be reduced to the appropriate discharge limitations subject to the Best Available Technology currently available (BAT)/ Best Conventional Pollutant Control Technology (BCT) discharge requirement, consistent with the CWA and other respective federal and state requirements for such facilities."

The Audit Team recommends that Highways Oahu District and Airports Division clarify DOH's expectations for the assessment and enforcement of this permit requirement. In particular, the Audit Team believes that BAT / BCT is not defined in the detail needed to effectively implement the permit requirement. In this regard, the Audit Team could not fully determine Highways Oahu District's and Airports Division's compliance with this permit requirement.

2. Highways Oahu District, Highways Maui District and Airports Division - Reference to EPA's Multi-Sector General Permit (MSGP)

Part E.1. of Airports Division's individual permit states that "DOT-AIR's Maintenance Baseyard...shall comply with the requirements in HAR, Chapter 11-55, Appendix B, which includes requiring the DOT-AIR to comply with the EPA's 2008 Multi-Sector General Permit, Part 8 of the Sector-Specific Requirements for Industrial Activity (e.g., Part 8, Subpart S – Air Transportation)." Hawaii Administrative Rules (HAR) 11-55 Appendix B Part 8.(b) states that Airport Division, Highways Oahu District, and Highways Maui District must "comply with Section 2.1.2 and applicable sector-specific requirements in Part 8 of the EPA's 2008 MSGP" at their maintenance baseyards.

The Audit Team recommends that Highways Oahu District, Highways Maui District, and Airports Division clarify DOH's expectations for the assessment and enforcement of these permit requirements. It is unclear to the Audit Team if DOH expects HDOT to be able to explicitly demonstrate compliance with each of the specific requirements found in the MSGP sections referenced. In this regard, the Audit Team could not fully determine Highways Oahu District's, Highways Maui District's, and Airports Division's compliance with these permit requirements.

3. Highways Oahu District and Airports Division - Basic Water Quality Criteria

Part C.1. of Highways Oahu District's and Airports Division's individual permits states in part that "discharge shall comply with the basic water quality criteria which states: all waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, including ...substances in amounts sufficient to produce taste in the water or detectable off flavor in the flesh of fish" (emphasis added).

It is unclear to the Audit Team how these permit requirements are measurable and enforceable as written. The Audit Team recommends that Highways Oahu District and Airports Division clarify DOH's expectations for the assessment and enforcement of these permit requirements. In this regard, the Audit Team could not fully determine Highways Oahu District's and Airports Division's compliance with these permit requirements.

4. Highways Oahu District and Airports Division - Visual Inspections of Receiving State Waters, Effluent, Control Measures and Best Management Practices (BMPs)

Part C.3. of Highways Oahu District's and Airports Division's individual permits state that "during inspections/screenings as required by this permit, the Permittee shall also visually inspect the receiving state waters, effluent, and control measures and Best Management Practices (BMPs) to detect violations of and conditions which may cause violations of the basic water quality criteria as specified in HAR, Section 11-54-4. (e.g., the Permittee shall look at effluent and receiving state waters for turbidity, color, floating oil and grease, floating debris and scum, materials that will settle, substances that will produce taste in the water or detectable off-flavor in fish, and inspect for items that may be toxic or harmful to human or other life)."

It is unclear to the Audit Team whether visual inspections are required for all inspections/screenings conducted as part of Highways Oahu District's and Airports Division's stormwater programs. It is also unclear whether DOH expects that Highways Oahu District and Airports Division fill out and maintain explicit records documenting the visual inspections. The Audit Team recommends that Highways Oahu District and Airports Division clarify DOH's expectations for the assessment and enforcement of these permit requirements. In this regard, the Audit Team could not fully determine Highways Oahu District's and Airports Division's compliance with these permit requirements.

5. Harbors Division and Kahului Airport - No On-Site Audits

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's Stormwater Management Program Plan (SWMPP). Harbors Division and Kahului Airport did not have facilities described in their respective SWMPPs that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for these permits.

6. Daniel K. Inouye International Airport - Wash Racks

Airports Division's individual permit establishes industrial stormwater requirements at several wash racks. Airports Division provided a final fact sheet from DOH which stated that the final permit no longer includes the wash racks, therefore Airports Division presumes the wash racks were included in the final permit in error. As such, the Audit Team did not assess compliance at these wash racks.

Aside from the limitations discussed above and unless otherwise noted in this report, the Audit Team found HDOT's programs in compliance with their permit obligations.

3.1 Identification of Potential Violations and Deficiencies (CD Appendix A Section D.7.c.)

CD Appendix A Section D.7.c. requires an identification of Potential Violations and Deficiencies. Audit Team recommendations for improvement are noted as applicable.

3.1.1 Potential Violations

A Potential Violation is defined in the AWP as an area where the evaluation found the permittee not in compliance with a specific SWMPP commitment, the CD, and/or permit and regulations. The Audit Team identified six (6) Potential Violations; one (1) pertaining to Airports Division, four (4) pertaining to Highways Maui District and one (1) pertaining to Highways Oahu District. Details on the Potential Violations and HDOT's proposed Corrective Actions are provided in Section 5 of Appendices B2, B5, and B6.

Please note that the Potential Violation numbers assigned to Highways Maui District, as delivered to EPA and HDOH on May 31, 2019, were incorrect and have been corrected in this report as follows:

As Delivered to EPA and HDOH on 5/31/19	As Presented in This Report
PV #4	PV #2
PV #5	PV #3
PV #6	PV #4
PV #7	PV #5

3.1.2 Deficiencies

A Deficiency is defined in the AWP as an item which, if not corrected, may lead to Potential Violations. The Audit Team identified fifteen (15) Deficiencies; three (3) pertaining to Airports Division, five (5) pertaining to Highways Maui District, and seven (7) pertaining to Highways Oahu District. Details on the Deficiencies and HDOT's proposed Corrective Actions are provided in Section 6 of Appendices B2, B5, and B6. For each Deficiency, the Audit Team has provided recommendations for improvement.

3.2 Best Practices and Opportunities (CD Appendix A Section D.7.d.)

CD Appendix A Section D.7.d. requires an identification of best practices and opportunities for information/technology transfer that may be beneficial to other Divisions.

The Audit Team noted several best practices during this PEAR that may be beneficial to other divisions, including:

1. **Use of Digital Forms.** Highways Oahu District and Airports Division utilize digital forms for their baseyard inspections. Airports Division is transitioning to a new system that can be used to implement quality control measures (for example, use of an electronic form that allows an inspection checklist to be submitted only after all questions are marked with a response).

Highways Maui District does not currently utilize digital forms. The Audit Team recommends that Highways Maui District consider exploring the use of digital forms for their baseyard inspections.

2. **Tracking Responses to Inspection Questions.** Airports Division tracks individual responses to baseyard inspection questions to improve training programs and conduct focused training in the future. Highways Oahu District also tracks common trends in documented BMP deficiencies (e.g., fueling, good housekeeping, equipment storage, etc.) and deficiencies specific to individual maintenance crews. This information is utilized when updating annual storm water training for each maintenance crew.

The Audit Team recommends that Highways Maui District also consider tracking responses to baseyard inspection questions in order to enhance employee training.

3. **Maintaining Rainfall Data.** Highways Oahu District and Airports Division maintain historical rainfall data collected from rain gauges installed at their baseyards in order to support their submittal of discharge monitoring reports (DMR), as needed. Along with this rainfall log, they note extenuating circumstances regarding sample collection such as afterhours rainfall events, antecedent rainfall, and insufficient sheet flow when reporting no discharge events.

The Audit Team recommends that Highways Maui District also consider collecting and maintaining site-specific rainfall data and tracking similar extenuating circumstances documenting their sampling efforts and supporting submittal of no-discharge DMRs.

4. **Deadlines for Corrective Actions.** While not required by their permit, Airports Division sets a deadline of 30 days to implement corrective actions that may be appropriate based on baseyard inspection findings. Similarly, Highways Oahu District is currently developing a framework, similar to its construction independent inspection program, where deficiencies are categorized and assigned timeframes to implement corrective actions.

The Audit Team recommends that Highways Maui District also consider setting deadlines for completion of corrective actions found to be appropriate based on baseyard inspection findings.

5. **Signage Prohibiting Washing.** Highways Oahu District has posted signage in areas at the Kakoi Baseyard where potable water is dispensed with no connection to the sanitary sewer for disposal. This signage states the following:

This is NOT A SINK!
Not for Washing of Anything!

The Audit Team recommends that HDOT consider installing such signage at other HDOT baseyards as an effective deterrent against washing tools or equipment in areas which may impact storm water runoff.

3.3 Retrospective Analysis (CD Appendix A Section D.7.b.)

CD Appendix A Section D.7.b. requires a retrospective analysis of program activities that maybe outmoded, ineffective, insufficient, or excessively burdensome, and recommendations to modify, streamline, or expand them in accordance with what has been learned. Findings include the following:

1. **Regular Meetings.** The four maintenance baseyards visited by the Audit Team are governed by the same stormwater regulations throughout HDOT (HAR 11-55 Appendix B). The Audit Team recommends that HDOT consider a regular (quarterly or semi-annual) meeting for MS4 Permit Coordinators to meet in person or via teleconference to discuss items of interest related to compliance at baseyards. This could help facilitate dialogue among the Divisions and give staff the opportunity to share ideas and challenges related to compliance at baseyards.
2. **DMR Guidance.** The Audit Team identified instances where Highways Oahu District did not fill out the “No. Ex” (“Number of Exceedances”) field in their DMRs. This field is required to be filled per DOH guidance (found here: <https://health.hawaii.gov/cwb/files/2017/08/DMR-Instructions.pdf>) and is helpful for DMR reviewers. The Audit Team recommends that Highways Oahu District consult DOH guidance moving forward.
3. **After-Hours Sampling.** Airports Division attempts to collect storm water samples from their baseyard during the weekends and holidays. Highways Maui District and Highways Oahu District do not attempt to sample after-hours, on weekends, or on holidays.

The Audit Team recommends that HDOT consider developing a department-wide policy on whether sampling is attempted after-hours, on weekends, or on holidays. HAR 11-55 Appendix A Part 14. (a) (3), which is applicable to all HDOT stormwater permits, states that “representative sampling may include weekends”. HDOT may consider consulting DOH to better understand DOH’s expectations regarding this matter.

3.4 Implementation (CD Appendix A Section D.7.e)

CD Appendix A Section D.7.e. requires an analysis of the practices implemented for each Division's program elements and a determination as to whether identified best practices can be universally implemented across all three Divisions. If best practices cannot be universally implemented, this section describes identified impediments.

In Sections 3.2 and 3.3, the Audit Team has identified several recommendations where best practices may be universally implemented. For HDOT staff to champion such implementation from within the organization, the Audit Team believes that a compelling case must be made for why the proposed changes will lead to improvements in compliance. Absent that compelling case, HDOT staff may understandably maintain that their time and attention should remain focused on implementing their current programs.

3.5 Positive Program Elements

HDOT staff were helpful and cooperative in responding to requests for information, scheduling and coordinating the On-Site Evaluation, etc. HDOT staff were receptive to MS4 Permit Audit findings shared to date and interested in improving their MS4 programs. The Audit Team identified the following positive program elements during the development of this PEAR:

1. In 2018, Airports Division exceeded their goal of training 70% of maintenance personnel at Kahului Airport.
2. In 2018, Airports Division removed 19,480 cubic feet of trash through street sweeping at the Daniel K. Inouye International Airport, the greatest amount of trash through sweeping recorded in this permit term.
3. At the Daniel K. Inouye International Airport, Airports Division has reduced the use of herbicides by 85% in pounds (55% in gallons) since 2015, which exceeds their goal of a 2% reduction in the number of herbicides used over the permit term.
4. Highways Oahu District has installed excellent non-technical signage at their Kakoi Baseyard which explains aspects of their storm water management plan, BMPs, and rain garden.
5. Effective February 2019, Highways Maui District has established an environmental section within its staff to manage and delegate inspection of the Kahului Baseyard to ensure inspections are performed and corrective actions are implemented and documented.

Appendix A

Project Milestones and Deadlines

Appendix A: PEAR 5 Project Milestones and Deadlines

Appendix A of the Consent Decree (CD) defines various project milestones and deadlines, described for ease of reference below:

Program Element	Evaluation Complete: (a)	Draft PEAR to HDOT: (b)	HDOT Review of Draft PEAR: (c)	Final PEAR to HDOT: (d)
PEAR 5: Pollution Prevention / Good Housekeeping	27 Months (810 Days) ^(e) After AWPC ^(f) 3 June 2019	855 Days After AWPC 18 July 2019	885 Days After AWPC 17 August 2019	930 Days After AWPC 1 October 2019

Notes:

- (a) "Evaluation" as referenced in CD Appendix A Section B.5. is defined to represent the conclusion of the Post-On-Site Evaluation Review Period.
- (b) Pursuant to CD Appendix A Section D.2., Kennedy/Jenks Consultants completed a draft audit report and transmitted it to State of Hawaii Department of Transportation (HDOT) within 45 days of completing the audit of this program element [defined as the conclusion of "evaluation", as discussed in Note (a)].
- (c) Pursuant to CD Appendix A Section D.3., HDOT reviewed the draft PEAR to correct factual inaccuracies within 30 days of receipt.
- (d) Pursuant to CD Appendix A Section D.4., Kennedy/Jenks Consultants completed a final PEAR within 120 days of completing the audit of the program element [defined as the conclusion of "evaluation", as discussed in Note (a)].
- (e) "Months" are based on a 30-day month.
- (f) AWPC = Audit Work Plan Commencement (15 March 2017)

Milestone	Date Completed
Notice of Audit	1 March 2019
Records Request	20 March 2019
Response to Records Request	16 April 2019
Request for Clarifications	30 April 2019
Pre-On-Site Evaluation Conference Call	7 May 2019
Response to Request for Clarifications	14 May 2019
On-Site Evaluation	20 May 2019 to 22 May 2019
End of Post-On-Site Evaluation Review Period	3 June 2019
Potential Violations to HDOT PM/EPA/DOH	31 May 2019 and 5 June 2019
Notice of Corrective Action to EPA/DOH	14 June 2019 and 19 June 2019
Draft PEAR to HDOT PM	18 July 2019
MS4 Permit Coordinator Comments to HDOT PM	13 August 2019
HDOT PM Comments to Audit Team	15 August 2019
Final PEAR to HDOT PM	6 September 2019

Notes:

PM = project manager
EPA = United States Environmental Protection Agency
DOH = State of Hawaii Department of Health
MS4 = Municipal Separate Storm Sewer System

Appendix B1

Permit-Specific Information – Kahului Airport

Appendix B1: Permit-Specific Information – Kahului Airport

1. Key Documents

Permit Document	1. Kahului Airport Small MS4 Permit HI 14KE349
Latest Annual Report	2018 OGG ACR-v1.pdf
Permit	OGG-MS4-permit-20140721.14KE349.FNL_.14 OGG-NGPC-Appendix-K-Permit-Extension-14KE349.EXT_.16
Stormwater Web site	http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/ogg-storm-water-program/
SWMPP	OGG SWMPP flowchart _1_2_2019

Appendix B1: Permit-Specific Information – Kahului Airport

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (2018 OGG ACR-v1.pdf)	Table 2-1 Section 5.1.2.2 Section 5.3 Section 6.1.4 Section 10
Permit (OGG-MS4-permit-20140721.14KE349.FNL_.14, OGG-NGPC-Appendix-K-Permit-Extension- 14KE349.EXT_.16)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/ogg-storm-water-program/)	In entirety
SWMPP (OGG SWMPP flowchart _1_2_2019)	Pollution Prevention / Good Housekeeping section

Appendix B1: Permit-Specific Information – Kahului Airport

3. On-Site Evaluation

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's SWMPP. Kahului Airport did not have facilities described in their SWMPP that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for this permit.

4. On-Site Evaluation Photos

No photographs were taken, as no on-site audit was conducted for this permit.

5. Potential Violations

No Potential Violations were identified by the Audit Team for this permit.

6. Deficiencies

No Deficiencies were identified by the Audit Team for this permit.

Appendix B2

Permit-Specific Information – Daniel K. Inouye International Airport

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

1. Key Documents

<div>Permit</div> <div>Document</div>	<div>2. Daniel K. Inouye International Airport</div> <div>Individual Permit</div> <div>HI S000005</div>
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts	SWMPP-SectionE.pdf
Authorized Use List of Chemicals	2. Chemical Applications Authorized Use List.pdf
Field Manual (Maintenance Activities Best Management Practices Field Manual)	SWMPP-SectionE.pdf Baseyard-SWPCP_20181026.pdf
Latest Annual Monitoring Plan	SWMPP-SectionH.pdf
Latest Annual Monitoring Report	7.10 Annual Monitoring Report-v1.pdf
Latest Annual Report	2. HNG-3PYA-6V2CY-v1-SubmissionDownload.zip
Maintenance plan for vegetated portions of the drainage system used for erosion and sediment control, and LID features	SWMPP-SectionE.pdf
Permit	HNL MS4 Permit.pdf 2. 20190301.HI S000005.EXT.19.pdf
Storm Water Pollution Control Plans for Facilities to be Audited	Baseyard-SWPCP_20181026.pdf Baseyard-SWPCP_March2019_Final.pdf
Stormwater Web site	http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/hnl-storm-water-program/
SWMPP	SWMPP-Introduction-201810Oct.pdf SWMPP-Section[A-H].pdf Note: SWMPP Section D updated June 2018 SWMPP Section E updated October 2018
Trash Reduction Plan	SWMPP-SectionE.pdf

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts (<i>SWMPP-SectionE.pdf</i>)	In entirety
Authorized Use List of Chemicals (<i>2. Chemical Applications Authorized Use List.pdf</i>)	In entirety
Field Manual (Maintenance Activities Best Management Practices Field Manual) (<i>SWMPP-SectionE.pdf</i> , <i>Baseyard-SWPCP_20181026.pdf</i>)	In entirety
Latest Annual Monitoring Plan (<i>SWMPP-SectionH.pdf</i>)	Section 1.3 Section 1.4 Section 2.2 Section 2.3 Section 2.4 Section 3.2 Section 4.2.1
Latest Annual Monitoring Report (<i>7.10 Annual Monitoring Report-v1.pdf</i>)	In entirety
Latest Annual Report (<i>2. HNG-3PYA-6V2CY-v1-SubmissionDownload.zip</i>)	Section 2 Section 3.3.1.3 Section 3.3.3.1 Section 7.2 Section 7.3 Table 7-4
Maintenance plan for vegetated portions of the drainage system used for erosion and sediment control, and LID features (<i>SWMPP-SectionE.pdf</i>)	In entirety
Permit (<i>HNL MS4 Permit.pdf</i> , <i>2. 20190301.HI S000005.EXT.19.pdf</i>)	In entirety
Storm Water Pollution Control Plans for Facilities to be Audited (<i>Baseyard-SWPCP_20181026.pdf</i> , <i>Baseyard-SWPCP_March2019_Final.pdf</i>)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/hnl-storm-water-program/)	In entirety
SWMPP (<i>SWMPP-Introduction-201810Oct.pdf</i> , <i>SWMPP-Section[A-H].pdf</i> , <i>SWMPP Section E updated October 2018</i>)	SWMPP Section A SWMPP Section E SWMPP Section H
Trash Reduction Plan (<i>SWMPP-SectionE.pdf</i>)	In entirety

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

3. On-Site Evaluation

On 21 May 2019, the Audit Team held a kickoff meeting at Daniel K. Inouye International Airport with Airports Division staff and consultants. Photographs taken during the On-Site Evaluation can be found in Section 4.

Next, the Audit Team drove to the HNL Maintenance Baseyard located at 2919 Aolele Street and met with facility personnel. The Audit Team then conducted an inspection of the baseyard, accompanied by Airports Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

4. On-Site Evaluation Photos

Photographs are provided on the subsequent pages below.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

5. Potential Violations

Potential Violation Tracking #1 applies to this permit. Please see pages B2-6 through B2-10.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Final Notice of Potential Violation

Potential Violation Tracking #: 1

Determination of Potential Violation Date: 6/3/2019

Potential Violation Notification Date: 6/5/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

As reported in Section 2.3 of Airports Division's Annual Monitoring Report (2017-2018) for the Daniel K. Inouye International Airport (HNL), there have been consistent exceedances of storm water discharge limits for total phosphorous, total nitrogen, and nitrate + nitrite at the HNL Maintenance Baseyard since the permit was issued in 2014. Copper has consistently been in exceedance except for one sampling event during the current permit term, and zinc has been in exceedance for every sampling event.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.:

HI S000005 Part C.2: "... discharge shall not cause or contribute to a violation of any of the applicable beneficial uses or water quality objectives contained in HAR, Chapter 11-54, titled "Water Quality Standards."

HI S000005 Part F.2. {1}.: "Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table."

HI S000005 Part F.2.{4}.: "Monitor and Report. The value shall not exceed the applicable limit as specified in Chapter 11-54 for the applicable classification of the receiving state waters."

SWMPP: Not Applicable.

Hawaii Administrative Rules (HAR): Not Applicable.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☒ Confirmed Potential Violation
 - Email Notice of Corrective Action sent to EPA/DOH on: **6/19/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 1 Potential Violation Notification Date: **6/5/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/19/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

SUMMARY - For details see attachment titled “Corrective Actions for PEAR 5 Potential Violation #1”:

Department of Transportation, Airports Division (DOTA) has implemented the following corrective actions for Potential Violation (PV) Tracking #1 related to exceedances reported within Section 2.3 of DOTA’s Annual Monitoring Report (2017–2018) for the Daniel K. Inouye International Airport (HNL), previously known as Honolulu International Airport.

There were two sampling events during the 2017–2018 reporting year, on August 29, 2017 and on December 26, 2017. In November 2017, between these sampling events, five metal-reducing drain inlet filters were installed (refer to Section 2.5 of the 2017–2018 Annual Monitoring Report). These multi-layer filter cartridges have filter media and boom designed to treat dissolved and particulate metals.

In response to monitoring exceedances, DOTA has implemented numerous measures to reduce pollutants subject to the Best Available Technology (BAT)/Best Conventional Pollutant Control Technology (BCT) currently available in accordance with Permit

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Part B.4. These pollutant-reducing corrective actions are described below and in the latest Annual Monitoring Plan for Fiscal Year 2020 [Storm Water Management Program Plan (SWMPP) Section H, April 2019].

- DOTA increased the sweeping frequency at the HNL Maintenance Baseyard to weekly instead of twice a month to target exceeded parameters, since dissolved metals and nutrients can attach to suspended particles. Sweeping will be conducted in accordance with weather conditions, surface traffic, area access, and maintenance worker safety considerations.
- On March 27, 2019, DOTA implemented a temporary source control Best Management Practice (BMP) by painting the metal surfaces with corrosion-inhibiting paint, replacing corroded fencing, and sweeping the area to remove the rust flakes.
- On May 6, 2019, DOTA also installed a temporary BMP, a drain protector mat (specifically, a GR8 Guard), at drain inlet EID 5499, the inlet closest to the covered parking structure that was severely rusting. This drain protector mat will provide another level of protection to capture any rusted metal flakes and sediment.

DOTA will sample during the next representative storm event to measure the effectiveness of recently implemented BMPs including the painting of the metal covered parking structure, the installation of the GR8 Guard, and more frequent HNL Maintenance Baseyard sweeping. If the next sample event has exceedances, DOTA will report any exceedance in accordance with Section 4.2.3 of the SWMPP Section H, collect samples from the subsequent representative storm event to monitor exceedance parameters for compliance with effluent limits, and will use an adaptive management approach to evaluate and implement potential BMPs/Permanent BMPs (PBMPs).

Additionally, DOTA has plans to implement the following future actions to help reduce storm water sampling exceedances from HNL Maintenance Baseyard:

- A construction project for the Heavy Equipment Garage at the HNL Maintenance Baseyard (AO1142-15), which will provide shelter for heavy equipment; thus, lessening the potential impact to storm water. The project bid opening was on May 24, 2018; the project was awarded to Molina Engineering; and a pre-construction meeting was held on April 3, 2019. This project could reduce exposure of parking and maintenance activities of heavy equipment that currently do not fit under the existing auto shop.
 - o Project Construction Start – September 2019.
 - o Project Construction Completion – Estimated to be December 2020.
- Maintenance of the five drain inlet inserts (replacing the filter media and the booms) will be conducted under the Inspection, Maintenance, and Pollution Prevention of MS4 Contract (BS1927-23), which has been awarded to Weston Solutions and is anticipated to begin in August 2019. With this contract, DOTA has the ability to authorize the contractor to replace the filter media more frequently, such that pollutants that could potentially leach from the filter media do not affect the storm water.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

DOTA is committed to continuing to research and implement additional BMPs if subsequent storm water sampling events do not show an appropriate reduction in parameters previously detected as exceedances.

In summary, DOTA will continue to report exceedances and take steps to implement various BMPs in order to reduce, eliminate, and prevent reoccurrences of the exceedances in accordance with its Permit and the HAR, Chapter 11-55, Appendix B, Sections 10(b)(2) and 10(c).

Description of Attachments (if applicable):

Corrective Actions for PEAR 5 Potential Violation #1



Program Element Audit Report (PEAR) 5 Pollution Prevention/ Good Housekeeping Program Corrective Actions for Draft Notice of Potential Violation



Description of Corrective Action:

Department of Transportation, Airports Division (DOTA) has implemented the following corrective actions for Potential Violation (PV) Tracking #1 related to exceedances reported within Section 2.3 of DOTA's Annual Monitoring Report (2017–2018) for the Daniel K. Inouye International Airport (HNL), previously known as Honolulu International Airport.

Section 2.3 of the 2017–2018 Annual Monitoring Report states:

Since the MS4 [Municipal Separate Storm Sewer System] Permit took effect on 4/14/2014, there has been consistent exceedances for total phosphorous, total nitrogen, and nitrate + nitrite. These exceedances were previously not known to DOTA due to unit errors of the effluent limits. Since these exceedances were discovered this year, DOTA is unable to determine the reasons for these past exceedances. Future stormwater monitoring analysis will take into account these past exceedances, and if exceedances occur, DOTA will evaluate the reasons why.

Except for one sampling event during the current permit term, copper has consistently been in exceedance, and zinc has been in exceedance for every sampling event. It is hoped that the five-drain inlet filter PBMPs [Permanent Best Management Practices] installed this year [2017] will help lower the concentration of metals.

There were two sampling events during the 2017–2018 reporting year, on August 29, 2017 and on December 26, 2017. In November 2017, between these sampling events, five metal-reducing drain inlet filters were installed (refer to Section 2.5 of the 2017–2018 Annual Monitoring Report). These multi-layer filter cartridges have filter media designed to treat dissolved and particulate metals. The five drains also have a fitted boom to further aid in absorbing and filtering metals. While there were still metal exceedances for the December 26, 2017 sampling event, DOTA decided that more sampling was needed to determine the effectiveness of the drain inlet filters. Furthermore, in May 2018, DOTA moved the sample location for HNL 003 approximately 10 feet upline from the previous location. The area-velocity flow sensor, the multi-parameter sonde, and the strainer were relocated to the 24-inch pipe upline before entering the oil water separator (OWS) due to the observed tidal influence from Kaloaloa Canal within the pipe from OWS to outfall 4576 (refer to Section 2.5 of the 2017–2018 Annual Monitoring Report and Section 2.2 of the Annual Monitoring Plan for Fiscal Year 2019). DOTA did this in order to collect a more representative sample of stormwater runoff from the HNL Maintenance Baseyard.

During the 2018–2019 reporting year, DOTA has continued to sample each representative storm event since there have been exceedances. There have been four representative sampling events so far during this reporting year: September 12, 2018; October 26, 2018; December 18, 2018; and December 28, 2018. The exceedances from these sampling events include total phosphorous, total nitrate, nitrate + nitrite, ammonia nitrogen, turbidity, copper and zinc, with the exception of less nutrient exceedances during the September 12, 2018 and October 26, 2018 events. DOTA has conducted multiple site visits during rain events to re-evaluate stormwater flow at the HNL



Program Element Audit Report (PEAR) 5 Pollution Prevention/ Good Housekeeping Program Corrective Actions for Draft Notice of Potential Violation



Maintenance Baseyard and possible causes of the exceedances. In response to monitoring exceedances, DOTA has implemented numerous measures to reduce pollutants subject to the Best Available Technology (BAT)/Best Conventional Pollutant Control Technology (BCT) currently available in accordance with Permit Part B.4. These pollutant reducing corrective actions are described below and in the latest Annual Monitoring Plan for Fiscal Year 2020 (Storm Water Management Program Plan [SWMPP] Section H, April 2019).

DOTA increased the sweeping frequency at the HNL Maintenance Baseyard to weekly, instead of twice a month, to target exceeded parameters, since dissolved metals and nutrients can attach to suspended particles. Sweeping will be conducted in accordance with weather conditions, surface traffic, area access, and maintenance worker safety considerations. By removing suspended solids with increased street sweeping, DOTA will evaluate if it can reduce the metals and nutrients associated with these particles.

Since the installation of the five drain inlet filters, sampling results have unfortunately continued to exceed in metals. In response, DOTA noticed that the covered parking structure near drain inlet EID 5499 was severely rusted, resulting in metal rust flakes accumulating on the ground. On March 27, 2019, DOTA implemented a temporary source control Best Management Practice (BMP) by painting the metal surfaces with corrosion inhibiting paint, replacing the corroded fencing, and sweeping the area to remove the rust flakes (see Figures 1 through 4). This is a temporary measure until a capital improvement project can be planned to refurbish the structure.



Figure 1. Rusty Covered Parking Structure (March 13, 2019).



Figure 2. Covered Parking Structure Mitigated (March 27, 2019). Metal surfaces painted with corrosion inhibiting paint. Corroded fencing removed. Rust flakes on the ground swept up.



Program Element Audit Report (PEAR) 5 Pollution Prevention/ Good Housekeeping Program Corrective Actions for Draft Notice of Potential Violation



Figure 3. New Fence for the Covered Parking Structure (April 15, 2019).



Figure 4. New Fence for the Covered Parking Structure (April 15, 2019).

On May 6, 2019, DOTA also installed another temporary BMP, a drain protector mat (specifically a GR8 Guard), at drain inlet EID 5499, the inlet closest to the covered parking structure that was severely rusting (see Figure 5). While the covered parking structure rust issue was temporarily mitigated, this drain protector mat will provide another level of protection to capture any rusted metal flakes. It could also assist in combating the turbidity exceedances by protecting against possible loose soil from the aggregate storage area in the vicinity.



Figure 5. GR8 Guard Drain Protector Mat at Drain Inlet EID 5499.



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**Pollution Prevention/
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Corrective Actions for
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DOTA will sample the next representative storm event to measure the effectiveness of recently implemented BMPs including the painting of the metal covered parking structure, the installation of the GR8 guard, and more frequent HNL Maintenance Baseyard sweeping. If the next sample event has exceedances, DOTA will report any exceedance in accordance with Section 4.2.3 of the SWMPP Section H, collect samples from the subsequent representative storm event to monitor exceedance parameters for compliance with effluent limits, and will use an adaptive management approach to evaluate and implement potential BMPs/PBMPs.

Additionally, DOTA has plans to implement the following future actions to help reduce stormwater sampling exceedances from HNL Maintenance Baseyard:

- DOTA has planned a construction project for the Heavy Equipment Garage at the HNL Maintenance Baseyard (AO1142-15), which will provide shelter for heavy equipment, thus lessening the potential impact to stormwater. The project bid opening was in May 24, 2018; the project was awarded to Molina Engineering; and a pre-construction meeting was held on April 3, 2019. This project could reduce exposure of parking and maintenance activities of heavy equipment that currently do not fit under the existing auto shop. Please see below for the construction schedule of the project.
 - Project Construction Start – September 2019
 - Project Construction Completion – Estimated to be December 2020
- Maintenance of the five drain inlet inserts, which involves replacing the filter media and the booms will be conducted under the Inspection, Maintenance, and Pollution Prevention of MS4 Contract (BS1927-23), which has been awarded to Weston Solutions and is anticipated to begin in August 2019. With this contract, DOTA has the ability to authorize the contractor to replace the filter media more frequently, such that pollutants that could potentially leach from the filter media do not affect the stormwater and to ensure proper maintenance of these drain inlet inserts.

DOTA is committed to continuing to research and implement additional BMPs if subsequent stormwater sampling events do not show an appropriate reduction in parameters previously detected as exceedances. Additionally, PBMPs will be researched to see if any options are feasible and allowable per Airport and FAA safety and wildlife regulations.

In summary, DOTA will continue to report exceedances and take steps to implement various BMPs in order to reduce, eliminate, and prevent reoccurrences of the exceedances in accordance with its Permit and the HAR, Chapter 11-55, Appendix B, Sections 10(b)(2) and 10(c).

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

6. Deficiencies

Deficiency Tracking #1 through #3 applies to this permit. Please see pages B2-13 through B2-25.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Draft Notice of Deficiency

Deficiency Tracking #: 1

Related Permit(s): Airports Division

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed equipment stored outdoors leaking oil onto the pavement without a drip pan at the Daniel K. Inouye International Airport (HNL) Maintenance Baseyard.

Recommendations for Improvement:

Airports Division should implement the best management practices described in their storm water pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photographs of equipment leaking oil observed during the On-Site Audit and associated map indicating location where photographs were taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP (March 2019) Appendix V (Best Management Practices):

Page 4: "Maintain vehicles and equipment used at the facility in good operating condition. Inspect damaged vehicles and equipment for fluid leaks and repair as soon as possible. Use drip pans as necessary and empty when full."

Page 4: "Clean up spills and leaks promptly using dry methods (e.g., absorbent material) to prevent the discharge of pollutants. Use appropriate cleanup materials for the spill. Clean paved surfaces to remove oil and grease stains using degreasers and water as long as all the water is contained, captured by a vacuum, and disposed of properly."

Page 4: "Store damaged and/or leaky vehicles and equipment indoors whenever possible, and use drip pans to catch leaks if stored outdoors. DO NOT leave leaking vehicles and equipment parked overnight on the painted concrete pad area outside the maintenance shop without appropriate drainage controls."

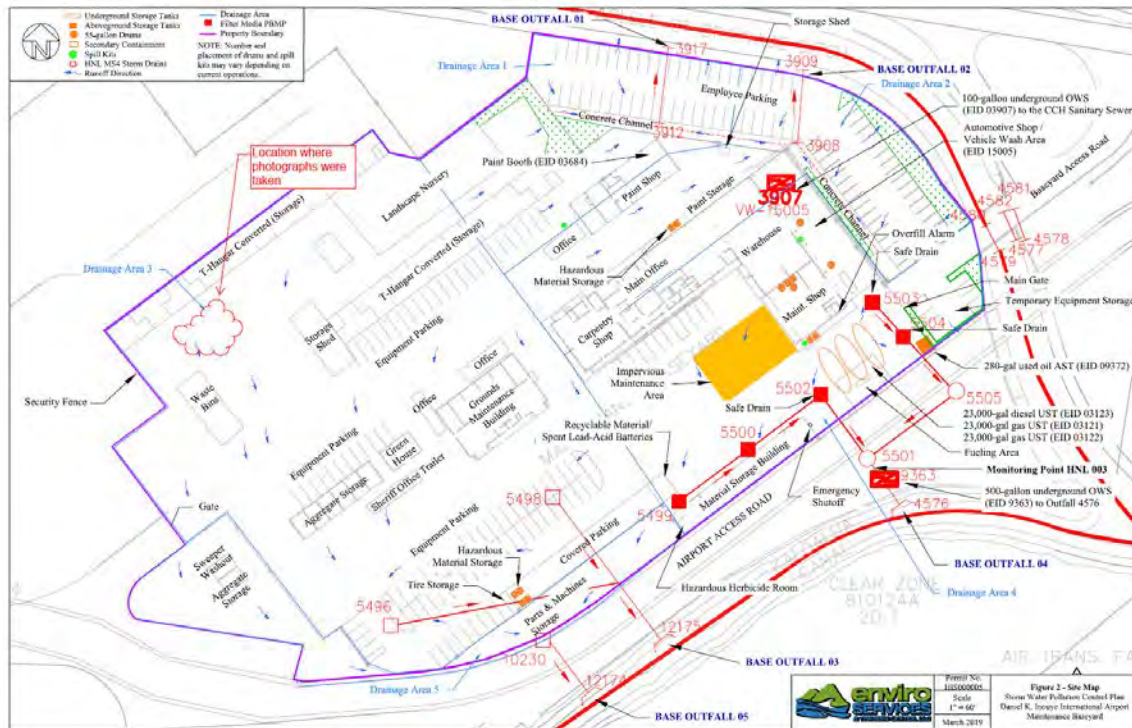
Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye
International Airport



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 1

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Draft Notice of Deficiency

Deficiency Tracking #: 2

Related Permit(s): Airports Division

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed metal materials stored outside and not under cover at the Daniel K. Inouye International Airport (HNL) Maintenance Baseyard.

Recommendations for Improvement:

Airports Division should implement the best management practices described in their storm water pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photograph of metal storage observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP (March 2019) Appendix V (Best Management Practices):

Page 18: “Store metal materials, such as reinforcing steel and dowels, on pallets or dunnage, and under cover, or in containers to prevent contact with rain and runoff.”

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

A photograph of a scrap metal yard under a clear blue sky. In the foreground, there are large piles of scrap metal, including coiled rebar and twisted rods, some resting on wooden pallets. To the left, a large industrial fan is visible. In the background, there are concrete structures, a metal framework, and a building with a chain-link fence.



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 2

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Draft Notice of Deficiency

Deficiency Tracking #: 3

Related Permit(s): Airports Division

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed debris (gravel) in the concrete channel by the employee parking at the Daniel K. Inouye International Airport (HNL) Maintenance Baseyard.

Recommendations for Improvement:

Airports Division should implement the best management practices described in their storm water pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of debris observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

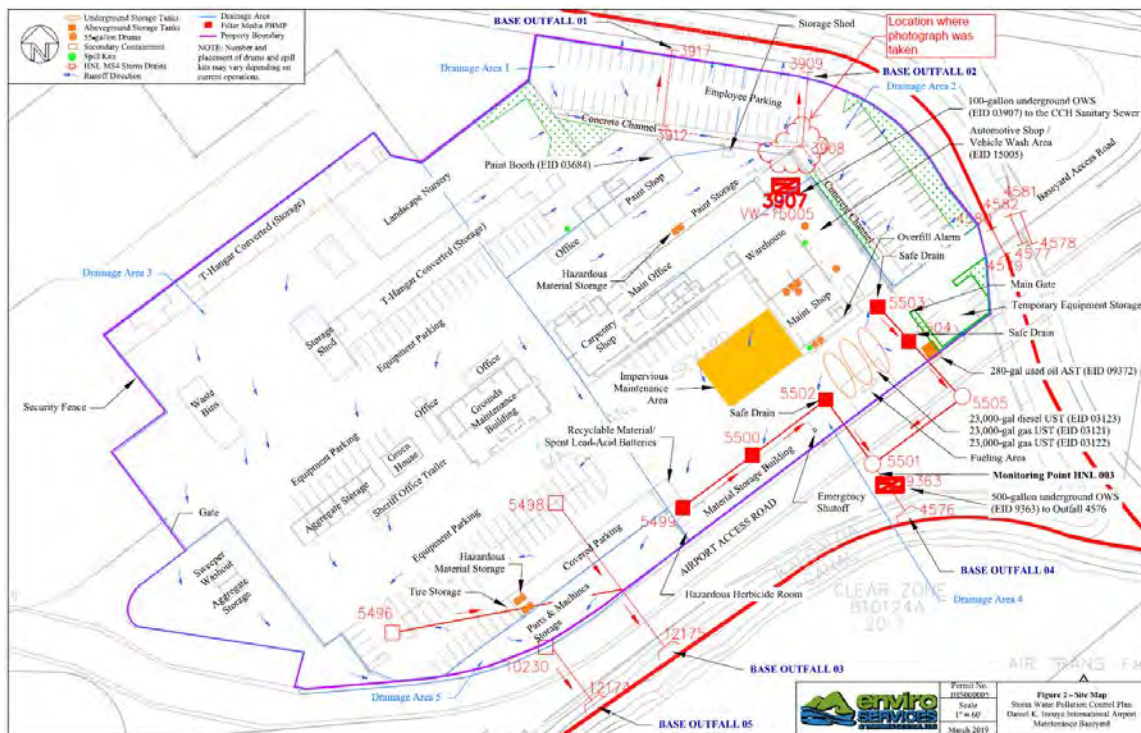
SWPCP (March 2019)

Page 11: "With regards to debris management, the Maintenance Baseyard shall also street sweep their facility and clean debris from the concrete channel by the Employee Parking."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 3

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B3

Permit-Specific Information – Honolulu Harbor

Appendix B3: Permit-Specific Information – Honolulu Harbor

1. Key Documents

Permit Document	3. Honolulu Harbor Small MS4 Permit HI 03KB482
Latest Annual Report	DOT-HAR_2018ACR_Complete.pdf
Permit	20161202.03KB482.EXT.16.pdf
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor	DOT-HAR_StockpilePlan_2015Jan.pdf
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan)	20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf
Stormwater Web site	http://hidot.hawaii.gov/harbors/library/storm-water-management/
SWMPP	Final-SWMP-150325.pdf

Appendix B3: Permit-Specific Information – Honolulu Harbor

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (DOT- <i>HAR_2018ACR_Complete.pdf</i>)	Section 2.1 Section 3.1 Table 10 Section 4.8 Attachments 15-19
Permit (20161202.03KB482.EXT.16.pdf)	In entirety
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor (DOT- <i>HAR_StockpilePlan_2015Jan.pdf</i>)	In entirety
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan) (20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/harbors/library/storm-water-management/)	In entirety
SWMPP (Final-SWMP-150325.pdf)	Section A: 2.6, Table 2-6 Section E

Appendix B3: Permit-Specific Information – Honolulu Harbor

3. On-Site Evaluation

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's SWMPP. Honolulu Harbor did not have facilities described in their SWMPP that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for this permit.

4. On-Site Evaluation Photos

No photographs were taken, as no on-site audit was conducted for this permit.

5. Potential Violations

No Potential Violations were identified by the Audit Team for this permit.

6. Deficiencies

No Deficiencies were identified by the Audit Team for this permit.

Appendix B4

Permit-Specific Information – Kalaeloa Barbers Point Harbor

Appendix B4: Permit-Specific Information – Kalaeloa Barbers Point Harbor

1. Key Documents

<div>Permit</div> <div>Document</div>	<div>3. Honolulu Harbor</div> <div>Small MS4 Permit</div> <div>HI 03KB482</div>
Latest Annual Report	DOT-HAR_2018ACR_Complete.pdf
Permit	20161202.03KB482.EXT.16.pdf
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor	DOT-HAR_StockpilePlan_2015Jan.pdf
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan)	20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf
Stormwater Web site	http://hidot.hawaii.gov/harbors/library/storm-water-management/
SWMPP	Final-SWMP-150325.pdf

Appendix B4: Permit-Specific Information – Kalaeloa Barbers Point Harbor

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (DOT- <i>HAR_2018ACR_Complete.pdf</i>)	Section 2.1 Section 3.1 Table 10 Section 4.8 Attachments 15-19
Permit (20161202.03KB482.EXT.16.pdf)	In entirety
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor (DOT- <i>HAR_StockpilePlan_2015Jan.pdf</i>)	In entirety
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan) (20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/harbors/library/storm-water-management/)	In entirety
SWMPP (Final-SWMP-150325.pdf)	Section A: 2.6, Table 2-6 Section E

Appendix B4: Permit-Specific Information – Kalaeloa Barbers Point Harbor

3. On-Site Evaluation

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's SWMPP. Kalaeloa Harbor did not have facilities described in their SWMPP that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for this permit.

4. On-Site Evaluation Photos

No photographs were taken, as no on-site audit was conducted for this permit.

5. Potential Violations

No Potential Violations were identified by the Audit Team for this permit.

6. Deficiencies

No Deficiencies were identified by the Audit Team for this permit.

Appendix B5

Permit-Specific Information – Highways Maui District

Appendix B5: Permit-Specific Information – Highways Maui District

1. Key Documents

<div>Permit</div> <div>Document</div>	<div>5. Maui District</div> <div>Small MS4 Permit</div> <div>HI 15KE674</div>
Latest Annual Report	Annual_Report_2018-HDOTMauiSWMP-WAtt.pdf
Permit	NGPC2015-04-02HI15KE674.pdf
	20161122 NGPC Extension HI 15KE674 EXT 16.pdf
Storm Water Pollution Control Plans for Facilities to be Audited	5. Appx-F.2-Kahului-Baseyard-SWPCP-Nov-2016.pdf
Stormwater Web site	http://hidot.hawaii.gov/stormwater/storm-water-management/maui/swmp/ http://hidot.hawaii.gov/stormwater/storm-water-management/maui/ http://stormwatermaui.com/
SWMPP	Maui-Storm-Water-Managment-Plan-Dec-2016.pdf Plus Appendices

Appendix B5: Permit-Specific Information – Highways Maui District

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (<i>Annual_Report_2018-HDOTMauiSWMP-WAtt.pdf</i>)	Section 2.2.6 Section 2.4.5 Section 3.4 Section 6
Permit (<i>NGPC2015-04-02HI15KE674.pdf, 20161122 NGPC Extension HI 15KE674 EXT 16.pdf</i>)	In entirety
Storm Water Pollution Control Plans for Facilities to be Audited (<i>5. Appx-F.2-Kahului-Baseyard-SWPCP-Nov-2016.pdf</i>)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/stormwater/storm-water-management/maui/swmp/ , http://hidot.hawaii.gov/stormwater/storm-water-management/maui/ , http://stormwatermaui.com/)	In entirety
SWMPP (<i>Maui-Storm-Water-Managment-Plan-Dec-2016.pdf</i>)	Section 1.2.2 Table 1-2 Section 3.2.2.1 Section 6

Appendix B5: Permit-Specific Information – Highways Maui District

3. On-Site Evaluation

20 May 2019

On May 20, 2019, the Audit Team held a kickoff meeting at Highways Maui District with Highways Division staff and consultants. Photographs taken during the On-Site Evaluation can be found in Section 4.

Facility #1 HWY-M Kahului Baseyard, 650 Palapapa Dr.

The Audit Team then conducted an inspection of the HWY-M Kahului baseyard, accompanied by Highways Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

Facility #2 HAR-M Kahului Harbor Baseyard, 103 Ala Luina St.

The Audit Team then drove to HAR-M Kahului Harbor baseyard and conducted an inspection of the boat and oil storage shed, accompanied by Highways and Harbors Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

4. On-Site Evaluation Photos

Photographs are provided on the subsequent pages below.

Appendix B5: Permit-Specific Information – Highways Maui District

5. Potential Violations

Potential Violation Tracking #2 through #5 apply to this permit. Please see pages B5-6 through B5-20.

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Potential Violation

Potential Violation Tracking #: 2

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

During the On-Site Audit, the Audit Team observed a facility outfall in the southwestern corner of the Highways Maui District Kahului Baseyard that was not identified on the November 2016 SWPCP site map. Additionally, Highways Maui District did not request or receive permission from the State of Hawaii Department of Health (HDOH) to monitor only one of the multiple outfalls at this facility.

Description of Attachments (if applicable):

Photograph of outfall in the southwestern corner of the facility; November 2016 SWPCP site map.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.

SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Part 6.(a)(7)(a): “where two or more outfalls are expected, based on the features and activities within the drainage areas, to convey substantially similar storm water discharges, the permittee may request to monitor only one of those outfalls. The director [of HDOH] may approve the request if the permittee demonstrates that the outfalls monitored are representative for the overall storm water discharges from the facility.”

HAR 11-55 Appendix B Part 6.(a)(2): “the storm water pollution control plan shall include the following [site map item]: outfall locations”.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Site Plan
Figure 2-2
Kahului Baseyard
DOT Highways Division
Maui District

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - o Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 2 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

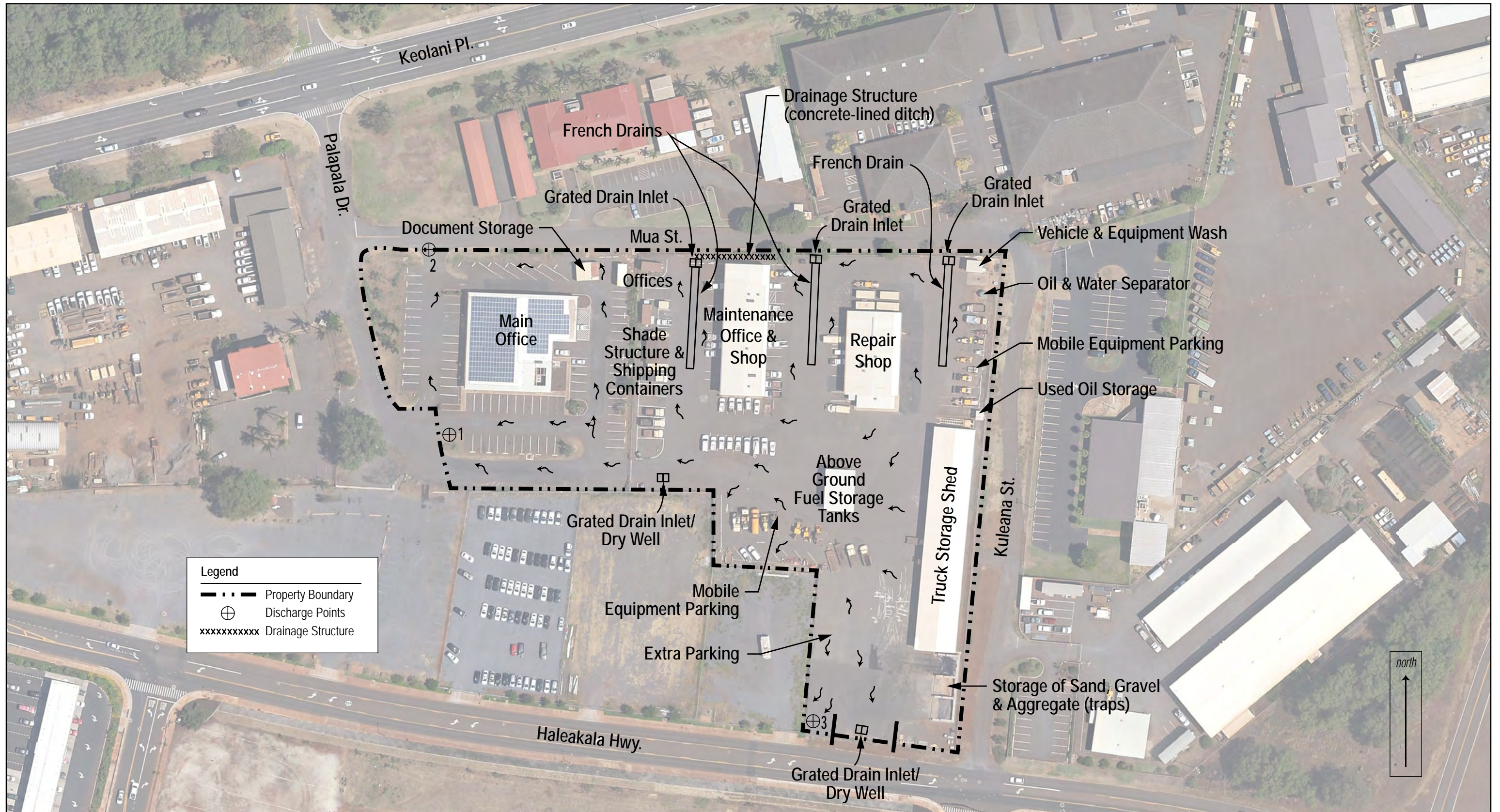
Description of Corrective Action:

HDOT Highways Maui District has updated areas within the Kahului Baseyard SWPCP pertinent to discharge point locations to include the missing discharge point noted in the Notice of Potential Violation.

A request for approval to monitor a single discharge point representative of the baseyard will be submitted to HDOH no later than July 12, 2019. The SWPCP will be updated within 30 days of receipt of approval from HDOH.

Description of Attachments (if applicable):

Updated sheets from the Kahului Baseyard SWPCP.



Site Plan

Figure 2-2

Kahului Baseyard

DOT Highways Division

Maui District

Small engine landscape maintenance equipment is stored inside shipping containers west of the maintenance office and shop. Heavy equipment and vehicles are stored in the open storage areas at the east and south sides of the baseyard or in the truck storage shed. Some traffic signs, equipment batteries, and empty 55 gallon drums are also stored in the truck storage shed.

Service of maintenance vehicles and equipment is conducted in the repair shop. Servicing of maintenance vehicles and equipment is conducted by an onsite mechanic and includes all repairs and the use of solvents. The oil generated during the maintenance is collected into a pan placed under the vehicle maintenance track within the repair shop. A used oil AST with a capacity of 300 gallons is located in the used oil shed near the truck storage shed. Spill response materials are located within the repair shop and used oil AST.

Manufacture and repair of traffic signs is conducted in the metal shop located within the maintenance office and shop.

Herbicides are kept in a locked room within the maintenance office and shop. Other chemicals used and stored at the site include gasoline fuel in a 2,000 gallon AST, diesel in a 2,000 gallon AST, motor oil in several 55 gallon drums, hydraulic fluid in several 55 gallon drums, used oil in a 300 gallon AST, and small quantities of lubricants, solvents, paints, and cleaning agents. Small quantities of fuel, hydraulic fluid, lubricants, and solvents are stored inside flammable material storage cabinets located within the maintenance office and shop and repair shop.

Trash is temporarily stored in covered garbage bins distributed throughout the baseyard. Trash is disposed of by a private contractor on a regular basis.

2.2 Site Drainage

The baseyard is paved with asphalt and is mainly flat, with only slight changes in topography (Figure 2-3). Drainage from each area of the yard is calculated in Table 2-1.

The baseyard is separated into an east section and west section by a chain link fence with an open space for vehicular traffic. The east section includes the maintenance office and shop, the repair shop, the ASTs, the vehicle and equipment wash shed, the truck storage shed and the used oil storage area. The west section is mainly the office building, records storage (in trailers/shipping containers) and employee parking.

In 2015 and 2016, the baseyard was renovated which included mostly repaving and new fencing. French drains and dry wells were also installed during the renovation drastically reducing the amount of stormwater leaving the site. Around the perimeter of the site, curbing was installed and holes in existing curbing were filled. Two of the five discharge locations described in the previous SWPCP have been eliminated keeping more stormwater on site during normal rainfalls. Three locations remain after the renovation where stormwater would leave the site during normal rainfalls. These are designated Discharge Points 1, 2 and 3.

Stormwater from Discharge Point 1 flows onto Palapala Drive which flows onto Keolani Place. The storm drains empty into Kanaha Canal which flows northeast toward the Pacific Ocean. Discharge Point 1 collects flow from a large amount of pavement in the yard, including both

employee and equipment parking areas and the fueling facility. Discharge Point 1 has been designated the sampling location as described in Section 5.

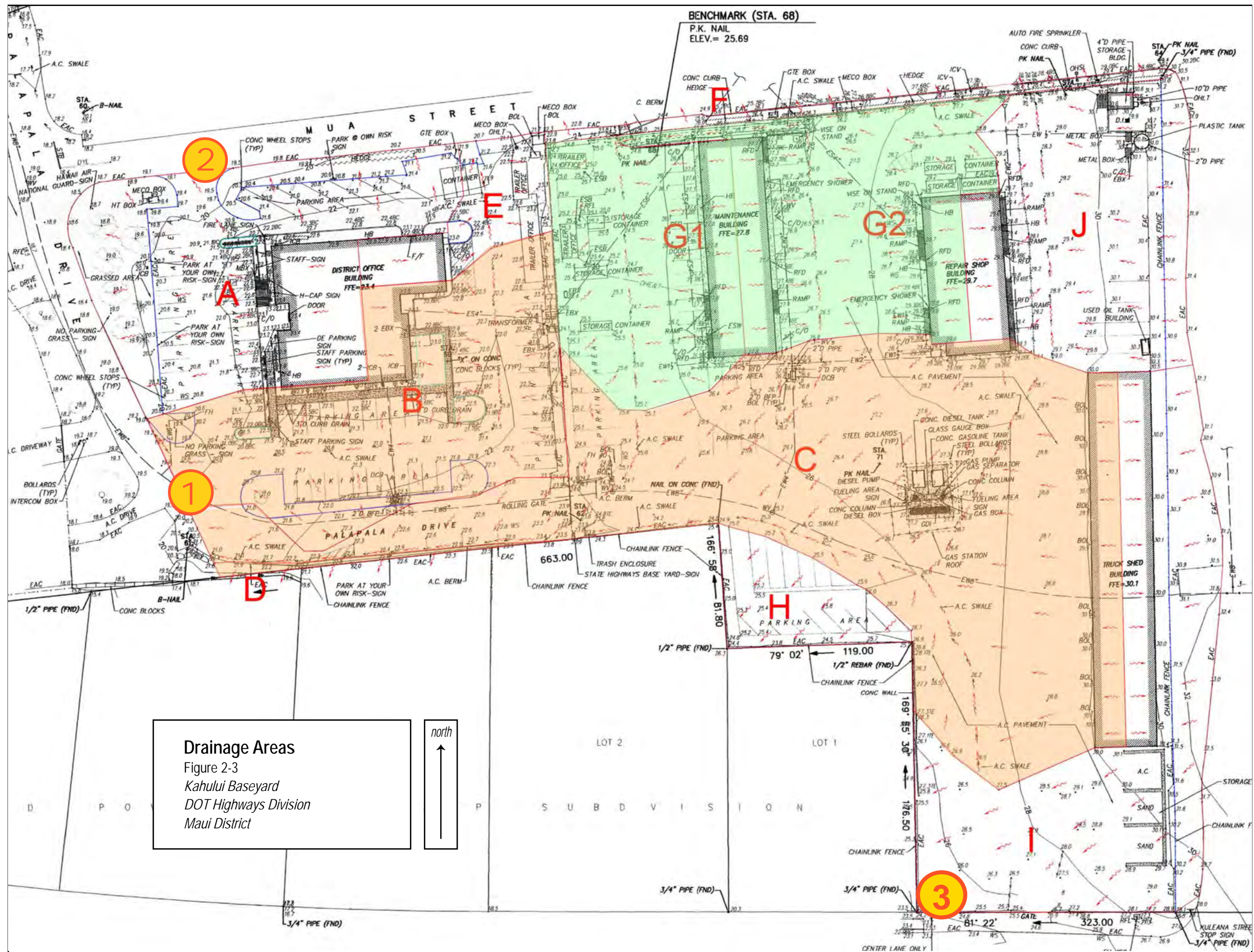
Stormwater from the northwestern corner of the yard used for parking flows onto Mua Street at a driveway designated Discharge Point 2. This water also flows to Kanaha Canal.

Stormwater from a portion of the southwest corner of the yard used for material storage flows onto Haleakala Highway through a curb cut designated as Discharge Point 3. This water also flows to Kanaha Canal.

The storm water at the east section of the yard generally flows from south to north and is collected into one of three French drains. The majority of stormwater from the southern portion of the yard flows south and into a newly constructed drywell by the back gate, with some flow exiting through Discharge Point 3.

2.3 Climate

The Kahului Baseyard is located on the north shore of central Maui. The overall climate on Maui is characterized by mild temperatures, cool and persistent tradewinds, a rainy winter season from October through April, and a dry summer season from May through September. The highest mean annual rainfall occurs near the summit of Pu'u Kukui Mountain and exceeds 360 inches. Along the coastal areas of Maui near the site, mean annual rainfall is less than 20 inches.



**TABLE 2-1
SUMMARY OF DRAINAGE AREAS**

Drainage Area	Area (Acres)	C _{weighted} -	T _{c, design} (min)	1yr I (in/hr)	2yr I (in/hr)	5yr I (in/hr)	10yr I (in/hr)	Q1 (cfs)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Discharge Location
A	0.67	0.73	10.0	1.95	2.61	3.54	4.26	0.95	1.28	1.73	2.08	2
B	0.69	0.84	10.0	1.95	2.61	3.54	4.26	1.13	1.51	2.05	2.46	1
C	1.61	0.90	10.0	1.95	2.61	3.54	4.26	2.82	3.77	5.11	6.15	1
D	0.02	0.90	10.0	1.95	2.61	3.54	4.26	0.03	0.05	0.06	0.08	1
E	0.14	0.84	10.0	1.95	2.61	3.54	4.26	0.24	0.32	0.43	0.52	retained on site
F	0.06	0.30	10.0	1.95	2.61	3.54	4.26	0.04	0.05	0.07	0.08	retained on site
G1	0.44	0.90	10.0	1.95	2.61	3.54	4.26	0.78	1.04	1.42	1.70	retained on site
G2	0.55	0.90	10.0	1.95	2.61	3.54	4.26	0.97	1.30	1.76	2.12	retained on site
H	0.15	0.90	10.0	1.95	2.61	3.54	4.26	0.25	0.34	0.46	0.56	retained on site
I	0.76	0.74	10.0	1.95	2.61	3.54	4.26	1.10	1.48	2.00	2.41	3
J	0.56	0.83	10.0	1.95	2.61	3.54	4.26	0.91	1.22	1.65	1.99	retained on site

Source

1

2

3

- 1 FHWA HEC-22, Table 3-1, pg. 3-6, County of Maui Table 3 for Built-up Areas
- 2 Based upon paved areas with short running lengths, used 10 minute T_c per HDOT design standards.
- 3 NOAA Atlas 14 Point Precipitation Frequency Estimates.

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Potential Violation

Potential Violation Tracking #: 3

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Highways Maui District was unable to provide records of corrective actions taken in response to inspection findings at their Kahului Baseyard.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.

SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 6.c.: “the permittee shall maintain a record of the following...(2) Inspection findings; and (3) Corrective actions taken.”

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 3 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

HDOT Highways Maui District will schedule retraining of maintenance supervisor staff no later than July 12, 2019 to review documentation protocols for corrective actions that should be taken in response to findings documented during baseyard inspections.

The training will include the development of a process for submission and retention of corrective action documentation. Upon completion a summary of topics covered, revised SOPs (if any) and attendance for the training will be documented in the SWMPP annual report.

Description of Attachments (if applicable): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Potential Violation

Potential Violation Tracking #: 4

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Highways Maui District did not conduct inspections of the Kahului Baseyard from 2014 through 2016.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.

SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

SWPCP Section 6.2: “Highways Maui District will perform quarterly inspections [of the baseyard] to ensure that BMPs are in place and in proper working order...” (emphasis added)

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 6.c.: “the permittee shall conduct facility inspections at least semi-annually”. (emphasis added)

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 4 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Effective February 1, 2019, HDOT Highways Maui District has established an environmental section within its staff to manage and delegate inspection of the Kahului Baseyard to ensure inspections are performed and corrective actions documented.

HDOT Highways Maui District will schedule training of environmental section and maintenance supervisor staff no later than July 12, 2019 to review inspection protocols. Topics covered during this training and attendance logs will be submitted in the SWMPP annual report.

The SWPCP will be updated to reflect baseyard facility inspection frequency in alignment with the requirements of HAR 11-55 Appendix B section 6.c. no later than July 12, 2019.

Description of Attachments (if applicable): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui
District

Final Notice of Potential Violation

Potential Violation Tracking #: 5

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Highways Maui District does not maintain logs of fertilizer, pesticide, or herbicide usage as required by their SWMPP.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Appendix F.1. (Chemical Applications Training Plan) Section 4.1: “Highways Maintenance personnel and landscape contractors shall maintain a log of the amount of fertilizer used and the locations where it is applied. The landscape contractors are required to complete the fertilizer and pesticide usage log forms provided in this program plan and to deliver the completed forms to Highways Division on a quarterly basis.”

SWMPP Appendix F.1. (Chemical Applications Training Plan) Section 4.2: “Highway Maintenance personnel and landscape contractors shall maintain a log of the amount of pesticide/herbicide used and the locations where it is applied. The landscape contractors are required to complete the fertilizer and pesticide usage log forms provided in this program plan and to deliver the completed forms to Highways Division on a quarterly basis.”

Hawaii Administrative Rules (HAR): Not Applicable.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - o Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 5 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

The infrequent usage of chemicals for weed control has been recorded by Maui District maintenance supervisors on a form titled “Herbicide/Pesticide Usage Log;” however, collection of the data to a single repository has not been done. Attached are samples of logs completed by maintenance supervisors.

Maui District will schedule retraining of maintenance supervisor staff by July 12, 2019 to review protocols for the proper documentation and reporting of chemical application use. Chemical application logs taken by maintenance supervisors will be collected by Maui District’s environmental section for future reference. A summary of topics covered in this training and established protocols will be submitted in the SWMPP annual report.

Description of Attachments (if applicable):

Herbicide/Pesticide Usage Logs.

HERBICIDE/PESTICIDE USAGE LOG

DATE	LOCATION (Route, Milepost, Direction, and Distance from Nearest Intersection)	WEATHER		CHEMICAL USED AND AMOUNT APPLIED (gallons)	APPLICATION METHOD	COMMENTS
12-3-18	Hana Hwy Morning Kihikihi mile post 3004	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5 mph <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input type="checkbox"/> Rain not expected today	10Z to 2 gallon	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	signs
03/15/2019	5508 - m/m 6.5 - To Kahului From M. Kihikihi	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5 mph - 10 mph <input checked="" type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input type="checkbox"/> Rain not expected today	10Z Peomay 30Z GARDON per GAL H2O	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% 16 Gals Glyphosate 2.5% Triclopyr Solution
03/19/19	5508 - 0443 2.3 - 4.5	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 3 - 5 <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	10Z Peomay + 30Z GARDON per GAL	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% Glyphosate 2.5% Triclopyr 3gal
3/19/19	5505 3.5 - 3.75	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5.5 - 7.5 mph <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	10Z Peomay 30Z GARDON per GAL	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% Glyphosate 2gal 2.5% Triclopyr
3/19/19	5508 3.4 - 3.8	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5.5 - 7.5 mph <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	10Z Peomay 30Z GARDON per GAL	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% Glyphosate 2gal 2.5% Triclopyr

HERBICIDE/PESTICIDE USAGE LOG

DATE	LOCATION (Route, Milepost, Direction, and Distance from Nearest Intersection)	WEATHER		CHEMICAL USED AND AMOUNT APPLIED (gallons)	APPLICATION METHOD	COMMENTS
04/03/2019	mm 5.2 5502 - 5503 End at mm 6	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind = 7.9 ↔ 8.5 Average / 1050m 9.5↑ <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input type="checkbox"/> Rain not expected today	(4%) min. - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	Intersection Street Poles Signs Guard rail STOP AT 1050m
04/04/2019	mm 5502 - 5503	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 0.5 → 1.9 <input type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4%) min - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	Guardrail Signs
04/16/19	mm26 PART 1	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 3.5 ↔ 4.5 <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4% min) - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	POST BOXES GUARDRAILS Signs
04/24/19	mm 26 PART 2	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 4.5 - 6.0 mph <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4% min) - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	GUARD RAILS Signs
05/07/19	mm 12 (to) mm16 mountain Side	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 3.5 - 6.5 mph <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4% min) - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	Signs/Post Guard rail Animal Dump

Appendix B5: Permit-Specific Information – Highways Maui District

6. Deficiencies

Deficiency Tracking #4 - #8 apply to this permit. Please see pages B5-22 through B5-45.

Appendix B5: Permit-Specific Information – Highways Maui District

Draft Notice of Deficiency

Deficiency Tracking #: 4

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

The Audit Team reviewed several completed inspection forms for Highways Maui District Kahului Baseyard with incomplete or missing responses.

Recommendations for Improvement:

Highways Maui District should consider additional training for inspectors, transitioning to digital forms, and implementing additional quality control measures for the completed inspection forms. The Audit Team also suggests re-formatting the inspection forms to more clearly indicate those items that require follow-up or action.

Description of Attachments (if applicable):

Example of a completed baseyard inspection form with incomplete and missing responses circled.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016) Appendix E: Third-Party Site-Specific SWCP Facility Inspection Form.

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

Third-Party Site-Specific SWPCP Facility Inspection Form

Facility Name:	Kahului Baseyard		
Inspector's Name & Title:	Jan Reichelderfer, lead planner		
Date & Time of Inspection:	2-7-17 2:00		
Weather:	<input type="checkbox"/> Raining <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Cloudy <input type="checkbox"/> High Wind <input type="checkbox"/> Moderate Wind <input checked="" type="checkbox"/> Calm Precipitation in last 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No		

SITE OBSERVATIONS / MANAGEMENT CONTROLS / BMPs

Issue Being Evaluated	Yes	No	N/A	Comments and Corrective Actions
Are preventive maintenance and housekeeping activities being implemented and documented?				
Are all work areas and storage areas neat and clean?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the loading and unloading areas clean?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the drainage area clean of debris (paper, leaves)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	mostly
Catch basins cleaned	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	had just been done
Regular removal/disposal of trash and waste products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	have note to empty metal dumpster
Are dumpsters and recycle bins kept closed when not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are potential pollutants stored under covered areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are drums stored within secondary structures / containment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

E-1

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

Issue Being Evaluated	Yes	No	N/A	Comments and Corrective Actions
Are any material storage containers, equipment, etc. leaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are oily parts and/or chemical containers exposed to storm water contact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are materials properly labeled?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Identification of all chemicals (MSDSs)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Prevention of chemical accumulation on ground in building	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Vehicles are serviced in covered areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is any equipment maintenance being performed outdoors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is equipment or vehicles being washed in designated areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are drip pans placed under equipment and vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	mostly
Are drip pans clean and in good condition (not leaking)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not all
Petroleum products recycled	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there dirt and grease buildup in the parking lot?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	evidence of spill

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

Issue Being Evaluated	Yes	No	N/A	Comments and Corrective Actions
Are there stains on the paved areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Any water flowing into outfall/offsite? (if yes, identify source)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Visual inspection of facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Maintenance of inspection log (documented and current)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Proper training of employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Restrict access to area and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have spill prevention and response procedures been implemented and is spill prevention equipment operational and ready?				
Visual inspection of paved areas for spills and leaks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	spill not leaving site
Prompt removal of any spills or leaks using spill kits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	trying to remove spill used "cat litter"
Spill response equipment stocked and inspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

REVIEW OF SWPCP

Issue Being Evaluated	Yes	No	Comments
Are there changes to the site description?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there changes to storm water control features?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there changes to potential pollutant sources or activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there changes to storm water program personnel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Have there been any spills or releases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes, did not go off site
Are corrective actions necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Kitty letter
Are there changes in employee responsibilities regarding storm water protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Question	Yes	No
If yes to any of the above, have revisions to the SWPCP Plan been made?	<input type="checkbox"/>	<input type="checkbox"/>
Are additional revisions recommended?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If revisions have not been made or are not recommended, indicate reason:		
Spill contained; did not go off site; will fill out repair		
Do the existing management controls/best management practices appear to be effective in reducing the potential for storm water pollution? If no, indicate reason:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are there any additional management controls/best management practices recommended as a result of the site inspection? If yes, describe new storm water management/best management control needed to address sources of pollutants and a time schedule for implementation:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
get metal dumpster emptied see attached		

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

REVIEW OF TRAINING

Issue Being Evaluated	Yes	No	Comments
Have employees been informed and trained of revisions?	<input type="checkbox"/>	<input type="checkbox"/>	
Is annual employee training current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are employee training records documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If no to any of the above, indicate reason for discrepancy and what corrective actions will be taken:			

REVISIONS OF STORM WATER POLLUTION CONTROL PLAN

Question	Yes	No
Have all revisions been made to the SWPCP, re-signed, and submitted to the Hawai'i State Department of Health within 30 days of the revision (if applicable)?	<input type="checkbox"/>	<input type="checkbox"/>
If no, indicate reason:		

STORM WATER POLLUTION CONTROL PLAN COMPLIANCE

Based on site observations and review of facility records conducted as part of this inspection report, this facility is determined to be in compliance with the facility's SWPCP.

Facility: Kahului Bargeyard

Printed Name: Jan Reichelderfer

Signature: _____

Title: _____

Date: _____

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 4

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B5: Permit-Specific Information – Highways Maui District

Draft Notice of Deficiency

Deficiency Tracking #: 5

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed a truck leaking oil onto the pavement at the Kahului Baseyard.

Recommendations for Improvement:

Highways Maui District should implement the best management practices described in their storm water pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of truck leaking oil observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016) Appendix A
Page A-3: "Inspect damaged vehicles for fluid leaks as soon as possible. Use drip pans as necessary."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 5

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B5: Permit-Specific Information – Highways Maui District

Draft Notice of Deficiency

Deficiency Tracking #: 6

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed storm drains without “No Dumping” placards affixed.

Recommendations for Improvement:

Highways Maui District should implement the best management practices described in their storm water pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photographs of storm drains without “No Dumping” placards affixed.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016)

Page A-3, Item A2-17: “Install “No Dumping” placards on all storm drains at DOT facilities to educate personnel that non-storm water is not to be discharged to the storm drainage system.”

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 6

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B5: Permit-Specific Information – Highways Maui District

Draft Notice of Deficiency

Deficiency Tracking #: 7

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed that tarping was insufficient to cover the entire stockpile at the Kahului Baseyard, as evidenced by stockpile materials which migrated outside the stockpile enclosure.

Recommendations for Improvement:

Highways Maui District should implement the best management practices described in their storm water pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of insufficient tarping over stockpiles observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016)

Page 2-4: "A stockpile of sand, gravel, and asphalt are stored in an aggregate storage area located in the south side of site near the truck storage shed. The area is asphalt paved without covering and consists of three concrete lined cells.... The stockpiles containing material that can be wind-blown are covered with tarps."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 7

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B5: Permit-Specific Information – Highways Maui District

Draft Notice of Deficiency

Deficiency Tracking #: 8

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

Highways Maui District indicated “ND” (short for “Non-Detect”) for several parameters on their 2017 Discharge Monitoring Report (DMR) instead of indicating that the test result is “less than #,” where the # is the lowest detection limit of the test method used.

Recommendations for Improvement:

In these situations, Highways Maui District should indicate on DMRs that the test result is “less than #,” where the # is the lowest detection limit of the test method used.

Description of Attachments (if applicable):

Page from 2017 DMR showing ND entries circled.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.


SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 8.(a)(4)(c): “if the test result is not detectable, indicate that the test result is “less than #,” where the # is the lowest detection limit of the test method used.”

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) NAME State of Hawaii ADDRESS 650 Palapala Dr. Kahului, Hawaii 96732		NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR) (3-9) HIR80D502 PERMIT NUMBER		DISCHARGE NUMBER 1 (10-18)		Form Approved OMB No. 2040-0004 Approval expires 05-31-98											
FACILITY LOCATION 650 Palapala Dr. Kahului, HI 96732		MONITORING PERIOD FROM 2017 01 01 TO 2017 12 31 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)		<input type="checkbox"/> Check here if No Discharge		NOTE: Read Instructions before completing this form											
PARAMETER (32-37)	SAMPLE MEASUREMENT	QUANTITY OR LOADING (34-51)			QUALITY OR CONCENTRATION (46-51)			UNITS	NO. EX (52-53)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)						
		AVERAGE (49-53)	MAXIMUM (54-51)	UNITS	MINIMUM (38-45)	AVERAGE (46-51)	MAXIMUM (54-51)										
Oil and Grease	SAMPLE MEASUREMENT					<1.3		mg/L	0	once	grab						
	PERMIT REQUIREMENT					15											
pH	SAMPLE MEASUREMENT					7.38		su	0	once	field						
	PERMIT REQUIREMENT					5.5-8.0											
lead	SAMPLE MEASUREMENT					1.5		ug/L	0	once	compo site						
	PERMIT REQUIREMENT					29											
Acenaphthene	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo site						
	PERMIT REQUIREMENT					570											
Fluoranthene	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo site						
	PERMIT REQUIREMENT					1300											
Naphthalene	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo site						
	PERMIT REQUIREMENT					770											
Poly nuclear aromatic hydrocarbons	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo site						
	PERMIT REQUIREMENT					>0.01 kgp											
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robin Shishido District Engineer TYPED OR PRINTED		I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH THE SYSTEM DESCRIBED, CLASSIFIED AND QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED BASED ON MY KNOWLEDGE AND BELIEF THAT THE INFORMATION IS 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.						TELEPHONE 808 873-3535		DATE 2018 1 18							
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 						AREA CODE 808		NUMBER 873-3535		YEAR 2018		MO 1		DAY 18	

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 8

HDOT Receipt of Draft PEAR Date:

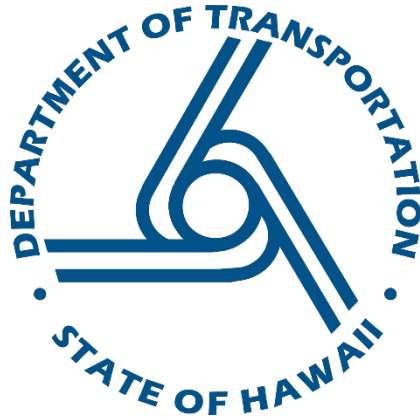
Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):



DRAFT Program Element
Audit Report (PEAR) No. 5

Pollution Prevention / Good
Housekeeping Program
Part 2 of 2

State Project No. OSC-15-01

July 2019

Prepared by
Kennedy/Jenks Consultants, Inc.

Prepared for
State of Hawaii
Department of Transportation
Office of Environmental Compliance
869 Punchbowl Street
Honolulu, Hawaii 96813

KJ Project No. 1696025*00

Appendix B6

Permit-Specific Information – Highways Oahu District

Appendix B6: Permit-Specific Information – Highways Oahu District

1. Key Documents

<div>Permit</div> <div>Document</div>	6. Highways Oahu District
	Individual Permit HI S000001
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts	H.1_Action-Plan-to-Address-Erosional-Outfalls_Final-April-2015.pdf
Authorized Use List of Chemicals	Authorized Use List of Chemicals_REV.pdf
Field Manual (Maintenance Activities Best Management Practices Field Manual)	Maintenance Activities BMP Field Manual_REV.pdf
Latest Annual Monitoring Plan	20180604.Contents of CD-2018-2019 Monitoring Plan FINAL-v1-HIS000001.pdf
Latest Annual Monitoring Report	Storm Water Annual Monitoring Report 2017-2018.pdf
Latest Annual Report	Annual Report 2017-2018 Plus appendices
Permit	20160318.Modified NPDES Permit HI S000001.PDF
Storm Water Pollution Control Plans for Facilities to be Audited	Final Kakoi SWPCP October 2016_REV.pdf
	Final Windward SWPCP October 2016_REV.pdf
Stormwater Web site	http://www.stormwaterhawaii.com/
	http://www.trashfreehawaii.com
SWMPP	SWMPP-Final_Combined_Compressed.pdf Plus Appendices
Trash Reduction Plan	Trash-Reduction-Plan_FINAL-10-18-16.pdf

Appendix B6: Permit-Specific Information – Highways Oahu District

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts (<i>H.1_Action-Plan-to-Address-Erosional-Outfalls_Final-April-2015.pdf</i>)	In entirety
Authorized Use List of Chemicals (<i>Authorized Use List of Chemicals_REV.pdf</i>)	In entirety
Field Manual (Maintenance Activities Best Management Practices Field Manual) (<i>Maintenance Activities BMP Field Manual_REV.pdf</i>)	In entirety
Latest Annual Monitoring Plan (<i>20180604.Contents of CD-2018-2019 Monitoring Plan FINAL-v1-HIS000001.pdf</i>)	Section 2.2.1 Section 4
Latest Annual Monitoring Report (<i>Storm Water Annual Monitoring Report 2017-2018.pdf</i>)	Chapter 3
Latest Annual Report (<i>Annual Report 2017-2018 Plus appendices</i>)	Chapter 7 Chapter 8 Chapter 9 Chapter 10 Chapter 12 Chapter 13
Permit (<i>20160318.Modified NPDES Permit HI S000001.PDF</i>)	In entirety
Storm Water Pollution Control Plans for Facilities to be Audited (<i>Final Kakoi SWPCP October 2016_REV.pdf, Final Windward SWPCP October 2016_REV.pdf</i>)	In entirety
Stormwater Web site (http://www.stormwaterhawaii.com/ http://www.trashfreehawaii.com)	In entirety
SWMPP (<i>SWMPP-Final_Combined_Compressed.pdf Plus Appendices</i>)	Chapter 6 Chapter 7 Chapter 8 Chapter 9 Chapter 11 Chapter 12
Trash Reduction Plan (<i>Trash-Reduction-Plan_FINAL-10-18-16.pdf</i>)	In entirety

Appendix B6: Permit-Specific Information – Highways Oahu District

3. On-Site Evaluation

22 May 2019

On May 22, 2019, the Audit Team held a kickoff meeting at Highways Oahu District with Highways Division staff and consultants. Photographs taken during the On-Site Evaluation can be found in Section 4.

Facility #1 Kakoi Baseyard, 727 Kakoi St.

The Audit Team then conducted an inspection of the Kakoi Baseyard, accompanied by Highways Division staff and consultants.

Facility #2 Windward Baseyard, 45-889 Pookela St.

The Audit Team then drove to Windward Baseyard and conducted an inspection of the baseyard, accompanied by Highways Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

4. On-Site Evaluation Photos

Photographs are provided on the subsequent pages below.

Appendix B6: Permit-Specific Information – Highways Oahu District

5. Potential Violations

Potential Violation Tracking #6 applies to this permit. Please see pages B6-6 through B6-10.

Appendix B6: Permit-Specific Information – Highways Oahu
District

Draft Notice of Potential Violation

Potential Violation Tracking #: 6

Determination of Potential Violation Date: 6/3/2019

Potential Violation Notification Date: 6/5/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

As reported in Section 3.2 of Highways Oahu District's 2017-2018 Annual Monitoring Report, five (5) results exceeded storm water discharge limits during the one sampling event that was conducted at the Pearl City Baseyard. The effluent parameters in exceedance were ammonia nitrogen, nitrate + nitrite, turbidity, total nitrogen, and total phosphorus.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.:

HI S000001 Part C.2.: "The discharge shall not cause or contribute to a violation of any of the applicable beneficial uses or water quality objectives contained in HAR, Chapter 11-54, titled "Water Quality Standards."

HI S000001 Part F.2.{1}.: "Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table."

HI S000001 Part F.2.{4}.: "The value shall not exceed the applicable limit as specified in Chapter 11-54 for the applicable classification of the receiving state waters."

SWMPP: Not Applicable

Hawaii Administrative Rules (HAR): Not Applicable.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: **6/19/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - o Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 6 Potential Violation Notification Date: **6/5/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/19/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Highways Oahu District (HWY-O) acknowledges the five exceedances resulting from the May 2, 2018, sampling event at the Pearl City Baseyard. Following the sampling event, HWY-O has complied with the oral and written notification requirements of Hawaii Administrative Rules (HAR), Chapter 11-55, Appendix B, Section 10(c) (see Attachment A).

HWY-O's adaptive management approach has produced clear improvements towards meeting the storm water discharge limits and its planned improvements will continue to reduce occurrences of exceedance. A previous sampling event in 2015 at the Pearl City Baseyard resulted in exceedances for six parameters (see Attachment B). Oral and written notifications were provided to the Department of Health Clean Water Branch. Following the exceedance, HWY-O allocated funds, designed, and constructed significant baseyard improvements to improve effluent concentrations. Completed in fall 2017, HWY-O installed crushed rock to the parking area that was previously exposed dirt, diverted storm water flows into a newly constructed concrete channel to reduce potential contact with pollutants, and installed five filters in downspouts that drain from the H-1 Freeway overpass through the baseyard. As a result of these structural best management practices (BMPs), with the exception of ammonia nitrogen, all other

Appendix B6: Permit-Specific Information – Highways Oahu District

parameters experienced a significant decrease in pollutant concentrations in the next sampling event on May 2, 2018, the event that is the subject of this Potential Violation. One parameter, lead, was reduced to a concentration below the discharge limit (see table below).

Sample Location	Parameter (Unit)	Discharge Limit	Analytical Results (Event - 8/24/15)	Analytical Results (Event - 5/2/18)
PC-1	Total Phosphorus (mg/L)	0.13	2.5	0.31
	Nitrate + Nitrite (mg/L)	0.04	1.4	0.414
	Ammonia Nitrogen (mg/L)	0.02	0.17	0.379
	Total Nitrogen (mg/L)	0.55	5.8	1.71
	Lead (ug/L)	29	280	7
	Turbidity (NTU)	8	1360	128

Beginning in June 2018, more frequent removal of sediment from the driveway and surrounding drainage channels, which were determined to be the source contributing to the parameter exceedances, were implemented as part of good housekeeping BMPs. Additionally, as a part of its annual storm water training, on July 13, 2018, Pearl City Baseyard personnel were trained on the sample results and BMPs for improvement.

In accordance with HAR, Chapter 11-55, Appendix B, Section 10(b)(2), HWY-O has monitored subsequent representative storms, but has not had an event that resulted in sample collection. HWY-O will continue to identify and implement additional BMPs if subsequent storm water samples do not demonstrate that discharge limits are met.

Funding has been identified and further storm water improvements are currently in design for the Pearl City Baseyard. Initial design concepts include new asphalt pavement over areas that are currently gravel or dirt, diversion of storm water flows, and the installation of a storm water treatment device, likely a water polisher with filter media to target the pollutants of concern. Specific improvements are subject to change based on feedback during design review.

Due to the time and resources needed to implement storm water improvements at the Pearl City Baseyard, HWY-O requests an extension for Corrective Action. The following projected schedule serves as HWY-O's Corrective Action Workplan:

March 31, 2020 – Complete Plans, Specifications and Estimate
June 30, 2020 – Complete Advertising and Open Bids
August 31, 2020 – Award Project
March 31, 2021 – Project Completion

HWY-O will continue to collect samples from representative storm events to monitor for compliance with effluent limits.

Description of Attachments (if applicable):

Attachment A – Oral and Written Notification for May 2, 2018 Event

Attachment B – Discharge Monitoring Report for August 24, 2015 Event

Attachment A:

Oral and Written Notification for May
2, 2018 Event



MAY 31 2018

JADE T. BUTAY
DIRECTOR

Deputy Director
ROY CATALANI
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
OAHU DISTRICT
727 KAKOI STREET
HONOLULU, HAWAII 96813-2017
May 30, 2018

HWY-OW 2.18-0514

TO: ALEC WONG, P.E., CHIEF
CLEAN WATER BRANCH

FROM: GEORGE G. ABCEDE
OAHU DISTRICT ENGINEER

SUBJECT: STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION,
HIGHWAYS DIVISION (DOT-HWYS)
OAHU MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT NO. HI S000001
STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES,
PEARL CITY BASEYARD MONITORING

In accordance with the requirements of the DOT-HWYS MS4 NPDES Permit No. HI S000001 (effective October 28, 2013 and modified effective April 1, 2016), this notification is being provided to satisfy the sections noted below:

MS4 NPDES Permit Part F.2. Storm Water Associated with Industrial Activities

The MS4 NPDES Permit Part F.2., Note {1} states:

Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table. Actual or measured levels which exceed those storm water discharge limits or are outside those ranges shall be reported to the CWB required in HAR, Chapter 11-55, Appendix B, Section 10(c).

HAR, Chapter 11-55, Appendix B, Section 10(c) states:

- (2) *The permittee shall make oral reports by telephone to the Clean Water Branch at (808) 586-4309 during regular office hours which are Monday through Friday, (excluding holidays) from 7:45 a.m. until 4:15 p.m. or the Hawaii State Hospital Operator at (808) 247-2191 outside of regular office hours.*

(3) The permittee shall provide a written report within five days of the time the permittee or its duly authorized representative becomes aware of the circumstances.

Description of Event:

Pearl City Baseyard

Storm water samples were collected from the Pearl City Baseyard's designated discharge monitoring points (PC-1) on May 2, 2018. The storm water discharge lasted from approximately 5:43 a.m. until 9:05 a.m. and discharged approximately 1,440 gallons per day. The oral report via phone call was made to the Department of Health, Clean Water Branch on May 29, 2018 at 8:14 a.m. Discharge limit exceedances are presented in the following table:

Sample Location	Sample Event Date	Parameter (unit)	Analytical Results	Discharge Limit
PC-1	5/2/2018	Turbidity (NTU)	128	8
		Total Nitrogen (mg/L)	1.71	0.55
		Ammonia Nitrogen (mg/L)	0.379	0.02
		Nitrate + Nitrite (mg/L)	0.414	0.04
		Total Phosphorus (mg/L)	0.310	0.13

The source contributing to the parameter exceedances is most likely sediment on the driveway and surrounding drainage channels within the baseyard. Field observations indicated that sheet flow in the baseyard was primarily from drainage channels designed to direct storm water from H-1 Freeway Pearl City Viaduct downspouts through the baseyard and to the discharge point. Minimal sheet flow from direct rainfall onto the baseyard itself was observed.

More frequent removal of sediment from the driveway and surrounding drainage channels will be implemented as part of good housekeeping Best Management Practices (BMPs). Permanent BMPs filters were installed in selected downspouts in Fall 2017. Inspection, cleaning, and maintenance of downspout filters occurs every couple of weeks and after substantial rainfall events. Drainage channels were also installed in Fall 2017 and provide sediment filtration and erosion control. Off-site sources of storm water run-on to the baseyard were also minimized in Fall 2017. Initial discharge point inspection was conducted to determine feasibility of installing a pollutant separating baffle box was conducted in Fall 2017 and budget for a permanent BMP project has been established for design and construction in 2019.

Required parameters will continue to be monitored in subsequent storm events to determine if discharge limits continue to be exceeded.

Mr. Alec Wong, P.E., Chief
May 30, 2018
Page 3

HWY-OW 2.18-0514

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.

Should you have any questions regarding this report, please contact Mr. Kelly Lee Sato of our Oahu District Environmental Management Section at (808) 483-2569.

bc: HWY-O (George Abcede)
HWY-OW (Kelly Lee Sato)
HWY-OM (Ryan Nakata)
EnviroServices and Training Center, LLC. (Kyson Morikuni)

KLS:lk

Attachment B:
Discharge Monitoring Report for
August 24, 2015 Event

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

FACILITY Pearl City Baseyard

LOCATION 820 2nd Street
Pearl City, Hawaii 96782

HI S000001

PERMIT NUMBER

PC-1


DISCHARGE NUMBER

MONITORING PERIOD

FROM

YEAR	MO	DAY	TO	YEAR	MO	DAY
2015	07	01		2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Estimated Flow Rate	SAMPLE MEASUREMENT						25,848	gal/day		1/365	Calc
	PERMIT REQUIREMENT				Report						
Biochemical Oxygen Demand	SAMPLE MEASUREMENT						9.48	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				Report						
Chemical Oxygen Demand	SAMPLE MEASUREMENT						370	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				Report						
Total Suspended Solids	SAMPLE MEASUREMENT						1200	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				Report						
Total Phosphorus	SAMPLE MEASUREMENT						2.5	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				0.13						
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT						4.4	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				Report						
Nitrate + Nitrite	SAMPLE MEASUREMENT						1.4 B	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				0.04						
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.						TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O							808	831-6703	2017	02	10
TYPED OR PRINTED									SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

B: Compound was found in the blank and the sample

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved.

OMB No. 2040-0004

ADDRESS 727 Kako'i Street
Honolulu, Hawaii 96819

HI S000001

PERMIT NUMBER

PC-1

DISCHARGE NUMBER

FACILITY Pearl City Baseyard


LOCATION 820 2nd Street
Pearl City, Hawaii 96782

MONITORING PERIOD

FROM

YEAR	MO	DAY	TO	YEAR	MO	DAY
2015	07	01		2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Ammonia Nitrogen	SAMPLE MEASUREMENT						0.17 J	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				0.02						
Cadmium	SAMPLE MEASUREMENT						1.5 J	µg/l		1/365	Comp.
	PERMIT REQUIREMENT				3.0						
Chromium VI	SAMPLE MEASUREMENT						2.1	µg/l		1/365	Comp.
	PERMIT REQUIREMENT				16.0						
Lead	SAMPLE MEASUREMENT						280	µg/l		1/365	Comp.
	PERMIT REQUIREMENT				29.0						
Oil and Grease	SAMPLE MEASUREMENT						ND	mg/l		1/365	Grab
	PERMIT REQUIREMENT				15.0						
pH	SAMPLE MEASUREMENT						7.52*	pH Units		1/365	Grab
	PERMIT REQUIREMENT				5.5 - 8.0						
Turbidity	SAMPLE MEASUREMENT						1360	NTU		1/365	Grab
	PERMIT REQUIREMENT				8						
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.					TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O							808	831-6703	2017	02	10
TYPED OR PRINTED					SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			AREA CODE	NUMBER	YEAR	MO

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

*: Measured in field 4 hours after sample event

ND: Not Detected

EPA Form 3320-1 (Rev. 3/99) Previous editions may be used.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

HI S000001

PERMIT NUMBER

PC-1

DISCHARGE NUMBER

FACILITY Pearl City Baseyard

LOCATION 820 2nd Street
Pearl City, Hawaii 96782

MONITORING PERIOD

FROM

YEAR	MO	DAY	TO	YEAR	MO	DAY
2015	07	01		2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Dissolved Oxygen	SAMPLE MEASUREMENT				8.26*		9.67 H3**	mg/l		1/365	Grab
	PERMIT REQUIREMENT				Report						
Oxygen Saturation	SAMPLE MEASUREMENT						67.8**	%		1/365	Grab
	PERMIT REQUIREMENT				Report						
Temperature	SAMPLE MEASUREMENT						10.6*	°C		1/365	Grab
	PERMIT REQUIREMENT				Report						
Salinity	SAMPLE MEASUREMENT						ND	psu		1/365	Grab
	PERMIT REQUIREMENT				Report						
Benzene	SAMPLE MEASUREMENT						ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT				1,800						
Toluene	SAMPLE MEASUREMENT						ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT				5,800						
Ethylbenzene	SAMPLE MEASUREMENT						ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT				11,000						
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.					TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O							808 831-6703		2017	02	10
TYPED OR PRINTED							SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

*: Measured in the field 4 hours after sample event

H3: Measured past holding time

**: Measured in lab

ND: Not Detected

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004

ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

HI S000001	PC-1
PERMIT NUMBER	DISCHARGE NUMBER


FACILITY Pearl City Baseyard

LOCATION 820 2nd Street
Honolulu, Hawaii 96819

MONITORING PERIOD						
YEAR	MO	DAY		YEAR	MO	DAY
2015	07	01	FROM	2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Total Nitrogen	SAMPLE MEASUREMENT						5.8	mg/l		1/365	Calc.
	PERMIT REQUIREMENT				0.55						
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
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	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.			TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O				808	831-6703	2017	02	10
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Estimated Flow Rate Calculations and Field Parameters

Department of Transportation, Highways Division

Pearl City Baseyard

1. Sample Location: PC-1
2. Date: 8/24/2015
3. Duration of Storm Event: 1:13 (73 minutes)
4. Time Storm Event Began: 0307 am
5. Time Storm Event Ended: 0420 am
6. Magnitude of Rainfall Event: 0.10 inches
7. Date of Last Rain Event Greater than 0.1 inches: 4/20/2015 (days)
8. Water Quality (Storm water discharge and the receiving water will be inspected for the following characteristics):
 - i. Turbidity: Moderate w/ some vegetation and sediment
 - ii. Color: Turbid brown
 - iii. Floating oil and grease: None
 - iv. Floating debris and scum: None
 - v. Materials that will settle: Sediment
 - vi. Substances that will produce taste in the water or detectable off-flavor in fish: None
 - vii. Items that may be toxic or harmful to human or other life: None
9. pH: 7.52 standard units
10. Temperature: 6.0 °C
11. Dissolved Oxygen: 74.2% [10.6 °C] possible error?
12. Oxygen Saturation [% O₂ saturation= (DO of sample) / (maximum possible DO at a given temperature)*100]: 74.35
13. Flow Rate: 25,848 (gallons per day - gpd)

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-119107-1

Client Project/Site: DOT HWY SWPCP

For:

EA Engineering, Science, and Technology

615 Piikoi Street

Suite 515

Honolulu, Hawaii 96814

Attn: Jeff Morrell



Authorized for release by:

9/15/2015 11:43:22 AM

Pat Abe, Senior Project Manager

(808)486-5227

pat.abe@testamericainc.com

Designee for

Craig Pilialoha, Project Manager I

(808)486-5227

craig.pilialoha@testamericainc.com

LINKS

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results through

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-119107-1	PC-082415-COMPOSITE	Water	08/24/15 03:10	08/26/15 10:00
440-119107-2	PC-082415-GRAB	Water	08/24/15 03:09	08/26/15 10:00

Case Narrative

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Job ID: 440-119107-1

Laboratory: TestAmerica Honolulu

Narrative

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory unless otherwise stated in the report. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. TestAmerica Analytical Testing Corporation certifies that the analytical results contained herein apply only to the specific sample(s) analyzed.

The Chain(s) of Custody are included and are an integral part of this report. This entire report was reviewed and approved for release.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(808)486-5227

LABORATORY REPORT

At sample receipt, the cooler/sample was 3 degrees C.

TestAmerica has determined that samples which require thermal preservation shall be considered acceptable if the arrival temperature is within 2 degrees C of the required temperature or the method specified range. For samples with a temperature requirement of 4 degrees C, an arrival temperature from 0 degrees C to 6 degrees C meets specifications. Samples that are delivered to the laboratory on the same day that they are collected may not meet these criteria. In these cases, the samples are considered acceptable if there is evidence that the chilling process has begun, such as arrival on ice.

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-119107-1

Comments

Samples were transferred into the appropriate containers from the unpreserved autosampler containers per client request.

No additional comments.

Receipt

The samples were received on 8/26/2015 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 3.6° C, 3.9° C, 4.3° C, 4.5° C and 4.7° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract non-Sister

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method(s) 1664A: Elevated reporting limits are provided for the following sample due to insufficient sample provided for 1664A

Case Narrative

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Job ID: 440-119107-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

preparation/analysis: PC-082415-GRAB (440-119107-2).

Method(s) 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-277475 and analytical batch 440-277776. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Methods BOD 5-Day SM5210B, Dissolved Oxygen 360.1, Oxygen Saturation, Turbidity: These methods were subcontracted to TestAmerica Honolulu. The subcontract laboratory certifications are different from that of the facility issuing the final report.

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Client Sample ID: PC-082415-COMPOSITE

Lab Sample ID: 440-119107-1

Date Collected: 08/24/15 03:10

Matrix: Water

Date Received: 08/26/15 10:00

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	2.1		1.0	0.25	ug/L	-		08/27/15 21:19	1

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.5	J	2.0	0.50	ug/L	-	08/28/15 09:23	08/31/15 04:39	2
Lead	280		2.0	1.0	ug/L	-	08/28/15 09:23	08/31/15 04:39	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	4.4		0.20	0.10	mg/L	-	08/27/15 13:52	08/27/15 22:04	1
Nitrate Nitrite as N	1.4	B	0.050	0.0031	mg/L	-		09/09/15 15:55	1
Phosphorus, Total	2.5		0.50	0.25	mg/L	-	08/31/15 19:05	08/31/15 21:25	1
Chemical Oxygen Demand	370		20	10	mg/L	-		08/27/15 20:06	1
Salinity	ND		2.0	2.0	psu	-		09/01/15 12:00	1
Total Suspended Solids	1200		40	20	mg/L	-		08/28/15 16:23	1
Ammonia (as N)	0.17	J	0.50	0.10	mg/L	-	09/04/15 04:00	09/04/15 06:37	1
Nitrogen, Total	5.8				mg/L	-		09/10/15 15:52	1

Method: EPA 360.1 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved - measured in lab not in field	9.67	H3	0.100	0.100	mg/L	-	08/24/15 15:02	08/24/15 15:02	1.00

Method: SM 2130 B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	1360		10.0		N.T.U.	-	08/25/15 09:17	08/25/15 09:17	100

Method: SM 4500-O2 - Calculated Analyses

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Oxygen Saturation	67.8		0.0100	0.0100	%	-	09/14/15 14:25	09/14/15 14:25	1.00

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	9.48		2.00	0.200	mg/L	-	08/24/15 19:59	08/29/15 16:45	1.00

Client Sample ID: PC-082415-GRAB

Lab Sample ID: 440-119107-2

Date Collected: 08/24/15 03:09

Matrix: Water

Date Received: 08/26/15 10:00

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L	-		08/31/15 22:35	1
Ethylbenzene	ND		1.0	0.25	ug/L	-		08/31/15 22:35	1
Toluene	ND		1.0	0.25	ug/L	-		08/31/15 22:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120					08/31/15 22:35	1
Dibromofluoromethane (Surr)	97		76 - 132					08/31/15 22:35	1
Toluene-d8 (Surr)	102		80 - 128					08/31/15 22:35	1

TestAmerica Irvine

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Client Sample ID: PC-082415-GRAB

Lab Sample ID: 440-119107-2

Date Collected: 08/24/15 03:09

Matrix: Water

Date Received: 08/26/15 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		6.4	1.8	mg/L		09/01/15 08:55	09/02/15 09:39	1

Method Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL IRV
218.6	Chromium, Hexavalent (Ion Chromatography)	EPA	TAL IRV
200.8	Metals (ICP/MS)	EPA	TAL IRV
1664A	HEM and SGT-HEM	1664A	TAL IRV
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL IRV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAC
365.3	Phosphorus, Total	EPA	TAL IRV
410.4	COD	MCAWW	TAL IRV
SM 2520B	Salinity	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM 4500 NH3 D	Ammonia	SM	TAL IRV
Total Nitrogen	Nitrogen, Total	EPA	TAL IRV
EPA 360.1	General Chemistry Parameters		TAL HON
SM 2130 B	General Chemistry Parameters		TAL HON
SM 4500-O2	Calculated Analyses		TAL HON
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaai St. #104, Honolulu, HI 96818, TEL 808-486-5227

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Client Sample ID: PC-082415-COMPOSITE

Date Collected: 08/24/15 03:10

Date Received: 08/26/15 10:00

Lab Sample ID: 440-119107-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	218.6		1	10 mL		276369	08/27/15 21:19	RW	TAL IRV
Total Recoverable	Prep	200.2			25 mL	25 mL	276759	08/28/15 09:23	EN	TAL IRV
Total Recoverable	Analysis	200.8		2	25 mL	25 mL	277198	08/31/15 04:39	RC	TAL IRV
Total/NA	Prep	351.2			25 mL	25 mL	276534	08/27/15 13:52	SN	TAL IRV
Total/NA	Analysis	351.2		1	25 mL	25 mL	276670	08/27/15 22:04	SN	TAL IRV
Total/NA	Analysis	353.2		1			85571	09/09/15 15:55	JCB	TAL SAC
Total/NA	Prep	365.2/365.3/365			5 mL	50 mL	277365	08/31/15 19:05	NC	TAL IRV
Total/NA	Analysis	365.3		1	5 mL	50 mL	277393	08/31/15 21:25	TMB	TAL IRV
Total/NA	Analysis	410.4		1	0.625 mL	2.5 mL	276645	08/27/15 20:06	MSM	TAL IRV
Total/NA	Analysis	SM 2520B		1			277574	09/01/15 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	25 mL	1000 mL	276878	08/28/15 16:23	MMH	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	278258	09/04/15 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1	50 mL	50 mL	278284	09/04/15 06:37	YZ	TAL IRV
Total/NA	Analysis	Total Nitrogen		1			279404	09/10/15 15:52	TN	TAL IRV
Total	Analysis	EPA 360.1		1.00			15H0067	08/24/15 15:02	JMC	TAL HON
Total	Prep	Default Prep GenChem		1.00	300 mL	300 mL	15H0067_P	08/24/15 15:02	JMC	TAL HON
Total	Analysis	SM 2130 B		100			15H0073	08/25/15 09:17	RHK	TAL HON
Total	Prep	Default Prep GenChem		1.00	25 mL	25 mL	15H0073_P	08/25/15 09:17	RHK	TAL HON
Total	Analysis	SM 4500-O2		1.00			15I0041	09/14/15 14:25	JEC	TAL HON
Total	Prep	Default Prep GenChem		1.00	1 mL	1 mL	15I0041_P	09/14/15 14:25	JEC	TAL HON
Total	Prep	Default Prep GenChem		1.00	300 mL	300 mL	15H0072_P	08/24/15 19:59	JMC	TAL HON
Total	Analysis	SM5210B		1.00			15H0072	08/29/15 16:45	JMC	TAL HON

Client Sample ID: PC-082415-GRAB

Date Collected: 08/24/15 03:09

Date Received: 08/26/15 10:00

Lab Sample ID: 440-119107-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	10 mL	10 mL	277353	08/31/15 22:35	WC	TAL IRV
Total/NA	Prep	1664A			785 mL	1000 mL	277475	09/01/15 08:55	L1A	TAL IRV
Total/NA	Analysis	1664A		1	785 mL	1000 mL	277776	09/02/15 09:39	L1A	TAL IRV

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaai St. #104, Honolulu, HI 96818, TEL 808-486-5227

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-277353/3

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			08/31/15 19:35	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/31/15 19:35	1
Toluene	ND		1.0	0.25	ug/L			08/31/15 19:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		08/31/15 19:35	1
Dibromofluoromethane (Surr)	96		76 - 132		08/31/15 19:35	1
Toluene-d8 (Surr)	101		80 - 128		08/31/15 19:35	1

Lab Sample ID: LCS 440-277353/4

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.0		ug/L		100	68 - 130
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130
Toluene	25.0	25.4		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	98		80 - 128

Lab Sample ID: 440-119433-A-1 MS

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	23.2		ug/L		93	66 - 130
Ethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130
Toluene	ND		25.0	24.3		ug/L		97	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	95		76 - 132
Toluene-d8 (Surr)	100		80 - 128

Lab Sample ID: 440-119433-A-1 MSD

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	23.4		ug/L		94	66 - 130	1	20
Ethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130	0	20
Toluene	ND		25.0	24.2		ug/L		97	70 - 130	1	20

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-119433-A-1 MSD

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	100		80 - 128

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 440-276369/3

Matrix: Water

Analysis Batch: 276369

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		1.0	0.25	ug/L			08/27/15 05:28	1

Lab Sample ID: LCS 440-276369/2

Matrix: Water

Analysis Batch: 276369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	50.0	49.7		ug/L		99	90 - 110

Lab Sample ID: MRL 440-276369/4

Matrix: Water

Analysis Batch: 276369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	1.00	1.18		ug/L		118	50 - 150

Lab Sample ID: 440-119107-1 MS

Matrix: Water

Analysis Batch: 276369

Client Sample ID: PC-082415-COMPOSITE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	2.1		50.0	52.1		ug/L		100	90 - 110

Lab Sample ID: 440-119107-1 MSD

Matrix: Water

Analysis Batch: 276369

Client Sample ID: PC-082415-COMPOSITE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	2.1		50.0	51.6		ug/L		99	90 - 110	1	10

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-276759/1-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.25	ug/L		08/28/15 09:23	08/31/15 03:53	1

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 440-276759/1-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.50	ug/L		08/28/15 09:23	08/31/15 03:53	1

Lab Sample ID: LCS 440-276759/2-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	80.0	79.6		ug/L		100	85 - 115
Lead	80.0	82.9		ug/L		104	85 - 115

Lab Sample ID: LCSD 440-276759/3-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	80.0	81.3		ug/L		102	85 - 115	2	20
Lead	80.0	83.7		ug/L		105	85 - 115	1	20

Lab Sample ID: 440-117423-A-1-D MS

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		80.0	69.1		ug/L		86	70 - 130
Lead	2.4		80.0	74.9		ug/L		91	70 - 130

Lab Sample ID: 440-117423-A-1-E MSD

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		80.0	66.3		ug/L		83	70 - 130	4	20
Lead	2.4		80.0	71.4		ug/L		86	70 - 130	5	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-277475/1-A

Matrix: Water

Analysis Batch: 277776

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0	1.4	mg/L		09/01/15 08:55	09/02/15 09:39	1

Lab Sample ID: LCS 440-277475/2-A

Matrix: Water

Analysis Batch: 277776

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	20.0	17.2		mg/L		86	78 - 114

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 440-277475/3-A

Matrix: Water

Analysis Batch: 277776

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 277475

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	20.0	17.1		mg/L		86	78 - 114	1	11

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 440-276534/3-A

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 276534

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20	0.10	mg/L		08/27/15 13:52	08/27/15 21:58	1

Lab Sample ID: LCS 440-276534/4-A

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.00	4.89		mg/L		98	90 - 110		

Lab Sample ID: LCSD 440-276534/5-A

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.00	4.88		mg/L		98	90 - 110	0	20

Lab Sample ID: 440-119059-B-1-B MS

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND		5.00	4.98		mg/L		100	90 - 110		

Lab Sample ID: 440-119059-B-1-C MSD

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND		5.00	5.00		mg/L		100	90 - 110	0	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 320-85571/15

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.0130	J	0.050	0.0031	mg/L			09/09/15 15:41	1

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 320-85571/16

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.982		mg/L		98	90 - 110

Lab Sample ID: 440-119144-E-2 MS

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.078	B	1.00	1.03		mg/L		95	90 - 110

Lab Sample ID: 440-119144-E-2 MSD

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.078	B	1.00	1.03		mg/L		95	90 - 110	0	20

Method: 365.3 - Phosphorus, Total

Lab Sample ID: MB 440-277365/1-A

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.050	0.025	mg/L		08/31/15 19:05	08/31/15 21:24	1

Lab Sample ID: LCS 440-277365/2-A

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	0.502	0.405		mg/L		81	80 - 120

Lab Sample ID: 440-117704-W-1-E MS

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 277365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	ND		0.502	0.503		mg/L		100	75 - 125

Lab Sample ID: 440-117704-W-1-F MSD

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 277365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phosphorus, Total	ND		0.502	0.419		mg/L		84	75 - 125	18	20

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 410.4 - COD

Lab Sample ID: MB 440-276645/9

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			08/27/15 20:05	1

Lab Sample ID: LCS 440-276645/10

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	207		mg/L		103	90 - 110

Lab Sample ID: 440-119059-B-1 MS

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		200	208		mg/L		104	70 - 120

Lab Sample ID: 440-119059-B-1 MSD

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		200	208		mg/L		104	70 - 120	0	15

Method: SM 2520B - Salinity

Lab Sample ID: 440-119114-B-1 DU

Matrix: Water

Analysis Batch: 277574

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Salinity	ND		ND		psu		NC	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-276878/1

Matrix: Water

Analysis Batch: 276878

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			08/28/15 16:23	1

Lab Sample ID: LCS 440-276878/2

Matrix: Water

Analysis Batch: 276878

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	986		mg/L		99	85 - 115

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 440-118978-B-1 DU

Matrix: Water

Analysis Batch: 276878

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	240		238		mg/L		2	10

Method: SM 4500 NH3 D - Ammonia

Lab Sample ID: MB 440-278258/2-A

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 278258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.50	0.10	mg/L		09/04/15 04:00	09/04/15 06:18	1

Lab Sample ID: LCS 440-278258/1-A

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ammonia (as N)	2.50	2.41		mg/L		96	85 - 115

Lab Sample ID: 440-119591-E-2-B MS

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Ammonia (as N)	ND		2.50	2.41		mg/L		96	75 - 125

Lab Sample ID: 440-119591-E-2-C MSD

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ammonia (as N)	ND		2.50	2.51		mg/L		100	75 - 125	4	15

Lab Sample ID: 440-119802-A-1-C DU

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Ammonia (as N)	62		57.5		mg/L		8	15

Method: EPA 360.1 - General Chemistry Parameters

Lab Sample ID: 15H0067-DUP1

Matrix: Water - NonPotable

Analysis Batch: 15H0067

Client Sample ID: PC-082415 COMP

Prep Type: Total

Prep Batch: 15H0067_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Oxygen, Dissolved - measured in lab not in field	9.67		9.62	H3	mg/L		0.5	20

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: SM 2130 B - General Chemistry Parameters

Lab Sample ID: 15H0073-BLK1
Matrix: Water - NonPotable
Analysis Batch: 15H0073

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 15H0073_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	0.0600	J	0.100		N.T.U.	-	08/25/15 09:13	08/25/15 09:13	1.00

Lab Sample ID: 15H0073-DUP1
Matrix: Water - NonPotable
Analysis Batch: 15H0073

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 15H0073_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Turbidity	19.4		19.2		N.T.U.	-	1	20

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 15H0072-BLK1
Matrix: Water - NonPotable
Analysis Batch: 15H0072

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 15H0072_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	0.510	J	2.00	0.200	mg/L	-	08/24/15 19:37	08/29/15 16:06	1.00

Lab Sample ID: 15H0072-BS1
Matrix: Water - NonPotable
Analysis Batch: 15H0072

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 15H0072_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	207		mg/L	-	104	85 - 115

Lab Sample ID: 15H0072-DUP1
Matrix: Water - NonPotable
Analysis Batch: 15H0072

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 15H0072_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
BOD - 5 Day	4.34		4.33		mg/L	-	0.2	20

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

GC/MS VOA

Analysis Batch: 277353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-2	PC-082415-GRAB	Total/NA	Water	624	
440-119433-A-1 MS	Matrix Spike	Total/NA	Water	624	
440-119433-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624	
LCS 440-277353/4	Lab Control Sample	Total/NA	Water	624	
MB 440-277353/3	Method Blank	Total/NA	Water	624	

HPLC/IC

Analysis Batch: 276369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	218.6	
440-119107-1 MS	PC-082415-COMPOSITE	Total/NA	Water	218.6	
440-119107-1 MSD	PC-082415-COMPOSITE	Total/NA	Water	218.6	
LCS 440-276369/2	Lab Control Sample	Total/NA	Water	218.6	
MB 440-276369/3	Method Blank	Total/NA	Water	218.6	
MRL 440-276369/4	Lab Control Sample	Total/NA	Water	218.6	

Metals

Prep Batch: 276759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117423-A-1-D MS	Matrix Spike	Total Recoverable	Water	200.2	
440-117423-A-1-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.2	
440-119107-1	PC-082415-COMPOSITE	Total Recoverable	Water	200.2	
LCS 440-276759/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
LCSD 440-276759/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.2	
MB 440-276759/1-A	Method Blank	Total Recoverable	Water	200.2	

Analysis Batch: 277198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117423-A-1-D MS	Matrix Spike	Total Recoverable	Water	200.8	276759
440-117423-A-1-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	276759
440-119107-1	PC-082415-COMPOSITE	Total Recoverable	Water	200.8	276759
LCS 440-276759/2-A	Lab Control Sample	Total Recoverable	Water	200.8	276759
LCSD 440-276759/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	276759
MB 440-276759/1-A	Method Blank	Total Recoverable	Water	200.8	276759

General Chemistry

Analysis Batch: 85571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	353.2	
440-119144-E-2 MS	Matrix Spike	Total/NA	Water	353.2	
440-119144-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
LCS 320-85571/16	Lab Control Sample	Total/NA	Water	353.2	
MB 320-85571/15	Method Blank	Total/NA	Water	353.2	

Prep Batch: 276534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	

TestAmerica Irvine

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

General Chemistry (Continued)

Prep Batch: 276534 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	351.2	
LCS 440-276534/4-A	Lab Control Sample	Total/NA	Water	351.2	
LCSD 440-276534/5-A	Lab Control Sample Dup	Total/NA	Water	351.2	
MB 440-276534/3-A	Method Blank	Total/NA	Water	351.2	

Analysis Batch: 276645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1 MS	Matrix Spike	Total/NA	Water	410.4	
440-119059-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	410.4	
LCS 440-276645/10	Lab Control Sample	Total/NA	Water	410.4	
MB 440-276645/9	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 276670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	276534
440-119059-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	276534
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	351.2	276534
LCS 440-276534/4-A	Lab Control Sample	Total/NA	Water	351.2	276534
LCSD 440-276534/5-A	Lab Control Sample Dup	Total/NA	Water	351.2	276534
MB 440-276534/3-A	Method Blank	Total/NA	Water	351.2	276534

Analysis Batch: 276878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-118978-B-1 DU	Duplicate	Total/NA	Water	SM 2540D	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 2540D	
LCS 440-276878/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 440-276878/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 277365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117704-W-1-E MS	Matrix Spike	Total/NA	Water	365.2/365.3/365	
440-117704-W-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	365.2/365.3/365	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	365.2/365.3/365	
LCS 440-277365/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 440-277365/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 277393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117704-W-1-E MS	Matrix Spike	Total/NA	Water	365.3	277365
440-117704-W-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	365.3	277365
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	365.3	277365
LCS 440-277365/2-A	Lab Control Sample	Total/NA	Water	365.3	277365
MB 440-277365/1-A	Method Blank	Total/NA	Water	365.3	277365

Prep Batch: 277475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-2	PC-082415-GRAB	Total/NA	Water	1664A	
LCS 440-277475/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-277475/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

TestAmerica Irvine

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

General Chemistry (Continued)

Prep Batch: 277475 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-277475/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 277574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 2520B	
440-119114-B-1 DU	Duplicate	Total/NA	Water	SM 2520B	

Analysis Batch: 277776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-2	PC-082415-GRAB	Total/NA	Water	1664A	277475
LCS 440-277475/2-A	Lab Control Sample	Total/NA	Water	1664A	277475
LCSD 440-277475/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	277475
MB 440-277475/1-A	Method Blank	Total/NA	Water	1664A	277475

Prep Batch: 278258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 4500 NH3 B	
440-119591-E-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 B	
440-119591-E-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 B	
440-119802-A-1-C DU	Duplicate	Total/NA	Water	SM 4500 NH3 B	
LCS 440-278258/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
MB 440-278258/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 278284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 4500 NH3 D	278258
440-119591-E-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 D	278258
440-119591-E-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 D	278258
440-119802-A-1-C DU	Duplicate	Total/NA	Water	SM 4500 NH3 D	278258
LCS 440-278258/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	278258
MB 440-278258/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 D	278258

Analysis Batch: 279404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	Total Nitrogen	

WetChem

Analysis Batch: 15H0067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0067-DUP1	PC-082415 COMP	Total	Water - NonPotable	EPA 360.1	15H0067_P
440-119107-1	PC-082415-COMPOSITE	Total	Water	EPA 360.1	15H0067_P

Analysis Batch: 15H0072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	15H0072_P
15H0072-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	15H0072_P

TestAmerica Irvine

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

WetChem (Continued)

Analysis Batch: 15H0072 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	15H0072_P
440-119107-1	PC-082415-COMPOSITE	Total	Water	SM5210B	15H0072_P

Analysis Batch: 15H0073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0073-BLK1	Method Blank	Total	Water - NonPotable	SM 2130 B	15H0073_P
15H0073-DUP1	Duplicate	Total	Water - NonPotable	SM 2130 B	15H0073_P
440-119107-1	PC-082415-COMPOSITE	Total	Water	SM 2130 B	15H0073_P

Analysis Batch: 15I0041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total	Water	SM 4500-O2	15I0041_P

Prep Batch: 15H0067_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0067-DUP1	PC-082415 COMP	Total	Water - NonPotable	Default Prep GenChem	
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Prep Batch: 15H0072_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
15H0072-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep GenChem	
15H0072-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Prep Batch: 15H0073_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0073-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
15H0073-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Prep Batch: 15I0041_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Definitions/Glossary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

WetChem

Qualifier	Qualifier Description
H3	Sample was received and analyzed past holding time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-16
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-16 *
New Mexico	State Program	6	N/A	01-29-16
Northern Mariana Islands	State Program	9	MP0002	01-29-16
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	07-08-18

Laboratory: TestAmerica Honolulu

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		HON-S-206	01-31-18

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-15
Arizona	State Program	9	AZ0708	08-11-16
Arkansas DEQ	State Program	6	88-0691	06-17-16
California	State Program	9	2897	01-31-16
Colorado	State Program	8	N/A	08-31-16
Connecticut	State Program	1	PH-0691	06-30-17
Florida	NELAP	4	E87570	06-30-16
Hawaii	State Program	9	N/A	01-29-16
Illinois	NELAP	5	200060	03-17-16
Kansas	NELAP	7	E-10375	10-31-15
Louisiana	NELAP	6	30612	06-30-16
Michigan	State Program	5	9947	01-31-16
Nevada	State Program	9	CA44	07-31-16
New Jersey	NELAP	2	CA005	09-30-15
New York	NELAP	2	11666	04-01-16
Oregon	NELAP	10	CA200005	01-29-16
Pennsylvania	NELAP	3	9947	03-31-16
Texas	NELAP	6	T104704399-15-9	05-31-16
US Fish & Wildlife	Federal		LE148388-0	02-28-16
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-16
Virginia	NELAP Secondary AB	3	460278	03-14-16
Washington	State Program	10	C581	05-04-16
West Virginia (DW)	State Program	3	9930C	12-31-15
Wyoming	State Program	8	8TMS-Q	01-29-16

* Certification renewal pending - certification considered valid.

TestAmerica Irvine

Honolulu

4429 Malaia St.

Suite 104

Honolulu, HI 96826

phone 808.486.5227 fax 808.486.2456

PC-1 (1)

Chain of Custody Record

MYM0078
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Jeff Morrell		Site Contact: Jeff Morrell		Date: 8-24-15		COC No:					
Name: Jeff Morrell		Tel/Fax: Jeff Morrell (271-8142)		Lab Contact: Jimson Carr		Carrier:		Job No. of COCs					
Email: jmorrell@east.com		E-mail results to jmorrell@east.com						SDG No.					
HWY-OM Environmental and Safety Program Support		Analysis Turnaround Time											
Phone: (808) 271-8142 Fax: (808) 845-9733		10 Day Turnaround											
Project Name: DOT HWY SWPCP													
Site: Pearl City													
PO # Enviro Services													
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Oil and grease	Benzene, Toluene, Ethylbenzene	Turbidity / Salinity / Oxygen Saturation (Method 6010)	Ammonia Nitrogen / Total Nitrogen	Cadmium / Lead / Chromium VI	Sample Specific Notes:	
PC-082415-016 PC-1(1)		82415	0309	grab	Water	1	X						
PC-082415-02 PC-1(2)			0310	comp	Water	1							
PC-082415-03			0311										
PC-082415-04			0312										
PC-082415-05			0313										
PC-082415-06			0314										
PC-082415-07			0322										
PC-082415-08			0323										
PC-082415-09			0324										
PC-082415-10			0334										
PC-082415-11			0337										
PC-082415-12			0351										
Preservation Used (1=I ₂ , 2=HCl; 3=H ₂ SO ₄ ; 4=HNO ₃ ; 5=NaOH; 6=Other)													
Possible Hazard Identification													
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> San Irritant <input type="checkbox"/> Poison <input type="checkbox"/> Unknown													
Special Instructions/QC Requirements & Comments:													
Lab to Composite bottle													
2 through 12. 1D Composite Sample on PC-082415 - Comp.													
Relinquished by: Renee Kueley		Company: EATC	Date/Time: 8-24-15 1230	Received by: [Signature]		Company: TACON	Date/Time: 8/24/15 1230						
Relinquished by:		Company:	Date/Time:	Received by: [Signature]		Company:	Date/Time:						
Relinquished by: KATHY KUELEY		Company: TACON	Date/Time: 8/25/15 1226	Received by: [Signature]		Company: TACON	Date/Time: 8/26/15 10:00						

Fed 17743 65109794

CS 43/47 37/36 39/43 35/39 41/45 TR-75

Client Information (Sub Contract Lab)				Lab PM		Carrier Tracking No(s)		GOC No			
Company:				E-Mail:		Page 1 of 1		440-87435.1			
Address:				Phone:		Page 1 of 1		440-87435.1			
City:				E-Mail:		Page 1 of 1		440-87435.1			
State, Zip:				E-Mail:		Page 1 of 1		440-87435.1			
Phone:				E-Mail:		Page 1 of 1		440-87435.1			
Email:				E-Mail:		Page 1 of 1		440-87435.1			
Project Name:				E-Mail:		Page 1 of 1		440-87435.1			
Site:				E-Mail:		Page 1 of 1		440-87435.1			
Sample Identification - Client ID (Lab ID) PC-082415-COMPOSITE (440-119107-1)				Sample Date 8/24/15		Sample Time 03:10 Pacific		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=ore, BT=bitumen, A=acid)	
Due Date Requested: 9/2/2015				TAT Requested (days): 7		PO #: 44014024		WO #: 44014024		Project #: 44014024	
Address: 880 Riverside Parkway West Sacramento CA, 95605				Phone: 916-373-5600(Tel) 916-372-1059(Fax)		Email: EA Engineering - Jeff Morrell		Site: EA Engineering - Jeff Morrell		Special Instructions/Note: None	
Analysis Requested				Field Filtered Sample (Yes or No)		35.2/ Nitrate Nitrite Only		Total Number of Containers		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Possible Hazard Identification Unconfirmed Deliverable Requested. I, II, III, IV, Other (specify)				Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab		Archive For		Months		Special Instructions/Note: None	
Empty Kit Relinquished by:				Date:		Time:		Method of Shipment:		Company:	
Relinquished by:				Date/Time:		Time:		Method of Shipment:		Company:	
Relinquished by:				Date/Time:		Time:		Method of Shipment:		Company:	
Relinquished by:				Date/Time:		Time:		Method of Shipment:		Company:	
Custody Seals Intact Yes <input type="checkbox"/> No <input type="checkbox"/>				Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company:		Company:	

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 440-119107-1

Login Number: 119107

List Source: TestAmerica Irvine

List Number: 1

Creator: Escalante, Maria I

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 440-119107-1

Login Number: 119107

List Number: 2

Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento

List Creation: 08/28/15 03:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B6: Permit-Specific Information – Highways Oahu District

6. Deficiencies

Deficiency Tracking #9 through #15 apply to this permit. Please see pages B6-12 through B6-41.

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 9

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed metal building materials and rolled fencing stored in uncovered areas at the Kakoi Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photographs of metal storage in uncovered areas observed during the On-Site Audit and associated map indicating locations where photographs were taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP, October 2016

Page 42: "Store metals in covered area or with a tarp to prevent rusting"

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

Photograph 1



Photograph 2



Figure 2-1: Storm Water Pollution Control Plan - Kakoi Baseyard

Legend

- Storm Drain with BMP Insert
- Storm Drain Manhole
- Storm Drain Outfall
- Storm Drain Pipe
- BMP
- X = X = Fence
- X = X = Gate
- Parking
- Rain Garden
- Historic Events
- Grass
- Concrete
- Buildings
- Covered Areas
- Uncovered Areas
- Misc. Features
- Rain Garden
- Historic Events
- Grass
- Concrete

Photograph 1

Photograph 2

SWPCP Figure Revision Date - January 2019

STORM WATER POLLUTION CONTROL PLAN - KAKOI BASEYARD

SITE PLAN

FIGURE 2-1

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 9

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 10

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed a truck leaking oil west of the warehouse at the Kakoi Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of truck leaking oil observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP, October 2016

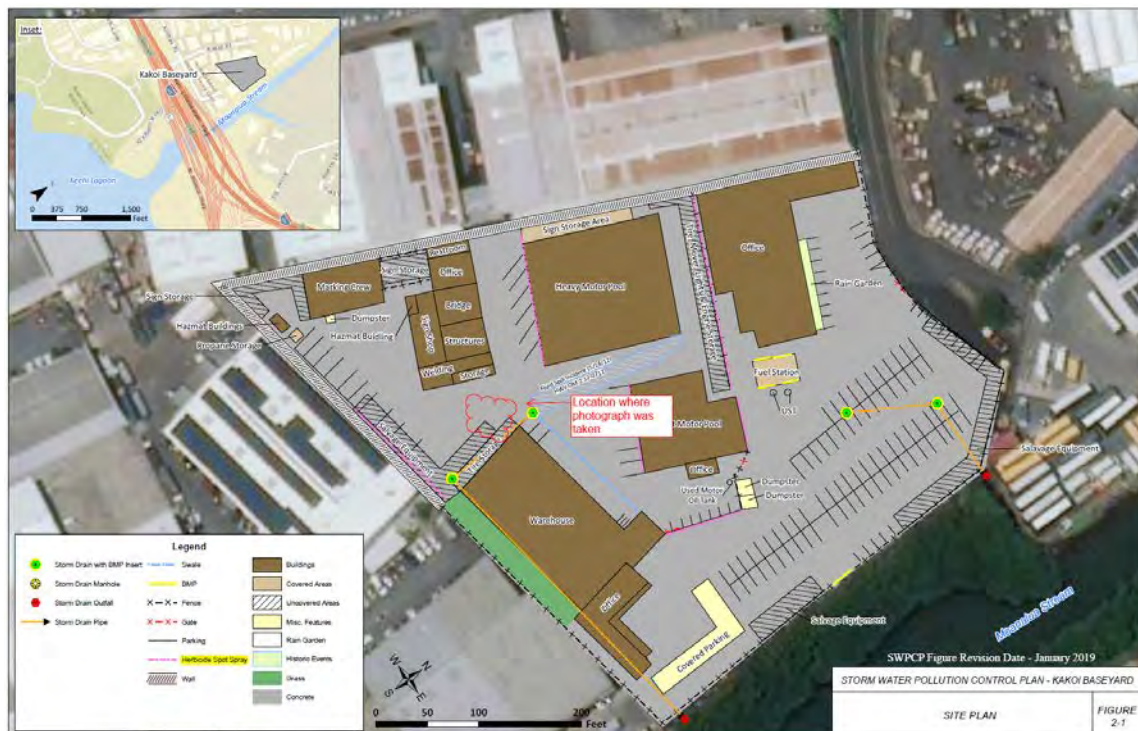
Page 34: "Clean any parking area oil stains that produce a sheen when wet"

Page 40: "Inspect vehicles for leaks and use drip pans where necessary."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 10

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 11

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed accumulated sediment and debris southeast of the fuel station at the Kako'i Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of accumulated sediment and debris observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

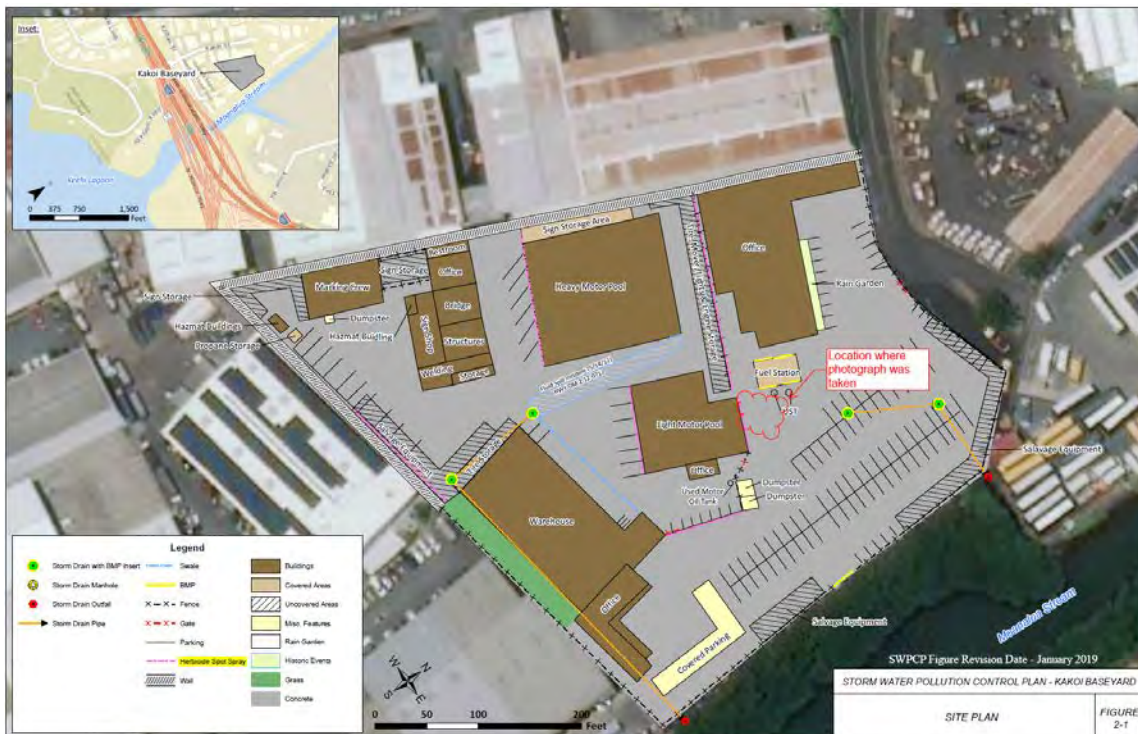
SWPCP, October 2016

Page 33: "Sweep baseyard areas at least once per week and additionally as needed to remove accumulated sediment and debris and to prevent tracking."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 11

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 12

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed a wet oil stain along the western edge of the Windward Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photographs of oil stain observed during the On-Site Audit and associated map indicating location where photographs were taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP, October 2016

Page 16: "Clean any parking area oil stains that produce a sheen when wet."

Page 20: "Inspect vehicles for leaks and use drip pans where necessary."

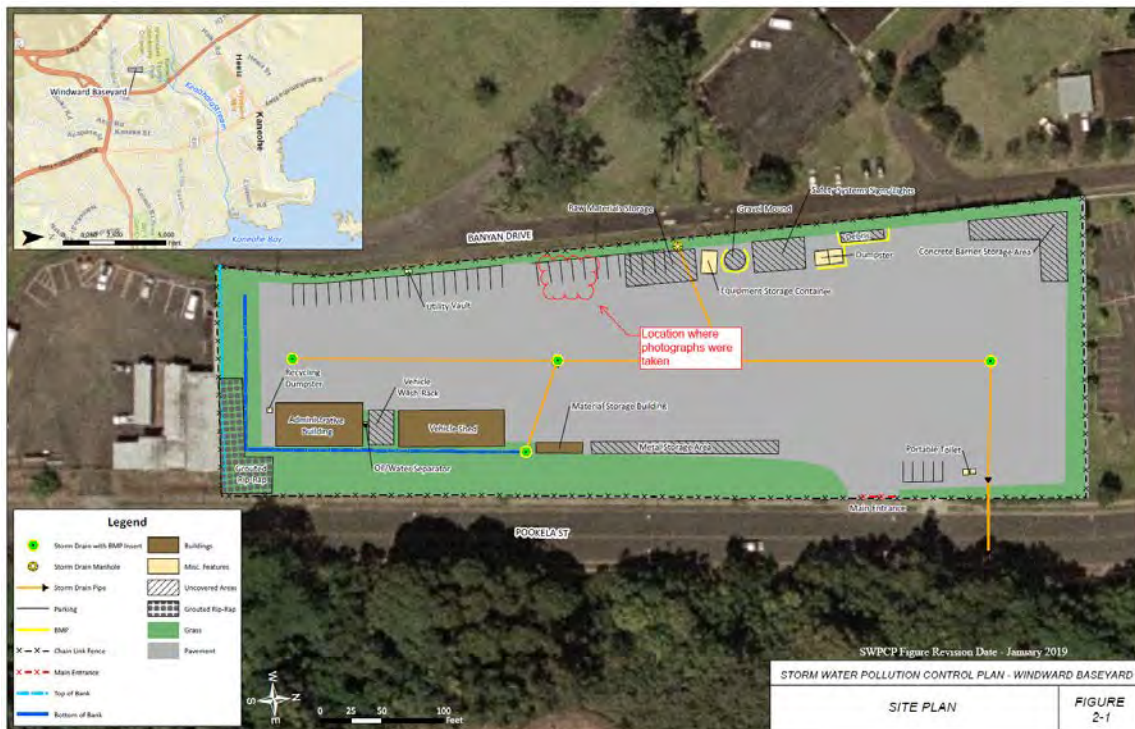
Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 12

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 13

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed metals being stored uncovered outside at the Windward Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photographs of metal storage outside observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

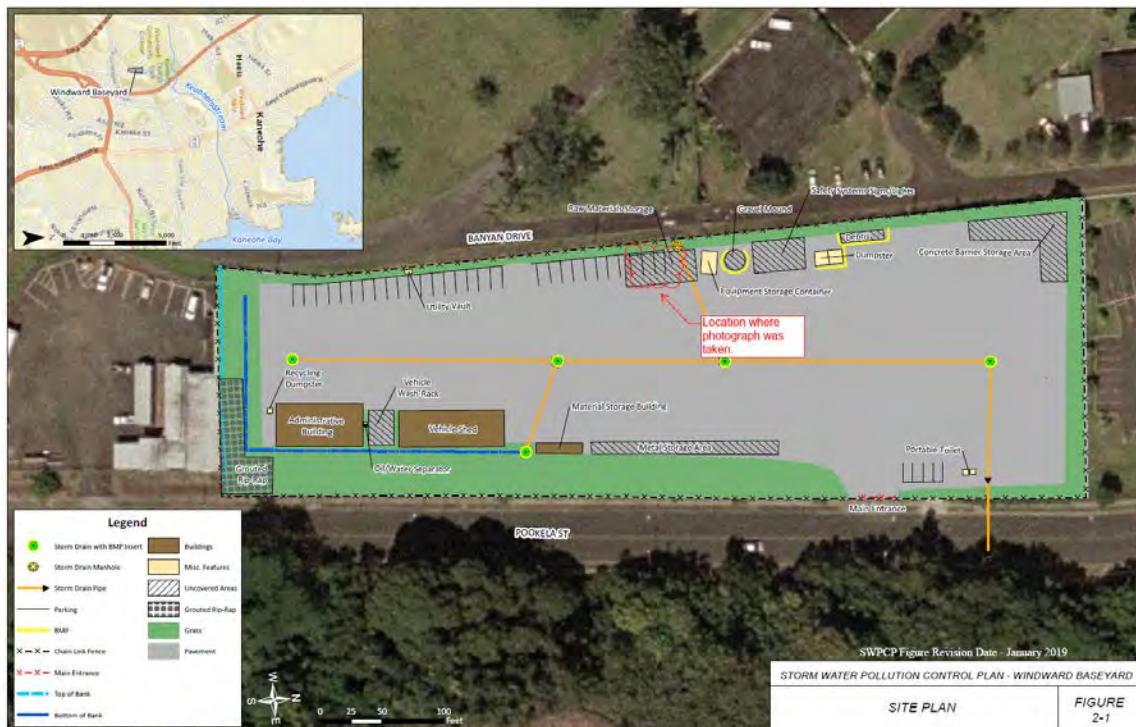
SWPCP, October 2016

Page 21: "Store metals in covered area or with a tarp to prevent rusting."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 13

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 14

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

Highways Oahu District indicated “ND” (short for “Non-Detect”) for several parameters on Discharge Monitoring Reports (DMRs) reviewed for this audit instead of indicating as required by the Hawaii Administrative Rules referenced below that the test result is "less than #," where the # is the lowest detection limit of the test method used”.

Recommendations for Improvement:

In these situations, Highways Oahu District should indicate on DMRs that the test result is "less than #," where the # is the lowest detection limit of the test method used”.

Description of Attachments (if applicable):

Example of a DMR for Windward Baseyard with ND entries circled.

Applicable Regulatory References

NPDES Permit No.:

HI S000001 Part E.1: “baseyards...covered under this permit shall comply with the requirements in HAR, Chapter 11-55, Appendix B.”

SWMPP: Not Applicable.

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 8.(a)(4)(c): “if the test result is not detectable, indicate that the test result is "less than #,"where the # is the lowest detection limit of the test method used.”

Code of Federal Regulations (CFR): Not Applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)
NAME Department of Transportation, Highways Division

ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

FACILITY Windward Baseyard
LOCATION 45-889 Pookela Street
Kaneohe, Hawaii 96744

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

HI S000001
PERMIT NUMBER

WW-1
DISCHARGE NUMBER

MONITORING PERIOD
FROM 2016 07 01 TO 2017 02 06

Form Approved
OMB No 2040-0004

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
Ammonia Nitrogen	SAMPLE MEASUREMENT					ND	mg/l		1/365	Grab
	PERMIT REQUIREMENT					Report				
Cadmium	SAMPLE MEASUREMENT					ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT					3.0				
Chromium VI	SAMPLE MEASUREMENT					5.0	µg/l		1/365	Grab
	PERMIT REQUIREMENT					16.0				
Lead	SAMPLE MEASUREMENT					ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT					29.0				
Oil and Grease	SAMPLE MEASUREMENT					ND	mg/l		1/365	Grab
	PERMIT REQUIREMENT					15.0				
pH	SAMPLE MEASUREMENT					6.35	pH Units		1/365	Grab
	PERMIT REQUIREMENT					5.5 - 8.0				
Turbidity	SAMPLE MEASUREMENT					13 H	NTU		1/365	Grab
	PERMIT REQUIREMENT					15 (Wet Season)				
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.					TELEPHONE		DATE	
Pratt Kinimaka District Engineer, HWY-O							808 831-6703		2017 03 06	
TYPED OR PRINTED							SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE NUMBER YEAR MO DAY	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

ND: Not Detected
H: Sample was prepped or analyzed beyond the specific holding time

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 14

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix B6: Permit-Specific Information – Highways Oahu District

Draft Notice of Deficiency

Deficiency Tracking #: 15

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

The Audit Team reviewed the October 2016 Kakoi Baseyard Storm Water Pollution Control Plan (SWPCP) which indicated in Table 3-1 that the selected test method for ammonia nitrogen had a detection limit that was higher than the numeric effluent limit. When the Audit Team brought this to HWY-O's attention, they clarified that this issue was addressed when HWY-O brought on a new analytical laboratory in June 2017. However, the SWPCP was not updated at that time to reflect this change.

Recommendations for Improvement:

Highways Oahu District should review and update the SWPCP as often as needed to comply with their permit requirements.

Description of Attachments (if applicable):

Table 3-1 of the October 2016 SWPCP for Kakoi Baseyard.

Applicable Regulatory References

NPDES Permit No.:

HI S000001 Part E.1: "baseyards...covered under this permit shall comply with the requirements in HAR, Chapter 11-55, Appendix B."

SWMPP: Not Applicable.

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Part 6.(d): "[t]he permittee shall review and update the storm water pollution control plan as often as needed to comply with the conditions of this general permit or conditions of the notice of general permit coverage".

HAR 11-55 Appendix B Part 8.(a)(4)(c): "the permittee shall use test methods with detection limitations that reflect the applicable numerical limitations as specified in chapter 11-54".

Code of Federal Regulations (CFR): Not Applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

TABLE 3-1: KAKOI BASEYARD MONITORING PARAMETERS

Parameter (unit)	Sample Type	Test Method	Reporting Limit/ Detection Limit	Discharge Limit ¹
Flow (gallons per day)	Calculate / Estimate	Calculate / Estimate	NA	NA ⁽⁵⁾
Biochemical Oxygen Demand (5-Day) (mg/L)	Composite	SM 5210B	2.0 / 0.2	NA ⁽⁵⁾
Chemical Oxygen Demand (mg/L)	Composite	E410.4	20 / 10	NA ⁽⁵⁾
Total Suspended Solids (mg/L)	Composite	SM 2540D	10 / 5.0	NA ⁽⁵⁾
Total Phosphorus (mg/L)	Composite	E365.4	0.1 / NA	0.05
Total Kjeldahl Nitrogen (mg/L)	Composite	E351.2	0.5 / NA	NA ⁽⁵⁾
Nitrate + Nitrite (mg/L)	Composite	E353.2	0.05 / 0.008	0.025
Ammonia Nitrogen (mg/L)	Composite	SM 4500-NH3 D	1.0 / 0.2	0.01
Total Nitrogen (mg/L)	Composite	Calculation	NA	0.35
Cadmium (µg/L) ⁽²⁾	Composite	E200.8	1.0 / 0.11	3.0
Chromium VI (µg/L) ⁽²⁾	Composite	E218.6	1.0 / 0.25	16
Lead (µg/L) ⁽²⁾	Composite	E200.8	1.0 / 0.3	29
Oil and Grease (mg/L)	Grab	E1664A	5.0 / 1.4	15
pH (unit) ^{(3) (4)}	Grab	E150.1	0.01 / NA	5.5-8.0
Turbidity (NTU)	Grab	SM 2130B	0.1 / NA	3
Dissolved Oxygen (mg/L) ⁽⁴⁾	Grab	E360.1	0.1 / NA	NA ⁽⁵⁾
Oxygen Saturation (%)	Grab	Calculation	NA	NA ⁽⁵⁾
Temperature (°C) ^{(3) (4)}	Grab	E170.1	NA	NA ⁽⁵⁾
Salinity (ppt)	Grab	SM 2520B	0.1 / NA	NA ⁽⁵⁾
Benzene (µg/L)	Grab	E624	0.50 / 0.25	1,800
Toluene (µg/L)	Grab	E624	1.0 / 0.25	5,800
Ethylbenzene (µg/L)	Grab	E624	1.0 / 0.25	11,000

Notes: All parameters will be monitored annually.

⁽¹⁾ Discharge limits applied for locations where the receiving water is considered inland or fresh water.

⁽²⁾ The total recoverable portion of all metals will be tested.

⁽³⁾ Ensure that parameter is measured within 15 minutes of obtaining grab sample.

⁽⁴⁾ Analysis will be performed in the field.

⁽⁵⁾ No limitation at this time. Only monitoring and reporting on the DMR is required.

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☐ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on:
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 15

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Description of Attachments (if applicable):

Appendix C

Revised Audit Work Plan, November 2016

State of Hawaii Department of Transportation

Office of Environmental Compliance



Revised Audit Work Plan

State Project No. OSC-15-01

November 2016

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D3:	Notice of Corrective Action

List of Acronyms

ACR	Annual Compliance Report
AWPC	Audit Work Plan Commencement
BMP	best management practice
CD	Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC)
CFR	Code of Federal Regulations
DOH	Department of Health
EPA	United States Environmental Protection Agency
HAR	Hawaii Administrative Rules
HARP	Hazard Appraisal and Recognition Plan
HDOT	State of Hawaii Department of Transportation
MEP	maximum extent practicable
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PEAR	Program Element Audit Report
PM	Project Manager
QA	quality assurance
QC	quality control
SWMPP	Storm Water Management Program Plan

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Section 1: Introduction, Purpose, and Goals

Under Paragraph 10.d of the Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC) entered on 5 November 2014 (CD) with the United States Environmental Protection Agency (EPA) and the State of Hawaii (State) Department of Health (DOH), the State of Hawaii Department of Transportation (HDOT) is required to perform compliance audits of Municipal Separate Storm Sewer System (MS4)¹ permits issued to HDOT's Airports, Highways, and Harbors Divisions (referred to herein as the singular "MS4 Permit Audit"). Specific requirements for the MS4 Permit Audit are defined in Appendix A of the CD and included in Appendix A of this document. The MS4 Permit Audit will be conducted in accordance with this Audit Work Plan (AWP) by Kennedy/Jenks Consultants (Kennedy/Jenks), the selected independent third-party audit firm.

This AWP was conditionally approved by EPA & DOH on 31 October 2016. As memorialized in the conditional approval letter, HDOT will begin the audit on 15 March 2017. This date is hereafter referred to as the AWP Commencement date (AWPC). This AWP includes project milestones with defined dates in some cases (e.g., "15 April 2017") while other dates may be specified relative to the AWPC (e.g., "30 days after AWPC"). All "days" in this AWP refer to calendar days as opposed to business days.

The defined purpose of the MS4 Permit Audit is to assess HDOT's current regulatory and administrative compliance with its MS4 permits, DOH National Pollutant Discharge Elimination System (NPDES) General Permit Coverage Authorizing Discharges of Storm Water and Certain Non-Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Hawaii Small MS4 General Permit), applicable Storm Water Management Program Plans (SWMPs), and the CD.

The defined goals of the MS4 Permit Audit focus on meeting the requirements listed in Appendix A of the CD, including:

- Evaluating compliance with HDOT MS4 permits and the CD
- Identifying information gathered during the MS4 Permit Audit that may be used to promote information and technology transfer between HDOT Divisions
- Identifying Potential Violations (areas where the evaluation found the permittee not in compliance with a specific permit requirement or SWMP commitment) and Deficiencies (items which, if not corrected, may be anticipated to lead to Potential Violations) in HDOT's stormwater programs and assisting with timely self-correction of identified Potential Violations and Deficiencies by HDOT.

¹ The MS4 refers to the conveyance system in addition to the jurisdiction(s) which own/operate the system.

In addition to meeting the CD requirements and EPA & DOH expectations, the overarching goal of the MS4 Permit Audit is to develop internal trust and collaboration within HDOT. The Audit Team will seek HDOT-wide opportunities for improvement rather than focusing on minor issues of non-compliance.

Reporting requirements of the MS4 Permit Audit are defined in Appendix A Section D.7. of the CD and include:

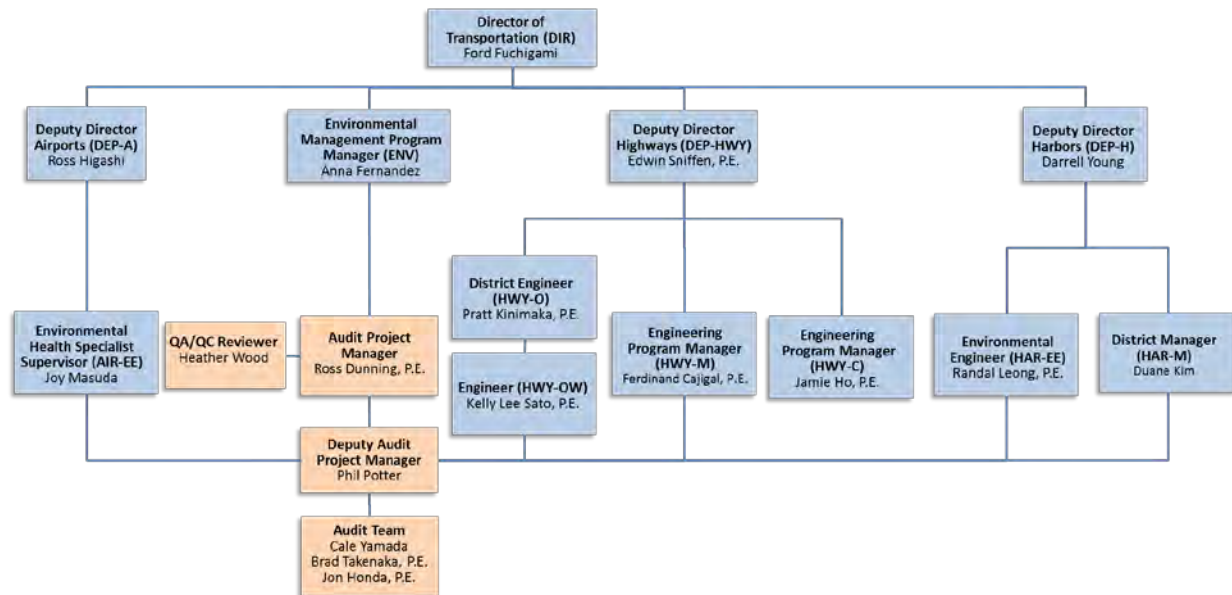
- A specific statement of the procedures followed, HDOT sites and activities visited, and all materials reviewed during the MS4 Permit Audit
- Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and providing recommendations to modify, streamline, or augment them in accordance with what has been learned during the MS4 Permit Audit, as appropriate.
- Identification of Potential Violations and Deficiencies and of MS4 permit conditions, applicable SWMPPs, the CD, and/or other applicable regulations, and providing recommendations for improvements as found to be appropriate
- Identification of best practices and opportunities for information/technology transfer to be applied across the three HDOT Divisions
- An analysis of the practices implemented for each HDOT Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report will clearly describe impediments identified.

In accordance with requirements defined in Appendix A of the CD, EPA's *MS4 Program Evaluation Guidance* (hereinafter EPA (2007) guidance) was consulted in the development of this AWP. The audit protocols included herein are intended to promote consistency among regulated facilities when conducting environmental audits and to validate that the MS4 Permit Audit is conducted in a thorough and comprehensive manner. Program evaluation worksheets (included in Appendix B) were developed to guide the Audit Team while performing the MS4 Permit Audit. Each worksheet addresses a separate program element, and includes key questions derived from the EPA (2007) guidance document recommended to be considered during an MS4 evaluation. While this AWP is based on the EPA (2007) guidance for auditing small MS4s, HDOT has adapted the guidance to focus some aspects of the audit process to reflect the unique nature of HDOT operations.

Section 2: Audit Team and HDOT Personnel

Figure 2-1 provides an organizational chart defining the Audit Team and HDOT staff that will be involved in the MS4 Permit Audit.

Figure 2-1 Organizational Chart



Additional information describing key MS4 Permit Audit personnel is provided below.

HDOT Project Manager – Anna Fernandez

In her role as Environmental Program Manager, Anna Fernandez reports directly to the HDOT Director. She serves as the HDOT Project Manager (PM) for this project. In this role, she administers and manages Kennedy/Jenks in performing the MS4 Permit Audit and their contact with HDOT leaders and stakeholders.

Deputy Director(s)

Deputy Directors report directly to the HDOT Director. They are responsible for facilitating the Audit Team's access to HDOT personnel and facilities within their respective Divisions as appropriate. The following Deputy Directors will be directly involved in the MS4 Permit Audit process:

Airports (DEP-A) – Ross Higashi
Highways (DEP-HWY) – Edwin Sniffen, P.E.
Harbors (DEP-H) – Darrell Young

MS4 Permit Coordinator(s)

MS4 Permit Coordinators are those HDOT personnel responsible for managing compliance with the MS4 permit for each Division, district, or designated MS4 permitted area. The following MS4 Permit Coordinators will be directly involved in the MS4 Permit Audit process:

Airports (AIR-EE) – Joy Masuda (Environmental Health Specialist Supervisor)
Oahu Highways (HWY-OW) – Kelly Lee Sato, P.E. (Engineer)
Maui Highways (HWY-M) – Ferdinand Cajigal, P.E. (Engineering Program Manager)
Oahu Harbors (HAR-EE) – Randal Leong, P.E. (Environmental Engineer)
Maui Harbors (HAR-M) – Duane Kim (District Manager)

Additional Key MS4 Permit Audit Personnel

The following key staff will also be consulted throughout the MS4 Permit Audit Process:

District Engineer (HWY-O) - Pratt Kinimaka, P.E.
Engineering Program Manager (HWY-C) - Jamie Ho, P.E.

Audit Project Manager – Ross W. Dunning, P.E. / Principal (Kennedy/Jenks)

Ross is a Principal of Kennedy/Jenks and leads their companywide stormwater practice. He has assisted many Western U.S. Port authorities for almost 20 years with development of strategies and stormwater management plans to address Clean Water Act and NPDES regulations. He is Kennedy/Jenks' point of contact for the HDOT PM, and manages the Audit Team to verify that MS4 Permit Audit procedures and reports meet CD requirements and are on schedule. The Audit PM is responsible for updating this Audit Work Plan (with the approval of the HDOT PM), producing schedules, preparing audit reports, and maintaining audit records.

Lead Quality Assurance/Quality Control (QA/QC) Reviewer: Heather Wood
(Kennedy/Jenks)

Heather is the former Director of Sustainability for the Port of Virginia, responsible for development of their environmental programs and permit compliance (including NPDES). Heather is also the former Chair of the American Association of Port Authorities Environmental Committee. She is Kennedy/Jenks' Ports and Harbors Sector Leader. In her role as the Lead QA/QC Reviewer, she will direct the review of MS4 Permit Audit work products, including draft and final audit reports, by qualified Kennedy/Jenks staff.

Deputy Audit Project Manager – Phil Potter (Kennedy/Jenks)

Phil is based in Kennedy/Jenks' Honolulu office and leads the firm's stormwater practice in Hawaii. For over 8 years, he has assisted municipal clients including the HDOT Highways Oahu District and the City and County of Honolulu with development and implementation of their NPDES compliance programs. In his role as the Deputy Audit PM, Phil is responsible for assisting the Audit PM in the execution of the Audit Work Plan and will directly coordinate with the HDOT MS4 Permit Coordinators and other stakeholders.

Auditors – Cale Yamada; Brad Takenaka, P.E.; Jon Honda P.E. (Kennedy/Jenks)

Cale, Brad, and Jon are experienced stormwater professionals in Kennedy/Jenks' Honolulu office. Among their many stormwater projects, they currently assist the City and County of Honolulu with ongoing development and implementation of its municipal stormwater program including, but not limited to, providing periodic MS4 program compliance inspections for hundreds of City and County industrial facilities throughout the island of Oahu.

Auditors are responsible for performing inspections of HDOT facilities and documentation, and performing interviews with HDOT employees responsible for MS4 program implementation and management in order to assess compliance with applicable MS4 program and CD requirements. Auditors are also responsible for coordinating with the Audit PM and Deputy Audit PM regarding any Potential Violations and Deficiencies identified. Hereinafter, the "Audit Team" refers to the Kennedy/Jenks' staff introduced above.

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Section 3: Audit Notes and Guidelines

This Section addresses various topics intended to guide the Audit Team in completing the MS4 Permit Audit in a safe and efficient manner.

3.1 Health, Safety, and Site Access Considerations

Prior to initiating onsite evaluations (see Section 5.2), the Audit PM will lead the Audit Team in developing a Hazard Appraisal and Recognition Plan (HARP), following Kennedy/Jenks' standard safety program. The HARP describes how to identify and analyze safety risks associated with field activities, operations, and facilities; approaches for mitigating identified risks; and processes for documenting and reporting accidents, near misses, and potentially unsafe conditions which may be encountered in the field. The HARP is a "living document" which will be updated as appropriate throughout the term of the MS4 Permit Audit. The Audit Team will wear appropriate personal protective equipment (hard hat, safety vest, safety shoes, protective eyewear, and hearing protection as appropriate) while performing the onsite evaluations.

Harbors Facilities

At this time, no special security clearances or requirements are defined to be necessary at Harbors facilities and/or project sites, as long as the Audit Team is escorted by personnel with valid Transportation Worker Identification Credentials (TWIC) and documentation of Maritime Security (MARSEC) Facility Security Awareness training certification. Active loading or unloading of cargo may necessitate additional safety requirements at certain pier locations.

Airports Facilities

At this time, Airports Division facilities to be evaluated are anticipated to be outside secured air operations areas; therefore, no special requirements or clearances are defined to be necessary. Adequate notice will be provided to the Airports Division MS4 Permit Coordinator to arrange security escort as found to be necessary.

Highways Facilities

At this time, there are no defined security restrictions to access Oahu District or Maui District Highway facilities as the Audit Team will be escorted by HDOT personnel at all times.

3.2 Quality Control Procedures

The Audit PM is responsible for ensuring that Kennedy/Jenks' effort and deliverables meet their company's professional mandate to consistently perform work in a technically correct manner, meeting the standard of care for their profession. The standard of care is defined to represent the watchfulness, attention, caution, prudence, and skill that other qualified professionals in the same or similar circumstances would exercise.

Kennedy/Jenks' quality assurance (QA) program includes processes and procedures developed over their near century-old history to achieve and maintain a rigorous level of quality, planning,

application, and verification. Its quality control (QC) program implements this process and QC reviewers will continuously monitor their effort and work products on this project to meet contract and CD requirements, Kennedy/Jenks' QA/QC standards, and HDOT's expectations.

3.3 Photographs

Digital photographs collected and archived during the course of the MS4 Permit Audit will be managed in accordance with EPA's *Digital Camera Guidance for EPA Civil Inspections and Investigations* (2006). Photographs taken will be organized into photograph logs with each photograph numbered with the date and time included. A brief photograph caption will identify the facility or site name, describe what is depicted in the photograph, the location, direction, and other pertinent data (e.g., the location within the facility or site) as appropriate.

3.4 "Maximum Extent Practicable" Concept

Unlike NPDES industrial wastewater permits which typically contain specific end-of-pipe effluent limits based on water quality standards or available treatment technology, HDOT's MS4 permits include programmatic requirements involving the implementation of BMPs in order to reduce pollutants discharged to the "maximum extent practicable" (MEP). In addition, HDOT's permits allow flexibility in the types of BMPs and activities implemented to meet permit requirements. There is also added complexity in evaluating several similar permits applicable to the very different operations conducted at HDOT Highways, Airports, and Harbors facilities. This makes it challenging to assess the true effectiveness of HDOT's several MS4 stormwater programs and how they may be integrated.

Per EPA (2007) guidance, HDOT is considered a non-traditional MS4 permittee, and as such, the evaluation of its MS4 programs will be specific to their particular circumstances and applicable permit requirements. Some HDOT MS4 permits contain broad requirements that outline the basic SWMPP components the permittee is required to implement, giving the permittee the flexibility to develop a program to meet these broad requirements. Other MS4 permits are more prescriptive and specify in detail the minimum activities and best management practices (BMPs) for each program element.

Given these inherent operational differences and challenges, each HDOT permittee has traditionally applied different approaches to comply with specific permit requirements based on MS4-specific traits or issues. For example, EPA regulations require permittees to develop "procedures for site inspection and enforcement" for addressing construction activities. Few MS4 permits specify how the permittee should inventory their active construction projects or track enforcement activities. A permittee with only a few construction projects a year may be able to use a paper system to inventory and track construction projects. A permittee with hundreds or thousands of construction projects would likely need a database or similar electronic tracking system to ensure it was implementing the program to a level considered to meet MEP.

It is relatively straightforward to assess whether HDOT has developed certain programs and conducted various activities that are called for and within the timeframes specified in each of the permits under consideration, as well as activities or programs specified under SWMPPs or other documents prepared by HDOT. The challenge for the Audit Team and HDOT is to assess

whether the programs and activities implemented have or will constitute MEP. EPA (2007) guidance will assist with this determination, but is not definitive. Determination requires application of the Audit Team's best professional judgment.

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Section 4: Audit Structure and Schedule

For each of the six program elements required to be reviewed by the CD, Kennedy/Jenks will review the six permitted MS4 programs concurrently, developing six Program Element Audit Reports (Final PEARs) that represent the culmination of the auditing efforts across the three HDOT Divisions.

Appendix A of the CD defines various project milestones and deadlines, described for ease of reference below:

Table 4-1 CD Appendix A Deadlines

Program Element	Evaluation Complete: ^(a)	Draft PEAR to HDOT: ^(d)	HDOT Review of Draft PEAR: ^(e)	Final PEAR to HDOT: ^(f)
PEAR #1: Post-Construction Runoff Control / Permanent Best Management Practices	3 Months (90 Days) ^(b) After AWPC ^(c) 13 June 2017	135 Days After AWPC 28 July 2017	165 Days After AWPC 27 August 2017	210 Days After AWPC 11 October 2017
PEAR #2: Construction Site Runoff Control	9 Months (270 Days) After AWPC 10 December 2017	315 Days After AWPC 24 January 2017	345 Days After AWPC 23 February 2017	390 Days After AWPC 9 April 2018
PEAR #3: Public Outreach / Public Involvement	15 Months (450 Days) After AWPC 8 June 2018	495 Days After AWPC 23 July 2018	525 Days After AWPC 22 August 2018	570 Days After AWPC 8 October 2018
PEAR #4: Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Programs	21 Months (630 Days) After AWPC 5 December 2018	675 Days After AWPC 19 January 2019	705 Days After AWPC 18 February 2019	750 Days After AWPC 4 April 2019
PEAR #5: Pollution Prevention / Good Housekeeping	27 Months (810 Days) After AWPC 3 June 2019	855 Days After AWPC 18 July 2019	885 Days After AWPC 17 August 2019	930 Days After AWPC 1 October 2019
PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability	33 Months (990 Days) After AWPC 30 November 2019	1035 Days After AWPC 14 January 2020	1065 Days After AWPC 13 February 2019	1110 Days After AWPC 29 March 2020

Notes:

- (a) "Evaluation" as referenced in CD Appendix A Section B.5. is defined in this AWP to represent the conclusion of the Post-Onsite Evaluation Review Period (See Section 5.2.3) for PEARs #1, 2, 4, and 5. For PEARs #3 and 6, no onsite evaluation is required and therefore "evaluation" is defined to represent the date of conclusion of the Records Review period. Please refer to Appendix C for more detail.

- (b) "Months" are based on 30-day months in this AWP.
- (c) AWPC = Audit Work Plan Commencement (15 March 2017)
- (d) Pursuant to CD Appendix A Section D.2., Kennedy/Jenks will complete a draft audit report and transmit it to HDOT within 45 days of completing an audit of a program element (defined in this AWP as the conclusion of "evaluation", as discussed in Note (a)).
- (e) Pursuant to CD Appendix A Section D.3., HDOT will review the draft PEAR to correct any factual inaccuracies within 30 days of receipt.
- (f) Pursuant to CD Appendix A Section D.4., Kennedy/Jenks will complete a final PEAR within 120 days of completing an audit of a program element (defined in this AWP as the conclusion of "evaluation", as discussed in Note (a)).

Section 5: Program Element Audits

Each program element audit will follow a similar schedule and structure, discussed generally in this section. The Program Element Audits will occur over a 37-month period depicted graphically below (Figure 5-1):

Figure 5-1 Program Element Audit Schedule

	2017												2018												2019												2020			
PEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
1																																								
2																																								
3																																								
4																																								
5																																								
6																																								

Appendices B1 - B6 list the basic information anticipated to be reviewed for each MS4 program element to be audited. The Audit Team will utilize worksheets provided in Appendices B1 - B6 to collect and track information for each MS4 permit and element. References to Appendices C1 - C6 are also included, defining specific schedules for each of the six PEARs. Each Program Element Audit will include three phases (Pre-Audit, Onsite Evaluation, and Reporting), detailed in the following sections.

5.1 Pre-Audit

This Section describes the first phase of each Program Element Audit.

5.1.1 Notice of Audit

The Audit Team will schedule events, confirm appropriate participants, and begin planning the upcoming program element audit with the HDOT PM prior to initiating each Program Element Audit (Appendices C1 - C6 Item 1). The HDOT PM will coordinate with the MS4 Permit Coordinators to provide the following for each of the six MS4 permits:

- Facility or Division-specific SWMPPs
- Recent Annual Reports
- Documentation of required training, inspection reports, legal enforcement correspondence, if any, etc.
- Relevant memoranda of understanding with adjacent or contributing agencies, municipalities, etc.
- Organizational charts specifically listing HDOT staff with MS4 permit authority and responsibility.

The HDOT PM will coordinate with the MS4 Permit Coordinators to identify individuals and stakeholders that should be engaged during the MS4 Permit Audit.

5.1.2 Records Request

The Audit Team will review those sections of the NPDES permits, SWMPPs, guidance documents, the CD, etc. pertinent to the each individual audit element. Based on this review, the Audit Team will develop a records request and submit it to the HDOT PM (Appendices C1 - C6 Item 2). Where documentation is required (completed forms, logs, sign-in sheets, etc.), the Audit Team will request a subset of relevant records for verification. Electronic records are preferred, but physical copies of hard copy records are also acceptable. The HDOT PM will work with the MS4 Permit Coordinators to acquire and provide requested records to the Audit Team (Appendices C1 - C6 Item 3).

5.1.3 Records Review

The Audit Team will compare the program element requirements and commitments identified in the NPDES permits, SWMPPs, CD, annual reports, etc. and the records obtained in the record review (Appendices C1 - C6 Item 4). This review will be informed to the extent appropriate by the interview questionnaire provided in Appendices B1 - B6. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators may be conducted during this period.

5.2 Onsite Evaluation

This Section describes the second phase of each Program Element Audit.

5.2.1 Pre-Onsite Evaluation Conference Call

The Audit Team and HDOT PM will contact each MS4 Permit Coordinator to confirm schedules, address questions and security concerns, confirm personnel safety equipment needed, and organize training and orientation briefings that may be required (Appendices C1 - C6 Item 5).

5.2.2 Onsite Evaluation

For work planning purposes, it is assumed that onsite evaluations for each Program Element will be conducted over the course of five (5) days (except for PEAR #4, which requires an extra day). Detailed activity descriptions and schedules are included in Appendices C1 - C6 (Item 6). It should be noted that following EPA (2007) guidance, PEAR #3 and PEAR #6 do not require onsite evaluations². The onsite evaluations for each Program Element are tentatively scheduled during the following time periods (Table 5-1):

² Although no on-site evaluation is required for PEAR #3 (Public Outreach / Public Involvement Program), the Audit Team will endeavor to identify and attend events such as Harbors' tenant outreach in order to gain a well-rounded understanding of this program.

Table 5-1 Tentative On-Site Evaluation Dates

PEAR	On-Site Evaluation
PEAR #1: Post-Construction / Permanent Best Management Practices	Tuesday 30 May 2017 to Monday 5 June 2017
PEAR #2: Construction Site Runoff Control	Monday 27 November 2017 to Friday 1 December 2017
PEAR #3: Public Outreach / Public Involvement Program	[none required]
PEAR #4: Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program	Monday 19 November 2018 to Wednesday 28 November 2018
PEAR #5: Pollution Prevention / Good Housekeeping Program	Monday 20 May 2019 to Friday 24 May 2019
PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability	[none required]

5.2.3 Post-Onsite Evaluation Review Period

Following the Onsite Evaluations, the Audit Team will review the findings of the Pre-Audits and Onsite Evaluations and address final evaluation-related tasks that may have been noted (Appendices C1 - C6 Item 7). This review period completes the evaluation of the program element, as referenced in CD Appendix A Section B.5.

5.3 Reporting

This Section describes the third phase of each Program Element Audit.

5.3.1 Draft PEARs

Pursuant to the CD, the Audit Team will prepare draft PEARs documenting the procedures followed, sites and activities visited, materials reviewed, and a summary of major findings from the program element audits of the six HDOT NPDES permits (Appendices C1 - C6 Item 8). The PEARs will be structured so that they may be easily incorporated into each Division's Annual Compliance Report (ACR) (see Section 7).

The Audit Team will endeavor to draw defensible conclusions based on the NPDES permit requirements and conditions, the SWMPP developed to meet the permit goals, measurable achievement of those goals, and the Audit Team's best professional judgment interpretation of compliance with the NPDES regulations.

EPA (2007) guidance describes that, in some cases, it may not be possible to assess compliance with a program component because of the limitations of the MS4 program evaluation process. If this is found to be the case, the draft PEAR for the program element will state that this is the case and provide as much supporting information as possible. Similarly, if there were no findings of note for a particular SWMPP or NPDES component, this fact will be stated in the PEAR.

If the Audit Team identifies what may be a Potential Violation or Deficiency at any point during the Pre-Audit, Onsite Evaluation, or Reporting periods, actions will be taken in accordance with the decision tree defined in Section 6 for the Audit Team, HDOT PM, and MS4 Permit Coordinators to follow. The draft PEAR will describe the two findings as follows:

- Findings reviewed per Section 6 and found to be Potential Violations, reported to DOH/EPA and addressed via Corrective Actions.
- Findings found to be Deficiencies, for which recommendations for improvement will be included.

Each draft PEAR will identify BMPs and opportunities for information/technology transfer that may be considered for application across the three HDOT Divisions. The draft PEARS will also analyze the practices implemented for each HDOT Division's program elements and assess whether identified best practices can be universally implemented across the three HDOT Divisions. If best practices cannot be universally implemented, the draft PEAR report will describe identified impediments (such as legal barriers). The draft PEAR will also identify positive program elements considered to exceed the NPDES requirements and SWMPP. Finally, the draft PEAR will include a retrospective analysis of activities that are considered to be potentially outmoded, ineffective, insufficient, or excessively burdensome. Recommendations to modify, streamline, or expand them in accordance with what has been learned will be listed.

The Audit Team will complete the draft PEAR within 45 days of the completion of the evaluation for each program element. The Audit Team will provide five (5) copies of the draft PEAR and one electronic file copy in Word (Version 2007 or earlier) to the HDOT PM.

5.3.2 HDOT Review

Upon receipt, the HDOT PM will distribute copies of the draft PEARS to the appropriate MS4 Permit Coordinators, who will be responsible for reviewing the reports and distributing the reports to key personnel for their review. The MS4 Permit Coordinators will submit to the HDOT PM a consolidated written request for clarification and corrections to the draft PEAR for their respective permit as found to be necessary (Appendices C1 - C6 Item 9). The HDOT PM will then submit the consolidated requests and corrections to the Audit PM (Appendices C1 - C6 Item 10).

5.3.3 Final Audit Report

Upon receipt of the consolidated requests and corrections, the Audit Team will make appropriate changes to the draft PEARS and submit the final PEARS (Appendices C1 - C6 Item 11).

For PEARs #1 - 5, the Final PEAR is scheduled to be submitted approximately 25 days in advance of the CD deadline. This is intended to afford additional time for the Divisions in each subsequent Program Element Audit. The CD is structured such that, if followed strictly, only 60 calendar days are afforded for Steps 1 to 7 of PEARs #2 - 6. For example, Final PEAR #1 is due at 210 days following AWPC and the evaluation of PEAR #2 is due at 270 days following AWPC. By reducing the time it takes Kennedy/Jenks to write the Final PEAR, an additional 25 days are afforded to the Divisions to fulfill the records request for the subsequent audit (Appendices C2 - C6 Item 3).

The Audit Team will provide five (5) copies of the final PEARs and one electronic file copy in Word (Version 2007 or earlier) to the HDOT PM.

5.3.4 Post-Audit Report Review

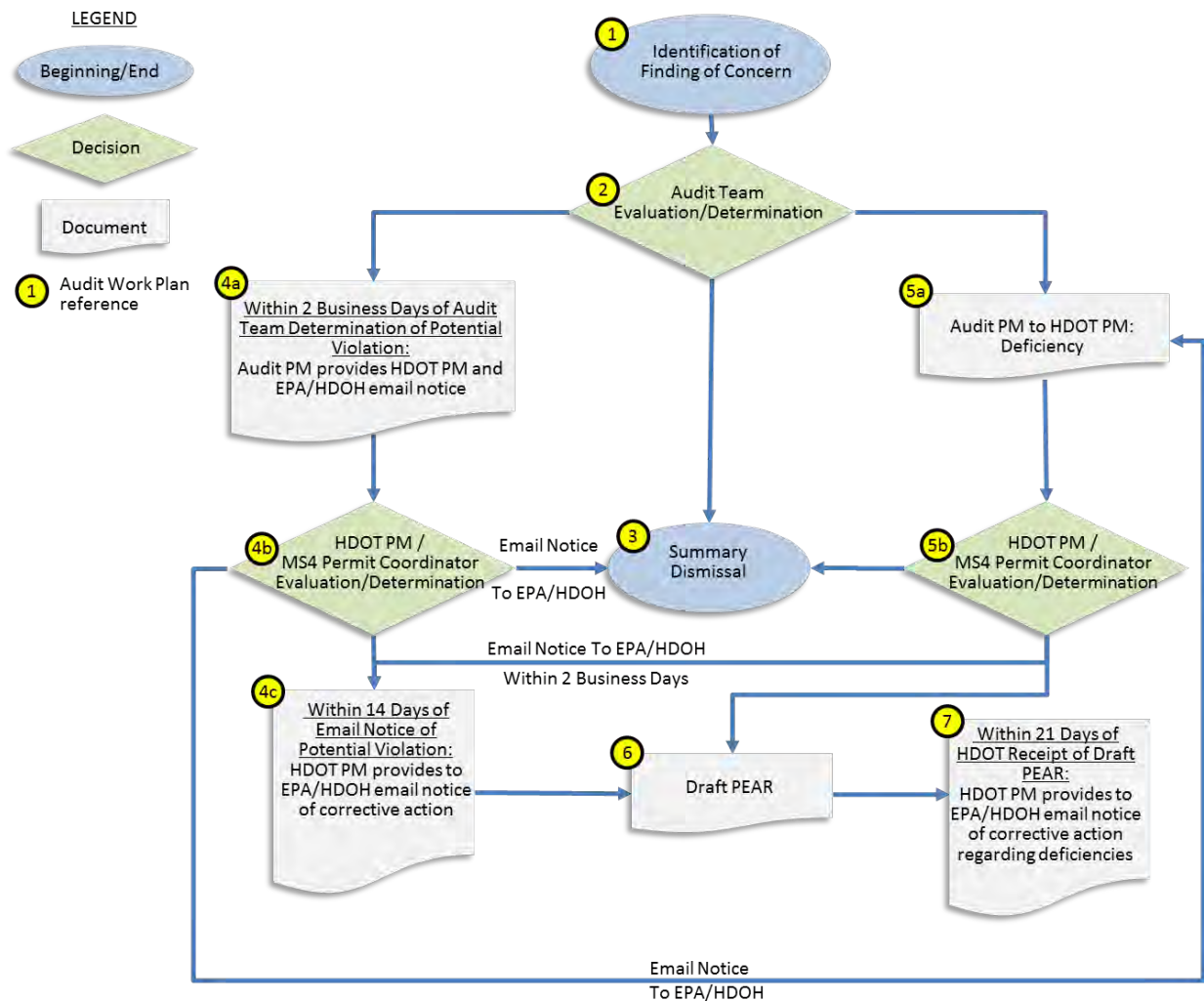
The HDOT PM and Audit PM will meet after the submission of each PEAR to discuss QC procedures and potential improvements to be made prior to the subsequent PEAR.

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Section 6: Potential Violations and Deficiencies

If at any point during the Pre-Audit, Onsite Evaluation or Reporting Periods the Audit Team identifies what may represent a Potential Violation or Deficiency (hereinafter “Finding of Concern”), the Audit Team, HDOT PM, and MS4 Permit Coordinators will follow the decision tree shown on Figure 6-1.

Figure 6-1 Potential Violation and Deficiency Decision Tree



① 6.1 Identification of Finding of Concern

② 6.2 Audit Team Consultation

Upon identification of a Finding of Concern, the Audit Team will consult internally to assess whether the Finding of Concern may represent a Potential Violation, a Deficiency, or whether it summarily merits dismissal.

Potential Violation - The Audit Team will categorize the Finding of Concern as a Potential Violation if it meets the EPA (2007) guidance definition of an “area where the evaluation found the permittee not in compliance with a specific permit requirement or SWMPP commitment”. These occurrences would follow the procedures listed in Section 6.3.

Deficiency – The Audit Team will categorize the Finding of Concern as a Deficiency if it meets the Consent Decree definition of an “item which, if not corrected, will lead to potential violations”¹. These occurrences would follow the procedures listed in Section 6.4.

③ Summary Dismissal – The Audit Team will dismiss the Finding of Concern if it does not meet either the definition of a Potential Violation or a Deficiency. No further action will be required.

¹ EPA (2007) guidance further elaborates that deficiencies are areas of concern impeding effective program implementation. They are typically areas where the permit or SWMPP does not describe specifically how the permittee should conduct an activity, yet the evaluator believes the permittee may consider altering how they conduct the activity to meet water quality goals. Deficiencies can also be areas where future permit violations could result if the permittee continues on its present path. The Audit Team will look for opportunities to enhance program elements (e.g. recommending that MS4 Coordinators perform required annual reviews earlier in the year, thereby allowing time for self-correction).

6.3 Potential Violation Decision Tree

4a Notification: Audit PM to HDOT PM and EPA & DOH

If the Finding of Concern is categorized by the Audit Team as a Potential Violation, the Audit PM will notify the HDOT PM and EPA & DOH via email¹ within 2 business days of making the determination using the form presented in Appendix D1. Additionally, the HDOT PM will be notified via telephone. These notifications will include the following information:

1. Specific details of the Potential Violation
2. Related photographs, if any
3. Applicable regulatory references [i.e., NPDES permit, SWMPP, Hawaii Administrative Rules (HAR), or Code of Federal Regulations (CFR) references, as applicable].

4b Evaluation/Determination

The HDOT PM will consult with the appropriate MS4 Permit Coordinator to further investigate the factual accuracy of the Potential Violation determination. Based on that consultation, the Potential Violation may be summarily dismissed (if found to be factually inaccurate) or re-categorized as a Deficiency (if incorrectly categorized as a Potential Violation). Both of these scenarios would be accompanied by email notification from the HDOT PM to EPA & DOH using the form presented in Appendix D2. The time required for this consultation is included in the 14-day timeline described in Item 4c, below.

4c Determination of Potential Violation

If the Finding of Concern is confirmed to be a Potential Violation, the HDOT PM will then work with the appropriate MS4 Permit Coordinator to assess suitable corrective actions.

Unless otherwise agreed upon with EPA & DOH, HDOT will correct the Potential Violation within 14 days of initial Audit Team email notification to EPA & DOH (see Item 4a above). Email notification of the Corrective Action will be provided to EPA & DOH by the HDOT PM using the forms presented in Appendix D2 and Appendix D3. The Consent Decree allows HDOT the option to request an extension to this reporting deadline. In order for EPA & DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA & DOH.

¹ Per EPA & DOH request, Connor Adams (EPA) and Matthew Kurano (DOH) will be copied on all email notifications to EPA & DOH.

6.4 Deficiency Decision Tree

5a Notification: Audit PM to HDOT PM

If a Finding of Concern is categorized as a Deficiency, the Audit PM will notify the HDOT PM via telephone and email and include the following information:

1. Specific details of the Deficiency
2. Related photographs, if any
3. Applicable regulatory references (i.e., NPDES permit, SWMPP, HAR, or CFR references, as applicable).

5b Evaluation/Determination

The HDOT PM will consult with the appropriate MS4 Permit Coordinator to further investigate the factual accuracy of the Deficiency determination. Based on that consultation, the Deficiency may be summarily dismissed (if found to be factually inaccurate) or re-categorized as a Potential Violation (if incorrectly categorized as a Deficiency). The latter scenario will be accompanied by an email notification to EPA & DOH within 2 business days of making the determination using the form presented in Appendix D2.

6 Deficiency

If the finding is confirmed to be a Deficiency, this finding (along with confirmed Potential Violations) will be documented in the appropriate draft PEAR. The HDOT PM will work with the appropriate MS4 Permit Coordinator to assess the appropriate corrective actions.

7 Unless otherwise agreed upon with EPA & DOH, HDOT will correct Deficiencies within 21 days of receiving the draft PEAR (Appendices C1 - C6 Item 8). Email notification of the Corrective Action will be provided to EPA & DOH by the HDOT PM using the form included in Appendix D3. The CD allows HDOT the option to request an extension to this reporting deadline. In order for EPA & DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA & DOH.

Section 7: Annual Compliance Report

Due to the differences in Division operations, not all portions of each PEAR will be applicable to all MS4 permittees. As such, the PEARs will be structured so that they may be easily incorporated into each Division's Annual Compliance Report (ACR). The HDOT PM will work with each permittee to ensure that the appropriate PEAR content is included in each individual ACR. Each ACR will include a detailed summary of actions taken as a result of the audit reports and dates at which corrective actions, if warranted, were taken.

Additionally, pursuant to CD Appendix A Section D.5., the HDOT PM will submit each original draft and final PEAR to EPA & DOH at the same time that ACRs are submitted. Within the draft and final PEAR, an authorized HDOT official will certify that, to the best of the official's knowledge and information, the MS4 Permit Audit was conducted in accordance with this AWP. If items have not been corrected, HDOT will provide a schedule for implementing corrective measures.

References

- United States Environmental Protection Agency. 2005. Small SM4 Stormwater Program Overview. December. Accessed online at <<https://www3.epa.gov/npdes/pubs/fact2-0.pdf>>.
- United States Environmental Protection Agency. 2006. Digital Camera Guidance for EPA Civil Inspections and Investigations. July. Accessed online at <<https://www.epa.gov/sites/production/files/2013-09/documents/digitalcameraguide.pdf>>.
- United States Environmental Protection Agency. 2007. *MS4 Program Evaluation Guidance*. Accessed online at <https://www3.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf>.

Appendix A

Consent Decree Sections Pertaining to Audit
(10.d Page and Appendix A)

Divisions. HDOT shall ensure that HDOT Office of Environmental Compliance staff have the training and professional qualifications, sufficient to assess compliance, to identify actual or potential non-compliance, and to identify and require implementation of remedies.

d. The HDOT Office of Environmental Compliance staff shall perform audits of each operational division of HDOT in accordance with Appendix A.

11. Stormwater Management Plan (SWMP)

a. Modification of Stormwater Management Plan Elements

i. HDOT-Harbors shall modify the 2009 SWMPs for Honolulu Harbor and Kalaeloa Barbers Point Harbor to integrate changes described below. The modified SWMPs shall be provided to EPA and HDOH no later than 90 days of entry of the Consent Decree. HDOT-Harbors may choose to develop one SWMP for both Harbors.

ii. Within 90 days of entry of the Consent Decree, HDOT-Harbors shall post the SWMPs on HDOT-Harbors' stormwater management website. HDOT-Harbors shall solicit comments from Tenants and the public, through a variety of mechanisms. HDOT-Harbors shall provide a schedule for receipt of comments, not to exceed 45 days. Among other mechanisms, HDOT-Harbors shall solicit comments on the SWMP by publishing notices regarding its availability for review and comment in one local newspaper. HDOT-Harbors shall continue to maintain records of comments received as described in SWMP Section 3.2.

APPENDIX A

ENVIRONMENTAL COMPLIANCE AUDITS

A. General Provisions

1. This Appendix provides details of the NPDES MS4 compliance audits required by Paragraph 10.d of the Consent Decree. The audits shall include evaluation of common stormwater program elements at each of HDOT's three divisions (Airports, Highways and Harbors), as stated in Paragraph A.3 below, throughout the state on a per element schedule. The audits shall be completed to fulfill the following goals:
 - a. Determine compliance with the federal regulations and state MS4 permits and regulations and this Consent Decree (see Paragraph A.2, below);
 - b. Ensure information gathered during the audits is used to promote information and technology transfer between divisions; and
 - c. Identify deficiencies and potential violations that are discovered by the third party auditor and allow for timely self-correction of the deficiencies and potential violations by HDOT.
2. The audits shall be designed to assess current regulatory and administrative compliance with the following items throughout each of HDOT's divisions:
 - a. The Hawaii NPDES General Permit Authorizing Discharges of Storm Water and Certain Non-Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Hawaii Small MS4 General Permit), Hawaii Administrative Rules, chapter 11-55, Appendix K;
 - b. NPDES permit, Permit No. HI S000001, MS4 Permit for the HDOT-Highways, Oahu District;
 - c. NPDES Permit, Permit No. HIS000005, MS4 Permit for the HDOT-Airports, Honolulu International Airport;
 - d. Applicable Storm Water Management Plans (SWMPs); and
 - e. This Consent Decree.
 - f. Future NPDES MS4 permits and SWMPs issued to HDOT. This obligation shall not delay or prevent termination of the Consent Decree.
3. The audits shall include, but not be limited to, an evaluation of the following MS4 Program Elements as they relate to compliance at each of HDOT's three divisions:
 - a. Public Education/Outreach and Participation/Involvement
 - b. Illicit Discharge Detection and Elimination (including commercial/tenant oversight programs)
 - c. Construction Site Runoff Control
 - d. Post-Construction Runoff Control/ Permanent BMPs
 - e. Pollution Prevention/ Good Housekeeping
 - f. An analysis of how Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability impact MS4 compliance
4. HDOT shall audit Program Elements for the Harbors, Airports and Highways Divisions in accordance with the schedule defined in the Work Plan described in Paragraph B.1, below.

5. The audits shall be conducted by a qualified third party environmental consulting firm retained by HDOT and selected by a committee consisting of representatives of the HDOH and HDOT. The selection committee shall choose an audit firm which is experienced with environmental auditing and the permits and regulations described in Paragraph A.2, above.
6. The requirements of this Appendix related to the consulting firm's qualifications, authority to conduct the audits, and production of the HDOT Audit Reports (Audit Reports) shall be incorporated in any contract relating to the audits entered into by HDOT and the selected consulting firm to the extent allowed by State Procurement Code.
7. Any violations by HDOT discovered through the execution of the Environmental Compliance Audit detailed in this Appendix are neither "voluntarily discovered" within the terms of EPA's revised *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations Policy* (Audit Policy) nor voluntarily disclosed to EPA under EPA penalty policies. Accordingly, any such violations are ineligible for penalty mitigation or other favorable treatment under the Audit Policy.
8. HDOT agrees not to attempt to use any state audit and/or privilege laws to restrict EPA's or HDOH's ability to review the Audit Reports at HDOT facilities to determine if the audits have been properly completed and HDOT has corrected any uncorrected non-compliance, potential violation, or deficiency as per its certification (see Paragraph F below). Also, HDOT agrees not to attempt to use any state audit and/or privilege laws to restrict EPA's or HDOH's ability to obtain, review and/or use the Audit Reports in any action to enforce the audit provisions of the Consent Decree. Neither information contained in the Audit Reports, nor underlying information upon which the Audit Reports relied, that indicates regulatory violations at any HDOT facility, shall be claimed as confidential business information by HDOT or its consulting firm.

B. Procurement of Services/Audit Work Plan

1. HDOT shall advertise a Request for Qualifications from third party audit firms to conduct the audits. Advertisement for the Request for Qualifications shall not exceed forty-five (45) days.
2. Within thirty (30) days of the end of the Request for Qualifications period, the HDOT and HDOH selection committee shall conduct the professional services selection of an audit firm and provide the recommendation to the Director.
3. Within fifteen (15) days of the selection committee recommendation to the Director of Transportation, or another length of time agreed to by EPA and HDOH, HDOT shall notify the potential audit firm with a letter of selection, pending negotiation of fees.
4. Within thirty (30) days or another length of time agreed to by EPA and HDOH, HDOT shall, as approved by the Director of Transportation, award the selected audit firm and proceed to process the contract for the audit work. Within seven (7) days of each milestone, HDOT shall notify EPA and HDOH by email that the following milestones were completed:
 - a. Request for Qualifications advertisement;
 - b. Awarding of contract between HDOT and the selected audit firm;
 - c. Notice to Proceed on the Audit.
5. On or before September 16, 2016, HDOT shall submit a draft audit work plan (Audit Work Plan) to EPA and HDOH for review and approval. In developing the Audit Work Plan, HDOT shall consult EPA's guidance on auditing small MS4s:

http://www.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf The Audit Work Plan shall include the following audit schedule and describe each task necessary to accomplish the Audit Scope with targeted time frames for the consulting firm to complete:

- a. 3 months after the Audit Work Plan is approved: Evaluation of Post Construction/Permanent BMP programs for all three HDOT divisions;
 - b. 9 months after the Audit Work Plan is approved: Evaluation of Construction Site Runoff Control programs for all three HDOT divisions;
 - c. 15 months after the Audit Work Plan is approved: Evaluation of Public Outreach/Public Involvement for all three HDOT divisions;
 - d. 21 months after the Audit Work Plan is approved: Evaluation of Illicit Discharge Detection and Elimination, Industrial Commercial Activities/Tenant Programs for all three HDOT Divisions;
 - e. 27 months after the Audit Work Plan is approved: Evaluation of Pollution Prevention/Good Housekeeping for all three HDOT Divisions;
 - f. 33 months after the Audit Work Plan is approved: Evaluation of Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability for all three HDOT divisions.
6. The Audit Work Plan shall include, but is not limited to: the minimum documents to be reviewed (e.g. SWMPs, training records, inspection reports, etc.), minimum number of field verifications, as necessary, for each program element evaluated, deliverables (notices of potential violations, draft and final audit reports), and reporting deadlines.
 7. EPA, after consultation with HDOH, may reject the draft Audit Work Plan in whole or in part. If EPA rejects the Audit Work Plan or any portion of it, EPA shall identify the reason(s) in writing to HDOT for such rejection and may require HDOT to redraft the Audit Work Plan in its entirety or part. EPA shall provide any comments to HDOT within forty-five (45) days.
 8. If EPA and HDOH reject the Audit Work Plan in whole or part, HDOT shall resubmit a revised Audit Work Plan within one hundred and twenty (120) days. After submission of the revised Audit Work Plan, EPA, after consultation with HDOH, shall provide any comments to HDOT within forty-five (45) days. HDOT will review all comments and make all required modifications to the revised Audit Work Plan. If EPA does not provide written comments, the revised Audit Work Plan shall be deemed approved by EPA and HDOH.

C. Audits

1. HDOT shall take all appropriate measures to facilitate the audit firm in performing the audits in accordance with the approved Audit Work Plan.
2. HDOT shall grant the audit firm full access to and unrestricted review of all HDOT records, documents and information that the audit firm requires to complete the audits.

D. Reporting/Audit Reports

1. HDOT shall require the audit firm to provide preliminary written notice of any potential violations identified in any audit to HDOT, EPA and HDOH within 2 business days following an audit of a program element in Paragraph B.1, above.
2. HDOT shall require the audit firm to complete a draft audit report to HDOT within 45 days of completing an audit of a program element.
3. HDOT shall review the draft audit report to correct any factual inaccuracies within 30 days after receiving the draft audit report.
4. HDOT shall require the audit firm to complete a final audit report within 120 days, or another length of time agreed to by EPA and DOH, of completing an audit of a program element.
5. HDOT shall submit original draft and final audit reports to EPA and HDOH with the Annual Compliance Report (ACR).
6. HDOT shall provide a detailed summary of any actions taken as a result of the audit reports and dates at which those actions were taken with the ACR.
7. The HDOT Audit Reports shall contain:
 - a. A specific statement of the procedures followed, HDOT sites and activities visited and all materials reviewed during the audits;
 - b. Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and recommendations to modify, streamline, or expand them in accordance with what has been learned;
 - c. An identification of deficiencies (items which, if not corrected, will lead to potential violations) and potential violations with the applicable SWMPs, this Consent Decree, and/or applicable permit and regulations, and recommendations for improvement;
 - d. Identification of best practices and opportunities for information/technology transfer to be applied across all divisions; and
 - e. An analysis of the practices implemented for each Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report shall clearly describe the identified impediments.
8. HDOT shall correct any deficiency or potential violation identified in the Audit Reports or otherwise discovered by HDOT as part of the audit process set forth herein within the time frames identified in Paragraph E below.

E. Corrections of Potential Violations and Deficiencies

1. HDOT shall correct any potential violations within 14 days of notification as described in D.1 of this Appendix, or another period of time agreed to by EPA and DOH. In order for EPA and DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA and HDOH.
2. HDOT shall correct any deficiencies within 21 days of receiving the draft Audit Report, or another period of time agreed to by EPA and HDOH. In order for EPA and HDOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA and HDOH.
3. If HDOT corrects any violation discovered through the Audit process within the time frames described above, it shall not be subject any related stipulated penalties under Paragraph 30.

4. Notwithstanding anything in E.3 of this Appendix, the United States and HDOH reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree or to obtain penalties or injunctive relief under the Act or its implementing regulations, or under other federal or State laws, regulations, or permit conditions, if HDOH or EPA independently discovers a violation of a permit, law, or statute.
5. Similarly, United States and HDOH, reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree or to obtain penalties or injunctive relief under the Act or its implementing regulations, or under other federal or State laws, regulations, or permit conditions, if an activity or violation poses an immediate threat to human health or the environment.

F. Certifications

1. HDOT shall provide the following information and certifications to EPA and HDOH regarding completion of each audit and correction of any non-compliance or potential violation identified in the Audit Reports or otherwise discovered by HDOT as part of the audit process within an Environmental Compliance Audit section of the ACR. An authorized HDOT official shall certify that, to the best of the official's knowledge and information, the audits were conducted in accordance with the Work Plan described above, the Audit Reports are submitted to HDOT, EPA and HDOH in the ACR as described above, and all items of non-compliance identified in the Audit Reports have been corrected or steps have been taken to correct them. If all items have not been corrected, HDOT must include a schedule for correcting the issue.

Appendix B

PEAR 1 through 6 Guiding Questions

B1: PEAR #1 – Post-Construction /
Permanent Best Management Practices

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Overall Approach						
A1	Discuss the process chronologically in the order that a project would occur. Walk us through the process as if we were a developer proposing a project.						
B	Laws/Rules/Regulations/Policies						
B1	What legal authority does the permittee have to require post-construction BMPs on development sites and to ensure maintenance?						
B2	Does the permittee’s legal authority address post-construction requirements for all projects disturbing one acre or more?						
B3	Does the legal authority require site design, source control, and stormwater treatment BMPs?						
B4	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
B5	What procedures for alternative compliance (i.e., planning-level BMPs and other non-structural controls) are allowed?						
B6	Does the legal authority authorize the permittee to require stormwater management plans to address post-construction impacts?						
B7	Do the laws/rules/regulations/policies outline the contents of an approvable plan and responsibilities for operation and maintenance of approved BMPs?						
C	Post-Construction BMP Standards						
C1	What technical guidance (e.g., BMP manual) does the permittee use as the standard for design and selection of post-construction BMPs? Note: It is not necessary to do a thorough review of the manual or standards used by the permittee.						
C2	Are project proponents required to follow a technical guidance manual?						
C3	Does the guidance provide siting and use criteria for the BMPs to ensure proper and adequate BMPs are being selected and implemented?						
C4	Does the guidance provide siting and use criteria for BMP selection based on the development context (i.e., BMP selection appropriate for ultra urban-areas versus those more appropriate for more rural settings with larger parcels)?						
C5	Are pollutants of concern that are typically generated by the proposed development type considered when selecting or approving BMPs?						
C6	Does the technical manual provide guidance on sizing, performance, and location of BMPs?						
C7	When was the BMP manual last updated?						
C8	Does the permittee have different requirements or standards for different types of developments (e.g., specific post-construction requirements for gas stations or automobile repair facilities)?						
C9	Does the permittee have design manuals related to land-efficient site designs (e.g. better site design, better models for large retailers)?						
C10	Does the permittee promote source control and site design standards to reduce the generation of pollutants in addition to treatment BMPs?						
C11	Does the permittee include in standards and manuals specifications for innovative site design practices, such as low-impact development and other techniques that manage runoff on-site?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
C12	Are project applicants encouraged or required to use vegetative BMPs that promote infiltration, such as swales, biofiltration practices, etc., where possible?						
C12	Does the permittee offer financial incentives to support post-construction stormwater goals (e.g., programs to support redevelopment, such as enterprise zones, or stormwater utility credits)?						
D	Plan Review and Approval Procedures						
D1	Which Division/District is responsible for post-construction stormwater plan review?						
D2	How many plan reviewers are there?						
D3	How many plans submitted for review (private and public projects) each year?						
D4	What is the project size threshold for the permittee to require post-construction BMPs?						
D5	Does the permittee apply standard conditions that incorporate post-construction installation and maintenance requirements into its plan review process?						
D6	Do plan reviewers use specific criteria or a checklist when reviewing plans?						
D7	Does the permittee consider pollutants of concern or whether the project discharges to a 303(d) listed impaired water when determining which BMPs are required?						
D8	Does the permittee consider such regional concerns as smart growth initiatives, watershed master plans, and other larger-scale planning efforts to ensure that each new development and redevelopment plan is consistent with the goals of these initiatives?						
D9	For up to three sets of post-construction plans provided by permittee:						
D9a	Are adequate BMPs included on plans, details, and drawings?						
D9b	What types of standard conditions or notes are included?						
D9c	Are maintenance requirements specified?						
D9d	Do the location of BMPs hinder maintenance?						
D10	What types of projects must be reviewed by the permittee for post-construction stormwater controls?						
D11	Does the permittee have a process to identify priority projects identified in the MS4 NPDES permit?						
D12	What types of standards or technical guidance do the permittee’s reviewers use to review projects?						
D13	Does the permittee condition improvements to existing developments with requirements for post-construction stormwater controls? How are these redevelopment requirements triggered?						
E	Post-Construction BMP Inventory						
E1	How does the permittee track the installation and maintenance of post-construction BMPs?						
E2	Is your post-construction BMP inventory managed in a database and/or linked to GIS?						
E3	What information is collected?						
F	BMP Inspection & Maintenance						
F1	Does the permittee require maintenance agreements for all projects with post-construction BMPs?						
F2	Are as-built inspections conducted at the conclusion of a project to ensure the BMP has been built properly? What Division/District is responsible for this?						
F3	Do staff conduct these inspections or are they self-certified?						
F4	Does the permittee inspect private facilities or require inspections by owner/operators?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
F5	If the permittee performs the inspections, how often are they performed?						
F6	If owner/operators are required to inspect and maintain their BMPs, how is this authorized? Through a MOU? Through conditions of approval? Through another type of agreement?						
F7	How does the permittee ensure inspections are occurring? Reminder notices? Inspection reports?						
F8	Who is responsible for structural stormwater BMP maintenance (public and private)? Permittee? Owner?						
G	Enforcement						
G1	How does the permittee require proper maintenance and repair after the inspection?						
G2	What types of enforcement actions are provided by laws/rules/regulations/policies (e.g., notices of violation, abatement)?						
G3	Is the permittee’s enforcement authority limited (e.g., limits on the dollar amount of fines, inability to issue civil penalties)?						
G4	How many enforcement actions have been taken in the past year due to lack of BMP maintenance?						
H	Public Construction Projects						
H1	For staff:						
H1a	Are plan reviewers trained on post-construction BMPs and requirements?						
H1b	What type of training do staff performing “as built” and post-construction inspections receive?						
H1c	How often are the trainings conducted?						
H1d	How many staff have been trained?						
H1e	What type of training or education does the permittee provide to developers and engineers on post-construction requirements?						
H2	For developers and plan designers:						
H2a	What types of educational materials have been developed and distributed to developers and designers regarding post-construction BMPs and application requirements?						
H2b	How are the materials distributed? At the permit desk? During inspections?						
H2c	What type of training does the permittee provide or advertise to local developers and designers?						
H2d	How often is this training conducted?						
H2e	How many developers and designers have been trained?						
H2f	Are they required to attend?						
I	Consent Decree Questions						
I1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
I1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
I2a	Have deficiencies or potential violations been identified?						
I2b	What are recommendations for correcting these deficiencies or potential violations?						
I4	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						

Appendix B1: PEAR #1 – Post-Construction / Permanent Best Management Practices

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
15	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
16	If best practices cannot be universally implemented, what are the identified impediments?						

B2: PEAR #2 – Construction Site Runoff Control

Appendix B2: PEAR #2 – Construction Site Runoff Control

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Laws/Rules/Regulations/Policies						
A1	What legal authority does the permittee have to require erosion and sediment control BMPs on construction sites and to ensure compliance?						
A2	Does the permittee’s legal authority address stormwater quality for all projects disturbing at least 1 acre?						
A3	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
A4	Does the legal authority authorize the permittee to require erosion and sediment control plans?						
B	Construction Site Inventory						
B1	How does the permittee track construction projects?						
B2	Is the following information collected?						
B2a	The number and status (active/inactive/completed) of construction sites						
B2b	The number, frequency, results, and follow-up actions resulting from inspections						
B2c	The actions taken to resolve the issues and dates when compliance was achieved.						
B2d	The number and type of enforcement actions taken at sites in violation						
B2e	Complaints submitted by the public						
B3	Does the inventory include construction sites disturbing less than 1 acre?						
B4	What is the threshold for tracking projects?						
B5	Does the inventory track which sites have submitted an NOI for coverage under a state/EPA construction general permit?						
B6	How is the inventory updated? How often?						
B7	Does the permittee prioritize projects for more frequent or targeted inspections? If yes, based on what criteria?						
C	Construction Requirements and BMPs						
C1	What technical guidance (e.g., BMP manual or fact sheets) does the permittee use as the standard for design and selection of nonstructural and structural construction BMPs?						
C2	Are project applicants required to follow these technical manuals?						
C3	Does the guidance set minimum operation and maintenance requirements for BMPs?						
C4	Does the guidance include installation requirements for the BMPs?						
C5	Does the guidance provide proper siting and use criteria for BMPs to ensure that adequate BMPs are being selected and implemented?						
C6	Does the permittee provide guidance as to recommended BMPs to be used?						
C7	Does the permittee have different requirements or standards for different times of the year (i.e., during the rainy season vs. the dry season)?						
D	Plan Review Procedures						
D1	Does the permittee hold pre-application meetings on any construction project? Are stormwater and erosion and sediment control requirements addressed at these meetings?						
D2	What is the permittee’s threshold for plan review? (For example, does the permittee review plans for all projects disturbing greater than 1 acre, or do they use another threshold?)						

Question Number	Question	Airports		Harbors		Highways	
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		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
D3	Does the permittee apply standard conditions that incorporate erosion and sediment control requirements into its plan review process?						
D4	Do the plan reviewers verify whether the project applicant has submitted an NOI to the state or EPA? Is evidence of NOI submission required before a plan can be approved or a local permit issued?						
D5	Do plan reviewers use specific criteria or a checklist when reviewing plans?						
D6	Does the permittee consider during the review process whether the construction project discharges to a TMDL/impaired water?						
D7	For up to two construction plans provided:						
D7a	Are adequate BMPs included on plans?						
D7b	What types of standard conditions or notes are included?						
D7c	Are maintenance requirements specified?						
D7d	Are BMPs addressing other construction activities, such as materials storage and waste disposal, incorporated into the construction plans?						
D7e	Do the plans include notes addressing the prohibition of non-stormwater discharges?						
D7f	Were comments provided by the permittee to the project proponent reasonable and appropriate?						
E	Construction Site Inspections						
E1	Does the permittee adequately inspect the following phases of construction?						
E1a	Clearing and grubbing and site preparation						
E1b	Mass grading and public infrastructure/utility construction						
E1c	Building construction and final grading						
E1d	Final stabilization						
E2	What group is charged with erosion and sediment control inspections?						
E3	Do the inspectors use a checklist or inspection form during each inspection?						
E4	How many inspectors does the permittee use to verify erosion and sediment control compliance at construction sites?						
E5	Does this number appear adequate to assess active construction occurring in the permitted area? Compare this to the total number of construction sites that need to be inspected at any one time (number of inspections per construction site per year). Consider project durations and phasing, local conditions (e.g., dry vs. wet seasons), and additional duties assigned to inspectors.						
E6	Does the permittee have an established prioritization process for establishing inspection frequency? If so, on what factors is the prioritization based (i.e., size, proximity to water body, sensitive areas)?						
E7	How often are sites inspected?						
E8	Does the permittee target inspections during and immediately after wet weather events? If so:						
E8a	What size rain event triggers an inspection?						
E8b	How soon after a rain event?						
E9	Is there an established rainy season for the area? Are sites inspected prior to the start of the rainy season to determine preparedness?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
F	Program Support and Resources						
F1	Does the program have a dedicated source of funding to support plan review staff and inspectors?						
G	Enforcement						
G1	What types of enforcement actions are provided for in applicable laws/rules/regulations/policies (e.g., notices of violation, “stop work” orders, fines)?						
G2	Is use of these actions outlined in an established, escalating enforcement policy?						
G3	Review with the permittee statistics on enforcement of construction site erosion and sediment controls.						
G3a	How many enforcement actions are taken per year?						
G3b	Are follow-up inspections conducted to verify compliance?						
G4	Are there limitations on the permittee’s enforcement authority (e.g., limits on the dollar amount of fines, inability to issue civil penalties)?						
G5	Do staff feel that their enforcement authority is adequate to achieve compliance on construction projects?						
H	Training and Education						
H1	For staff:						
H1a	What type of training do construction inspectors receive? Are plan reviewers trained on erosion and sediment control BMPs and requirements?						
H1b	How often is training conducted?						
H1c	How many staff have been trained?						
H1d	What type of follow-up is conducted by the permittee to verify that the training is effective?						
H2	For construction operators:						
H2a	What types of educational materials have been developed and distributed to construction operators?						
H2b	How are the educational materials distributed?						
H2c	What type of training does the permittee provide or advertise to local construction operators?						
H2d	How often is this training conducted? How many construction site operators have been trained?						
H2e	Are contractors and developers required to attend?						
H2f	Are training sessions held in cooperation with other local permittees or regional authorities?						
I	Public Construction Projects						
I1	Do RFPs or contracts include language specifying stormwater requirements?						
I2	Are inspection and maintenance requirements specified in the contract?						
I3	What oversight does the permittee implement to ensure the contractor is implementing all requirements appropriately and adequately?						
I4	What penalties are in place to require compliance from the permittee’s contractors?						
J	Consent Decree Questions						
J1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						

Appendix B2: PEAR #2 – Construction Site Runoff Control

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
J1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
J2a	Have deficiencies or potential violations been identified?						
J2b	What are recommendations for correcting these deficiencies or potential violations?						
J3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
J4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
J5	If best practices cannot be universally implemented, what are the identified impediments?						

B3: PEAR #3 – Public Outreach / Public Involvement

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Goals and Objectives						
A1	Does the permittee have a strategy document for education and participation?						
A2	Does the document include specific goals?						
A3	On what are the goals based?						
A4	Are the goals measurable? How?						
B	Message Development						
B1	Have specific messages been developed for stormwater outreach?						
B2	On what are the messages based? Pollutants of concern? General awareness? Problem target audience? All of the above?						
B3	Are different messages used for different target audiences (i.e., children, homeowners, industry, etc.) or is one central message used for all?						
B4	Do the messages encourage participation in stormwater-related activities?						
B5	Do the messages educate about behavior changes that the audience can make to contribute to a solution?						
B6	Have messages been developed specific to reducing illicit discharges with information about how to report them to the appropriate authorities?						
B7	Have messages been developed to educate pesticide, fertilizer, and herbicide applicators (including homeowners) about ways to reduce stormwater pollution?						
C	Target Audiences						
C1	Has the permittee identified target audiences for outreach efforts? How are these target audiences selected? What are the target audiences?						
C2	What land use groups (i.e., industry, commercial businesses) has the permittee targeted?						
C3	Have certain ethnic groups or nationalities been identified as audiences to be targeted based on an evaluation of local demographics?						
C4	Have the target groups been reevaluated based on evaluation of the strategy and progress that has been made?						
C5	For Phase I permittees: have they targeted pesticide, herbicide, and fertilizer applicators (including homeowners) and construction site operators for outreach?						
C6	For Phase II permittees: have they targeted industries or commercial businesses of concern for outreach?						
D	Message Packaging						
D1	Does the permittee have a variety of written educational materials?						
D2	Does the permittee have a variety of other packages (i.e., Web site, presentations, displays) for educational materials?						
D3	Did the permittee produce the education and outreach materials in the different languages that are spoken in the community?						
D4	Do the permittee’s materials explain stormwater issues in easy-to-understand terms?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
E	Distribution Mechanisms						
E1	Does the permittee track distribution of materials to measure effectiveness?						
E2	Is the permittee focused solely on distribution or is an effort made to evaluate the impact of the messages?						
E3	Does the permittee use a variety of distribution mechanisms to target various audiences?						
F	Evaluation Methods						
F1	How does the permittee evaluate the effectiveness of the outreach strategy?						
F2	Has the permittee conducted a public awareness survey?						
F3	Which outreach materials have been the most effective in soliciting public involvement and participation? Changing audience behaviors? Increasing general stormwater awareness?						
F4	Have any changes been made to the outreach strategy or materials based on an evaluation of effectiveness?						
G	Public Participation Activities						
G1	What opportunities does the permittee give to the public to review and comment on any changes to the SWMP, such as public comment via a Web site, a public meeting, or a stormwater advisory group?						
G2	What volunteer opportunities (i.e., stream cleanups, storm drain stenciling) does the permittee coordinate or publicize to encourage the public to participate in stormwater-related activities?						
G3	Does the permittee sponsor or promote any of the following activities?						
G3a	Beach/stream/lake cleanups						
G3b	Volunteer stream monitoring						
G3c	Stream clean-ups or equivalent activities						
G3d	Stormwater citizen panel						
H	Consent Decree Questions						
H1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
H1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
H2a	Have deficiencies or potential violations been identified?						
H2b	What are recommendations for correcting these deficiencies or potential violations?						
H3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
H4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
H5	If best practices cannot be universally implemented, what are the identified impediments?						

B4: PEAR #4 – Illicit Discharge Detection and
Elimination (IDDE) Program Element and
Industrial Commercial Activities/Tenant (I/C) Program

Appendix B4: PEAR #4 – Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Legal Authority (IDDE)						
A1	Does the permittee have laws/rules/regulations/policies to prohibit illicit discharges and dumping to the MS4?						
A2	What exclusions are included in laws/rules/regulations/policies?						
A3	What enforcement mechanisms are authorized in the event of an illicit discharge being detected?						
A4	Has an enforcement escalation plan been developed?						
B	Mapping (IDDE)						
B1	Does the permittee have a map showing storm drain pipes, outfalls, and storm drain inlets?						
B2	Is the map readily available to the personnel who would respond to an illicit discharge incident?						
B3	Does the permittee have a map of the storm drain system showing the locations of outfalls and municipally maintained structural stormwater controls?						
C	Field Screening (IDDE)						
C1	How are field screening areas identified?						
C2	Are areas of the MS4 prioritized based on incidents of illicit discharges, land use, dumping reports, etc.?						
C3	How often are field screening areas evaluated?						
C4	Are outfalls inspected during dry weather to identify any potential dry-weather discharges? What does the inspection include?						
C5	If dry-weather flows are present, are they being sampled to determine potential sources of pollutants? For what parameters?						
C6	Does the permittee have a database (or other method) to track locations of illicit discharges, spills, and illegal dumping?						
C7	Does the database track dry-weather monitoring or screening data?						
D	Investigation of Potential Illicit Discharges (IDDE)						
D1	Does the permittee have a procedure for tracing the source of an active illicit discharge?						
D2	Who performs the investigations?						
D3	Are these procedures written in a document or plan?						
D4	What equipment does the permittee use to find illicit discharges?						
D5	Does the permittee have equipment to videotape storm drains, or can it quickly contract out this work?						
D6	How are investigations tracked?						
D7	Has an enforcement response plan been adopted for use when an illicit discharge source has been located?						
E	Spill Response and Prevention (IDDE)						
E1	Does the permittee have a clear set of procedures in place that details who is responsible for responding to spills and emergency situations?						
E2	Do field staff have spill containment supplies in their vehicles, and are they trained to contain minor spills?						

Appendix B4: PEAR #4 – Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
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E3	Is a contractor or other entity available for larger spills?						
E4	Does the permittee have the ability to collect cleanup and abatement costs from the responsible party?						
E5	How are spills and spill response tracked to ensure adequate reporting?						
F	Public Awareness and Reporting Program (IDDE)						
F1	Does the permittee prioritize subwatersheds or neighborhoods and assign resources for educational efforts based on frequency and types of illicit discharge incidents?						
F2	Is there a general phone number or “hotline” in the phone book or Web site that people can call to report a spill or dumping?						
F3	What types of public outreach materials are available to publicize public reporting?						
F4	Does the permittee track the number of public calls or complaints reporting illicit discharges?						
G	Preventing Sanitary Sewer Discharges (IDDE)						
G1	Has the permittee conducted any studies or evaluations to determine whether sanitary sewers are contributing pollutants to the MS4?						
G2	What is the extent of infiltration and inflow into the sanitary sewer system? How is this impacting discharge from the MS4?						
G3	If the permittee also operates a sanitary sewer system, do they have procedures to prevent sewage spills and SSOs to the MS4?						
H	Education and Training (IDDE)						
H1	What type of training do field staff (e.g., storm sewer maintenance crews, street sweepers) receive on spill response and IDDE?						
H2	Are staff generally educated about what illicit discharges are and how to report them?						
I	Legal Authority (I/C)						
I1	Does the Phase I permittee have the authority to require industrial and commercial facilities to implement stormwater BMPs?						
I2	Does the Phase I permittee have the authority to conduct inspections and enforce requirements?						
I3	What laws/rules/regulations/policies provide this legal authority?						
I4	What types of facilities are covered under this legal authority?						
I5	Who (e.g., specific staff, Division/District, etc.) has the authority to enforce the laws/rules/regulations/policies and/or inspect the facilities?						
I6	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
J	Facility Inventory (I/C)						
J1	Has the permittee completed an inventory of industrial/commercial facilities discharging to the stormwater system?						
J2	What types of facilities are included on the inventory?						
J3	What sources were used to create the inventory?						
J3A	Facilities that filed NOIs for EPA MSGP or state industrial general permit coverage?						
J3B	Significant industrial users within the pretreatment program?						

Question Number	Question	Airports		Harbors		Highways	
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J3C	Business licenses?						
J3D	Phone book?						
J3E	“Windshield” survey?						
J4	Does the inventory include all the industrial/commercial facilities subject to the industrial general permit?						
J5	Does the permittee periodically check to see if new facilities that must be covered by an industrial stormwater general permit have filed an NOI?						
J6	What is the process for notifying the permitting authority of non-filers?						
J7	If applicable, does the inventory include all the facilities specified as required in the MS4 NPDES permit?						
J8	How is the inventory updated? How often?						
J9	What information is maintained about the facilities?						
J10	How is the inventory maintained and stored?						
J11	Does the permittee prioritize the facilities?						
J12	Is the prioritization based on facility type, past inspection or enforcement results, proximity to receiving waters, potential pollutant sources on-site, and so forth?						
J13	Is the prioritization used to determine frequency of inspections?						
J14	Has the permittee mapped the locations of prioritized facilities to cross-reference reports of dumping, illicit discharges, or other water quality issues?						
K	Standards, BMPs and Outreach (I/C)						
K1	Has the permittee adopted standards or BMPs that industrial/commercial facilities are required to implement (e.g., all car dealerships must install a wash rack plumbed to the sanitary sewer)?						
K2	Are the requirements for new developments only or are they triggered by improvements of existing facilities? Are there schedules for implementing retrofits?						
K3	Are these standards applicable to existing facilities, new facilities, or both?						
K4	Does the permittee refer facility operators to specific stormwater BMP or standards guidance documents?						
K5	What type of educational program has been developed for industrial and commercial facility operators?						
K6	What type of brochures, handouts, or guidance on BMPs is provided to these facilities by the permittee?						
K7	When is this information provided? During inspections? During training events? During professional organization presentations?						
L	Staff Training (I/C)						
L1	What type of training do the industrial and commercial inspectors receive?						
L2	How often?						
L3	If additional inspectors are used (e.g., food safety inspectors for restaurant inspections, pretreatment inspectors), are they trained specifically on stormwater BMPs and requirements? By whom?						

Question Number	Question	Airports		Harbors		Highways	
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		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
M	Inspections (I/C)						
M1	Who performs inspections and for what types of facilities (e.g., health inspectors for restaurants, pretreatment inspectors for industrial facilities with a pretreatment permit)						
M2	How often are industrial and commercial facilities inspected? How is the frequency determined?						
M3	Does the permittee’s industrial/commercial inspector(s) use a standard checklist during inspections?						
M4	Is a report written after the inspection? How is the inspection documented in the file?						
M5	Does the permittee verify NPDES permit coverage for facilities?						
M6	For industrial facilities, does the inspector review the SWPPP and monitoring data during the inspection?						
M7	Does the permittee refer non-filers to the permitting authority?						
M8	Do inspectors provide educational materials during inspections? What types?						
M9	If multiple Divisions/Districts perform inspections, how is information transferred or cataloged?						
N	Program Support and Resources (I/C)						
N1	Does the program have a dedicated source of funding to support inspectors?						
O	Enforcement (I/C)						
O1	In instances of noncompliance, do the inspection staff use a formalized, approved enforcement escalation procedure?						
O2	How was the enforcement escalation procedure developed? Is it used? Is it effective?						
O3	Who is authorized to apply various enforcement procedures (e.g., NOVs, fines)?						
O4	What types of penalties are readily available to the inspection staff?						
O5	What is the most common method of gaining compliance (e.g., NOVs, fines, abatement)?						
O6	Can the permittee describe a recent non-compliance issue at an industrial/commercial facility? If so, how was compliance achieved?						
O7	At what point are non-compliance cases referred to the NPDES permitting authority? How many have been referred in the last 12 months?						
P	Consent Decree Questions						
P1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
P1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
P2a	Have deficiencies or potential violations been identified?						
P2b	What are recommendations for correcting these deficiencies or potential violations?						
P3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
P4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
P5	If best practices cannot be universally implemented, what are the identified impediments?						

B5: PEAR #5 – Pollution Prevention / Good Housekeeping Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Infrastructure Mapping and Characterization						
A1	Does the permittee have a map showing all inlets, outfalls, storm drain conduits, stormwater management facilities, and receiving water bodies?						
A2	Does this map include catch basins and structural stormwater controls?						
A3	Is the map readily available and used by maintenance field staff when performing maintenance activities?						
A4	Is the map in hard copy format only or is it also in a geographic information system (GIS)?						
A5	Are infrastructure assets or components named or numbered to better track necessary maintenance and repairs?						
A6	Is information regarding stormwater infrastructure maintained in a database or mapping system? What types of data are maintained?						
A6a	Type of structure or asset						
A6b	Location (address, latitude/longitude)						
A6c	Photo						
A6d	Date built						
A6e	Date last inspected						
A6f	Date last cleaned/maintained						
B	Catch Basin Cleaning						
B1	Does the permittee have a schedule for routine maintenance or cleaning of catch basins?						
B1a	How many are cleaned and how often?						
B1b	Has the permittee targeted certain areas for more frequent maintenance?						
B1c	Does the permittee set goals for how many basins are inspected and cleaned each year?						
B1d	How does the permittee track and record cleaning and maintenance needs?						
B1e	What information is documented? Does the permittee track which catch basins are cleaned, how much material is removed, and so forth?						
B1f	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency? Are they used to identify areas for targeted outreach?						
B2	What are the permittee's procedures for disposing of waste removed from catch basins or storm drains?						
B2a	Does the permittee flush material that could potentially discharge to surface water?						
B2b	If the material is removed using a wet vacuum, how is the material dewatered? How is the decanted water disposed?						
B3	Does the permittee have a schedule for routine maintenance or inspection of storm drain pipes?						
B4	What are the permittee's maintenance procedures for cleaning clogged storm drain pipes?						
C	Stormwater Management Structures						
C1	Are catch basins and other inlet structures marked so that the public knows they drain to surface waters?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
C2	Has the permittee inventoried the type and location of public stormwater management structures in its jurisdiction? How are the data collected and stored?						
C2a	Pump stations						
C2b	Drainage structures (debris basins, detention basins, regional ponds, etc.)						
C2c	Structural treatment controls						
C2d	Open channels						
C3	How is vegetation maintained in grassed swales, rain gardens, pond perimeters, and other vegetated stormwater controls?						
C4	Has the permittee mapped private stormwater management structures?						
C5	How often are these facilities inspected?						
C6	Are the stormwater management structures regularly maintained by the permittee?						
C6a	Are records kept of material and debris removed during maintenance?						
C6b	How is maintenance conducted? Are chemicals used to maintain vegetation and pests?						
C7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency? Are they used to identify areas for targeted outreach based on type and volume of materials removed?						
D	Street Sweeping						
D1	Does the permittee regularly sweep streets? Public parking lots?						
D2	What is the schedule for street sweeping?						
D3	Are areas scheduled for sweeping based on aesthetics only or is consideration given for reducing impacts on the stormwater management infrastructure and surface water?						
D4	What types of sweepers are used? Wet or dry?						
D5	How is street-sweeping debris disposed? If the debris is dewatered, how is this done? How is the decanted water disposed?						
D6	Are records kept of the amount of debris collected?						
D7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency?						
E	Public Streets, Roads and Highway Maintenance						
E1	What types of public streets, roads, and highways operation and maintenance practices and procedures are performed by the permittee?						
E2	Are BMPs used by field crews to minimize stormwater impacts during road maintenance or repair activities?						
E3	What types of BMPs are used? Discuss BMPs used for such activities as:						
E3a	Ditch cleaning						
E3b	Sidewalk repair						
E3c	Asphalt patching						
E3d	Curb and gutter repair						
E3e	Street striping						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
E3f	Sign painting						
E3g	Maintaining dirt and gravel roads (preventing erosion, dust control)						
F	Facility Inventory						
F1	Does the permittee have an inventory of public facilities? At a minimum, this list should include the following, as applicable:						
F1a	Public works yards						
F1b	Public transit facilities						
F1c	Wastewater and domestic water treatment plants						
F1d	Sanitary sewer system overflow locations						
F1e	Public parks/open areas						
F1f	Public parking lots						
F1g	Public buildings						
F1h	Landfills and hazardous waste disposal sites, transfer locations, or storage facilities						
F2	Have the facilities been inspected and assessed for water quality impacts?						
F3	Are any facilities required to apply for coverage under a general industrial permit? Do these facilities have SWPPPs?						
G	Chemical and Hazardous Material Use and Disposal						
G1	What types of chemicals or hazardous materials are used by the permittee?						
G2	Where are these materials stored?						
G3	Has the permittee implemented an alternative materials program to reduce the use of hazardous materials?						
G4	Has the permittee implemented an inventory reduction program to reduce the quantity of chemicals and hazardous materials stored and used?						
G5	Does the permittee have a household hazardous waste collection center for the public?						
G5a	Are records of the quantity of materials collected maintained by type of material?						
G5b	How does the permittee notify the public of these sites?						
G6	Does the permittee have special household hazardous waste collection days?						
G7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize maintenance frequency? Are they used to identify areas of targeted outreach?						
H	Pesticide, Herbicide and Fertilizer Application and Management						
H1	What kind of program has been established to address pollutants associated with the application of pesticides, herbicides, and fertilizer at public facilities?						
H2	Are the permittee's fertilizer/pesticide applicators certified? Are permits or other certifications required?						
H3	Where are the chemicals stored? Are appropriate procedures and secondary containment followed?						
H4	Is there a pesticide/fertilizer application plan?						
H5	Does the permittee practice integrated pest management (IPM) or use alternatives to pesticides?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
H6	How does the permittee implement alternative landscaping to minimize the use of fertilizers and pesticides?						
H7	What types of educational activities does the permittee conduct for applicators?						
H8	What types of BMPs are used during application of pesticides in public rights-of-way?						
H9	What types of BMPs are used during application of pesticides at municipal facilities such as parks?						
I	Municipal Staff						
I1	Have standard operating procedures or their equivalent been developed to ensure that municipal field staff integrate stormwater quality BMPs into their daily activities?						
I2	Have BMPs or standards been officially adopted by the permittee for use by municipal field staff?						
I3	What reference materials or guidance documents are provided to field staff regarding BMP specifications and details?						
I4	How does the permittee ensure that staff are fulfilling their responsibilities as outlined in standard operating procedures? Do managers provide oversight on a regular basis?						
J	Contracted Services Staff						
J1	Does the permittee require contractors to incorporate stormwater quality BMPs into their activities?						
J2	How are BMPs required? Are the requirements outlined in requests for proposals? Are they included in contracts?						
J3	Have BMPs or standards been officially adopted by the permittee for use by contractual staff?						
J4	What reference materials or guidance documents are provided to contractual staff regarding BMP specifications and details?						
J5	How does the permittee ensure that contractors are fulfilling their responsibilities as outlined in their contracts? Are inspections performed? Are periodic reports submitted?						
K	Training and Education						
K1	What type of general stormwater training is provided to staff that are not involved in field activities? How often?						
K2	How are new employees trained?						
K3	What types of activity-specific training is provided to field staff? Is information on specific BMPs provided?						
K4	Is any training provided to contract staff?						
L	Consent Decree Questions						
L1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
L1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
L2a	Have deficiencies or potential violations been identified?						
L2b	What are recommendations for correcting these deficiencies or potential violations?						
L3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
L4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
L5	If best practices cannot be universally implemented, what are the identified impediments?						

B6: PEAR #6 – Staffing, Funding, Organizational Structure,
Availability of Resources, and Storm Water Program Sustainability

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	SWMP Planning Documents						
A1	Has a SWMP Plan been developed? If so, when? Last revised?						
A2	Is there a schedule for revision of the SWMP plan?						
A3	Is there an additional MS4-wide document, plan, or program? Who developed it?						
A4	How were internal and external stakeholders included in the development or revision of the SWMP plan?						
B	Staff Inventory and Organization						
B1	Does the permittee have a person designated to lead and coordinate the stormwater program and activities?						
B2	Does the SWMP planning document include an organization chart listing responsible parties for each SWMP component?						
C	Performance Standards or Goals						
C1	Has the permittee established measurable goals or performance standards for program components?						
C2	If performance standards have been established, are they measurable or are they essentially BMP recommendations with level of service (i.e., number of miles swept) requirements?						
C3	Does the permittee attempt to quantify or assess a program or a BMP’s water quality impact or effectiveness as opposed to merely tracking level of service?						
D	Prioritization of Resources						
D1	Has the permittee identified specific pollutants of concern for its local water bodies?						
D2	Are these pollutants of concern consistent with priorities identified in the 303(d)-listed impairments for local water bodies?						
D3	Are these pollutants of concern consistent with any water quality monitoring data or studies conducted by the permittee or another agency?						
D4	Has the permittee developed strategies to specifically address those pollutants?						
D5	How does the permittee decide on program priorities? Are these reassessed periodically?						
D6	Does the SWMP include a schedule of activities?						
D7	Does the MS4 discharge to a water body on the state’s list of impaired waters?						
D7a	What pollutants are identified on the list?						
D7b	Has stormwater been identified as a source?						
D7c	Does the SWMP specifically address this pollutant?						
D7d	Does the SWMP identify BMPs specifically for sources or discharges to the listed water body						
D8	Has a TMDL been developed for a water body to which the MS4 discharges and for which stormwater has been identified as a pollutant source?						
D8a	What pollutants are addressed in the TMDL?						
D8b	Does the TMDL specifically address (or include wasteload allocations for) stormwater?						
D8c	Has the corrective action plan or other planning to address TMDLs been reviewed for integration with the SWMP?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
D8d	Does the permittee’s stormwater program address the pollutants of concern identified in the TMDL?						
D9	Is the permittee participating in any watershed planning efforts?						
D10	Have any goals been developed based on watershed issues, strategies, or challenges?						
D11	Has the permittee established a set of indicators or parameters to assess progress toward meeting the goal(s) of the watershed plan?						
D12	Is the permittee’s stormwater program implemented on a watershed basis?						
E	Assessment and Evaluation of Programs						
E1	Does the permittee regularly measure progress against the established performance standards and goals?						
E2	Are the goals quantifiable?						
E3	Is the permittee analyzing data in the annual report to identify program activities that may need to change to address problem areas?						
E4	Has the SWMP been altered based on this evaluation?						
F	Assessment and Evaluation of BMPs						
F1	Is the permittee able to track both structural BMPs and non-structural BMPs and activities?						
F2	Has the permittee set measurable goals or performance standards to evaluate individual BMPs and activities or suites of BMPs that address a particular pollutant source?						
F3	Is there a process to evaluate or revise individual BMPs and suites of BMPs when receiving water outcomes or endpoints are not being met?						
F4	Do assessments evaluate impacts of BMPs on ground water?						
F5	Is the permittee analyzing data in the annual report to identify individual BMPs or suites of BMPs that may need to change to address problem areas?						
G	Assessment and Evaluation of Water Quality						
G1	Has the permittee documented environmental, water quality, stream corridor, habitat, or other types of improvements?						
G2	Has the permittee estimated reductions in pollutant loadings from the MS4 or other quantifiable water quality benefits expected as the result of the municipal stormwater program?						
H	Dry & Wet Weather Outfall Screening and Monitoring (If Applicable)						
H1	Does the permittee conduct dry or wet weather screening at outfalls to characterize stormwater flows from the MS4?						
H2	Does the permittee have written screening procedures?						
H3	What is the permittee’s schedule for screening the sites?						
H4	Are parts of the permit area prioritized for screening based on incidents of illicit discharges, land use, dumping reports, etc.?						
H5	What parameters are being tested?						
H6	How does the permittee prioritize sites for follow-up (e.g., magnitude and nature of suspected discharge)?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
H7	Who conducts the sampling? What kind of training have sampling personnel received?						
H8	What type of records are kept?						
H8a	Analytical results						
H8b	Date and duration (in hours) of the storm events sampled (rainfall data)						
H8c	Rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff (rainfall data)						
H8d	Duration (in hours) of the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (rainfall data)						
H8e	Estimate of the total flow of the discharge sampled (stage and velocity)						
H9	What analytical methods are used (i.e., 40 CFR Part 136)?						
H10	What are the results of the initial sampling and analysis?						
H11	Has the permittee made any changes to the monitoring program based on past results and experience?						
H12	How have monitoring results been used to assess program components?						
H13	Are monitoring data used to estimate pollutant loads for a TMDL?						
I	Biological Monitoring (If Applicable)						
I1	Does the permittee perform biological sampling?						
I2	Has a plan been developed to conduct biological sampling? If so, does the plan include the following:						
I2a	Identification of sampling stations and rationale for selection						
I2b	Location of known major MS4 outfalls discharging to water bodies in which sampling stations were chosen						
I2c	Land use activities near sampling stations						
I2d	Frequency of monitoring						
I3	Who conducts biological sampling and what training have they received?						
I4	Has the permittee made any changes to the monitoring program based on past results and experience?						
I5	How have monitoring results been used to assess program components?						
J	Ambient Monitoring (If Applicable)						
J1	Does the permittee conduct ambient monitoring to characterize water quality conditions in receiving waters?						
J2	How were the sampling sites selected?						
J3	Is sampling conducted both during dry weather and wet weather?						
J4	What is the frequency of sampling?						
J5	What parameters are analyzed? What sampling and analytical methods have been used?						
J6	Does the permittee have a written protocol or procedures for this sampling program?						
J7	Who conducts the sampling and what training have they received?						
J8	Has the permittee made any changes to the monitoring program based on past results and experience?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
J9	How have monitoring results been used to assess program components?						
J10	Are monitoring data used to estimate pollutant loads for a TMDL?						
K	Data Collection and Reporting						
K1	What reporting requirements are included in the MS4 NPDES permit?						
K2	For co-permittees or Phase II permittees that rely on other entities to implement required elements of the program, how are data provided or reported?						
K3	How are the required data collected, tracked, and reported?						
K3a	Is there a database?						
K3b	Are there reporting forms?						
K4	Are there internal reporting deadlines within the municipal program structure?						
K5	Are the appropriate data being collected by the permittee to be able to measure effectiveness and determine if performance standards are being met?						
K6	How are data disseminated to those who use them, if at all?						
L	Consent Decree Questions						
L1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
L1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
L2a	Have deficiencies or potential violations been identified?						
L2b	What are recommendations for correcting these deficiencies or potential violations?						
L3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
L4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
L5	If best practices cannot be universally implemented, what are the identified impediments?						

Appendix C

PEAR 1 through 6 Schedule

C1: PEAR #1 – Schedule for Post-Construction /
Permanent Best Management Practices

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

1. Notice of Audit

- Within 7 Days of AWPC
- Within 7 Days of Last Milestone
- By Wednesday 22 March 2017

2. Records Request

- Within 14 Days of AWPC
- Within 7 Days of Last Milestone
- By Wednesday 29 March 2017

3. Fulfillment of Records Request

- Within 43 Days of AWPC
- Within 29 Days of Last Milestone
- By Thursday 27 April 2017

4. Records Review Complete

- Within 57 Days of AWPC
- Within 14 Days of Last Milestone
- By Thursday 11 May 2017

5. Pre-Onsite Evaluation Conference Call

- Within 64 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 18 May 2017

6. Completion of Onsite Evaluation

- Within 82 Days of AWPC
- Within 18 Days of Last Milestone
- By Monday 5 June 2017

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaheo Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
76 Days After AWPC	77 Days After AWPC	79 Days After AWPC	82 Days After AWPC	76 Days After AWPC	78 Days After AWPC
Tuesday 30 May 2017	Wednesday 31 May 2017	Friday 2 June 2017	Monday 5 June 2017	Tuesday 30 May 2017	Thursday 1 June 2017
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>BMP 1: OGG CONRAC, location tentative</i>	<i>BMP 1: Pervious pavement and bioswale systems, NDWP New Employee Parking Lots at Elliott St.</i>	<i>BMP 1: Alaska Marine Lines, Pier 29</i>	<i>BMP 1: GLP Asphalt Facility</i>	[BMPs will be inspected only if they are installed by this time] <i>See Records Request. No BMPs to inspect. Meeting only.</i>	<i>BMP 1: University Ave. Bioswales, In median of H-1 ramps to University Ave. on makai side of freeway</i>
<i>BMP 2: Wash rack, location tentative</i>	<i>BMP 2: Contech CDS 2025 System and FloGuard drop inlet filtration insert, NDWP Diamondhead Site Improvements, GSE Lot fronting Hardstand 3</i>	<i>BMP 2: Matson Auto Facility, Pier 32</i>	[Additional BMPs will be inspected only if they are installed by this time] <i>Spencer Yim confirmed via phone on 4-18-17 that no additional BMPs have been installed.</i>		<i>BMP 2: Fort Weaver Rd. CDS Units, Fort Weaver Rd., Ewa</i>
[An additional BMP will be inspected only if one is installed by this time]	<i>BMP 3: Bioswale system, Kalewa St Storage Lots 1-6, Corner of Lagoon and Kalewa St.</i>	<i>BMP 3: HC&D Facility, Pier 60</i> <i>Replaced with UH Marine Center Pier 35, per 4-18-17 Call with Spencer Yim</i>			<i>BMP 3: Luluku Storm Water Treatment System, H-3/Likelike interchange, Kaneohe</i>
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) The Audit Team will then verify that up to three (3) structural and source control BMPs approved by each permittee and subject to post-construction requirements were installed and are being maintained properly in the field. Approved plans and inspection records for each BMP will have been reviewed ahead of the onsite evaluation (during the records review period). The BMPs identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 90 Days of AWPC
- **Consent Decree Deadline: Within 90 Days of AWPC**
- Within 8 Days of Last Milestone
- By Tuesday 13 June 2017

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 135 Days of AWPC
- **Consent Decree Deadline: Within 135 Days of AWPC**
- Within 45 Days of Last Milestone
- By Friday 28 July 2017

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 162 Days of AWPC
- Within 27 Days of Last Milestone
- By Thursday 24 August 2017

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 163 Days of AWPC¹
- **Consent Decree Deadline: Within 165 Days of AWPC**
- Within 1 Days of Last Milestone
- By Friday 25 August 2017

11. Completion of Final PEAR

- Within 183 Days of AWPC²
- **Consent Decree Deadline: 210 Days of AWPC**
- Within 20 Days of Last Milestone
- By Thursday 14 September 2017

¹ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

² The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C2: PEAR #2 – Schedule for Construction Site Runoff Control

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

1. Notice of Audit

- Within 190 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 21 September 2017

2. Records Request

- Within 197 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 28 September 2017

3. Fulfillment of Records Request

- Within 226 Days of AWPC
- Within 29 Days of Last Milestone
- By Friday 27 October 2017

4. Records Review Complete

- Within 239 Days of AWPC
- Within 13 Days of Last Milestone
- By Thursday 9 November 2017

5. Pre-Onsite Evaluation Conference Call

- Within 246 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 16 November 2017

6. Completion of Onsite Evaluation

- Within 261 Days of AWPC
- Within 15 Days of Last Milestone
- By Friday 1 December 2017

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
257 Days After AWPC	258 Days After AWPC	260 Days After AWPC	261 Days After AWPC	257 Days After AWPC	259 Days After AWPC
Monday 27 November 2017	Tuesday 28 November 2017	Thursday 30 November 2017	Friday 1 December 2017	Monday 27 November 2017	Wednesday 29 November 2017
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>Construction Site #1: OGG Consolidated Rent A Car Facility, Kahului Airport, Near Hemaloa St and Keolani Pl.</i>	<i>Construction Site #1: HNL Consolidated Rent A Car Facility, Rent-A-Car Lots, Corner of Aolele, Rodgers, Paiea St.</i>	<i>Construction Site #1: New Kapalama Container Yard, Kapalama, Honolulu Harbor</i>	[Unable to forecast construction projects; will be re-contacted by Kennedy/Jenks Consultants closer to the date]	<i>Construction Site #1: Kuihelani Highway Resurfacing</i>	[Unable to forecast construction projects; will be re-contacted by Kennedy/Jenks Consultants closer to the date]
<i>Construction Site #2: OGG Vehicle Washrack Installation, AOA side, Near Cargo Building and Triturator</i>	<i>Construction Site #2: HNL NDWP IIT Mauka Extension, Mauka Interisland Terminal, Existing Commuter Air Terminal</i>	<i>Construction Site #2: Piers 24-29 Utilities</i>		[An additional construction site will be inspected only if one is active at this time]	
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) The Audit Team will then accompany construction inspectors as they conduct up to two (2) inspections. The purpose of the field evaluation is to assess the permittee's construction inspection program—how knowledgeable the inspectors are about stormwater requirements and BMPs, how thorough of an inspection they conduct, and how they handle problems identified at construction sites. The construction sites identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 268 Days of AWPC¹
- **Consent Decree Deadline: Within 270 Days of AWPC**
- Within 7 Days of Last Milestone
- By Friday 8 December 2017

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 313 Days of AWPC²
- **Consent Decree Deadline: Within 315 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 22 January 2018

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 338 Days of AWPC
- Within 25 Days of Last Milestone
- By Friday 16 February 2018

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 342 Days of AWPC²
- **Consent Decree Deadline: Within 345 Days of AWPC**
- Within 4 Days of Last Milestone
- By Tuesday 20 February 2018

11. Completion of Final PEAR

- Within 362 Days of AWPC³
- **Consent Decree Deadline: 390 Days of AWPC**
- Within 20 Days of Last Milestone
- By Monday 12 March 2018

¹ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

² The deadline is ahead of the CD Deadline due to the required shift in the #7 deadline.

³ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C3: PEAR #3 – Schedule for Public Outreach / Public Involvement

Appendix C3: Schedule for PEAR #3 - Public Outreach / Public Involvement Program

1. Notice of Audit

- Within 369 Days of AWPC
- Within 7 Days of Last Milestone
- By Monday 19 March 2018

2. Records Request

- Within 377 Days of AWPC
- Within 8 Days of Last Milestone
- By Tuesday 27 March 2018

3. Fulfillment of Records Request

- Within 420 Days of AWPC
- Within 43 Days of Last Milestone
- By Wednesday 9 May 2018

4. Records Review Complete

- Within 450 Days of AWPC
- **Consent Decree Deadline: Within 450 Days of AWPC**
- Within 30 Days of Last Milestone
- By Friday 8 June 2018

For this Program Element, the end of the records review period represents the completion of evaluation. No onsite evaluation will occur for this program element. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators may be conducted during the records review period. If requested by the Audit Team or MS4 Permit Coordinator, an in-person meeting may be scheduled during this period.

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.

Appendix C3: Schedule for PEAR #3 - Public Outreach / Public Involvement Program

5. – 7. Not Applicable (See #4)

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 495 Days of AWPC
- **Consent Decree Deadline: Within 495 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 23 July 2018

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 523 Days of AWPC
- Within 28 Days of Last Milestone
- By Monday 20 August 2018

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 525 Days of AWPC
- **Consent Decree Deadline: Within 525 Days of AWPC**
- Within 2 Days of Last Milestone
- By Wednesday 22 August 2018

11. Completion of Final PEAR

- Within 545 Days of AWPC¹
- **Consent Decree Deadline: 570 Days of AWPC**
- Within 20 Days of Last Milestone
- By Tuesday 11 September 2018

¹ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C4: PEAR #4 – Schedule for Illicit Discharge Detection and
Elimination (IDDE) Program Element and
Industrial Commercial Activities/Tenant (I/C) Program

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

1. Notice of Audit

- Within 552 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 18 September 2018

2. Records Request

- Within 559 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 25 September 2018

3. Fulfillment of Records Request

- Within 583 Days of AWPC
- Within 24 Days of Last Milestone
- By Friday 19 October 2018

4. Records Review Complete

- Within 597 Days of AWPC
- Within 14 Days of Last Milestone
- By Friday 2 November 2018

5. Pre-Onsite Evaluation Conference Call

- Within 604 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 9 November 2018

6. Completion of Onsite Evaluation

- Within 623 Days of AWPC
- Within 19 Days of Last Milestone
- By Wednesday 28 November 2018

The table below provides a preliminary schedule for the onsite evaluation period.

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaheo Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit HI 4KE349	Individual Permit HI S000005	Small MS4 Permit HI 03KB482	Small MS4 Permit HI 03KB488	Small MS4 Permit HI 14KE352	Individual Permit HI S000001
614 Days After AWPC Monday 19 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Near baseyard, Keolani Place <i>Outfall #2:</i> Sampling #G, Basin G 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> UPS, 9682 Hemaloa Pl. <i>I/C Facility #2:</i> ASIC-HFFC, 761 Kaonawai Pl. 4pm – 5pm I/C Debrief Meeting [See Note (d)]	616 Days After AWPC Wednesday 21 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Near Iolana Place, Off Lagoon Drive <i>Outfall #2:</i> Aolewa Place, Near Access A 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> UPS, 128 Mokeua Pl. <i>I/C Facility #2:</i> United Airlines, 110 Lauhoe Pl. 4pm – 5pm I/C Debrief Meeting [See Note (d)]	621 Days After AWPC Monday 26 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> SDDH035050, Pier 38 <i>Outfall #2:</i> SDDH0517960, Pier 51 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> Young Brothers Maintenance Facility, Pier 39 <i>I/C Facility #2:</i> Matson Maintenance Facility, Piers 52-53 4pm – 5pm I/C Debrief Meeting [See Note (d)]	622 Days After AWPC Tuesday 27 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> SDDBP043660, Pier P-4 [Outfall #1 is the only accessible outfall at this harbor, due to safety concerns] 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> Marisco <i>I/C Facility #2:</i> Grace Pacific 4pm – 5pm I/C Debrief Meeting [See Note (d)]	615 Days After AWPC Tuesday 20 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Outlet No. 1 <i>Outfall #2:</i> DP3 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH [I/C Program not evaluated, as Maui Highways does not have an I/C Program] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> First Hawaiian Bank, 94-205 Leoku St., Waipahu, HI <i>I/C Facility #2:</i> CM Recycling, 204 Sand Island Access Rd., Honolulu, HI 4pm – 5pm I/C Debrief Meeting [See Note (d)]	623 Days After AWPC Wednesday 28 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> PID 304162 Jarrett White Rd., north of Mahiole St., <i>Outfall #2:</i> PID 301831, Kaahele St., north of Moanalua Rd. 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> First Hawaiian Bank, 94-205 Leoku St., Waipahu, HI <i>I/C Facility #2:</i> CM Recycling, 204 Sand Island Access Rd., Honolulu, HI 4pm – 5pm I/C Debrief Meeting [See Note (d)]

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meetings. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) Illicit Discharge Detection and Elimination (IDDE) Program: The Audit Team will accompany inspectors in the field as they conduct up to two (2) dry-weather outfall screenings. The outfalls identified in this Appendix are preliminary and are subject to modification.

(c) Industrial/Commercial (I/C) Program: The Audit Team will accompany inspectors in the field as they inspect up to two (2) industrial/commercial facilities. The facilities identified in this Appendix are preliminary and are subject to modification.

(d) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 630 Days of AWPC
- **Consent Decree Deadline: Within 630 Days of AWPC**
- Within 7 Days of Last Milestone
- By Wednesday 5 December 2018

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 674 Days of AWPC¹
- **Consent Decree Deadline: Within 675 Days of AWPC**
- Within 44 Days of Last Milestone
- By Friday 18 January 2019

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 700 Days of AWPC
- Within 26 Days of Last Milestone
- By Wednesday 13 February 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 702 Days of AWPC²
- **Consent Decree Deadline: Within 705 Days of AWPC**
- Within 2 Days of Last Milestone
- By Friday 15 February 2019

11. Completion of Final PEAR

- Within 723 Days of AWPC³
- **Consent Decree Deadline: 750 Days of AWPC**
- Within 21 Days of Last Milestone
- By Friday 8 March 2019

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

² The deadline is ahead of the CD Deadline due to the required shift in the #8 deadline.

³ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C5: PEAR #5 – Schedule for Pollution Prevention /
Good Housekeeping Program

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

1. Notice of Audit

- Within 730 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 15 March 2019

2. Records Request

- Within 737 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 22 March 2019

3. Fulfillment of Records Request

- Within 762 Days of AWPC
- Within 25 Days of Last Milestone
- By Tuesday 16 April 2019

4. Records Review Complete

- Within 776 Days of AWPC
- Within 14 Days of Last Milestone
- By Tuesday 30 April 2019

5. Pre-Onsite Evaluation Conference Call

- Within 783 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 7 May 2019

6. Completion of Onsite Evaluation

- Within 800 Days of AWPC
- Within 17 Days of Last Milestone
- By Friday 24 May 2019

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
796 Days After AWPC	797 Days After AWPC	799 Days After AWPC	800 Days After AWPC	796 Days After AWPC	798 Days After AWPC
Monday 20 May 2019	Tuesday 21 May 2019	Thursday 23 May 2019	Friday 24 May 2019	Monday 20 May 2019	Wednesday 22 May 2019
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>Facility #1:</i> OGG Baseyard, Keolani Pl.	<i>Facility #1:</i> HNL Baseyard, 2919 Aolele St.	<i>Facility #1:</i> Sand Island Baseyard, 48 Sand Island Access Road	<i>Facility #1:</i> Kalaeloa Storage Facility	<i>Facility #1:</i> HWY-M Kahului Baseyard, 650 Palapapa Dr.	<i>Facility #1:</i> Kakoi Baseyard, 727 Kakoi St.
<i>Facility #2:</i> ARFF Station, Onsite	<i>Facility #2:</i> Crash Fire Station 2, off Lagoon Drive	[DOT-HAR only operates one maintenance facility at Honolulu Harbor]	[DOT-HAR only operates one maintenance facility at Kalaeloa Harbor]	<i>Facility #2:</i> HAR-M Kahului Harbor, 103 Ala Luina St.	<i>Facility #2:</i> Windward Baseyard, 45-889 Pookela St.
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) After the Kickoff Meeting, the Audit Team will conduct a walk-through of up to two (2) permittee owned or operated facilities (maintenance yards, chemical storage facilities, etc.) with a facility supervisor and/or other key staff to verify that activities are performed as described in the SWMPP. The facilities identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 810 Days of AWPC
- **Consent Decree Deadline: Within 810 Days of AWPC**
- Within 10 Days of Last Milestone
- By Tuesday 3 June 2019

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 855 Days of AWPC
- **Consent Decree Deadline: Within 855 Days of AWPC**
- Within 45 Days of Last Milestone
- By Thursday 18 July 2019

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 882 Days of AWPC
- Within 27 Days of Last Milestone
- By Wednesday 14 August 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 884 Days of AWPC¹
- **Consent Decree Deadline: Within 885 Days of AWPC**
- Within 2 Day of Last Milestone
- By Friday 16 August 2019

11. Completion of Final PEAR

- Within 905 Days of AWPC²
- **Consent Decree Deadline: 930 Days of AWPC**
- Within 21 Days of Last Milestone
- By Friday 6 September 2019

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

² The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C6: PEAR #6 – Schedule for Staffing, Funding, Organizational Structure,
Availability of Resources, and Storm Water Program Sustainability

Appendix C6: Schedule for PEAR #6 - Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

1. Notice of Audit

- Within 912 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 13 September 2019

2. Records Request

- Within 919 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 20 September 2019

3. Fulfillment of Records Request

- Within 961 Days of AWPC
- Within 42 Days of Last Milestone
- By Friday 1 November 2019

4. Records Review Complete

- Within 989 Days of AWPC¹
- **Consent Decree Deadline: Within 990 Days of AWPC**
- Within 28 Days of Last Milestone
- By Friday 29 November 2019

For this Program Element, the end of the records review period represents the completion of evaluation. No onsite evaluation will occur for this program element. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators will be conducted during the records review period. If requested by the Audit Team or MS4 Permit Coordinator, an in-person meeting may be scheduled during this period.

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.

5. – 7. Not Applicable (See #4)

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

Appendix C6: Schedule for PEAR #6 - Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 1034 Days of AWPC²
- **Consent Decree Deadline: Within 1035 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 13 January 2020

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 1058 Days of AWPC
- Within 24 Days of Last Milestone
- By Thursday 6 February 2019

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 1064 Days of AWPC²
- **Consent Decree Deadline: Within 1065 Days of AWPC**
- Within 6 Days of Last Milestone
- By Wednesday 12 February 2020

11. Completion of Final PEAR

- Within 1108 Days of AWPC³
- **Consent Decree Deadline: 1110 Days of AWPC**
- Within 44 Days of Last Milestone
- By Friday 27 March 2020

² The deadline is ahead of the CD Deadline due to the required shift in the #4 deadline.

³ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

Appendix D

Notices to EPA & DOH

D1: Draft Notice of Potential Violation

State of Hawaii Department of Transportation
MS4 Permit Audit
Draft Notice of Potential Violation

Potential Violation Tracking #: _____

Determination of Potential Violation Date: _____

Potential Violation Notification Date: _____
(Today's Date)

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Description of Attached Photographs (if applicable):

Applicable Regulatory References

NPDES Permit No.: _____

SWMPP: _____

Hawaii Administrative Rules (HAR): _____

Code of Federal Regulations (CFR): _____

D2: Final Notice of Potential Violation

State of Hawaii Department of Transportation
MS4 Permit Audit
Final Notice of Potential Violation

Potential Violation Tracking #: _____

Determination of Potential Violation Date: _____

Potential Violation Notification Date: _____
(Today's Date)

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Description of Attached Photographs (if applicable):

Applicable Regulatory References

NPDES Permit No.: _____

SWMPP: _____

Hawaii Administrative Rules (HAR): _____

Code of Federal Regulations (CFR): _____

Result of HDOT PM Review:

- ☐ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: _____
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed
 - o Email Notice sent to EPA/DOH on: _____

D3: Notice of Corrective Action

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: _____ Potential Violation Notification Date: _____
(from Notice of Potential Violation Form)

Corrective Action Notification Date: _____
(Today's Date)

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

HDOT Receipt of Draft PEAR Date: _____

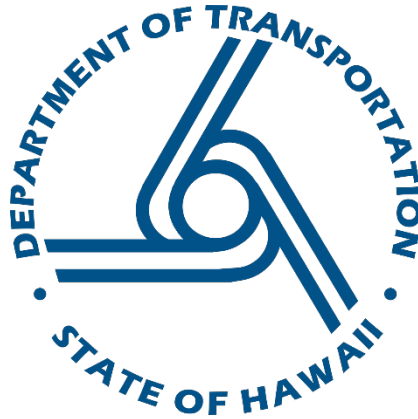
Corrective Action Notification Date: _____
(Today's Date)

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action

Description of Attached Photographs (if applicable):



FINAL Program Element
Audit Report (PEAR) No. 5

Pollution Prevention / Good
Housekeeping Program
Part 1 of 2

State Project No. OSC-15-01

September 2019

Prepared by
Kennedy/Jenks Consultants, Inc.

Prepared for
State of Hawaii
Department of Transportation
Office of Environmental Compliance
869 Punchbowl Street
Honolulu, Hawaii 96813

KJ Project No. 1696025*00

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List of Acronyms

AWP	Audit Work Plan
BAT	Best Available Technology
BCT	Best Conventional Pollutant Control Technology
BMP	best management practice
CD	Consent Decree
DOH	State of Hawaii Department of Health
DMR	discharge monitoring report
EPA	United States Environmental Protection Agency
HAR	Hawaii Administrative Rules
HDOT	State of Hawaii Department of Transportation
I/C	Industrial Commercial Activities/Tenant
IDDE	Illicit Discharge Detection and Elimination
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit
PEAR	Program Element Audit Report
PM	Project Manager
SWMPP	Stormwater Management Program Plan
SWPCP	Stormwater Pollution Control Plan

Section 1: Introduction

Under Paragraph 10.d of the Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC) entered on 5 November 2014 (CD) with the United States Environmental Protection Agency (EPA) and the State of Hawaii Department of Health (DOH), the State of Hawaii Department of Transportation (HDOT) was required to perform compliance audits of Municipal Separate Storm Sewer System (MS4) permits issued to HDOT's Airports, Highways, and Harbors Divisions (referred to herein as the singular "MS4 Permit Audit"). The ongoing MS4 Permit Audit is being conducted in accordance with an Audit Work Plan (AWP) approved by EPA and DOH on 31 October 2016 and provided as Appendix C of this report. The MS4 Permit Audit consists of individual audits of six program elements:

1. Post-Construction Runoff Control / Permanent Best Management Practices (BMPs)
2. Construction Site Runoff Control
3. Public Outreach / Public Involvement
4. Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program
5. Pollution Prevention / Good Housekeeping Program
6. Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

This Program Element Audit Report (PEAR) 5 documents procedures and findings of the Pollution Prevention / Good Housekeeping Program element.

Section 2: Methods (CD Appendix A Section D.7.a.)

As required in CD Appendix A Section D.7.a., this section includes a specific statement of the procedures followed, HDOT sites and activities visited, and materials reviewed during the MS4 Permit Audit. Additional details on specific dates can be found in Appendix A. Additional permit-specific details can be found in Appendices B1 through B6. The Audit Team reviewed the individual program element for the six permitted MS4 programs concurrently, developing a PEAR that represents the culmination of the auditing efforts across the three HDOT Divisions. The MS4 Permit Audit included three phases (Pre-Audit, On-Site Evaluation, and Reporting), detailed in the following sections.

2.1 Pre-Audit

2.1.1 Notice of Audit

The Audit Team began by providing a Notice of Audit to the MS4 Permit Coordinators via email. The Audit Team requested that the MS4 Permit Coordinators review two key documents.

First, the Audit Team created a table of Governing Regulations applicable to PEAR 5, which included sections of the federal regulations, HDOT's MS4 permits, and the CD. This table was used by the Audit Team in conjunction with the guiding questions in Appendix B of the AWP to informally track the results from the evaluation. The MS4 Permit Coordinators provided comments on this table.

Second, the Audit Team developed a draft list of documents to be reviewed to generate the Records Request. The Audit Team asked the MS4 Permit Coordinators to confirm that the Audit Team had identified the most updated and suitable documents. The Audit Team finalized this list of documents based on feedback from the MS4 Permit Coordinators. This list is provided in Section 1 of Appendices B1 through B6.

2.1.2 Records Request

The Audit Team reviewed the key documents and identified those sections relevant to PEAR 5 (provided in Section 2 of Appendices B1 through B6). Based on this review, the Audit Team developed a Records Request that was shared with the MS4 Permit Coordinators.

2.1.3 Records Review

The MS4 Permit Coordinators responded to the Records Request and the Audit Team completed an initial review of the records received. The Audit Team next sent Requests for Clarification. The Audit Team also conducted teleconferences with certain MS4 Permit Coordinators during this timeframe. MS4 Permit Coordinators provided additional information and records in response to this second request. The Audit Team then completed their review of records received.

2.2 On-Site Evaluation

2.2.1 Pre-On-Site Evaluation Conference Call

The Audit Team and HDOT Project Manager (PM) contacted the MS4 Permit Coordinators to confirm schedules, address questions and security concerns, and confirm personnel safety equipment needed.

2.2.2 On-Site Evaluation

During the On-Site Evaluation, the Audit Team visited several maintenance baseyards at the Airports Division on Oahu, Highways Maui District on Maui, and Highways Oahu District on Oahu. Additional details on specific sites visited during the On-Site Evaluations and associated photographs can be found in Sections 3 and 4, respectively, of Appendices B1 through B6.

2.2.3 Post-On-Site Evaluation Review Period

Following the On-Site Evaluations, the Audit Team reviewed the findings of the Pre-Audits and On-Site Evaluations and addressed final evaluation-related tasks that were noted. This review period completed the evaluation of the program element, as referenced in CD Appendix A, Section B.5.

2.3 Reporting

2.3.1 Draft PEAR

Pursuant to the CD, the Audit Team prepared a draft PEAR 5 and transmitted it to the HDOT PM, who distributed copies of the draft PEAR to the appropriate MS4 Permit Coordinators. The MS4 Permit Coordinators reviewed the draft PEAR and distributed the report to key personnel for their review (at the discretion of the MS4 Permit Coordinators). The MS4 Permit Coordinators submitted to the HDOT PM a consolidated written request for clarification and corrections to the draft PEAR for their respective permit. The HDOT PM then submitted the consolidated requests and corrections to the Audit PM.

2.3.2 Final PEAR

The Audit Team made appropriate changes to the draft PEAR and submitted the final PEAR.

Section 3: Key Findings (CD Appendix A Section D.7.b. – e.)

As required in CD Appendix A Section D.7.b. – e., this section details key findings of the MS4 Permit Audit for PEAR 5.

Compliance with several program components could not be determined, as discussed below:

1. Highways Oahu District and Airports Division - Reference to Best Available Technology currently available (BAT) / Best Conventional Pollutant Control Technology (BCT).

Part B.4 of Highways Oahu District's and Airports Division's individual permits states that "discharge of pollutants from the Permittee's Industrial facilities/activities shall be reduced to the appropriate discharge limitations subject to the Best Available Technology currently available (BAT) / Best Conventional Pollutant Control Technology (BCT) discharge requirement, consistent with the CWA and other respective federal and state requirements for such facilities."

The Audit Team recommends that Highways Oahu District and Airports Division clarify DOH's expectations for the assessment and enforcement of this permit requirement. In particular, the Audit Team believes that BAT / BCT is not defined in the detail needed to effectively implement the permit requirement. In this regard, the Audit Team could not fully determine Highways Oahu District's and Airports Division's compliance with this permit requirement.

2. Highways Oahu District, Highways Maui District and Airports Division - Reference to EPA's Multi-Sector General Permit (MSGP)

Part E.1. of Airports Division's individual permit states that "DOT-AIR's Maintenance Baseyard...shall comply with the requirements in HAR, Chapter 11-55, Appendix B, which includes requiring the DOT-AIR to comply with the EPA's 2008 Multi-Sector General Permit, Part 8 of the Sector-Specific Requirements for Industrial Activity (e.g., Part 8, Subpart S – Air Transportation)." Hawaii Administrative Rules (HAR) 11-55 Appendix B Part 8.(b) states that Airport Division, Highways Oahu District, and Highways Maui District must "comply with Section 2.1.2 and applicable sector-specific requirements in Part 8 of the EPA's 2008 MSGP" at their maintenance baseyards.

The Audit Team recommends that Highways Oahu District, Highways Maui District, and Airports Division clarify DOH's expectations for the assessment and enforcement of these permit requirements. It is unclear to the Audit Team whether DOH expects HDOT to be able to explicitly demonstrate compliance with each of the specific requirements found in the MSGP sections referenced. In this regard, the Audit Team could not fully determine Highways Oahu District's, Highways Maui District's, and Airports Division's compliance with these permit requirements.

3. Highways Oahu District and Airports Division - Basic Water Quality Criteria

Part C.1. of Highways Oahu District's and Airports Division's individual permits states in part that "discharge shall comply with the basic water quality criteria which states: all waters shall be free of substances attributable to domestic, industrial, or other controllable sources of pollutants, including ...substances in amounts sufficient to produce taste in the water or detectable off flavor in the flesh of fish" (emphasis added).

It is unclear to the Audit Team how these permit requirements are measurable and enforceable as written. The Audit Team recommends that Highways Oahu District and Airports Division clarify DOH's expectations for the assessment and enforcement of these permit requirements. In this regard, the Audit Team could not fully determine Highways Oahu District's and Airports Division's compliance with these permit requirements.

4. Highways Oahu District and Airports Division - Visual Inspections of Receiving State Waters, Effluent, Control Measures and Best Management Practices (BMPs)

Part C.3. of Highways Oahu District's and Airports Division's individual permits state that "during inspections/screenings as required by this permit, the Permittee shall also visually inspect the receiving state waters, effluent, and control measures and Best Management Practices (BMPs) to detect violations of and conditions which may cause violations of the basic water quality criteria as specified in HAR, Section 11-54-4. (e.g., the Permittee shall look at effluent and receiving state waters for turbidity, color, floating oil and grease, floating debris and scum, materials that will settle, substances that will produce taste in the water or detectable off-flavor in fish, and inspect for items that may be toxic or harmful to human or other life)."

It is unclear to the Audit Team whether visual inspections are required for all inspections/screenings conducted as part of Highways Oahu District's and Airports Division's stormwater programs. It is also unclear whether DOH expects that Highways Oahu District and Airports Division fill out and maintain explicit records documenting the visual inspections. The Audit Team recommends that Highways Oahu District and Airports Division clarify DOH's expectations for the assessment and enforcement of these permit requirements. In this regard, the Audit Team could not fully determine Highways Oahu District's and Airports Division's compliance with these permit requirements.

5. Harbors Division and Kahului Airport - No On-Site Audits

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's Stormwater Management Program Plan (SWMPP). Harbors Division and Kahului Airport did not have facilities described in their respective SWMPPs that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for these permits.

6. Daniel K. Inouye International Airport - Wash Racks

Airports Division's current individual permit establishes industrial stormwater requirements at several wash racks. Airports Division provided a final fact sheet from DOH which stated that the final permit no longer includes the wash racks; as such, Airports Division believes that references to wash racks were inadvertently left within the final permit. DOH has indicated to Airports Division that wash racks will be removed from Airports Division's next individual permit. As such, the Audit Team did not assess compliance at these wash racks.

Aside from the limitations discussed above and unless otherwise noted in this report, the Audit Team found HDOT's programs in compliance with their permit obligations.

3.1 Identification of Potential Violations and Deficiencies (CD Appendix A Section D.7.c.)

CD Appendix A Section D.7.c. requires an identification of Potential Violations and Deficiencies. Audit Team recommendations for improvement are noted as applicable.

3.1.1 Potential Violations

A Potential Violation is defined in the AWP as an area where the evaluation found the permittee not in compliance with a specific SWMPP commitment, the CD, and/or permit and regulations. The Audit Team identified six (6) Potential Violations; one (1) pertaining to Airports Division, four (4) pertaining to Highways Maui District, and one (1) pertaining to Highways Oahu District. Details on the Potential Violations and HDOT's proposed Corrective Actions are provided in Section 5 of Appendices B2, B5, and B6.

Please note that the Potential Violation numbers assigned to Highways Maui District, as delivered to EPA and HDOH on 31 May 2019, were incorrect and have been corrected in this report as follows:

As Delivered to EPA and HDOH on 5/31/19	As Presented in This Report
PV #4	PV #2
PV #5	PV #3
PV #6	PV #4
PV #7	PV #5

3.1.2 Deficiencies

A Deficiency is defined in the AWP as an item which, if not corrected, may lead to Potential Violations. The Audit Team identified fifteen (15) Deficiencies; three (3) pertaining to Airports Division, five (5) pertaining to Highways Maui District, and seven (7) pertaining to Highways Oahu District. Details on the Deficiencies and HDOT's proposed Corrective Actions are

provided in Section 6 of Appendices B2, B5, and B6. For each Deficiency, the Audit Team has provided recommendations for improvement.

3.2 Best Practices and Opportunities (CD Appendix A Section D.7.d.)

CD Appendix A Section D.7.d. requires an identification of best practices and opportunities for information/technology transfer that may be beneficial to other Divisions.

The Audit Team noted several best practices during this PEAR that may be beneficial to other divisions, including:

1. **Use of Digital Forms.** Highways Oahu District and Airports Division utilize digital forms for their baseyard inspections. Airports Division is transitioning to a new system that can be used to implement quality control measures (for example, use of an electronic form that allows an inspection checklist to be submitted only after all questions are marked with a response).

Highways Maui District does not currently utilize digital forms. The Audit Team recommends that Highways Maui District consider exploring the use of digital forms for their baseyard inspections.

2. **Tracking Responses to Inspection Questions.** Airports Division tracks individual responses to baseyard inspection questions to improve training programs and conduct focused training in the future. Highways Oahu District also tracks common trends in documented BMP deficiencies (e.g., fueling, good housekeeping, equipment storage, etc.) and deficiencies specific to individual maintenance crews. This information is utilized when updating annual stormwater training for each maintenance crew.

The Audit Team recommends that Highways Maui District also consider tracking responses to baseyard inspection questions in order to enhance employee training.

3. **Maintaining Rainfall Data.** Highways Oahu District and Airports Division maintain historical rainfall data collected from rain gauges installed at their baseyards in order to support their submittal of discharge monitoring reports (DMRs), as needed. Along with this rainfall log, they note extenuating circumstances regarding sample collection such as afterhours rainfall events, antecedent rainfall, and insufficient sheet flow when reporting no discharge events.

The Audit Team recommends that Highways Maui District also consider collecting and maintaining site-specific rainfall data and tracking similar extenuating circumstances documenting their sampling efforts and supporting submittal of no-discharge DMRs.

4. **Deadlines for Corrective Actions.** While not required by their permit, Airports Division sets a deadline of 30 days to implement corrective actions that may be appropriate based on baseyard inspection findings. Similarly, Highways Oahu District is currently developing a framework, similar to its construction independent inspection program, where deficiencies are categorized and assigned timeframes to implement corrective actions.

The Audit Team recommends that Highways Maui District also consider setting deadlines for completion of corrective actions found to be appropriate based on baseyard inspection findings.

5. **Signage Prohibiting Washing.** Highways Oahu District has posted signage in areas at the Kakoi Baseyard where potable water is dispensed with no connection to the sanitary sewer for disposal. This signage states the following:

This is NOT A SINK!
Not for Washing of Anything!

The Audit Team recommends that HDOT consider installing such signage at other HDOT baseyards as an effective deterrent against washing tools or equipment in areas which may impact stormwater runoff.

6. **Regular Meetings.** The four maintenance baseyards visited by the Audit Team are governed by the same stormwater regulations throughout HDOT (HAR 11-55 Appendix B). The Audit Team recommends that HDOT consider establishing a regular annual meeting for MS4 Permit Coordinators to meet in person or via teleconference to discuss items of interest related to compliance at baseyards. This could help facilitate dialogue among the Divisions and give staff the opportunity to share ideas and challenges related to compliance at baseyards.

3.3 Retrospective Analysis (CD Appendix A Section D.7.b.)

CD Appendix A Section D.7.b. requires a retrospective analysis of program activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and recommendations to modify, streamline, or expand them in accordance with what has been learned. Findings include the following:

1. **DMR Guidance.** The Audit Team identified instances where Highways Oahu District did not fill out the “No. Ex” (“Number of Exceedances”) field in their DMRs. This field is required to be filled per DOH guidance (found here: <https://health.hawaii.gov/cwb/files/2017/08/DMR-Instructions.pdf>) and is helpful for DMR reviewers. The Audit Team recommends that Highways Oahu District consult DOH guidance moving forward.
2. **After-Hours Sampling.** Airports Division attempts to collect stormwater samples from their baseyard during the weekends and holidays. Highways Maui District and Highways Oahu District do not attempt to sample after-hours, on weekends, or on holidays.

The Audit Team recommends that HDOT consider developing a department-wide policy on whether sampling is attempted after-hours, on weekends, or on holidays. HAR 11-55 Appendix A Part 14. (a) (3), which is applicable to all HDOT stormwater permits, states that “representative sampling may include weekends”. HDOT may consider consulting with DOH to better understand DOH’s expectations regarding this matter.

3.4 Implementation (CD Appendix A Section D.7.e)

CD Appendix A Section D.7.e. requires an analysis of the practices implemented for each Division's program elements and a determination as to whether identified best practices can be universally implemented across all three Divisions. If best practices cannot be universally implemented, this section describes identified impediments.

In Sections 3.2 and 3.3, the Audit Team has identified several recommendations where best practices may be universally implemented. For HDOT staff to champion such implementation from within the organization, the Audit Team believes that a compelling case must be made for why the proposed changes will lead to improvements in compliance. Absent that compelling case, HDOT staff may understandably maintain that their time and attention should remain focused on implementing their current programs.

3.5 Positive Program Elements

HDOT staff were helpful and cooperative in responding to requests for information, scheduling and coordinating the On-Site Evaluation, etc. HDOT staff were receptive to MS4 Permit Audit findings shared to date and interested in improving their MS4 programs. The Audit Team identified the following positive program elements during the development of this PEAR:

1. In 2018, Airports Division exceeded their goal of training 70% of maintenance personnel at Kahului Airport.
2. In 2018, Airports Division removed 19,480 cubic feet of trash through street sweeping at the Daniel K. Inouye International Airport, the greatest amount of trash through sweeping recorded in this permit term.
3. At the Daniel K. Inouye International Airport, Airports Division has reduced the use of herbicides by 85% in pounds (55% in gallons) since 2015, which exceeds their goal of a 2% reduction in the number of herbicides used over the permit term.
4. Highways Oahu District has installed excellent non-technical signage at their Kakoi Baseyard which explains aspects of their stormwater management plan, BMPs, and rain garden.
5. Effective February 2019, Highways Maui District has established an environmental section within its staff to manage and delegate inspection of the Kahului Baseyard to ensure inspections are performed and corrective actions are implemented and documented.

Appendix A

Project Milestones and Deadlines

Appendix A: PEAR 5 Project Milestones and Deadlines

Appendix A of the Consent Decree (CD) defines various project milestones and deadlines, described for ease of reference below:

Program Element	Evaluation Complete: (a)	Draft PEAR to HDOT: (b)	HDOT Review of Draft PEAR: (c)	Final PEAR to HDOT: (d)
PEAR 5: Pollution Prevention / Good Housekeeping	27 Months (810 Days) ^(e) After AWPC ^(f) 3 June 2019	855 Days After AWPC 18 July 2019	885 Days After AWPC 17 August 2019	930 Days After AWPC 1 October 2019

Notes:

- (a) "Evaluation" as referenced in CD Appendix A Section B.5. is defined to represent the conclusion of the Post-On-Site Evaluation Review Period.
- (b) Pursuant to CD Appendix A Section D.2., Kennedy/Jenks Consultants, Inc. completed a draft audit report and transmitted it to State of Hawaii Department of Transportation (HDOT) within 45 days of completing the audit of this program element [defined as the conclusion of "evaluation", as discussed in Note (a)].
- (c) Pursuant to CD Appendix A Section D.3., HDOT reviewed the draft PEAR to correct factual inaccuracies within 30 days of receipt.
- (d) Pursuant to CD Appendix A Section D.4., Kennedy/Jenks Consultants, Inc. completed a final PEAR within 120 days of completing the audit of the program element [defined as the conclusion of "evaluation", as discussed in Note (a)].
- (e) "Months" are based on a 30-day month.
- (f) AWPC = Audit Work Plan Commencement (15 March 2017)

Milestone	Date Completed
Notice of Audit	1 March 2019
Records Request	20 March 2019
Response to Records Request	16 April 2019
Request for Clarifications	30 April 2019
Pre-On-Site Evaluation Conference Call	7 May 2019
Response to Request for Clarifications	14 May 2019
On-Site Evaluation	20 May 2019 to 22 May 2019
End of Post-On-Site Evaluation Review Period	3 June 2019
Potential Violations to HDOT PM/EPA/DOH	31 May 2019 and 5 June 2019
Notice of Corrective Action to EPA/DOH	14 June 2019 and 19 June 2019
Draft PEAR to HDOT PM	18 July 2019
MS4 Permit Coordinator Comments to HDOT PM	13 August 2019
HDOT PM Comments to Audit Team	15 August 2019
Final PEAR to HDOT PM	6 September 2019

Notes:

PM = project manager
EPA = United States Environmental Protection Agency
DOH = State of Hawaii Department of Health
MS4 = Municipal Separate Storm Sewer System

Appendix B1

Permit-Specific Information – Kahului Airport

Appendix B1: Permit-Specific Information – Kahului Airport

1. Key Documents

Permit Document	1. Kahului Airport Small MS4 Permit HI 14KE349
Latest Annual Report	2018 OGG ACR-v1.pdf
Permit	OGG-MS4-permit- 20140721.14KE349.FNL_.14 OGG-NGPC-Appendix-K-Permit-Extension- 14KE349.EXT_.16
Stormwater Web site	http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/ogg-storm-water-program/
SWMPP	OGG SWMPP flowchart _1_2_2019

Appendix B1: Permit-Specific Information – Kahului Airport

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (2018 OGG ACR-v1.pdf)	Table 2-1 Section 5.1.2.2 Section 5.3 Section 6.1.4 Section 10
Permit (OGG-MS4-permit-20140721.14KE349.FNL_.14, OGG-NGPC-Appendix-K-Permit-Extension- 14KE349.EXT_.16)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/ogg-storm-water-program/)	In entirety
SWMPP (OGG SWMPP flowchart _1_2_2019)	Pollution Prevention / Good Housekeeping section

Appendix B1: Permit-Specific Information – Kahului Airport

3. On-Site Evaluation

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's SWMPP. Kahului Airport did not have facilities described in their SWMPP that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for this permit.

4. On-Site Evaluation Photos

No photographs were taken, as no on-site audit was conducted for this permit.

5. Potential Violations

No Potential Violations were identified by the Audit Team for this permit.

6. Deficiencies

No Deficiencies were identified by the Audit Team for this permit.

Appendix B2

Permit-Specific Information – Daniel K. Inouye International Airport

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

1. Key Documents

<div>Permit</div> <div>Document</div>	2. Daniel K. Inouye International Airport Individual Permit HI S000005
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts	SWMPP-SectionE.pdf
Authorized Use List of Chemicals	2. Chemical Applications Authorized Use List.pdf
Field Manual (Maintenance Activities Best Management Practices Field Manual)	SWMPP-SectionE.pdf Baseyard-SWPCP_20181026.pdf
Latest Annual Monitoring Plan	SWMPP-SectionH.pdf
Latest Annual Monitoring Report	7.10 Annual Monitoring Report-v1.pdf
Latest Annual Report	2. HNG-3PYA-6V2CY-v1-SubmissionDownload.zip
Maintenance plan for vegetated portions of the drainage system used for erosion and sediment control, and LID features	SWMPP-SectionE.pdf
Permit	HNL MS4 Permit.pdf 2. 20190301.HI S000005.EXT.19.pdf
Storm Water Pollution Control Plans for Facilities to be Audited	Baseyard-SWPCP_20181026.pdf Baseyard-SWPCP_March2019_Final.pdf
Stormwater Web site	http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/hnl-storm-water-program/
SWMPP	SWMPP-Introduction-201810Oct.pdf SWMPP-Section[A-H].pdf Note: SWMPP Section D updated June 2018 SWMPP Section E updated October 2018
Trash Reduction Plan	SWMPP-SectionE.pdf

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts (SWMPP-SectionE.pdf)	In entirety
Authorized Use List of Chemicals (2. Chemical Applications Authorized Use List.pdf)	In entirety
Field Manual (Maintenance Activities Best Management Practices Field Manual) (SWMPP-SectionE.pdf, Baseyard-SWPCP_20181026.pdf)	In entirety
Latest Annual Monitoring Plan (SWMPP-SectionH.pdf)	Section 1.3 Section 1.4 Section 2.2 Section 2.3 Section 2.4 Section 3.2 Section 4.2.1
Latest Annual Monitoring Report (7.10 Annual Monitoring Report-v1.pdf)	In entirety
Latest Annual Report (2. HNG-3PYA-6V2CY-v1-SubmissionDownload.zip)	Section 2 Section 3.3.1.3 Section 3.3.3.1 Section 7.2 Section 7.3 Table 7-4
Maintenance plan for vegetated portions of the drainage system used for erosion and sediment control, and LID features (SWMPP-SectionE.pdf)	In entirety
Permit (HNL MS4 Permit.pdf, 2. 20190301.HI S000005.EXT.19.pdf)	In entirety
Storm Water Pollution Control Plans for Facilities to be Audited (Baseyard-SWPCP_20181026.pdf, Baseyard-SWPCP_March2019_Final.pdf)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/airports/doing-business/engineering/environmental/hnl-storm-water-program/)	In entirety
SWMPP (SWMPP-Introduction-201810Oct.pdf, SWMPP-Section[A-H].pdf, SWMPP Section E updated October 2018)	SWMPP Section A SWMPP Section E SWMPP Section H
Trash Reduction Plan (SWMPP-SectionE.pdf)	In entirety

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

3. On-Site Evaluation

On 21 May 2019, the Audit Team held a kickoff meeting at Daniel K. Inouye International Airport with Airports Division staff and consultants.

Next, the Audit Team drove to the HNL Maintenance Baseyard located at 2919 Aolele Street and met with facility personnel. The Audit Team then conducted an inspection of the baseyard, accompanied by Airports Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

Photographs taken during the On-Site Evaluation can be found in Section 4.

4. On-Site Evaluation Photos

Photographs are provided on the subsequent pages below.



AIR-EE Photo 2.1.1
Impervious Maintenance Area



AIR-EE Photo 2.1.2
Impervious Maintenance Area



AIR-EE Photo 2.1.3
Impervious Maintenance Area



AIR-EE Photo 2.1.4
Impervious Maintenance Area



AIR-EE Photo 2.1.5
Driveway Near Fueling Area



AIR-EE Photo 2.1.6
Employee Parking Area Looking Southeast



AIR-EE Photo 2.1.7
Employee Parking Area Looking Towards Storm Drain 3908



AIR-EE Photo 2.1.8
Employee Parking Area Looking Northwest



AIR-EE Photo 2.1.9
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.10
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.11
Base Outfall 02



AIR-EE Photo 2.1.12
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.13
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.14
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.15
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.16
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.17
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.18
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.19
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.20
Inside Storm Drain 3912



AIR-EE Photo 2.1.21
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.22
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.23
Concrete Channel near Employee Parking Area



AIR-EE Photo 2.1.24
Area North of Landscape Nursery



AIR-EE Photo 2.1.25
Area North of Landscape Nursery



AIR-EE Photo 2.1.26
Property Boundary



AIR-EE Photo 2.1.27
Employee Parking Area Looking East



AIR-EE Photo 2.1.28
Base Outfall 01



AIR-EE Photo 2.1.29
Base Outfall 01



AIR-EE Photo 2.1.30
Covered Waste Receptacle in Employee Parking Area



AIR-EE Photo 2.1.31
Temporary Equipment Storage



AIR-EE Photo 2.1.32
Temporary Equipment Storage



AIR-EE Photo 2.1.33
Temporary Equipment Storage Area



AIR-EE Photo 2.1.34
Temporary Equipment Storage Area



AIR-EE Photo 2.1.35
Temporary Equipment Storage Area



AIR-EE Photo 2.1.36
Temporary Equipment Storage Area



AIR-EE Photo 2.1.37
Temporary Equipment Storage Area



AIR-EE Photo 2.1.38
Old Oil Stain



AIR-EE Photo 2.1.39
Temporary Equipment Storage



AIR-EE Photo 2.1.40
Used Oil AST



AIR-EE Photo 2.1.41
Used Oil AST



AIR-EE Photo 2.1.42
Old Oil Staining near Used Oil AST



AIR-EE Photo 2.1.43
Storm Drain 5504



AIR-EE Photo 2.1.44
Storm Drain 5504



AIR-EE Photo 2.1.45
Storm Drain 5504 (with Safe Drain)



AIR-EE Photo 2.1.46
Covered Fueling Area



AIR-EE Photo 2.1.47
Fueling Area



AIR-EE Photo 2.1.48
Fueling Area



AIR-EE Photo 2.1.49
Spill Kit for Fueling Area



AIR-EE Photo 2.1.50
Spill Kit for Fueling Area



AIR-EE Photo 2.1.51
Storm Drain 5502



AIR-EE Photo 2.1.52
Storm Drain 5502 (with Safe Drain)



AIR-EE Photo 2.1.53
Material Storage Building



AIR-EE Photo 2.1.54
Material Storage Building



AIR-EE Photo 2.1.55
Material Storage Building



AIR-EE Photo 2.1.56
Covered Material Storage on Secondary Containment



AIR-EE Photo 2.1.57
Covered Materials Storage in Secondary Containment



AIR-EE Photo 2.1.58
Covered Equipment Storage



AIR-EE Photo 2.1.59
Covered Equipment Storage



AIR-EE Photo 2.1.60
Driveway Looking Northeast (Towards Main Gate)



AIR-EE Photo 2.1.61
Driveway Looking Southwest



AIR-EE Photo 2.1.62
Storm Drain 5500



AIR-EE Photo 2.1.63
Recyclable Material/Spent Lead Acid Battery Storage



AIR-EE Photo 2.1.64
Recyclable Material/Spent Lead Acid Battery Storage



AIR-EE Photo 2.1.65
Hazardous Herbicide Room



AIR-EE Photo 2.1.66
Storm Drain 5499



AIR-EE Photo 2.1.67
Recyclable Material/Spent Lead Acid Battery Storage



AIR-EE Photo 2.1.68
Storm Drain 5500 (With Safe Drain)



AIR-EE Photo 2.1.69
Storm Drain 5500 (With Safe Drain)



AIR-EE Photo 2.1.70
Parts and Machines Storage Area



AIR-EE Photo 2.1.71
Parts and Machines Storage Area



AIR-EE Photo 2.1.72
Parts and Machines Storage Area



AIR-EE Photo 2.1.73
Parts and Machines Storage Area



AIR-EE Photo 2.1.74
Drip Pan Under Equipment



AIR-EE Photo 2.1.75
Parts and Machines Storage Area



AIR-EE Photo 2.1.76
Materials Stored off of Ground



AIR-EE Photo 2.1.77
Property Boundary Along Airport Access Road



AIR-EE Photo 2.1.78
Property Boundary Along Airport Access Road



AIR-EE Photo 2.1.79
Storm Drain 10230



AIR-EE Photo 2.1.80
Equipment Parking Area



AIR-EE Photo 2.1.81
Equipment Parking Area



AIR-EE Photo 2.1.82
Equipment Parking Area



AIR-EE Photo 2.1.83
Equipment Parking Area



AIR-EE Photo 2.1.84
Covered Equipment Storage Area



AIR-EE Photo 2.1.85
Covered Tire Storage Area



AIR-EE Photo 2.1.86
Vehicle Awaiting Repair in Equipment Parking Area



AIR-EE Photo 2.1.87
Covered Parking Area



AIR-EE Photo 2.1.88
Covered Parking Area



AIR-EE Photo 2.1.89
Covered Parking Area



AIR-EE Photo 2.1.90
Equipment Storage



AIR-EE Photo 2.1.91
Equipment and Material Storage



AIR-EE Photo 2.1.92
Material Storage



AIR-EE Photo 2.1.93
Material Storage



AIR-EE Photo 2.1.94
Material Storage



AIR-EE Photo 2.1.95
Storm Drain 5496



AIR-EE Photo 2.1.96
Storm Drain 5496



AIR-EE Photo 2.1.97
Covered Waste Receptacle



AIR-EE Photo 2.1.98
Base Outfall 04



AIR-EE Photo 2.1.99
Kaloaloe Canal Looking Towards Base Outfall 03 and 05



AIR-EE Photo 2.1.100
Equipment Storage



AIR-EE Photo 2.1.101
Equipment Storage



AIR-EE Photo 2.1.102
Equipment Storage



AIR-EE Photo 2.1.103
Aggregate Storage Area



AIR-EE Photo 2.1.104
Aggregate Storage and Sweeper Washout Area



AIR-EE Photo 2.1.105
Equipment Parking



AIR-EE Photo 2.1.106
Waste Bin Area



AIR-EE Photo 2.1.107
Waste Bin Area



AIR-EE Photo 2.1.108
Waste Bin Area



AIR-EE Photo 2.1.109
Waste Bin Area



AIR-EE Photo 2.1.110
Waste Bin Area



AIR-EE Photo 2.1.111
Waste Bin Area



AIR-EE Photo 2.1.112
Waste Bin Area



AIR-EE Photo 2.1.113
Waste Bin Area



AIR-EE Photo 2.1.114
Equipment Parking Area



AIR-EE Photo 2.1.115
Equipment Parking Area



AIR-EE Photo 2.1.116
Equipment Parking Area



AIR-EE Photo 2.1.117
Equipment Parking Area



AIR-EE Photo 2.1.118
Equipment Parking Area



AIR-EE Photo 2.1.119
Vehicle Leaking Oil in Equipment Parking Area



AIR-EE Photo 2.1.120
Vehicle Leaking Oil in Equipment Parking Area



AIR-EE Photo 2.1.121
Vehicle Leaking Oil in Equipment Parking Area



AIR-EE Photo 2.1.122
Vehicle Leaking Oil in Equipment Parking Area



AIR-EE Photo 2.1.123
Equipment Parking Area



AIR-EE Photo 2.1.124
Equipment Parking Area



AIR-EE Photo 2.1.125
Equipment Parking Area



AIR-EE Photo 2.1.126
T-Hangar Converted Storage Area



AIR-EE Photo 2.1.127
Outdoor Metal Stockpiles



AIR-EE Photo 2.1.128
Outdoor Metal Stockpiles



AIR-EE Photo 2.1.129
Outdoor Metal Stockpiles



AIR-EE Photo 2.1.130
Area Near Storage Shed



AIR-EE Photo 2.1.131
Area Near Storage Shed



AIR-EE Photo 2.1.132
Area Near Storage Shed



AIR-EE Photo 2.1.133
Chemical Bottles Observed Outside



AIR-EE Photo 2.1.134
Landscape Nursery



AIR-EE Photo 2.1.135
Landscape Nursery



AIR-EE Photo 2.1.136
Landscape Nursery



AIR-EE Photo 2.1.137
West of Landscape Nursery



AIR-EE Photo 2.1.138
West of Landscape Nursery



AIR-EE Photo 2.1.139
West of Landscape Nursery



AIR-EE Photo 2.1.140
West of Landscape Nursery



AIR-EE Photo 2.1.141
Grounds Maintenance Building



AIR-EE Photo 2.1.142
Grounds Maintenance Building



AIR-EE Photo 2.1.143
Grounds Maintenance Building



AIR-EE Photo 2.1.144
Grounds Maintenance Building



AIR-EE Photo 2.1.145
Grounds Maintenance Building



AIR-EE Photo 2.1.146
Grounds Maintenance Building



AIR-EE Photo 2.1.147
Grounds Maintenance Building



AIR-EE Photo 2.1.148
Aggregate Storage



AIR-EE Photo 2.1.149
Aggregate Storage



AIR-EE Photo 2.1.150
Aggregate Storage



AIR-EE Photo 2.1.151
Aggregate Storage



AIR-EE Photo 2.1.152
Aggregate Storage



AIR-EE Photo 2.1.153
Green House Area



AIR-EE Photo 2.1.154
Green House Area



AIR-EE Photo 2.1.155
Old Oil Stains in Equipment Parking Area



AIR-EE Photo 2.1.156
Equipment Parking Area



AIR-EE Photo 2.1.157
Equipment Parking Area



AIR-EE Photo 2.1.158
Equipment Parking Area



AIR-EE Photo 2.1.159
Equipment Parking Area



AIR-EE Photo 2.1.160
Equipment Parking Area



AIR-EE Photo 2.1.161
Paint Shop



AIR-EE Photo 2.1.162
Paint Storage in Secondary Containment



AIR-EE Photo 2.1.163
Covered Waste Receptacle



AIR-EE Photo 2.1.164
Paint Storage Area



AIR-EE Photo 2.1.165
Material Storage on Secondary Containment



AIR-EE Photo 2.1.166
Labeled Empty Drums



AIR-EE Photo 2.1.167
Chemical Storage Cabinet on Secondary Containment



AIR-EE Photo 2.1.168
Recyclable Materials

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

5. Potential Violations

Potential Violation Tracking #1 applies to this permit. Please see pages B2-6 through B2-10.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Final Notice of Potential Violation

Potential Violation Tracking #: 1

Determination of Potential Violation Date: 6/3/2019

Potential Violation Notification Date: 6/5/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

As reported in Section 2.3 of Airports Division's Annual Monitoring Report (2017-2018) for the Daniel K. Inouye International Airport (HNL), there have been consistent exceedances of stormwater discharge limits for total phosphorous, total nitrogen, and nitrate + nitrite at the HNL Maintenance Baseyard since the permit was issued in 2014. Copper has consistently been in exceedance except for one sampling event during the current permit term, and zinc has been in exceedance for every sampling event.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.:

HI S000005 Part C.2: "... discharge shall not cause or contribute to a violation of any of the applicable beneficial uses or water quality objectives contained in HAR, Chapter 11-54, titled "Water Quality Standards."

HI S000005 Part F.2. {1}.: "Pollutant concentration levels shall not exceed the stormwater discharge limits or be outside the ranges indicated in the table."

HI S000005 Part F.2.{4}.: "Monitor and Report. The value shall not exceed the applicable limit as specified in Chapter 11-54 for the applicable classification of the receiving state waters."

SWMPP: Not Applicable.

Hawaii Administrative Rules (HAR): Not Applicable.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☒ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: **6/19/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - o Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 1 Potential Violation Notification Date: **6/5/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/19/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

SUMMARY - For details see attachment titled “Corrective Actions for PEAR 5 Potential Violation #1”:

Department of Transportation, Airports Division (DOTA) has implemented the following corrective actions for Potential Violation (PV) Tracking #1 related to exceedances reported within Section 2.3 of DOTA’s Annual Monitoring Report (2017–2018) for the Daniel K. Inouye International Airport (HNL), previously known as Honolulu International Airport.

There were two sampling events during the 2017–2018 reporting year, on 29 August 2017 and on 26 December 2017. In November 2017, between these sampling events, five metal-reducing drain inlet filters were installed (refer to Section 2.5 of the 2017–2018 Annual Monitoring Report). These multi-layer filter cartridges have filter media and boom designed to treat dissolved and particulate metals.

In response to monitoring exceedances, DOTA has implemented numerous measures to reduce pollutants subject to the Best Available Technology (BAT)/Best Conventional Pollutant Control Technology (BCT) currently available in accordance with Permit

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Part B.4. These pollutant-reducing corrective actions are described below and in the latest Annual Monitoring Plan for Fiscal Year 2020 [Storm Water Management Program Plan (SWMPP) Section H, April 2019].

- DOTA increased the sweeping frequency at the HNL Maintenance Baseyard to weekly instead of twice a month to target exceeded parameters, since dissolved metals and nutrients can attach to suspended particles. Sweeping will be conducted in accordance with weather conditions, surface traffic, area access, and maintenance worker safety considerations.
- On 27 March 2019, DOTA implemented a temporary source control Best Management Practice (BMP) by painting the metal surfaces with corrosion-inhibiting paint, replacing corroded fencing, and sweeping the area to remove the rust flakes.
- On 6 May 2019, DOTA also installed a temporary BMP, a drain protector mat (specifically, a GR8 Guard), at drain inlet EID 5499, the inlet closest to the covered parking structure that was severely rusting. This drain protector mat will provide another level of protection to capture any rusted metal flakes and sediment.

DOTA will sample during the next representative storm event to measure the effectiveness of recently implemented BMPs including the painting of the metal covered parking structure, the installation of the GR8 Guard, and more frequent HNL Maintenance Baseyard sweeping. If the next sample event has exceedances, DOTA will report any exceedance in accordance with Section 4.2.3 of the SWMPP Section H, collect samples from the subsequent representative storm event to monitor exceedance parameters for compliance with effluent limits, and will use an adaptive management approach to evaluate and implement potential BMPs/Permanent BMPs (PBMPs).

Additionally, DOTA has plans to implement the following future actions to help reduce stormwater sampling exceedances from HNL Maintenance Baseyard:

- A construction project for the Heavy Equipment Garage at the HNL Maintenance Baseyard (AO1142-15), which will provide shelter for heavy equipment; thus, lessening the potential impact to stormwater. The project bid opening was on 24 May 2018; the project was awarded to Molina Engineering; and a pre-construction meeting was held on 3 April 2019. This project could reduce exposure of parking and maintenance activities of heavy equipment that currently do not fit under the existing auto shop.
 - o Project Construction Start – September 2019.
 - o Project Construction Completion – Estimated to be December 2020.
- Maintenance of the five drain inlet inserts (replacing the filter media and the booms) will be conducted under the Inspection, Maintenance, and Pollution Prevention of MS4 Contract (BS1927-23), which has been awarded to Weston Solutions and is anticipated to begin in August 2019. With this contract, DOTA has the ability to authorize the contractor to replace the filter media more frequently, such that pollutants that could potentially leach from the filter media do not affect the stormwater.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

DOTA is committed to continuing to research and implement additional BMPs if subsequent stormwater sampling events do not show an appropriate reduction in parameters previously detected as exceedances.

In summary, DOTA will continue to report exceedances and take steps to implement various BMPs in order to reduce, eliminate, and prevent reoccurrences of the exceedances in accordance with its Permit and the HAR, Chapter 11-55, Appendix B, Sections 10(b)(2) and 10(c).

Description of Attachments (if applicable):

Corrective Actions for PEAR 5 Potential Violation #1



Program Element Audit Report (PEAR) 5
**Pollution Prevention/
Good Housekeeping Program**
Corrective Actions for
Draft Notice of Potential Violation



Description of Corrective Action:

Department of Transportation, Airports Division (DOTA) has implemented the following corrective actions for Potential Violation (PV) Tracking #1 related to exceedances reported within Section 2.3 of DOTA's Annual Monitoring Report (2017–2018) for the Daniel K. Inouye International Airport (HNL), previously known as Honolulu International Airport.

Section 2.3 of the 2017–2018 Annual Monitoring Report states:

Since the MS4 [Municipal Separate Storm Sewer System] Permit took effect on 4/14/2014, there has been consistent exceedances for total phosphorous, total nitrogen, and nitrate + nitrite. These exceedances were previously not known to DOTA due to unit errors of the effluent limits. Since these exceedances were discovered this year, DOTA is unable to determine the reasons for these past exceedances. Future stormwater monitoring analysis will take into account these past exceedances, and if exceedances occur, DOTA will evaluate the reasons why.

Except for one sampling event during the current permit term, copper has consistently been in exceedance, and zinc has been in exceedance for every sampling event. It is hoped that the five-drain inlet filter PBMPs [Permanent Best Management Practices] installed this year [2017] will help lower the concentration of metals.

There were two sampling events during the 2017–2018 reporting year, on August 29, 2017 and on December 26, 2017. In November 2017, between these sampling events, five metal-reducing drain inlet filters were installed (refer to Section 2.5 of the 2017–2018 Annual Monitoring Report). These multi-layer filter cartridges have filter media designed to treat dissolved and particulate metals. The five drains also have a fitted boom to further aid in absorbing and filtering metals. While there were still metal exceedances for the December 26, 2017 sampling event, DOTA decided that more sampling was needed to determine the effectiveness of the drain inlet filters. Furthermore, in May 2018, DOTA moved the sample location for HNL 003 approximately 10 feet upline from the previous location. The area-velocity flow sensor, the multi-parameter sonde, and the strainer were relocated to the 24-inch pipe upline before entering the oil water separator (OWS) due to the observed tidal influence from Kaloaloa Canal within the pipe from OWS to outfall 4576 (refer to Section 2.5 of the 2017–2018 Annual Monitoring Report and Section 2.2 of the Annual Monitoring Plan for Fiscal Year 2019). DOTA did this in order to collect a more representative sample of stormwater runoff from the HNL Maintenance Baseyard.

During the 2018–2019 reporting year, DOTA has continued to sample each representative storm event since there have been exceedances. There have been four representative sampling events so far during this reporting year: September 12, 2018; October 26, 2018; December 18, 2018; and December 28, 2018. The exceedances from these sampling events include total phosphorous, total nitrate, nitrate + nitrite, ammonia nitrogen, turbidity, copper and zinc, with the exception of less nutrient exceedances during the September 12, 2018 and October 26, 2018 events. DOTA has conducted multiple site visits during rain events to re-evaluate stormwater flow at the HNL



Program Element Audit Report (PEAR) 5 Pollution Prevention/ Good Housekeeping Program Corrective Actions for Draft Notice of Potential Violation



Maintenance Baseyard and possible causes of the exceedances. In response to monitoring exceedances, DOTA has implemented numerous measures to reduce pollutants subject to the Best Available Technology (BAT)/Best Conventional Pollutant Control Technology (BCT) currently available in accordance with Permit Part B.4. These pollutant reducing corrective actions are described below and in the latest Annual Monitoring Plan for Fiscal Year 2020 (Storm Water Management Program Plan [SWMPP] Section H, April 2019).

DOTA increased the sweeping frequency at the HNL Maintenance Baseyard to weekly, instead of twice a month, to target exceeded parameters, since dissolved metals and nutrients can attach to suspended particles. Sweeping will be conducted in accordance with weather conditions, surface traffic, area access, and maintenance worker safety considerations. By removing suspended solids with increased street sweeping, DOTA will evaluate if it can reduce the metals and nutrients associated with these particles.

Since the installation of the five drain inlet filters, sampling results have unfortunately continued to exceed in metals. In response, DOTA noticed that the covered parking structure near drain inlet EID 5499 was severely rusted, resulting in metal rust flakes accumulating on the ground. On March 27, 2019, DOTA implemented a temporary source control Best Management Practice (BMP) by painting the metal surfaces with corrosion inhibiting paint, replacing the corroded fencing, and sweeping the area to remove the rust flakes (see Figures 1 through 4). This is a temporary measure until a capital improvement project can be planned to refurbish the structure.



Figure 1. Rusty Covered Parking Structure (March 13, 2019).



Figure 2. Covered Parking Structure Mitigated (March 27, 2019). Metal surfaces painted with corrosion inhibiting paint. Corroded fencing removed. Rust flakes on the ground swept up.



Program Element Audit Report (PEAR) 5 Pollution Prevention/ Good Housekeeping Program Corrective Actions for Draft Notice of Potential Violation



Figure 3. New Fence for the Covered Parking Structure (April 15, 2019).



Figure 4. New Fence for the Covered Parking Structure (April 15, 2019).

On May 6, 2019, DOTA also installed another temporary BMP, a drain protector mat (specifically a GR8 Guard), at drain inlet EID 5499, the inlet closest to the covered parking structure that was severely rusting (see Figure 5). While the covered parking structure rust issue was temporarily mitigated, this drain protector mat will provide another level of protection to capture any rusted metal flakes. It could also assist in combating the turbidity exceedances by protecting against possible loose soil from the aggregate storage area in the vicinity.



Figure 5. GR8 Guard Drain Protector Mat at Drain Inlet EID 5499.



Program Element Audit Report (PEAR) 5
**Pollution Prevention/
Good Housekeeping Program**
Corrective Actions for
Draft Notice of Potential Violation



DOTA will sample the next representative storm event to measure the effectiveness of recently implemented BMPs including the painting of the metal covered parking structure, the installation of the GR8 guard, and more frequent HNL Maintenance Baseyard sweeping. If the next sample event has exceedances, DOTA will report any exceedance in accordance with Section 4.2.3 of the SWMPP Section H, collect samples from the subsequent representative storm event to monitor exceedance parameters for compliance with effluent limits, and will use an adaptive management approach to evaluate and implement potential BMPs/PBMPs.

Additionally, DOTA has plans to implement the following future actions to help reduce stormwater sampling exceedances from HNL Maintenance Baseyard:

- DOTA has planned a construction project for the Heavy Equipment Garage at the HNL Maintenance Baseyard (AO1142-15), which will provide shelter for heavy equipment, thus lessening the potential impact to stormwater. The project bid opening was in May 24, 2018; the project was awarded to Molina Engineering; and a pre-construction meeting was held on April 3, 2019. This project could reduce exposure of parking and maintenance activities of heavy equipment that currently do not fit under the existing auto shop. Please see below for the construction schedule of the project.
 - Project Construction Start – September 2019
 - Project Construction Completion – Estimated to be December 2020
- Maintenance of the five drain inlet inserts, which involves replacing the filter media and the booms will be conducted under the Inspection, Maintenance, and Pollution Prevention of MS4 Contract (BS1927-23), which has been awarded to Weston Solutions and is anticipated to begin in August 2019. With this contract, DOTA has the ability to authorize the contractor to replace the filter media more frequently, such that pollutants that could potentially leach from the filter media do not affect the stormwater and to ensure proper maintenance of these drain inlet inserts.

DOTA is committed to continuing to research and implement additional BMPs if subsequent stormwater sampling events do not show an appropriate reduction in parameters previously detected as exceedances. Additionally, PBMPs will be researched to see if any options are feasible and allowable per Airport and FAA safety and wildlife regulations.

In summary, DOTA will continue to report exceedances and take steps to implement various BMPs in order to reduce, eliminate, and prevent reoccurrences of the exceedances in accordance with its Permit and the HAR, Chapter 11-55, Appendix B, Sections 10(b)(2) and 10(c).

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

6. Deficiencies

Deficiency Tracking #1 through #3 applies to this permit. Please see pages B2-13 through B2-32.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Final Notice of Deficiency

Deficiency Tracking #: 1

Related Permit(s): Airports Division

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed equipment stored outdoors leaking oil onto the pavement without a drip pan at the Daniel K. Inouye International Airport (HNL) Maintenance Baseyard.

Recommendations for Improvement:

Airports Division should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photographs of equipment leaking oil observed during the On-Site Audit and associated map indicating location where photographs were taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP (March 2019) Appendix V (Best Management Practices):

Page 4: "Maintain vehicles and equipment used at the facility in good operating condition. Inspect damaged vehicles and equipment for fluid leaks and repair as soon as possible. Use drip pans as necessary and empty when full."

Page 4: "Clean up spills and leaks promptly using dry methods (e.g., absorbent material) to prevent the discharge of pollutants. Use appropriate cleanup materials for the spill. Clean paved surfaces to remove oil and grease stains using degreasers and water as long as all the water is contained, captured by a vacuum, and disposed of properly."

Page 4: "Store damaged and/or leaky vehicles and equipment indoors whenever possible, and use drip pans to catch leaks if stored outdoors. DO NOT leave leaking vehicles and equipment parked overnight on the painted concrete pad area outside the maintenance shop without appropriate drainage controls."

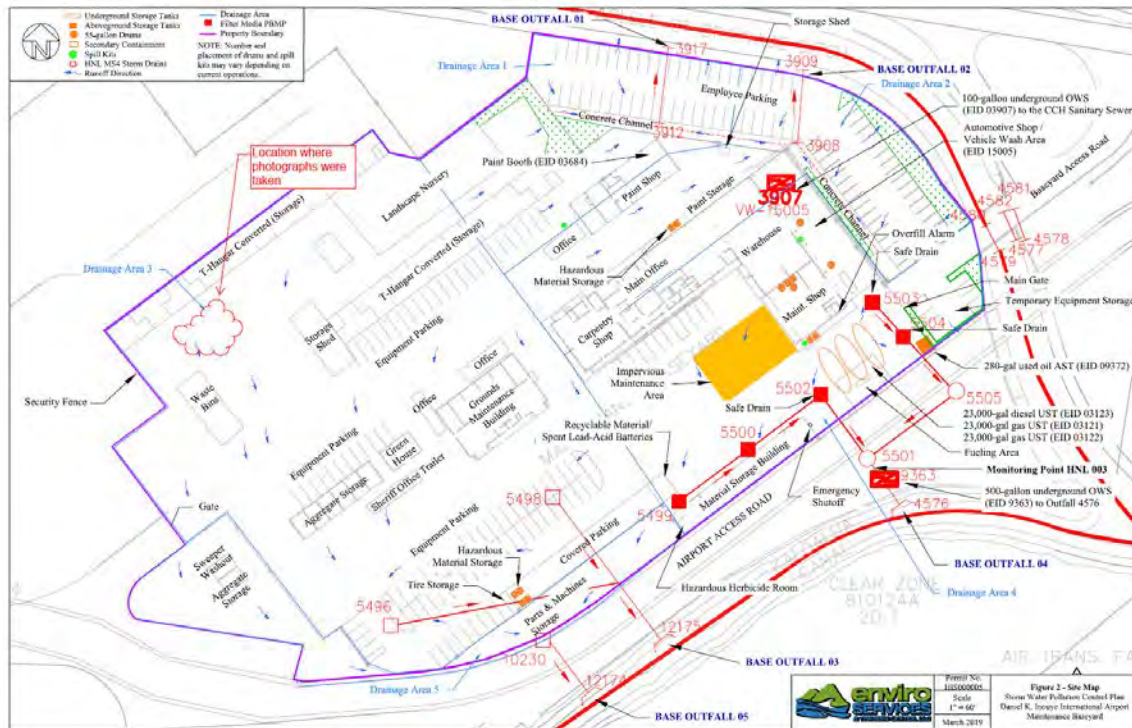
Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye
International Airport



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 1

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Department of Transportation, Airports Division (DOTA) provides the following summary of corrective actions for Deficiency Tracking #1 at the HNL Maintenance Baseyard.

During the audit, DOTA's General Construction and Maintenance Supervisor was on scene and was immediately informed of the leaking oil. The General Construction and Maintenance Supervisor stated that the Maintenance Baseyard personnel will conduct cleanup of the stain using appropriate dry cleanup methods, place a drip pan beneath the equipment, and stop and repair the cause of leak. Figures 1 and 2 below, indicate that this deficiency has been corrected.

DOTA implements the Best Management Practices (BMPs) listed in the Appendix V of the HNL Maintenance Baseyard SWPCP (March 2019) to the maximum extent practicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

DOTA has identified additional BMPs that will be implemented to assist with identifying leaks and preventive maintenance. DOTA will assign each vehicle and equipment to an assigned stall so if there is an oil leak, it can identify which vehicle or equipment is leaking.

This task will be completed by 1 September 2019. This will assist with identifying vehicles and equipment that are in need of preventive maintenance or repair and ensuring such maintenance or repair is completed.

Description of Attachments (if applicable): Figures 1 and 2, as described above.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport



Figure 1. Drip pan placed underneath the leaking equipment.



Figure 2. Stain underneath the leaking equipment cleaned.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Final Notice of Deficiency

Deficiency Tracking #: 2

Related Permit(s): Airports Division

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed metal materials stored outside and not under cover at the Daniel K. Inouye International Airport (HNL) Maintenance Baseyard.

Recommendations for Improvement:

Airports Division should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photograph of metal storage observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

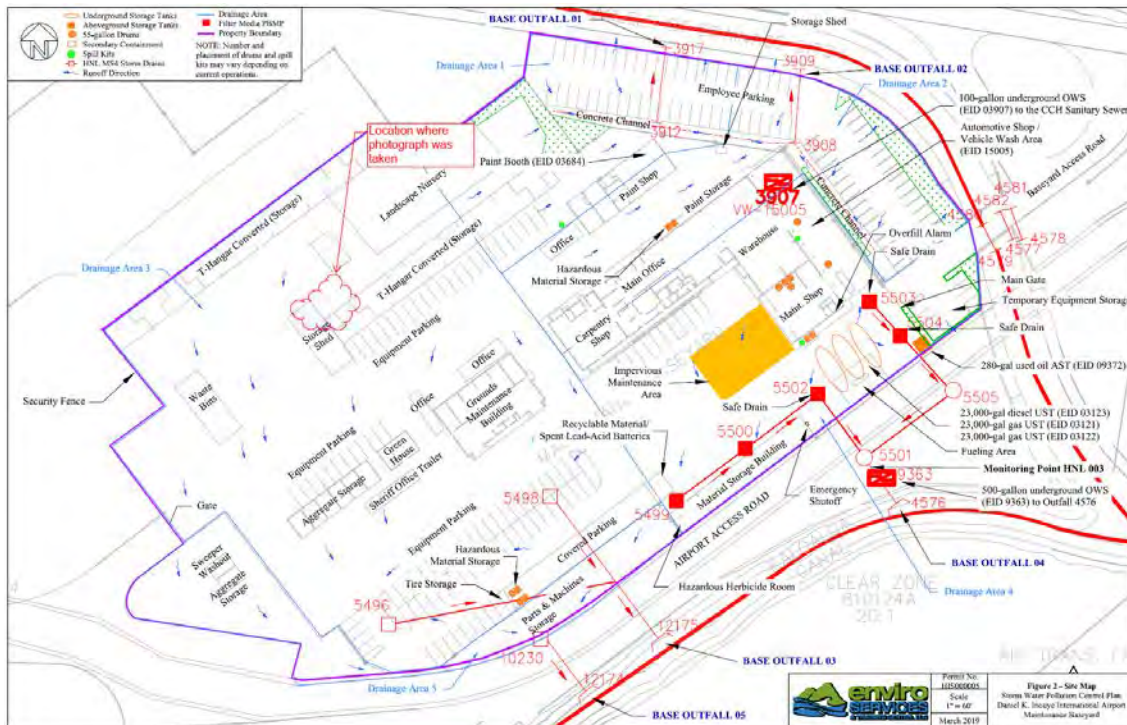
SWPCP (March 2019) Appendix V (Best Management Practices):

Page 18: “Store metal materials, such as reinforcing steel and dowels, on pallets or dunnage, and under cover, or in containers to prevent contact with rain and runoff.”

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport



Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 2

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Department of Transportation, Airports Division (DOTA) provides the following summary of corrective actions for Deficiency Tracking #2 at the HNL Maintenance Baseyard.

Following the post on-site audit debrief meeting, DOTA's General Construction and Maintenance Supervisor ensured that a cover was placed over the metals of concern in this deficiency, as evidenced on Figures 1 and 2 below. The stainless-steel materials were already stored on dunnage. This deficiency has been corrected.

DOTA implements the Best Management Practices (BMPs) listed in the Appendix V of the HNL Maintenance Baseyard SWPCP (March 2019) to the maximum extent practicable.

DOTA is also revising its HNL Maintenance Baseyard SWPCP to make it clear that the intent of covering metals is primarily to cover rusted metals, and covers will be used when feasible. There are instances where it may be infeasible to cover large or odd shaped objects using tarps due to airport safety concerns from the potential of dislodged

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

tarps becoming Foreign Object Debris (FOD) concerns. DOTA understands that rusted metals are a potential pollutant source if they come into contact with rainwater and intends to store them under cover, covered, or in containers to prevent contact with rain. Any minor modifications to the HNL Maintenance Baseyard SWPCP will be submitted to DOH along with the 2018–2019 Annual Compliance Report for HNL by 31 August 2019.

Description of Attachments (if applicable): Figures 1 and 2, as described above.

Appendix B2: Permit-Specific Information – Daniel K. Inouye
International Airport



Figure 1. Metal materials (already stored on dunnage) covered with tarp.



Figure 2. Another view of the metal materials covered and on dunnage.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Final Notice of Deficiency

Deficiency Tracking #: 3

Related Permit(s): Airports Division

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed debris (gravel) in the concrete channel by the employee parking at the Daniel K. Inouye International Airport (HNL) Maintenance Baseyard.

Recommendations for Improvement:

Airports Division should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of debris observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP (March 2019)

Page 11: "With regards to debris management, the Maintenance Baseyard shall also street sweep their facility and clean debris from the concrete channel by the Employee Parking."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 3

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Department of Transportation, Airports Division (DOTA) provides the following corrective actions for Deficiency Tracking #3 at the HNL Maintenance Baseyard.

Following the post on-site audit debrief meeting, the debris (gravel) in the concrete channel located by the employee parking lot was cleaned out, as evidenced on Figures 1 and 2 below. This deficiency has been corrected.

Additional Best Management Practice (BMP) measures were considered including the installation of a wire mesh at the PVC pipe entrances (Environmental Identification (EID) 3908 and EID 3912). However, this BMP posed flooding concerns based on the sizing of the PVC pipes. Instead, the HNL Maintenance Baseyard installed filter socks along the top edge of the concrete channel as a preventative BMP. The filter socks will prevent the source of debris (gravel) from the source (operations side of canal), from entering the concrete channel, as evidenced on Figures 1, 3, and 4.

Appendix B2: Permit-Specific Information – Daniel K. Inouye International Airport

DOTA implements the BMPs listed in the Appendix V of the HNL Maintenance Baseyard SWPCP (March 2019) to the maximum extent practicable. The Maintenance Baseyard is responsible for keeping the concrete channel clean and will continue to ensure that stormwater can flow freely in the channel to minimize the risk of flooding and discharge of pollutants to the receiving water.

DOTA will maintain the filter socks to ensure they prevent the gravel from entering the concrete channel. DOTA is currently revising its HNL Maintenance Baseyard SWPCP to include maintenance of the filter socks. Any minor modifications to the HNL Maintenance Baseyard SWPCP will be submitted to DOH along with the 2018–2019 Annual Compliance Report for HNL by 31 August 2019.

Description of Attachments (if applicable): Figures 1 through 4, as described above.

Appendix B2: Permit-Specific Information – Daniel K. Inouye
International Airport



Figure 1. Debris cleaned out and filter sock placed along the concrete channel.



Figure 2. PVC pipe entrance (Environmental Identification [EID] 3908) leading to the outfall (EID 3909) cleaned out.

Appendix B2: Permit-Specific Information – Daniel K. Inouye
International Airport



Figure 3. Another view of the debris cleaned out and filter sock placed along the concrete channel.



Figure 4. Another view of the debris cleaned out and filter sock placed along the concrete channel.

Appendix B3

Permit-Specific Information – Honolulu Harbor

Appendix B3: Permit-Specific Information – Honolulu Harbor

1. Key Documents

Permit Document	3. Honolulu Harbor Small MS4 Permit HI 03KB482
Latest Annual Report	DOT-HAR_2018ACR_Complete.pdf
Permit	20161202.03KB482.EXT.16.pdf
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor	DOT-HAR_StockpilePlan_2015Jan.pdf
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan)	20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf
Stormwater Web site	http://hidot.hawaii.gov/harbors/library/storm-water-management/
SWMPP	Final-SWMP-150325.pdf

Appendix B3: Permit-Specific Information – Honolulu Harbor

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (DOT- <i>HAR_2018ACR_Complete.pdf</i>)	Section 2.1 Section 3.1 Table 10 Section 4.8 Attachments 15-19
Permit (20161202.03KB482.EXT.16.pdf)	In entirety
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor (DOT- <i>HAR_StockpilePlan_2015Jan.pdf</i>)	In entirety
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan) (20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/harbors/library/storm-water-management/)	In entirety
SWMPP (Final-SWMP-150325.pdf)	Section A: 2.6, Table 2-6 Section E

Appendix B3: Permit-Specific Information – Honolulu Harbor

3. On-Site Evaluation

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's SWMPP. Honolulu Harbor did not have facilities described in their SWMPP that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for this permit.

4. On-Site Evaluation Photos

No photographs were taken, as no on-site audit was conducted for this permit.

5. Potential Violations

No Potential Violations were identified by the Audit Team for this permit.

6. Deficiencies

No Deficiencies were identified by the Audit Team for this permit.

Appendix B4

Permit-Specific Information – Kalaeloa Barbers Point Harbor

Appendix B4: Permit-Specific Information – Kalaeloa Barbers Point Harbor

1. Key Documents

<div>Permit</div> <div>Document</div>	<div>3. Honolulu Harbor</div> <div>Small MS4 Permit</div> <div>HI 03KB482</div>
Latest Annual Report	DOT-HAR_2018ACR_Complete.pdf
Permit	20161202.03KB482.EXT.16.pdf
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor	DOT-HAR_StockpilePlan_2015Jan.pdf
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan)	20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf
Stormwater Web site	http://hidot.hawaii.gov/harbors/library/storm-water-management/
SWMPP	Final-SWMP-150325.pdf

Appendix B4: Permit-Specific Information – Kalaeloa Barbers Point Harbor

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (DOT- <i>HAR_2018ACR_Complete.pdf</i>)	Section 2.1 Section 3.1 Table 10 Section 4.8 Attachments 15-19
Permit (20161202.03KB482.EXT.16.pdf)	In entirety
Pollution prevention plan for the stockpiles at Kalaeloa Barbers Point Harbor (DOT- <i>HAR_StockpilePlan_2015Jan.pdf</i>)	In entirety
Storm Sewer System Operation and Maintenance Program (SSS O&M Plan) (20160729.Storm Sewer System Operation and Maintenance Program (SSS OMP)-HI03KB482-HI03KB488.pdf)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/harbors/library/storm-water-management/)	In entirety
SWMPP (Final-SWMP-150325.pdf)	Section A: 2.6, Table 2-6 Section E

Appendix B4: Permit-Specific Information – Kalaeloa Barbers Point Harbor

3. On-Site Evaluation

EPA (2007) MS4 Program Evaluation Guidance states that in-field program evaluation activities for this PEAR are limited to those facilities described in a permittee's SWMPP. Kalaeloa Harbor did not have facilities described in their SWMPP that fall under this PEAR. As such, the Audit Team did not conduct on-site audits for this permit.

4. On-Site Evaluation Photos

No photographs were taken, as no on-site audit was conducted for this permit.

5. Potential Violations

No Potential Violations were identified by the Audit Team for this permit.

6. Deficiencies

No Deficiencies were identified by the Audit Team for this permit.

Appendix B5

Permit-Specific Information – Highways Maui District

Appendix B5: Permit-Specific Information – Highways Maui District

1. Key Documents

<div>Permit</div> <div>Document</div>	<div>5. Maui District</div> <div>Small MS4 Permit</div> <div>HI 15KE674</div>
Latest Annual Report	Annual_Report_2018-HDOTMauiSWMP-WAtt.pdf
Permit	NGPC2015-04-02HI15KE674.pdf 20161122 NGPC Extension HI 15KE674 EXT 16.pdf
Storm Water Pollution Control Plans for Facilities to be Audited	5. Appx-F.2-Kahului-Baseyard-SWPCP-Nov-2016.pdf
Stormwater Web site	http://hidot.hawaii.gov/stormwater/storm-water-management/maui/swmp/ http://hidot.hawaii.gov/stormwater/storm-water-management/maui/ http://stormwatermaui.com/
SWMPP	Maui-Storm-Water-Managment-Plan-Dec-2016.pdf Plus Appendices

Appendix B5: Permit-Specific Information – Highways Maui District

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Latest Annual Report (<i>Annual_Report_2018-HDOTMauiSWMP-WAtt.pdf</i>)	Section 2.2.6 Section 2.4.5 Section 3.4 Section 6
Permit (<i>NGPC2015-04-02HI15KE674.pdf, 20161122 NGPC Extension HI 15KE674 EXT 16.pdf</i>)	In entirety
Storm Water Pollution Control Plans for Facilities to be Audited (<i>5. Appx-F.2-Kahului-Baseyard-SWPCP-Nov-2016.pdf</i>)	In entirety
Stormwater Web site (http://hidot.hawaii.gov/stormwater/storm-water-management/maui/swmp/ , http://hidot.hawaii.gov/stormwater/storm-water-management/maui/ , http://stormwatermaui.com/)	In entirety
SWMPP (<i>Maui-Storm-Water-Managment-Plan-Dec-2016.pdf</i>)	Section 1.2.2 Table 1-2 Section 3.2.2.1 Section 6

Appendix B5: Permit-Specific Information – Highways Maui District

3. On-Site Evaluation

20 May 2019

On 20 May 2019, the Audit Team held a kickoff meeting at Highways Maui District with Highways Division staff and consultants. Photographs taken during the On-Site Evaluation can be found in Section 4.

Facility #1 HWY-M Kahului Baseyard, 650 Palapapa Dr.

The Audit Team then conducted an inspection of the HWY-M Kahului baseyard, accompanied by Highways Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

Facility #2 HAR-M Kahului Harbor Baseyard, 103 Ala Luina St.

The Audit Team then drove to HAR-M Kahului Harbor baseyard and conducted an inspection of the boat and oil storage shed, accompanied by Highways and Harbors Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

4. On-Site Evaluation Photos

Photographs are provided on the subsequent pages below.



HAR-M Photo 5.1.1
Vessel berthed in MS4 area



HAR-M Photo 5.1.2
Vessel berthed in MS4 area



HAR-M Photo 5.1.3
Vessel berthed in MS4 area



HAR-M Photo 5.1.4
Vessel berthed in MS4 area



HAR-M Baseyard Photo 5.1.5
Concrete containment building



HAR-M Baseyard Photo 5.1.6
Concrete containment building



HAR-M Baseyard Photo 5.1.7
Concrete containment building



HAR-M Baseyard Photo 5.1.8
Concrete containment building



HAR-M Baseyard Photo 5.1.9
Concrete containment building



HAR-M Baseyard Photo 5.1.10
Concrete containment building



HAR-M Baseyard Photo 5.1.11
Concrete containment building



HAR-M Baseyard Photo 5.1.12
Concrete containment building

Facility: HAR-M Baseyard, 103 Ala Luina St.

Date Photos Taken: 20 May 2019 (10:15am – 10:30 am)

Photographer: Kennedy/Jenks Consultants



HAR-M Baseyard Photo 5.1.13
Concrete containment building



HAR-M Baseyard Photo 5.1.14
Concrete containment building



HWY-M Photo 5.2.1
Parking Area (Sampling Location 2)



HWY-M Photo 5.2.2
Parking Area



HWY-M Photo 5.2.3
Parking Area



HWY-M Photo 5.2.4
Parking Area



HWY-M Photo 5.2.5
Parking Area



HWY-M Photo 5.2.6
Sampling Location 1



HWY-M Photo 5.2.7
Parking Area



HWY-M Photo 5.2.8
Sampling Location 1



HWY-M Photo 5.2.9
Sampling Location 1



HWY-M Photo 5.2.10
Sampling Location 1



HWY-M Photo 5.2.11
Sampling Location 1



HWY-M Photo 5.2.12
Sampling Location 1



HWY-M Photo 5.2.13
Sampling Location 1



HWY-M Photo 5.2.14
Sampling Location 1



HWY-M Photo 5.2.15
Sampling Location 1



HWY-M Photo 5.2.16
Sampling Location 1



HWY-M Photo 5.2.17
Sampling Location 1



HWY-M Photo 5.2.18
Sampling Location 1



HWY-M Photo 5.2.19
Driveway



HWY-M Photo 5.2.20
Driveway



HWY-M Photo 5.2.21
Driveway



HWY-M Photo 5.2.22
Driveway



HWY-M Photo 5.2.23
Parking Area



HWY-M Photo 5.2.24
Parking Area



HWY-M Photo 5.2.25
Parking Area



HWY-M Photo 5.2.26
Parking Area



HWY-M Photo 5.2.27
Parking Area



HWY-M Photo 5.2.28
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.29
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.30
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.31
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.32
Equipment Parking Area



HWY-M Photo 5.2.33
Equipment Parking Area



HWY-M Photo 5.2.34
Metals Storage Bin



HWY-M Photo 5.2.35
Metals Storage Bin



HWY-M Photo 5.2.36
Metals Storage Bin



HWY-M Photo 5.2.37
Metals Storage Bin



HWY-M Photo 5.2.38
Metals Storage Bin



HWY-M Photo 5.2.39
Metals Storage Bin



HWY-M Photo 5.2.40
Corner Near Metals Storage Bin



HWY-M Photo 5.2.41
Corner Near Metals Storage Bin



HWY-M Photo 5.2.42
Equipment Parking Area



HWY-M Photo 5.2.43
Equipment Parking Area



HWY-M Photo 5.2.44
Equipment Parking Area



HWY-M Photo 5.2.45
Equipment Parking Area



HWY-M Photo 5.2.46
Equipment Parking Area



HWY-M Photo 5.2.47
Equipment Parking Area



HWY-M Photo 5.2.48
Equipment Parking Area



HWY-M Photo 5.2.49
Equipment Parking Area



HWY-M Photo 5.2.50
Equipment Parking Area



HWY-M Photo 5.2.51
Equipment Parking Area



HWY-M Photo 5.2.52
Equipment Parking Area



HWY-M Photo 5.2.53
Equipment Parking Area



HWY-M Photo 5.2.54
Equipment Parking Area



HWY-M Photo 5.2.55
Equipment Parking Area



HWY-M Photo 5.2.56
Equipment Parking Area



HWY-M Photo 5.2.57
Equipment Parking Area



HWY-M Photo 5.2.58
Equipment Parking Area



HWY-M Photo 5.2.59
Equipment Parking Area



HWY-M Photo 5.2.60
Equipment Parking Area



HWY-M Photo 5.2.61
Equipment Parking Area Corner Near Haleakala Hwy



HWY-M Photo 5.2.62
Equipment Parking Area Corner Near Haleakala Hwy



HWY-M Photo 5.2.63
Equipment Parking Area Corner Near Haleakala Hwy



HWY-M Photo 5.2.64
Equipment Parking Area (facing north)



HWY-M Photo 5.2.65
Equipment Parking Area (facing north)



HWY-M Photo 5.2.66
Equipment Parking Area (facing east)



HWY-M Photo 5.2.67
Equipment Parking Area (facing east)



HWY-M Photo 5.2.68
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.69
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.70
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.71
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.72
Grated Drain Inlet/Dry Well



HWY-M Photo 5.2.73
Metal Storage Area



HWY-M Photo 5.2.74
Metal Storage Area



HWY-M Photo 5.2.75
Metal Storage Area



HWY-M Photo 5.2.76
Metal Storage Area



HWY-M Photo 5.2.77
Metal Storage Area



HWY-M Photo 5.2.78
Metal Storage Area



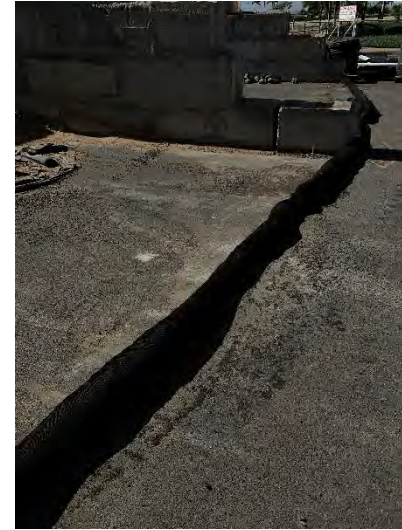
HWY-M Photo 5.2.79
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.80
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.81
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.82
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.83
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.84
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.85
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.86
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.87
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.88
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.89
Sand, Gravel, & Aggregate Storage Area



HWY-M Photo 5.2.90
Truck Storage Shed



HWY-M Photo 5.2.91
Truck Storage Shed



HWY-M Photo 5.2.92
Truck Storage Shed



HWY-M Photo 5.2.93
Truck Storage Shed



HWY-M Photo 5.2.94
Truck Storage Shed



HWY-M Photo 5.2.95
Truck Storage Shed



HWY-M Photo 5.2.96
Truck Storage Shed



HWY-M Photo 5.2.97
Truck Storage Shed Oil Leak



HWY-M Photo 5.2.98
Truck Storage Shed Oil Leak



HWY-M Photo 5.2.99
Used Oil Shed



HWY-M Photo 5.2.100
Used Oil Shed



HWY-M Photo 5.2.101
Mobile Equipment Parking



HWY-M Photo 5.2.102
Mobile Equipment Parking



HWY-M Photo 5.2.103
Vehicle and Equipment Wash Area



HWY-M Photo 5.2.104
Vehicle and Equipment Wash Area



HWY-M Photo 5.2.105
Grated Drain Inlet



HWY-M Photo 5.2.106
Grated Drain Inlet



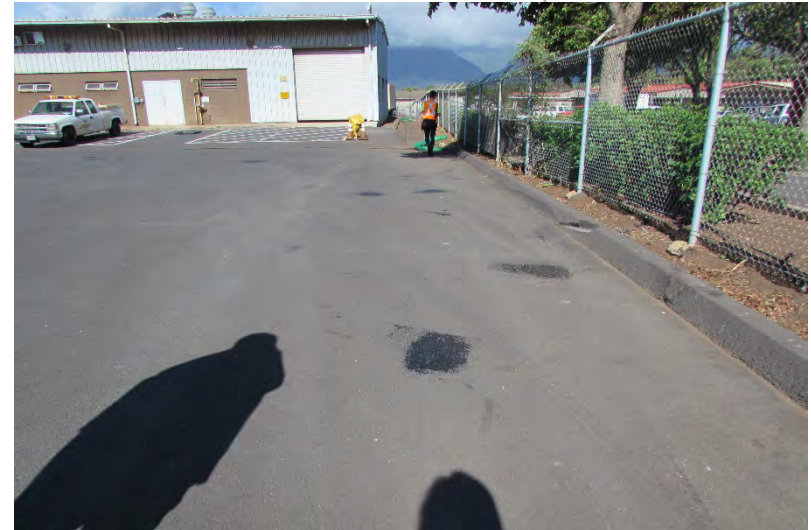
HWY-M Photo 5.2.107
Grated Drain Inlet



HWY-M Photo 5.2.108
Mobile Equipment Parking and Repair Shop Area



HWY-M Photo 5.2.109
Repair Shop and Maintenance Shop Area



HWY-M Photo 5.2.110
Repair Shop and Maintenance Shop Area



HWY-M Photo 5.2.111
Grated Drain Inlet



HWY-M Photo 5.2.112
Grated Drain Inlet



HWY-M Photo 5.2.113
Parking Area (that discharges to Grated Drain Inlet)



HWY-M Photo 5.2.114
Grated Drain Inlet



HWY-M Photo 5.2.115
Maintenance Shop Parking Area



HWY-M Photo 5.2.116
Maintenance Shop along Mua Street



HWY-M Photo 5.2.116
Maintenance Shop along Mua Street



HWY-M Photo 5.2.117
Grated Drain Inlet



HWY-M Photo 5.2.118
Grated Drain Inlet



HWY-M Photo 5.2.119
Grated Drain Inlet



HWY-M Photo 5.2.120
Offices (Near Mua Street)



HWY-M Photo 5.2.121
Maintenance Office and Shop Parking Area



HWY-M Photo 5.2.122
Maintenance Office and Shop Parking Area



HWY-M Photo 5.2.123
Shade Structure and Shipping Containers



HWY-M Photo 5.2.124
Water Containers (Under Shade Structure)



HWY-M Photo 5.2.125
Equipment Parking Area



HWY-M Photo 5.2.126
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.127
Fueling Area Asphalt Seal



HWY-M Photo 5.2.128
Fueling Area



HWY-M Photo 5.2.129
Fueling Area



HWY-M Photo 5.2.130
Fueling Area



HWY-M Photo 5.2.131
Covered Fueling Area



HWY-M Photo 5.2.132
Covered Fueling Area



HWY-M Photo 5.2.133
Asphalt Seal near Fueling Area



HWY-M Photo 5.2.134
Asphalt Seal near Fueling Area



HWY-M Photo 5.2.135
Fueling Area



HWY-M Photo 5.2.136
Fueling Area ASTs and Spill Kit



HWY-M Photo 5.2.137
Fueling Area Spill Kit



HWY-M Photo 5.2.138
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.139
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.140
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.141
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.142
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.143
Equipment Parking Area Asphalt Seal



HWY-M Photo 5.2.144
Covered Waste Receptacle



HWY-M Photo 5.2.145
Property Boundary Along Mua Street



HWY-M Photo 5.2.146
Property Boundary Along Mua Street



HWY-M Photo 5.2.147
Property Boundary Along Mua Street (near Document Storage)



HWY-M Photo 5.2.148
Property Boundary Along Mua Street (near Main Office)



HWY-M Photo 5.2.149
Employee Parking Area



HWY-M Photo 5.2.150
Potential Discharge Location from Drainage Area



HWHWY-M Photo 5.2.151
Potential Discharge Location from Drainage Area



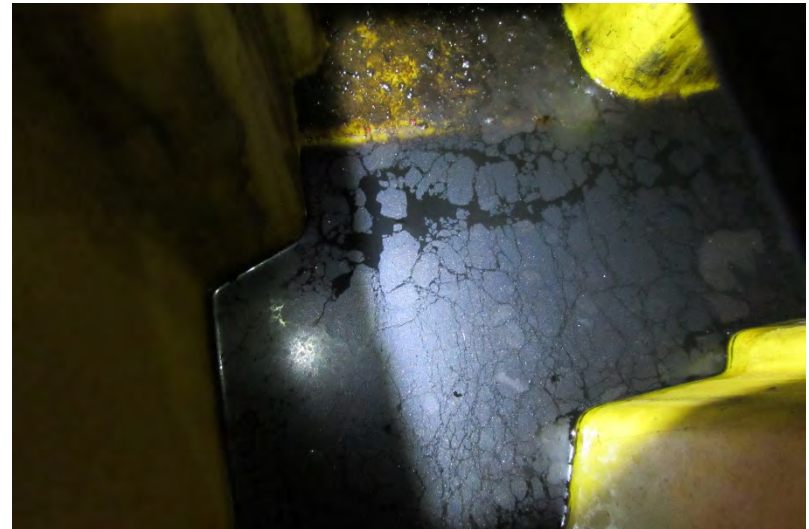
HWY-M Photo 5.2.152
Chemical Storage in Maintenance Office & Shop



HWY-M Photo 5.2.153
Chemical Storage in Maintenance Office & Shop



HWY-M Photo 5.2.154
Chemical Storage in Maintenance Office & Shop



HWY-M Photo 5.2.155
Product Buildup in Secondary Containment

Appendix B5: Permit-Specific Information – Highways Maui District

5. Potential Violations

Potential Violation Tracking #2 through #5 apply to this permit. Please see pages B5-6 through B5-20.

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Potential Violation

Potential Violation Tracking #: 2

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

During the On-Site Audit, the Audit Team observed a facility outfall in the southwestern corner of the Highways Maui District Kahului Baseyard that was not identified on the November 2016 SWPCP site map. Additionally, Highways Maui District did not request or receive permission from the State of Hawaii Department of Health (HDOH) to monitor only one of the multiple outfalls at this facility.

Description of Attachments (if applicable):

Photograph of outfall in the southwestern corner of the facility; November 2016 SWPCP site map.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.

SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Part 6.(a)(7)(a): “where two or more outfalls are expected, based on the features and activities within the drainage areas, to convey substantially similar storm water discharges, the permittee may request to monitor only one of those outfalls. The director [of HDOH] may approve the request if the permittee demonstrates that the outfalls monitored are representative for the overall storm water discharges from the facility.”

HAR 11-55 Appendix B Part 6.(a)(2): “the storm water pollution control plan shall include the following [site map item]: outfall locations”.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Site Plan
Figure 2-2
Kahului Baseyard
DOT Highways Division
Maui District

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 2 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

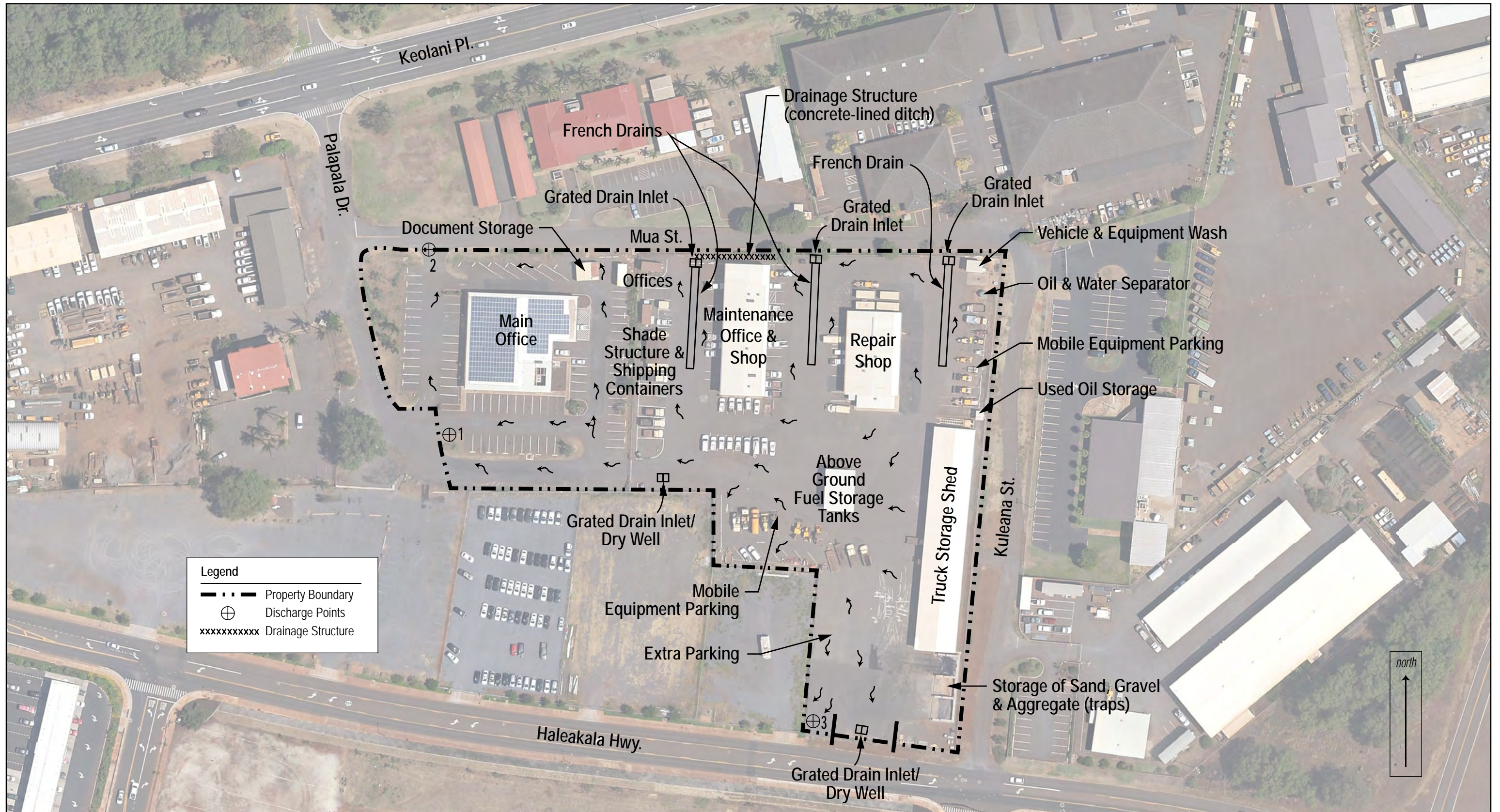
Description of Corrective Action:

HDOT Highways Maui District has updated areas within the Kahului Baseyard SWPCP pertinent to discharge point locations to include the missing discharge point noted in the Notice of Potential Violation.

A request for approval to monitor a single discharge point representative of the baseyard will be submitted to HDOH no later than 12 July 2019. The SWPCP will be updated within 30 days of receipt of approval from HDOH.

Description of Attachments (if applicable):

Updated sheets from the Kahului Baseyard SWPCP.



Site Plan

Figure 2-2

Kahului Baseyard

DOT Highways Division

Maui District

Small engine landscape maintenance equipment is stored inside shipping containers west of the maintenance office and shop. Heavy equipment and vehicles are stored in the open storage areas at the east and south sides of the baseyard or in the truck storage shed. Some traffic signs, equipment batteries, and empty 55 gallon drums are also stored in the truck storage shed.

Service of maintenance vehicles and equipment is conducted in the repair shop. Servicing of maintenance vehicles and equipment is conducted by an onsite mechanic and includes all repairs and the use of solvents. The oil generated during the maintenance is collected into a pan placed under the vehicle maintenance track within the repair shop. A used oil AST with a capacity of 300 gallons is located in the used oil shed near the truck storage shed. Spill response materials are located within the repair shop and used oil AST.

Manufacture and repair of traffic signs is conducted in the metal shop located within the maintenance office and shop.

Herbicides are kept in a locked room within the maintenance office and shop. Other chemicals used and stored at the site include gasoline fuel in a 2,000 gallon AST, diesel in a 2,000 gallon AST, motor oil in several 55 gallon drums, hydraulic fluid in several 55 gallon drums, used oil in a 300 gallon AST, and small quantities of lubricants, solvents, paints, and cleaning agents. Small quantities of fuel, hydraulic fluid, lubricants, and solvents are stored inside flammable material storage cabinets located within the maintenance office and shop and repair shop.

Trash is temporarily stored in covered garbage bins distributed throughout the baseyard. Trash is disposed of by a private contractor on a regular basis.

2.2 Site Drainage

The baseyard is paved with asphalt and is mainly flat, with only slight changes in topography (Figure 2-3). Drainage from each area of the yard is calculated in Table 2-1.

The baseyard is separated into an east section and west section by a chain link fence with an open space for vehicular traffic. The east section includes the maintenance office and shop, the repair shop, the ASTs, the vehicle and equipment wash shed, the truck storage shed and the used oil storage area. The west section is mainly the office building, records storage (in trailers/shipping containers) and employee parking.

In 2015 and 2016, the baseyard was renovated which included mostly repaving and new fencing. French drains and dry wells were also installed during the renovation drastically reducing the amount of stormwater leaving the site. Around the perimeter of the site, curbing was installed and holes in existing curbing were filled. Two of the five discharge locations described in the previous SWPCP have been eliminated keeping more stormwater on site during normal rainfalls. Three locations remain after the renovation where stormwater would leave the site during normal rainfalls. These are designated Discharge Points 1, 2 and 3.

Stormwater from Discharge Point 1 flows onto Palapala Drive which flows onto Keolani Place. The storm drains empty into Kanaha Canal which flows northeast toward the Pacific Ocean. Discharge Point 1 collects flow from a large amount of pavement in the yard, including both

employee and equipment parking areas and the fueling facility. Discharge Point 1 has been designated the sampling location as described in Section 5.

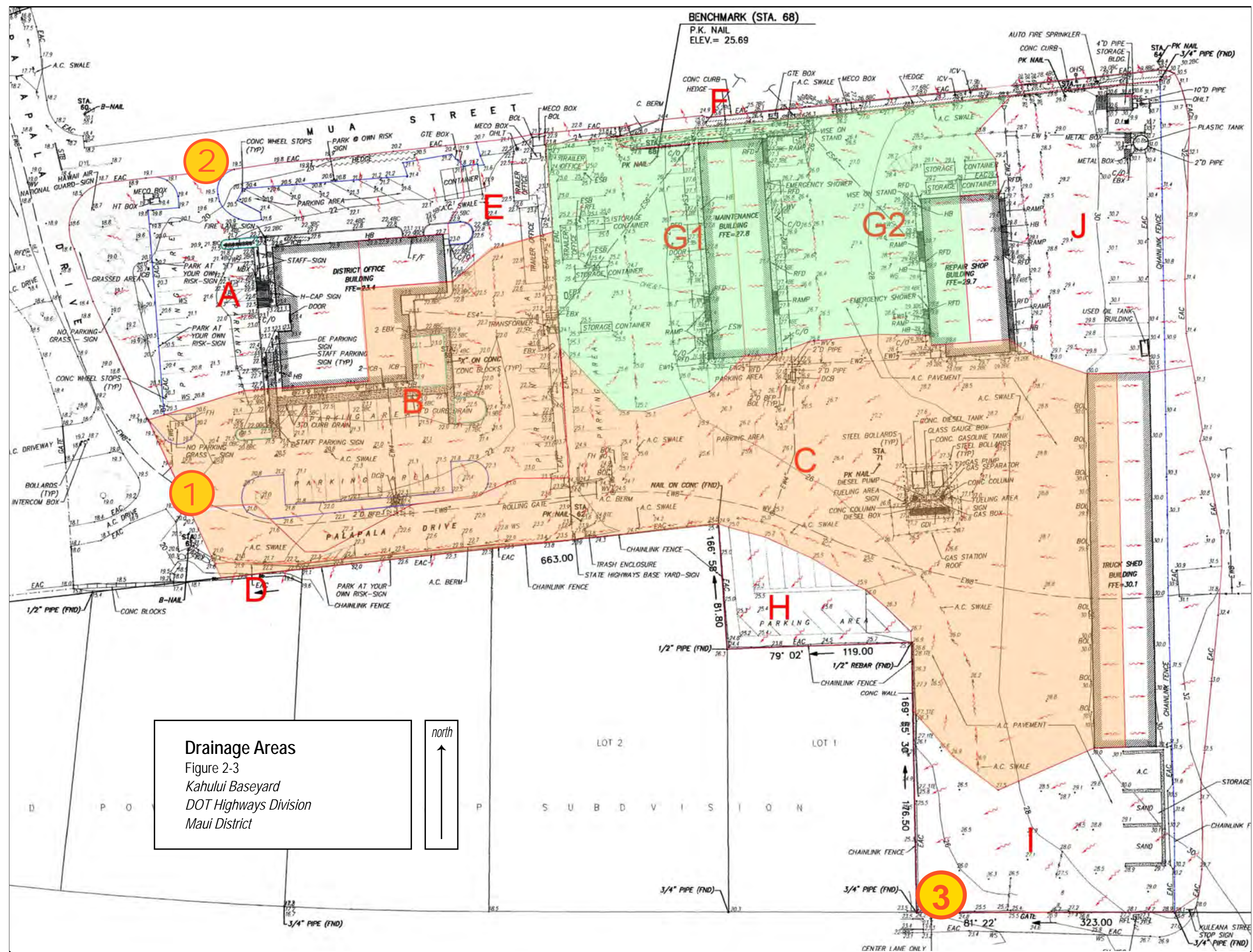
Stormwater from the northwestern corner of the yard used for parking flows onto Mua Street at a driveway designated Discharge Point 2. This water also flows to Kanaha Canal.

Stormwater from a portion of the southwest corner of the yard used for material storage flows onto Haleakala Highway through a curb cut designated as Discharge Point 3. This water also flows to Kanaha Canal.

The storm water at the east section of the yard generally flows from south to north and is collected into one of three French drains. The majority of stormwater from the southern portion of the yard flows south and into a newly constructed drywell by the back gate, with some flow exiting through Discharge Point 3.

2.3 Climate

The Kahului Baseyard is located on the north shore of central Maui. The overall climate on Maui is characterized by mild temperatures, cool and persistent tradewinds, a rainy winter season from October through April, and a dry summer season from May through September. The highest mean annual rainfall occurs near the summit of Pu'u Kukui Mountain and exceeds 360 inches. Along the coastal areas of Maui near the site, mean annual rainfall is less than 20 inches.



**TABLE 2-1
SUMMARY OF DRAINAGE AREAS**

Drainage Area	Area (Acres)	C _{weighted} -	T _{c, design} (min)	1yr I (in/hr)	2yr I (in/hr)	5yr I (in/hr)	10yr I (in/hr)	Q1 (cfs)	Q2 (cfs)	Q5 (cfs)	Q10 (cfs)	Discharge Location
A	0.67	0.73	10.0	1.95	2.61	3.54	4.26	0.95	1.28	1.73	2.08	2
B	0.69	0.84	10.0	1.95	2.61	3.54	4.26	1.13	1.51	2.05	2.46	1
C	1.61	0.90	10.0	1.95	2.61	3.54	4.26	2.82	3.77	5.11	6.15	1
D	0.02	0.90	10.0	1.95	2.61	3.54	4.26	0.03	0.05	0.06	0.08	1
E	0.14	0.84	10.0	1.95	2.61	3.54	4.26	0.24	0.32	0.43	0.52	retained on site
F	0.06	0.30	10.0	1.95	2.61	3.54	4.26	0.04	0.05	0.07	0.08	retained on site
G1	0.44	0.90	10.0	1.95	2.61	3.54	4.26	0.78	1.04	1.42	1.70	retained on site
G2	0.55	0.90	10.0	1.95	2.61	3.54	4.26	0.97	1.30	1.76	2.12	retained on site
H	0.15	0.90	10.0	1.95	2.61	3.54	4.26	0.25	0.34	0.46	0.56	retained on site
I	0.76	0.74	10.0	1.95	2.61	3.54	4.26	1.10	1.48	2.00	2.41	3
J	0.56	0.83	10.0	1.95	2.61	3.54	4.26	0.91	1.22	1.65	1.99	retained on site

Source

1

2

3

- 1 FHWA HEC-22, Table 3-1, pg. 3-6, County of Maui Table 3 for Built-up Areas
- 2 Based upon paved areas with short running lengths, used 10 minute T_c per HDOT design standards.
- 3 NOAA Atlas 14 Point Precipitation Frequency Estimates.

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Potential Violation

Potential Violation Tracking #: 3

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Highways Maui District was unable to provide records of corrective actions taken in response to inspection findings at their Kahului Baseyard.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.

SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 6.c.: “the permittee shall maintain a record of the following:...(2) Inspection findings; and (3) Corrective actions taken.”

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 3 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

HDOT Highways Maui District will schedule retraining of maintenance supervisor staff no later than 12 July 2019 to review documentation protocols for corrective actions that should be taken in response to findings documented during baseyard inspections.

The training will include the development of a process for submission and retention of corrective action documentation. Upon completion a summary of topics covered, revised SOPs (if any) and attendance for the training will be documented in the SWMPP annual report.

Description of Attachments (if applicable): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui
District

Final Notice of Potential Violation

Potential Violation Tracking #: 4

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Highways Maui District did not conduct inspections of the Kahului Baseyard from 2014 through 2016.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.

SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

SWPCP Section 6.2: “Highways Maui District will perform quarterly inspections [of the baseyard] to ensure that BMPs are in place and in proper working order...” (emphasis added)

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 6.c.: “the permittee shall conduct facility inspections at least semi-annually”. (emphasis added)

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 4 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Effective 1 February 2019, HDOT Highways Maui District has established an environmental section within its staff to manage and delegate inspection of the Kahului Baseyard to ensure inspections are performed and corrective actions documented.

HDOT Highways Maui District will schedule training of environmental section and maintenance supervisor staff no later than 12 July 2019 to review inspection protocols. Topics covered during this training and attendance logs will be submitted in the SWMPP annual report.

The SWPCP will be updated to reflect baseyard facility inspection frequency in alignment with the requirements of HAR 11-55 Appendix B section 6.c. no later than 12 July 2019.

Description of Attachments (if applicable): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui
District

Final Notice of Potential Violation

Potential Violation Tracking #: 5

Determination of Potential Violation Date: 5/29/2019

Potential Violation Notification Date: 5/31/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Highways Maui District does not maintain logs of fertilizer, pesticide, or herbicide usage as required by their SWMPP.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.: Not Applicable.

SWMPP:

SWMPP Appendix F.1. (Chemical Applications Training Plan) Section 4.1: “Highways Maintenance personnel and landscape contractors shall maintain a log of the amount of fertilizer used and the locations where it is applied. The landscape contractors are required to complete the fertilizer and pesticide usage log forms provided in this program plan and to deliver the completed forms to Highways Division on a quarterly basis.”

SWMPP Appendix F.1. (Chemical Applications Training Plan) Section 4.2: “Highway Maintenance personnel and landscape contractors shall maintain a log of the amount of pesticide/herbicide used and the locations where it is applied. The landscape contractors are required to complete the fertilizer and pesticide usage log forms provided in this program plan and to deliver the completed forms to Highways Division on a quarterly basis.”

Hawaii Administrative Rules (HAR): Not Applicable.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: **6/14/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - o Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 5 Potential Violation Notification Date: **5/31/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/14/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

The infrequent usage of chemicals for weed control has been recorded by Maui District maintenance supervisors on a form titled “Herbicide/Pesticide Usage Log;” however, collection of the data to a single repository has not been done. Attached are samples of logs completed by maintenance supervisors.

Maui District will schedule retraining of maintenance supervisor staff by 12 July 2019 to review protocols for the proper documentation and reporting of chemical application use. Chemical application logs taken by maintenance supervisors will be collected by Maui District’s environmental section for future reference. A summary of topics covered in this training and established protocols will be submitted in the SWMPP annual report.

Description of Attachments (if applicable):

Herbicide/Pesticide Usage Logs.

HERBICIDE/PESTICIDE USAGE LOG

DATE	LOCATION (Route, Milepost, Direction, and Distance from Nearest Intersection)	WEATHER		CHEMICAL USED AND AMOUNT APPLIED (gallons)	APPLICATION METHOD	COMMENTS
12-3-18	Hana Hwy Morning Kihikihi mile post 3004	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5 mph <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input type="checkbox"/> Rain not expected today	10Z to 2 gallon	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	signs
03/15/2019	5508 - m/m 6.5 - To Kahului From M. Kihikihi	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5 mph - 10 mph <input checked="" type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input type="checkbox"/> Rain not expected today	10Z Peomay 30Z Gaele per GAL H2O	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% 16 Gals Glyphosate 2.5% Triclopyr Solution
03/19/19	5508 - 0443 2.3 - 4.5	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 3 - 5 <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	10Z Peomay + 30Z Gaele per GAL	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% Glyphosate 2.5% Triclopyr 3gal
3/19/19	5505 3.5 - 3.75	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5.5 - 7.5 mph <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	10Z Peomay 30Z Gaele per GAL	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% Glyphosate 2gal 2.5% Triclopyr
3/19/19	5508 3.4 - 3.8	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 5.5 - 7.5 mph <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	10Z Peomay 30Z Gaele per GAL	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	.75% Glyphosate 2gal 2.5% Triclopyr

HERBICIDE/PESTICIDE USAGE LOG

DATE	LOCATION (Route, Milepost, Direction, and Distance from Nearest Intersection)	WEATHER		CHEMICAL USED AND AMOUNT APPLIED (gallons)	APPLICATION METHOD	COMMENTS
04/03/2019	mm 5.2 5502 - 5503 End at mm 6	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind = 7.9 ↔ 8.5 Average / 1050m 9.5↑ <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input type="checkbox"/> Rain not expected today	(4%) min. - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	Intersection Street Poles Signs Guard rail STOP AT 1050m
04/04/2019	mm 5502 - 5503	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 0.5 → 1.9 <input type="checkbox"/> Calm <input type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4%) min - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	Guardrail Signs
04/16/19	mm26 PART 1	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 3.5 ↔ 4.5 <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4% min) - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	POST BOXES GUARDRAILS Signs
04/24/19	mm26 PART 2	Sky <input type="checkbox"/> Clear <input checked="" type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 4.5 - 6.0 mph <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4% min) - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	GUARD RAILS Signs
05/07/19	mm 12 (to) mm16 mountain Side	Sky <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Partly Cloudy <input type="checkbox"/> Overcast Wind 3.5 - 6.5 mph <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Mild Breeze <input type="checkbox"/> High Wind, DO NOT SPRAY	Precipitation <input type="checkbox"/> Rain expected today, DO NOT APPLY <input type="checkbox"/> Raining - if raining, DO NOT APPLY <input checked="" type="checkbox"/> Rain not expected today	(4% min) - Round up - Element 3A	<input checked="" type="checkbox"/> Hand Sprayer <input type="checkbox"/> Spray Truck <input type="checkbox"/> Other:	Signs/Post Guard rail Animal Dump

Appendix B5: Permit-Specific Information – Highways Maui District

6. Deficiencies

Deficiency Tracking #4 - #8 apply to this permit. Please see pages B5-22 through B5-50.

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Deficiency

Deficiency Tracking #: 4

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

The Audit Team reviewed several completed inspection forms for Highways Maui District Kahului Baseyard with incomplete or missing responses.

Recommendations for Improvement:

Highways Maui District should consider additional training for inspectors, transitioning to digital forms, and implementing additional quality control measures for the completed inspection forms. The Audit Team also suggests re-formatting the inspection forms to more clearly indicate those items that require follow-up or action.

Description of Attachments (if applicable):

Example of a completed baseyard inspection form with incomplete and missing responses circled.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016) Appendix E: Third-Party Site-Specific SWCP Facility Inspection Form.

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

Third-Party Site-Specific SWPCP Facility Inspection Form

Facility Name:	Kahului Baseyard		
Inspector's Name & Title:	Jan Reichelderfer, lead planner		
Date & Time of Inspection:	2-7-17 2:00		
Weather:	<input type="checkbox"/> Raining <input checked="" type="checkbox"/> Sunny <input type="checkbox"/> Cloudy <input type="checkbox"/> High Wind <input type="checkbox"/> Moderate Wind <input checked="" type="checkbox"/> Calm Precipitation in last 24 hours? <input type="checkbox"/> Yes <input type="checkbox"/> No		

SITE OBSERVATIONS / MANAGEMENT CONTROLS / BMPs

Issue Being Evaluated	Yes	No	N/A	Comments and Corrective Actions
Are preventive maintenance and housekeeping activities being implemented and documented?				
Are all work areas and storage areas neat and clean?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are the loading and unloading areas clean?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the drainage area clean of debris (paper, leaves)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	mostly
Catch basins cleaned	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	had just been done
Regular removal/disposal of trash and waste products	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	have note to empty metal dumpster
Are dumpsters and recycle bins kept closed when not in use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are potential pollutants stored under covered areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are drums stored within secondary structures / containment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

Issue Being Evaluated	Yes	No	N/A	Comments and Corrective Actions
Are any material storage containers, equipment, etc. leaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are oily parts and/or chemical containers exposed to storm water contact?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are materials properly labeled?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Identification of all chemicals (MSDSs)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Prevention of chemical accumulation on ground in building	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Vehicles are serviced in covered areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is any equipment maintenance being performed outdoors?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Is equipment or vehicles being washed in designated areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Are drip pans placed under equipment and vehicles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	mostly
Are drip pans clean and in good condition (not leaking)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	not all
Petroleum products recycled	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is there dirt and grease buildup in the parking lot?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	evidence of spill

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

Issue Being Evaluated	Yes	No	N/A	Comments and Corrective Actions
Are there stains on the paved areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Any water flowing into outfall/offsite? (if yes, identify source)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Visual inspection of facility	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Maintenance of inspection log (documented and current)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Proper training of employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Restrict access to area and equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have spill prevention and response procedures been implemented and is spill prevention equipment operational and ready?				
Visual inspection of paved areas for spills and leaks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	spill not leaving site
Prompt removal of any spills or leaks using spill kits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	trying to remove spill used "cat litter"
Spill response equipment stocked and inspected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

REVIEW OF SWPCP

Issue Being Evaluated	Yes	No	Comments
Are there changes to the site description?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there changes to storm water control features?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there changes to potential pollutant sources or activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are there changes to storm water program personnel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Have there been any spills or releases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	yes, did not go off site
Are corrective actions necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Kitty letter
Are there changes in employee responsibilities regarding storm water protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Question	Yes	No
If yes to any of the above, have revisions to the SWPCP Plan been made?	<input type="checkbox"/>	<input type="checkbox"/>
Are additional revisions recommended?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If revisions have not been made or are not recommended, indicate reason:		
Spill contained; did not go off site; will fill out repair		
Do the existing management controls/best management practices appear to be effective in reducing the potential for storm water pollution? If no, indicate reason:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Are there any additional management controls/best management practices recommended as a result of the site inspection? If yes, describe new storm water management/best management control needed to address sources of pollutants and a time schedule for implementation:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
get metal dumpster emptied		
see attached		

Appendix B5: Permit-Specific Information – Highways Maui District

Storm Water Pollution Control Plan

REVIEW OF TRAINING

Issue Being Evaluated	Yes	No	Comments
Have employees been informed and trained of revisions?	<input type="checkbox"/>	<input type="checkbox"/>	
Is annual employee training current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are employee training records documented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If no to any of the above, indicate reason for discrepancy and what corrective actions will be taken:			

REVISIONS OF STORM WATER POLLUTION CONTROL PLAN

Question	Yes	No
Have all revisions been made to the SWPCP, re-signed, and submitted to the Hawai'i State Department of Health within 30 days of the revision (if applicable)?	<input type="checkbox"/>	<input type="checkbox"/>
If no, indicate reason:		

STORM WATER POLLUTION CONTROL PLAN COMPLIANCE

Based on site observations and review of facility records conducted as part of this inspection report, this facility is determined to be in compliance with the facility's SWPCP.

Facility: Kahului Bargeyard

Printed Name: Jan Reichelderfer

Signature: _____

Title: _____

Date: _____

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 4

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Maui District held a retraining for Maui District maintenance staff on 9 July 2019. Training topics included inspection processes, corrective action documentation, and transition to a new inspection form format.

Description of Attachments (if applicable):

Training session summary attached including training agenda, sign-in sheet, baseyard inspection process flowchart and revised Maui District Baseyard Inspection Form.

Maui District Small MS4

Maintenance Training / Coordination Meeting Summary

Wednesday July 10, 2019, 10:00 AM @ HWY-M Conference Room

Attendees: Ty Fukuroku, Annette Matsuda, Daniel Garcia, Bill John Park, Mark Morgan, Bruce Sakamoto, Wyatt Nakamura, Gerald Andrade, Matt Small, John Humel

Summary:

This training was conducted to address potential violations (PVs) identified in the PEAR 5 audit. The four PVs that were discussed are listed on the agenda. For each PV, the corrective action was described, roles and responsibilities were defined, and follow-up actions were identified. The following are the key topics and outcomes of this training:

1. PV #4 – Outfall Location Not Verified
 - a. The baseyard SWPCP has been updated to include discharge point #3.
 - b. A letter has been sent to HDOH requesting permission to just monitor discharge point #3.
2. PV #5 – Post-Inspection Corrective Actions Not Documented
 - a. The inspection process has been clarified in the Inspection Process Flowchart
 - b. A new inspection form will be used which includes a “deficient” checkbox used to indicate that corrective actions are required.
 - c. Corrective actions will be completed and documented according to the Inspection Process Flowchart
 - d. Inspections will now be semi-annual to be consistent with the NPDES permit, the SWPCP has been updated to reflect this.
 - e. Inspections will be scheduled so that maintenance supervisors can be present to facilitate immediate corrective actions.
3. PV # 7 – No Fertilizer, Pesticide or Herbicide Logs
 - a. Maui District’s AS400 system software has been updated to include the ability to track chemical application.
 - b. Maintenance supervisors have been trained/instructed on the inclusion of chemical application data when logging labor expenditures in the AS400 system.
 - c. Reports for chemical application will be producible upon request.

Maui District Small MS4

Maintenance Training / Coordination Meeting Agenda

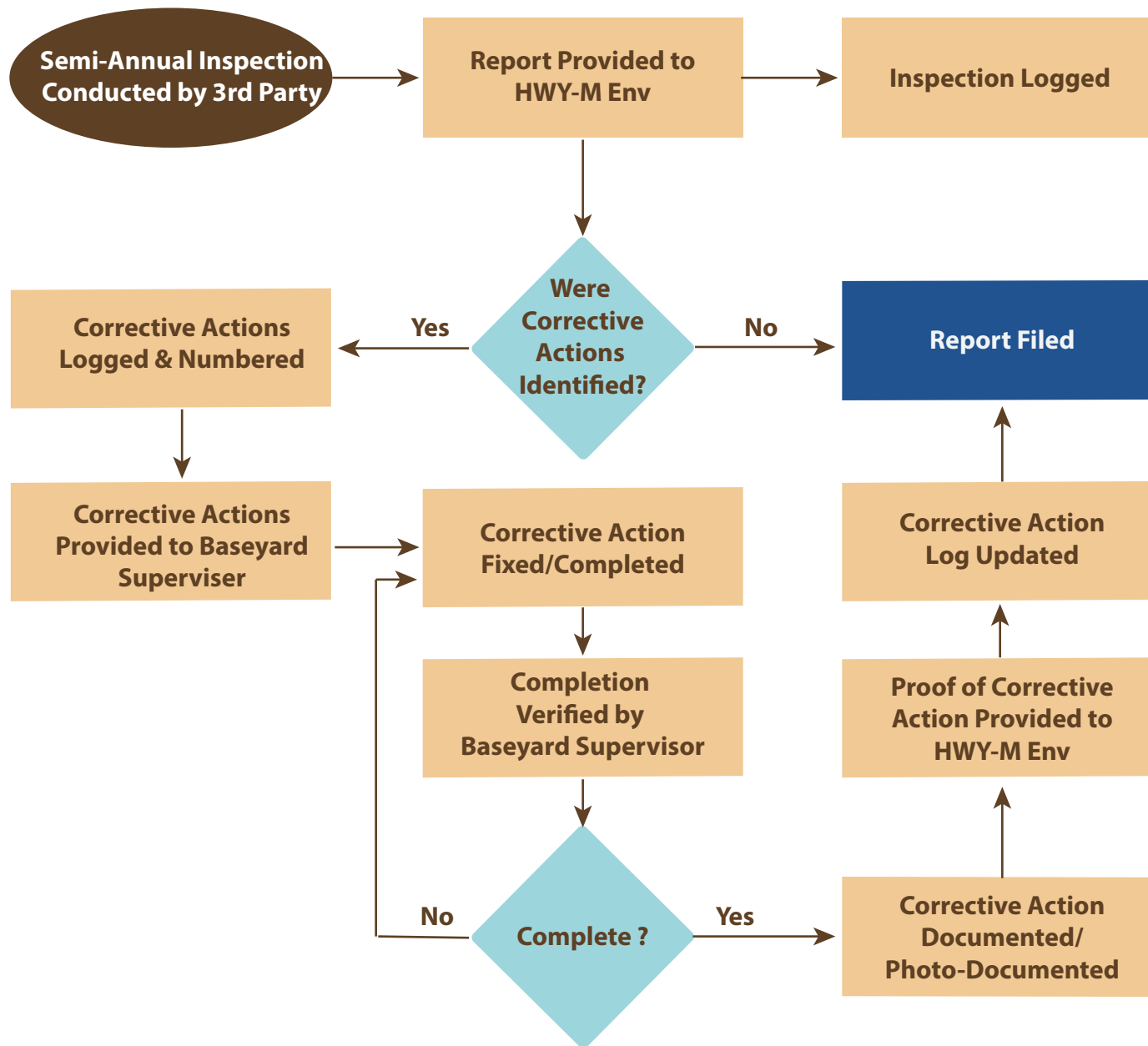
Wednesday July 10, 2019, 10:00 AM @ HWY-M Conference Room

1. Summary of PEAR 5 Audit Potential Violations
 - a. PV #4 – Outfall Location Not Verified
 - i. Action Item = Update of SWPCP for 3rd Discharge Point
 - ii. Action Item = Request for Approval to Monitor a Single Discharge Point
 - b. PV #5 – Post-Inspection Corrective Actions Not Documented – Action Item = This Training
 - c. PV # 6 – Baseyard Inspections Not Conducted from 2014-2016 – Action Item = This Training
 - d. PV # 7 – No Fertilizer, Pesticide or Herbicide Logs – Action Item = This Training
2. Baseyard Inspection Protocols
 - a. Inspection Frequency and Process Flowchart
 - b. Revised Inspection Form
 - c. Roles and Responsibilities
 - d. Documentation of Action Items
 - e. Documentation of Corrective Actions
3. Chemical Application Tracking
 - a. Roles and Responsibilities – In-house vs. Contracted
 - b. Format of Chemical Application Tracking Sheets
 - c. Chemical Application Tracking Log Submittals/Storage
 - d. Chemical Application Tracking Log Reporting
4. Open Discussion



Environmental Compliance Training & Workshop
Attendance List
 July 9, 2019
 Maui District Conference Room

NAME	TITLE	SIGNATURE
1. Gerald Andrade	WSP project manager	Gerald Andrade
2. Matt Sman	WSP PE COORDINATOR	Matt Sman
3. Bruce Sakamoto	Spec	Bruce Sakamoto
4. Mark Morimoto	Sup.-2-CR-F/T/K-SUB	Mark Morimoto
5. Annette Matsuda	HWY-M Maint. Engr	Annette Matsuda
6. WILLIAM J. PARK	C/M JOOT	William J. Park
7. TY FUKUROKU	HWY-M ENV. ENGR	Ty Fukuroku
8. Daniel Garcia	Civil Engineer	Daniel Garcia
9. MYA H. NAKAMURA	Mech Shop Supv TA	Mya H. Nakamura
10. JOHN KANE HUMEL	WSP - PUMPS ENGINEER	John Kane Humel
11.		
12.		
13.		
14.		
15.		
16.		



Kahului Baseyard Semi-Annual Inspection and Corrective Action Process Flowchart

Maui District Baseyard Inspection Form

BASEYARD SWPCP INSPECTION CHECKLIST

Facility	HWY-M, Kahului Baseyard	Weather	
Inspector		Rain in 24 Hours?	
Inspection Date			

Deficiencies Identified?		Inspector Signature	
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Task	Issue Being Evaluated	Yes?	No?	N/A	Deficient	Comments
DOCUMENTATION						
10	Is the SWPCP onsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
20	Date of last SWPCP update					June 2019
30	Has the SWPCP map been updated to reflect the current baseyard conditions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
40	Are there necessary changes to the SWPCP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
50	Are the inspection reports onsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
60	Have the annual storm water monitoring been conducted and are copies of the DMRs onsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
70	Is the National Pollutant Discharge Elimination System (NPDES) permit onsite?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
80	Have employees received training on storm water BMPs and the SWPCP within the last year?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
90	Have any reportable quantity (25-gal or more) spills been reported/documented? (Select N/A if there have been no spills greater than 25-gal since the last inspection).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Task	Issue Being Evaluated	Yes?	No?	N/A	Deficient	Comments
GOOD HOUSEKEEPING						
100	Are paved areas potentially exposed to storm water generally clear of sediment and debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
110	Are the rubbish bins covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
120	Is the rubbish managed to prevent overflow and/or contact with storm water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
130	Are the discharge areas (culvert, diversion channel, downspouts) clear of debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
140	Are there any oil stains present that produce a sheen when wet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
150	Are spill kits available and stocked? (Select Deficient if any supplies need to be replaced).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
160	Are spent spill cleanup materials properly disposed of?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
170	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Task	Issue Being Evaluated	Yes?	No?	N/A	Deficient	Comments
BASEYARD OPERATIONS						
180	Are drip pans or hydrocarbon absorbing pads utilized when conducting minor maintenance work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
190	Are saw dust or metal shavings swept at completion of the job or at the end of the shift?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
200	Are herbicides mixed in areas away from storm drains?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
210	Are excess herbicides stored under cover and/or in secondary containment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
220	Is containment utilized during painting activities, if necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
230	Is painting equipment cleaned in a proper location?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
240	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Task	Issue Being Evaluated	Yes?	No?	N/A	Deficient	Comments
FUELING						
250	Are portable containers, fuel cans, hoses, and dispensers checked for cracks and leaks prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
260	Are all fuel containers stored within secondary containment, if necessary?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
270	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
VEHICLE AND EQUIPMENT STORAGE						
280	Has salvage equipment been managed properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
290	If necessary, are drip pans utilized and in good condition and placed properly under equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
300	Are drip pans filled or overflowing with rainwater and/or petroleum products (oil and grease, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
310	Are handheld and/or portable equipment managed to minimize contact with storm water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
320	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Task	Issue Being Evaluated	Yes?	No?	N/A	Deficient	Comments
MATERIAL STORAGE						
330	Are material containers in good condition (i.e. no rust/leaks/deterioration) and closed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
340	Are materials stored off the ground or in a covered area away from drainage ways and downspouts?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
350	Wood construct. items or metal stored off ground, in a seg. area, covered w/ tarps, and contained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
360	Are plastic or concrete construct. items, stored in a seg. area and have containment socks in-place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
370	Are BMPs that are utilized for material containment in good condition and working effectively?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
380	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
WASTE MANAGEMENT						
250	Are wastes separated and stored? (Indicate in Comments if a hazardous waste pick-up needs to be scheduled).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
260	Have all hazardous and universal wastes been stored properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
270	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Deficiency

Deficiency Tracking #: 5

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed a truck leaking oil onto the pavement at the Kahului Baseyard.

Recommendations for Improvement:

Highways Maui District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of truck leaking oil observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016) Appendix A

Page A-3: "Inspect damaged vehicles for fluid leaks as soon as possible. Use drip pans as necessary."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 5

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

A drip pan has been added under the vehicle identified in the deficiency report.

Description of Attachments (if applicable): Photograph of drip pan.



Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Deficiency

Deficiency Tracking #: 6

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed storm drains without “No Dumping” placards affixed.

Recommendations for Improvement:

Highways Maui District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photographs of storm drains without “No Dumping” placards affixed.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016)

Page A-3, Item A2-17: “Install “No Dumping” placards on all storm drains at DOT facilities to educate personnel that non-storm water is not to be discharged to the storm drainage system.”

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 6

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

As of 1 August 2019, stencils have been applied to all inlets within the Kahului Baseyard.

Description of Attachments (if applicable): Photograph of inlet stencils.



Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Deficiency

Deficiency Tracking #: 7

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed that tarping was insufficient to cover the entire stockpile at the Kahului Baseyard, as evidenced by stockpile materials which migrated outside the stockpile enclosure.

Recommendations for Improvement:

Highways Maui District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of insufficient tarping over stockpiles observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Appendix F.2. (SWPCP, November 2016)

Page 2-4: "A stockpile of sand, gravel, and asphalt are stored in an aggregate storage area located in the south side of site near the truck storage shed. The area is asphalt paved without covering and consists of three concrete lined cells.... The stockpiles containing material that can be wind-blown are covered with tarps."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District



Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 7

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Maui District has installed larger tarps to cover stockpiled material. Biosocks at the exits of the designated stockpile areas serve as secondary containment measures to minimize migration of material outside of the storage areas. Periodic sweeping of the baseyard ensures any material that migrates out of the storage areas does not enter into the infiltration devices that provide drainage of the baseyard.

Description of Attachments (if applicable):

Photograph documentation of new stockpile covering installed in July 2019.



Appendix B5: Permit-Specific Information – Highways Maui District

Final Notice of Deficiency

Deficiency Tracking #: 8

Related Permit(s): Highways Maui District

Deficiency Narrative Description:

Highways Maui District indicated “ND” (short for “Non-Detect”) for several parameters on their 2017 Discharge Monitoring Report (DMR) instead of indicating that the test result is “less than #,” where the # is the lowest detection limit of the test method used.

Recommendations for Improvement:

In these situations, Highways Maui District should indicate on DMRs that the test result is “less than #,” where the # is the lowest detection limit of the test method used.

Description of Attachments (if applicable):

Page from 2017 DMR showing ND entries circled.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWMPP Section 6.2.4.1 states that Highways Maui District will implement the Kahului Baseyard Storm Water Pollution Control Plan (SWPCP) revised in November 2016.


SWPCP Appendix G (Notice of General Permit Coverage): Highways Maui District “shall comply with HAR, Chapter 11-55, Appendix B, NPDES General Permit Authorizing Discharges of Storm Water Associated with Industrial Activities” (HAR 11-55 Appendix B).

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 8.(a)(4)(c): “if the test result is not detectable, indicate that the test result is “less than #,” where the # is the lowest detection limit of the test method used.”

Code of Federal Regulations (CFR): Not applicable.

Appendix B5: Permit-Specific Information – Highways Maui District

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) NAME State of Hawaii ADDRESS 650 Palapala Dr. Kahului, Hawaii 96732		NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR) (3-9) HIR80D502 PERMIT NUMBER		DISCHARGE NUMBER 1 (10-18)		Form Approved OMB No. 2040-0004 Approval expires 05-31-98					
FACILITY LOCATION 650 Palapala Dr. Kahului, HI 96732		MONITORING PERIOD FROM 2017 01 01 TO 2017 12 31 (20-21) (22-23) (24-25) (26-27) (28-29) (30-31)		<input type="checkbox"/> Check here if No Discharge		NOTE: Read Instructions before completing this form					
PARAMETER (32-37)	SAMPLE MEASUREMENT (46-53)	QUANTITY OR LOADING (54-61)			QUALITY OR CONCENTRATION (62-69)			NO. EX (70-73)	FREQUENCY OF ANALYSIS (74-77)	SAMPLE TYPE (78-81)	
		AVERAGE (54-55)	MAXIMUM (56-57)	UNITS (58-59)	MINIMUM (62-63)	AVERAGE (64-65)	MAXIMUM (66-67)				UNITS (68-69)
Oil and Grease	SAMPLE MEASUREMENT					<1.3		mg/L	0	once	grab
	PERMIT REQUIREMENT					15					
pH	SAMPLE MEASUREMENT					7.38		su	0	once	field
	PERMIT REQUIREMENT					5.5-8.0					
lead	SAMPLE MEASUREMENT					1.5		ug/L	0	once	compo
	PERMIT REQUIREMENT					29					site
Acenaphthene	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo
	PERMIT REQUIREMENT					570					site
Fluoranthene	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo
	PERMIT REQUIREMENT					1300					site
Naphthalene	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo
	PERMIT REQUIREMENT					770					site
Poly nuclear aromatic hydrocarbons	SAMPLE MEASUREMENT					ND		ug/L	0	once	compo
	PERMIT REQUIREMENT					>0.01 kgp					site
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robin Shishido District Engineer TYPED OR PRINTED		I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH THE SYSTEM DESCRIBED. I AM AWARE THAT I AM RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION SUBMITTED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION.				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 		TELEPHONE 808 873-3535		DATE 2018 1 18	
COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)											

Appendix B5: Permit-Specific Information – Highways Maui District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B5: Permit-Specific Information – Highways Maui District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 8

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Maui District has evaluated its process for reporting test results where constituents of samples being tested fall below detectable limits of testing. Moving forward Maui District will comply with HAR 11-55 Appendix B Section Part 8.(a)(4)(c) which requires that detectable limits for testing be identified in cases where test results are not detectable.

Description of Attachments (if applicable):

Attached is a redacted copy of a DMR report demonstrating an appropriate reporting method.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME State of Hawaii
ADDRESS 650 Palapala Dr.
Kahului, Hawaii 96732

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

HIR80D502
PERMIT NUMBER

1
DISCHARGE NUMBER

Form Approved.
OMB No. 2040-0004
Approval expires 05-31-98

FACILITY 650 Palapala Dr.
LOCATION Kahului, HI 96732

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
2017	01	01	2017	12	31
(20-21) (22-23) (24-25)			(26-27) (28-29) (30-31)		

☐ Check here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Quantity of Discharge	SAMPLE MEASUREMENT	150	400	gpm					0	once	estimated
	PERMIT REQUIREMENT		monitor								
Biological Oxygen Demand	SAMPLE MEASUREMENT					1		mg/L	0	once	composite
	PERMIT REQUIREMENT					monitor					
Chemical Oxygen Demand	SAMPLE MEASUREMENT					30		mg/L	0	once	composite
	PERMIT REQUIREMENT					monitor					
Total Suspended Solids	SAMPLE MEASUREMENT					48.3		mg/L	0	once	composite
	PERMIT REQUIREMENT					monitor					
Total Phosphorus	SAMPLE MEASUREMENT					.1		mg/L	0	once	composite
	PERMIT REQUIREMENT					monitor					
Total Nitrogen	SAMPLE MEASUREMENT					.37		mg/L	0	once	composite
	PERMIT REQUIREMENT					monitor					
Nitrate and Nitrite	SAMPLE MEASUREMENT					.060		mg/L	0	once	composite
	PERMIT REQUIREMENT					monitor					

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

Robin Shishido
District Engineer

TYPED OR PRINTED

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.



SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

808 873-3535

AREA CODE

NUMBER

DATE

2018 1 18

YEAR

MO

DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME State of Hawaii
ADDRESS 650 Palapala Dr.
Kahului, Hawaii 96732

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16)	(17-19)
HIR80D502	1
PERMIT NUMBER	DISCHARGE NUMBER

Form Approved.
OMB No. 2040-0004
Approval expires 05-31-98

FACILITY LOCATION 650 Palapala Dr.
Kahului, HI 96732

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
2017	01	01	2017	12	31
(20-21) (22-23) (24-25)			(26-27) (28-29) (30-31)		

☐ Check here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER (32-37)		QUANTITY OR LOADING (46-53)			QUALITY OR CONCENTRATION (46-53)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)	
		AVERAGE (46-53)	MAXIMUM (54-61)	UNITS (54-61)	MINIMUM (38-45)	AVERAGE (46-53)	MAXIMUM (54-61)				UNITS (54-61)
Oil and Grease	SAMPLE MEASUREMENT					<1.3		mg/L	0	once	grab
	PERMIT REQUIREMENT					15					
pH	SAMPLE MEASUREMENT					7.38		su	0	once	field
	PERMIT REQUIREMENT					5.5-8.0					
lead	SAMPLE MEASUREMENT					1.5		ug/L	0	once	compo site
	PERMIT REQUIREMENT					29					
Acenaphthene	SAMPLE MEASUREMENT					ND less than 4.9		ug/L	0	once	compo site
	PERMIT REQUIREMENT					570					
Fluoranthene	SAMPLE MEASUREMENT					ND less than 4.9		ug/L	0	once	compo site
	PERMIT REQUIREMENT					1300					
Naphthalene	SAMPLE MEASUREMENT					ND less than 4.9		ug/L	0	once	compo site
	PERMIT REQUIREMENT					770					
Poly nuclear aromatic hydrocarbons	SAMPLE MEASUREMENT					ND less than 0.01		ug/L	0	once	compo site
	PERMIT REQUIREMENT					>0.01repo rt					
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.				TELEPHONE		DATE			
Robin Shishido District Engineer						808 873-3535		2018	1	18	
TYPED OR PRINTED						SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER	YEAR	MO

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME State of Hawaii
ADDRESS 650 Palapala Dr.
Kahului, Hawaii 96732

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

HIR80D502	1
PERMIT NUMBER	DISCHARGE NUMBER

Form Approved.
OMB No. 2040-0004
Approval expires 05-31-98

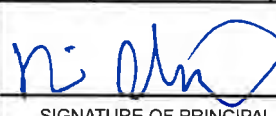
FACILITY LOCATION 650 Palapala Dr.
Kahului, HI 96732

MONITORING PERIOD						
YEAR	MO	DAY		YEAR	MO	DAY
2017	01	01	FROM	2017	12	31
(20-21) (22-23) (24-25)				(26-27) (28-29) (30-31)		

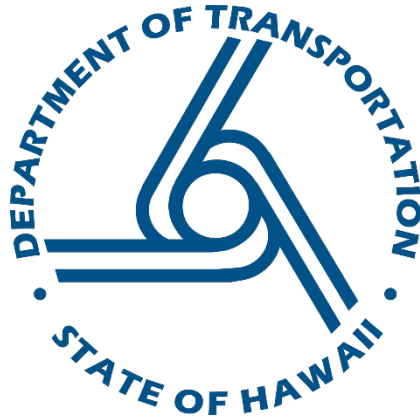
☐ Check here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61)			(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
Benzene	SAMPLE MEASUREMENT					ND less than 0.25		ug/L	0	once	grab
	PERMIT REQUIREMENT					1800					
Ethylbenzene	SAMPLE MEASUREMENT					ND less than 0.25		ug/L	0	once	grab
	PERMIT REQUIREMENT					11000					
Toluene	SAMPLE MEASUREMENT					ND less than 0.25		ug/L	0	once	grab
	PERMIT REQUIREMENT					5800					
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.		TELEPHONE		DATE		
Robin Shishido District Engineer			808	873-3535	2018	1	18
TYPED OR PRINTED			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)



FINAL Program Element
Audit Report (PEAR) No. 5

Pollution Prevention / Good
Housekeeping Program
Part 2 of 2

State Project No. OSC-15-01

September 2019

Prepared by
Kennedy/Jenks Consultants, Inc.

Prepared for
State of Hawaii
Department of Transportation
Office of Environmental Compliance
869 Punchbowl Street
Honolulu, Hawaii 96813

KJ Project No. 1696025*00

Appendix B6

Permit-Specific Information – Highways Oahu District

Appendix B6: Permit-Specific Information – Highways Oahu District

1. Key Documents

<div>Permit</div> <div>Document</div>	6. Highways Oahu District
	Individual Permit HI S000001
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts	H.1_Action-Plan-to-Address-Erosional-Outfalls_Final-April-2015.pdf
Authorized Use List of Chemicals	Authorized Use List of Chemicals_REV.pdf
Field Manual (Maintenance Activities Best Management Practices Field Manual)	Maintenance Activities BMP Field Manual_REV.pdf
Latest Annual Monitoring Plan	20180604.Contents of CD-2018-2019 Monitoring Plan FINAL-v1-HIS000001.pdf
Latest Annual Monitoring Report	Storm Water Annual Monitoring Report 2017-2018.pdf
Latest Annual Report	Annual Report 2017-2018 Plus appendices
Permit	20160318.Modified NPDES Permit HI S000001.PDF
Storm Water Pollution Control Plans for Facilities to be Audited	Final Kakoi SWPCP October 2016_REV.pdf
	Final Windward SWPCP October 2016_REV.pdf
Stormwater Web site	http://www.stormwaterhawaii.com/
	http://www.trashfreehawaii.com
SWMPP	SWMPP-Final_Combined_Compressed.pdf
	Plus Appendices
Trash Reduction Plan	Trash-Reduction-Plan_FINAL-10-18-16.pdf
AMS Maximo: Maintenance Baseyard User Guide	AMS Maximo Maintenance Facilities Module User Guide.pdf
NetDMR Standard Operating Procedure	Submission DMR via NetDMR SOP_Draft.pdf

Appendix B6: Permit-Specific Information – Highways Oahu District

2. Sections of Key Documents Found Relevant for PEAR 5

Document Name (Original File Name)	Sections/Pages Relevant to PEAR 5
Action Plan to address erosion at its storm drain system outlets with significant potential for water quality impacts (<i>H.1_Action-Plan-to-Address-Erosional-Outfalls_Final-April-2015.pdf</i>)	In entirety
Authorized Use List of Chemicals (<i>Authorized Use List of Chemicals_REV.pdf</i>)	In entirety
Field Manual (Maintenance Activities Best Management Practices Field Manual) (<i>Maintenance Activities BMP Field Manual_REV.pdf</i>)	In entirety
Latest Annual Monitoring Plan (<i>20180604.Contents of CD-2018-2019 Monitoring Plan FINAL-v1-HIS000001.pdf</i>)	Section 2.2.1 Section 4
Latest Annual Monitoring Report (<i>Storm Water Annual Monitoring Report 2017-2018.pdf</i>)	Chapter 3
Latest Annual Report (<i>Annual Report 2017-2018 Plus appendices</i>)	Chapter 7 Chapter 8 Chapter 9 Chapter 10 Chapter 12 Chapter 13
Permit (<i>20160318.Modified NPDES Permit HI S000001.PDF</i>)	In entirety
Storm Water Pollution Control Plans for Facilities to be Audited (<i>Final Kako'i SWPCP October 2016_REV.pdf, Final Windward SWPCP October 2016_REV.pdf</i>)	In entirety
Stormwater Web site (http://www.stormwaterhawaii.com/ http://www.trashfreehawaii.com/)	In entirety
SWMPP (<i>SWMPP-Final_Combined_Compressed.pdf Plus Appendices</i>)	Chapter 6 Chapter 7 Chapter 8 Chapter 9 Chapter 11 Chapter 12
Trash Reduction Plan (<i>Trash-Reduction-Plan_FINAL-10-18-16.pdf</i>)	In entirety
AMS Maximo: Maintenance Baseyard User Guide	In entirety
NetDMR Standard Operating Procedure	In entirety

Appendix B6: Permit-Specific Information – Highways Oahu District

3. On-Site Evaluation

22 May 2019

On 22 May 2019, the Audit Team held a kickoff meeting at Highways Oahu District with Highways Division staff and consultants. Photographs taken during the On-Site Evaluation can be found in Section 4.

Facility #1 Kakoi Baseyard, 727 Kakoi St.

The Audit Team then conducted an inspection of the Kakoi Baseyard, accompanied by Highways Division staff and consultants.

Facility #2 Windward Baseyard, 45-889 Pookela St.

The Audit Team then drove to Windward Baseyard and conducted an inspection of the baseyard, accompanied by Highways Division staff and consultants. The Audit Team concluded the On-Site Evaluation with a debrief meeting.

4. On-Site Evaluation Photos

Photographs are provided on the subsequent pages below.



HWY-O Photo 6.1.1
 Storm Water Program Records



HWY-O Photo 6.1.2
 SWPCP Onsite Copy



HWY-O Photo 6.1.3
 SWPCP Signage



HWY-O Photo 6.1.4
 SWPCP Signage



HWY-O Photo 6.1.5
BMP Signage



HWY-O Photo 6.1.6
Structural BMP Signage



HWY-O Photo 6.1.7
Rain Garden



HWY-O Photo 6.1.8
Rain Garden



HWY-O Photo 6.1.9
Covered Waste Receptacles



HWY-O Photo 6.1.10
Waste Collection Area



HWY-O Photo 6.1.11
Southeast Corner of Baseyard



HWY-O Photo 6.1.12
Covered Parking Area



HWY-O Photo 6.1.13
Covered Parking Area



HWY-O Photo 6.1.14
Discharge Location



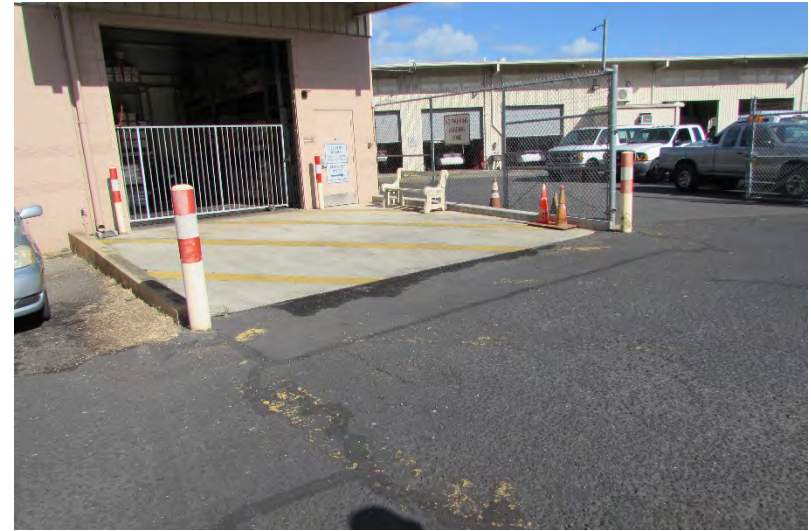
HWY-O Photo 6.1.15
Discharge Location (Moanalua Stream)



HWY-O Photo 6.1.16
Discharge Location



HWY-O Photo 6.1.17
Metals Stockpile



HWY-O Photo 6.1.18
Warehouse Area



HWY-O Photo 6.1.19
Warehouse Area



HWY-O Photo 6.1.20
Light Motor Pool Area



HWY-O Photo 6.1.21
Light Motor Pool Area



HWY-O Photo 6.1.22
Warehouse Area



HWY-O Photo 6.1.23
Warehouse Area



HWY-O Photo 6.1.24
Warehouse Area



HWY-O Photo 6.1.25
Street Sweeper Parked Near Drain Inlet



HWY-O Photo 6.1.26
Street Sweeper Parked Near Drain Inlet



HWY-O Photo 6.1.27
Storm Drain Inlet with BMP



HWY-O Photo 6.1.28
Storm Drain Inlet with BMP



HWY-O Photo 6.1.29
Storm Drain Inlet with BMP



HWY-O Photo 6.1.30
Drainage Area 1



HWY-O Photo 6.1.31
Drainage Area 1



HWY-O Photo 6.1.32
Northwest Corner of Warehouse Looking Toward Sampling Location



HWY-O Photo 6.1.33
Western Side of Warehouse



HWY-O Photo 6.1.34
Sampling Point Storm Drain Inlet with BMP



HWY-O Photo 6.1.35
Storm Drain Inlet with BMP



HWY-O Photo 6.1.36
Storm Drain Inlet with BMP



HWY-O Photo 6.1.37
Grass Area on Southern Side of Warehouse



HWY-O Photo 6.1.38
Drainage Area 1



HWY-O Photo 6.1.39
Salvage Equipment Area



HWY-O Photo 6.1.40
Salvage Equipment Area



HWY-O Photo 6.1.41
Salvage Equipment Area



HWY-O Photo 6.1.42
Covered Storage Area



HWY-O Photo 6.1.43
Covered Storage Area



HWY-O Photo 6.1.44
Vehicle with Drip Pan in Use



HWY-O Photo 6.1.45
Vehicle with Drip Pan in Use



HWY-O Photo 6.1.46
Covered Propane Storage



HWY-O Photo 6.1.47
Material Storage



HWY-O Photo 6.1.48
Sign Storage Area



HWY-O Photo 6.1.49
Sign Storage Area



HWY-O Photo 6.1.50
Sign Storage Area



HWY-O Photo 6.1.51
Sign Storage Area



HWY-O Photo 6.1.52
Driveway near Sign Shop (Looking East)



HWY-O Photo 6.1.53
Openings in South CMU Wall



HWY-O Photo 6.1.54
Openings in South CMU Wall



HWY-O Photo 6.1.55
Openings in South CMU Wall



HWY-O Photo 6.1.56
Parking Area



HWY-O Photo 6.1.57
Parking Area



HWY-O Photo 6.1.58
Outdoor Sign Storage Area



HWY-O Photo 6.1.59
Outdoor Sign Storage Area



HWY-O Photo 6.1.60
Marking Crew Area



HWY-O Photo 6.1.61
Outdoor Sign Storage Area



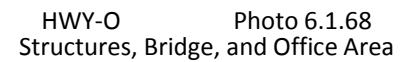
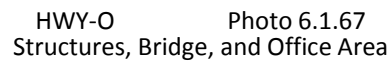
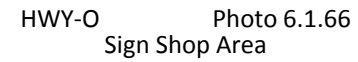
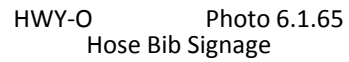
HWY-O Photo 6.1.62
Hose Bib Signage



HWY-O Photo 6.1.63
Sign Shop Area



HWY-O Photo 6.1.64
Sign Shop Area

 Kennedy Jenks



HWY-O Photo 6.1.69
Covered Sign Storage Area



HWY-O Photo 6.1.70
Heavy Motor Pool Building



HWY-O Photo 6.1.71
Heavy Motor Pool Building



HWY-O Photo 6.1.72
Heavy Motor Pool Building Roof Drainage



HWY-O Photo 6.1.73
Dry Oil Stain Outside Maintenance Bay



HWY-O Photo 6.1.74
Heavy Motor Pool Building Maintenance Bay



HWY-O Photo 6.1.75
Spill Kit



HWY-O Photo 6.1.76
Spill Kit



HWY-O Photo 6.1.77
Spill Kit Contents



HWY-O Photo 6.1.78
Flammable Storage Cabinets



HWY-O Photo 6.1.79
Heavy Motor Pool Building



HWY-O Photo 6.1.80
Vehicle with Drip Pan in Use



HWY-O Photo 6.1.81
Vehicle with Drip Pan in Use



HWY-O Photo 6.1.82
Heavy Motor Pool Building



HWY-O Photo 6.1.83
Heavy Motor Pool Building



HWY-O Photo 6.1.84
Heavy Motor Pool Building



HWY-O Photo 6.1.85
Heavy Motor Pool Building



HWY-O Photo 6.1.86
Heavy Motor Pool Building



HWY-O Photo 6.1.87
Tire, Mover, Lights & Engine Storage Area



HWY-O Photo 6.1.88
Tire, Mover, Lights & Engine Storage Area



HWY-O Photo 6.1.89
Tire, Mover, Lights & Engine Storage Area



HWY-O Photo 6.1.90
Tire, Mover, Lights & Engine Storage Area



HWY-O Photo 6.1.91
Tire, Mover, Lights & Engine Storage Area



HWY-O Photo 6.1.92
Light Motor Pool Area



HWY-O Photo 6.1.93
Light Motor Pool Area



HWY-O Photo 6.1.94
Light Motor Pool Area



HWY-O Photo 6.1.95
Used Motor Oil Tank Area



HWY-O Photo 6.1.96
Light Motor Pool Maintenance Bay



HWY-O Photo 6.1.97
Fuel Station Area



HWY-O Photo 6.1.98
Fuel Station Area



HWY-O Photo 6.1.99
Fuel Station Area



HWY-O Photo 6.1.100
Fuel Station Area



HWY-O Photo 6.1.101
USTs



HWY-O Photo 6.1.102
Fuel Station Area



HWY-O Photo 6.1.103
Spill Kit in Fuel Station



HWY-O Photo 6.1.104
Fuel Station Area



HWY-O Photo 6.1.105
Fuel Station Area



HWY-O Photo 6.1.106
Fuel Station Roof Drainage



HWY-O Photo 6.1.107
Fuel Station Roof Drainage



HWY-O Photo 6.1.108
Fuel Station Roof Drainage



HWY-O Photo 6.1.109
 Fuel Station Roof Drainage



HWY-O Photo 6.1.110
 Fuel Station Area



HWY-O Photo 6.1.111
 Fuel Station Signage



HWY-O Photo 6.1.112
 Sampling Location



HWY-O Photo 6.1.113
Sampling Location



HWY-O Photo 6.1.114
Storm Drain Inlet With BMP



HWY-O Photo 6.1.115
Storm Drain Inlet With BMP



HWY-O Photo 6.1.116
Storm Drain Inlet With BMP



HWY-O Photo 6.1.117
Storm Drain Inlet With BMP



HWY-O Photo 6.1.118
Sample Collection Point



HWY-O Photo 6.1.119
Sampling Location



HWY-O Photo 6.1.120
Parking Area (Looking East)



HWY-O Photo 6.1.121
Storm Drain Inlet With BMP



HWY-O Photo 6.1.122
Storm Drain Inlet With BMP



HWY-O Photo 6.1.123
Storm Drain Inlet With BMP



HWY-O Photo 6.1.124
Storm Drain Inlet With BMP



HWY-O Photo 6.1.125
Northeast Corner of Baseyard



HWY-O Photo 6.1.126
Parking Area (Looking South)



HWY-O Photo 6.1.127
Discharge Location



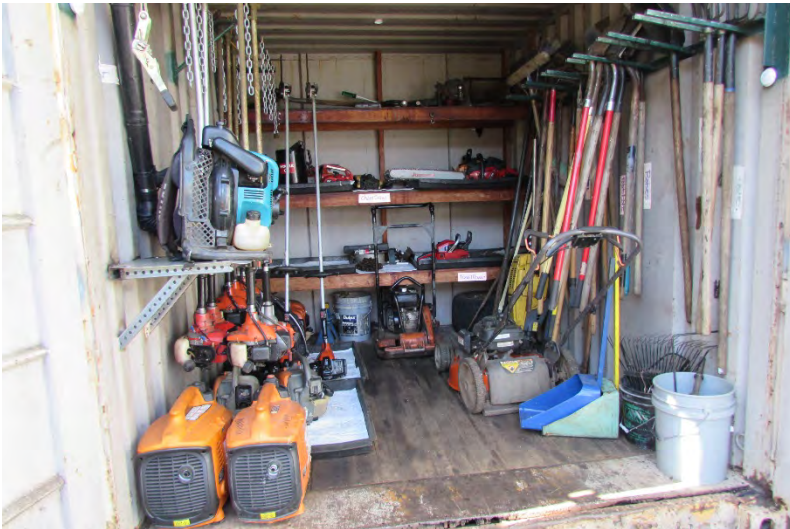
HWY-O Photo 6.1.128
Parked Equipment



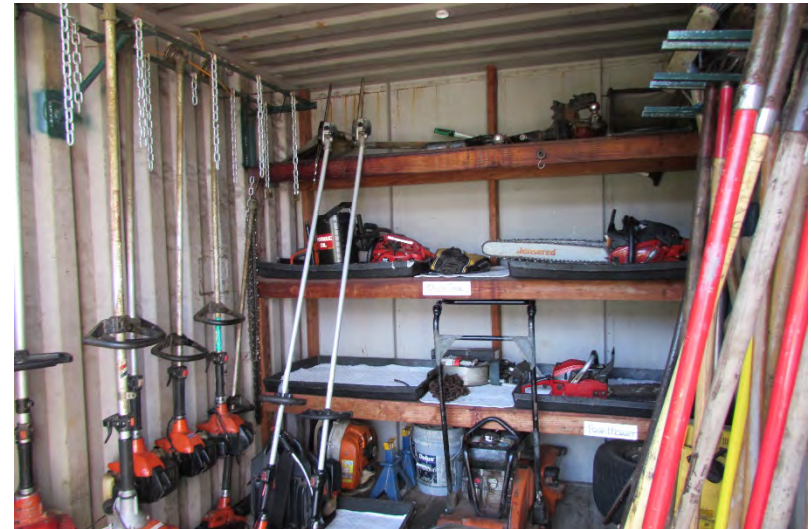
HWY-O Photo 6.1.129
Parked Equipment Battery



HWY-O Photo 6.1.130
Landscape Maintenance Equipment Storage



HWY-O Photo 6.1.131
Landscape Maintenance Equipment Storage



HWY-O Photo 6.1.132
Landscape Maintenance Equipment Storage



HWY-O Photo 6.2.1
Wet Oil Stain



HWY-O Photo 6.2.2
Wet Oil Stain



HWY-O Photo 6.2.3
Wet Oil Stain



HWY-O Photo 6.2.4
Material Stockpiles Along Banyan Drive Landscaped Area



HWY-O Photo 6.2.5
Material Stockpiles



HWY-O Photo 6.2.6
Drip Pans



HWY-O Photo 6.2.7
Material Stockpiles



HWY-O Photo 6.2.8
Material Stockpiles



HWY-O Photo 6.2.9
Banyan Drive Area



HWY-O Photo 6.2.10
Material Stockpiles



HWY-O Photo 6.2.11
Material Stockpiles



HWY-O Photo 6.2.12
Material Stockpiles



HWY-O Photo 6.2.13
Material Stockpiles



HWY-O Photo 6.2.14
Drip Pan in Disrepair



HWY-O Photo 6.2.15
Drip Pan in Disrepair



HWY-O Photo 6.2.16
Equipment Storage Container



HWY-O Photo 6.2.17
Safety Systems Signs/Lights Storage



HWY-O Photo 6.2.18
Safety Systems Signs/Lights Storage



HWY-O Photo 6.2.19
Covered Waste Receptacles



HWY-O Photo 6.2.20
Equipment Storage



HWY-O Photo 6.2.21
Equipment Storage



HWY-O Photo 6.2.22
White Residue on AC Pavement



HWY-O Photo 6.2.23
Equipment Storage



HWY-O Photo 6.2.24
Equipment Storage



HWY-O Photo 6.2.25
Equipment Storage



HWY-O Photo 6.2.26
Drip Pan Under Equipment



HWY-O Photo 6.2.27
Concrete Barrier Storage Area



HWY-O Photo 6.2.28
North Area of Baseyard



HWY-O Photo 6.2.29
North Area of Baseyard (Looking East)



HWY-O Photo 6.2.30
North Area of Baseyard (Looking South)



HWY-O Photo 6.2.31
Drain Inlets with BMPs



HWY-O Photo 6.2.32
Drain Inlets with BMPs



HWY-O Photo 6.2.33
Drain Inlets with BMPs



HWY-O Photo 6.2.34
Drain Inlets with BMPs



HWY-O Photo 6.2.35
New Drain Inlet (Not Connected)



HWY-O Photo 6.2.36
White Residue on AC Pavement



HWY-O Photo 6.2.37
White Residue on AC Pavement



HWY-O Photo 6.2.38
Northeastern Corner of Baseyard



HWY-O Photo 6.2.39
Construction Contractor Staging Area



HWY-O Photo 6.2.40
Construction Contractor Staging Area



HWY-O Photo 6.2.41
Construction Contractor Staging Area



HWY-O Photo 6.2.42
Construction Contractor Staging Area



HWY-O Photo 6.2.43
Construction Contractor Staging Area



HWY-O Photo 6.2.44
Construction Contractor Staging Area



HWY-O Photo 6.2.45
Construction Contractor Staging Area



HWY-O Photo 6.2.46
Construction Contractor Staging Area



HWY-O Photo 6.2.47
Material Stockpiles Along Pookela Street Landscaped Area



HWY-O Photo 6.2.48
Material Stockpiles



HWY-O Photo 6.2.49
Material Stockpiles



HWY-O Photo 6.2.50
Sampling Location



HWY-O Photo 6.2.51
Sampling Location



HWY-O Photo 6.2.52
Sampling Location



HWY-O Photo 6.2.53
Sampling Location



HWY-O Photo 6.2.54
Sampling Location



HWY-O Photo 6.2.55
Sampling Location



HWY-O Photo 6.2.56
Drainage Swale



HWY-O Photo 6.2.57
Drainage Swale



HWY-O Photo 6.2.58
Drip Pan Under Parked Equipment (in Vehicle Shed)



HWY-O Photo 6.2.59
Vehicle Wash Rack



HWY-O Photo 6.2.60
Vehicle Wash Rack Signage



HWY-O Photo 6.2.61
Covered Waste Receptacles



HWY-O Photo 6.2.62
Parking Area



HWY-O Photo 6.2.63
Covered Waste Receptacles



HWY-O Photo 6.2.64
Covered Waste Receptacles



HWY-O Photo 6.2.63
Area to the South of Baseyard



HWY-O Photo 6.2.64
Area to the South of Baseyard



HWY-O Photo 6.2.65
Drain Inlet with BMP (Southern)



HWY-O Photo 6.2.66
Drain Inlet with BMP (Southern)



HWY-O Photo 6.2.67
Parking Area



HWY-O Photo 6.2.68
Parking Area



HWY-O Photo 6.2.69
Drain Inlet with BMP (Outside Vehicle Shed)



HWY-O Photo 6.2.70
Drain Inlet with BMP (Outside Vehicle Shed)

Appendix B6: Permit-Specific Information – Highways Oahu District

5. Potential Violations

Potential Violation Tracking #6 applies to this permit. Please see pages B6-6 through B6-10.

Appendix B6: Permit-Specific Information – Highways Oahu
District

Draft Notice of Potential Violation

Potential Violation Tracking #: 6

Determination of Potential Violation Date: 6/3/2019

Potential Violation Notification Date: 6/5/2019

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

As reported in Section 3.2 of Highways Oahu District's 2017-2018 Annual Monitoring Report, five (5) results exceeded stormwater discharge limits during the one sampling event that was conducted at the Pearl City Baseyard. The effluent parameters in exceedance were ammonia nitrogen, nitrate + nitrite, turbidity, total nitrogen, and total phosphorus.

Description of Attachments (if applicable): Not Applicable.

Applicable Regulatory References

Consent Decree: Not Applicable.

NPDES Permit No.:

HI S000001 Part C.2.: "The discharge shall not cause or contribute to a violation of any of the applicable beneficial uses or water quality objectives contained in HAR, Chapter 11-54, titled "Water Quality Standards."

HI S000001 Part F.2.{1}.: "Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table."

HI S000001 Part F.2.{4}.: "The value shall not exceed the applicable limit as specified in Chapter 11-54 for the applicable classification of the receiving state waters."

SWMPP: Not Applicable

Hawaii Administrative Rules (HAR): Not Applicable.

Code of Federal Regulations (CFR): Not Applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: **6/19/2019**
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency (see rationale below)
 - o Email Notice sent to EPA/DOH on:
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on:

Rationale for Re-Categorization or Summary Dismissal: Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☒ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: 6 Potential Violation Notification Date: **6/5/2019**
(from Notice of Potential Violation Form)

Corrective Action Notification Date: **6/19/2019**

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #:

HDOT Receipt of Draft PEAR Date:

Corrective Action Notification Date:

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Highways Oahu District (HWY-O) acknowledges the five exceedances resulting from the 2 May 2018, sampling event at the Pearl City Baseyard. Following the sampling event, HWY-O has complied with the oral and written notification requirements of Hawaii Administrative Rules (HAR), Chapter 11-55, Appendix B, Section 10(c) (see Attachment A).

HWY-O's adaptive management approach has produced clear improvements towards meeting the stormwater discharge limits and its planned improvements will continue to reduce occurrences of exceedance. A previous sampling event in 2015 at the Pearl City Baseyard resulted in exceedances for six parameters (see Attachment B). Oral and written notifications were provided to the Department of Health Clean Water Branch. Following the exceedance, HWY-O allocated funds, designed, and constructed significant baseyard improvements to improve effluent concentrations. Completed in fall 2017, HWY-O installed crushed rock to the parking area that was previously exposed dirt, diverted stormwater flows into a newly constructed concrete channel to reduce potential contact with pollutants, and installed five filters in downspouts that drain from the H-1 Freeway overpass through the baseyard. As a result of these structural best management practices (BMPs), with the exception of ammonia nitrogen, all other

Appendix B6: Permit-Specific Information – Highways Oahu District

parameters experienced a significant decrease in pollutant concentrations in the next sampling event on 2 May 2018, the event that is the subject of this Potential Violation. One parameter, lead, was reduced to a concentration below the discharge limit (see table below).

Sample Location	Parameter (Unit)	Discharge Limit	Analytical Results (Event - 8/24/15)	Analytical Results (Event - 5/2/18)
PC-1	Total Phosphorus (mg/L)	0.13	2.5	0.31
	Nitrate + Nitrite (mg/L)	0.04	1.4	0.414
	Ammonia Nitrogen (mg/L)	0.02	0.17	0.379
	Total Nitrogen (mg/L)	0.55	5.8	1.71
	Lead (ug/L)	29	280	7
	Turbidity (NTU)	8	1360	128

Beginning in June 2018, more frequent removal of sediment from the driveway and surrounding drainage channels, which were determined to be the source contributing to the parameter exceedances, were implemented as part of good housekeeping BMPs. Additionally, as a part of its annual stormwater training, on 13 July 2018, Pearl City Baseyard personnel were trained on the sample results and BMPs for improvement.

In accordance with HAR, Chapter 11-55, Appendix B, Section 10(b)(2), HWY-O has monitored subsequent representative storms, but has not had an event that resulted in sample collection. HWY-O will continue to identify and implement additional BMPs if subsequent stormwater samples do not demonstrate that discharge limits are met.

Funding has been identified and further stormwater improvements are currently in design for the Pearl City Baseyard. Initial design concepts include new asphalt pavement over areas that are currently gravel or dirt, diversion of stormwater flows, and the installation of a stormwater treatment device, likely a water polisher with filter media to target the pollutants of concern. Specific improvements are subject to change based on feedback during design review.

Due to the time and resources needed to implement stormwater improvements at the Pearl City Baseyard, HWY-O requests an extension for Corrective Action. The following projected schedule serves as HWY-O's Corrective Action Workplan:

31 March 2020 – Complete Plans, Specifications and Estimate
30 June 2020 – Complete Advertising and Open Bids
31 August 2020 – Award Project
31 March 2021 – Project Completion

HWY-O will continue to collect samples from representative storm events to monitor for compliance with effluent limits.

Description of Attachments (if applicable):

Attachment A – Oral and Written Notification for 2 May 2018 Event

Attachment B – Discharge Monitoring Report for 24 August 2015 Event

Attachment A:

Oral and Written Notification for May
2, 2018 Event



MAY 31 2018

JADE T. BUTAY
DIRECTOR

Deputy Director
ROY CATALANI
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

OAHU DISTRICT
727 KAKOI STREET
HONOLULU, HAWAII 96813-2017

May 30, 2018

HWY-OW 2.18-0514

TO: ALEC WONG, P.E., CHIEF
CLEAN WATER BRANCH

FROM: GEORGE G. ABCEDE
OAHU DISTRICT ENGINEER

A handwritten signature in dark ink, appearing to read "G. Abcede", is written over the "FROM:" line.

SUBJECT: STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION,
HIGHWAYS DIVISION (DOT-HWYS)
OAHU MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
PERMIT NO. HI S000001
STORM WATER ASSOCIATED WITH INDUSTRIAL ACTIVITIES,
PEARL CITY BASEYARD MONITORING

In accordance with the requirements of the DOT-HWYS MS4 NPDES Permit No. HI S000001 (effective October 28, 2013 and modified effective April 1, 2016), this notification is being provided to satisfy the sections noted below:

MS4 NPDES Permit Part F.2. Storm Water Associated with Industrial Activities

The MS4 NPDES Permit Part F.2., Note {1} states:

Pollutant concentration levels shall not exceed the storm water discharge limits or be outside the ranges indicated in the table. Actual or measured levels which exceed those storm water discharge limits or are outside those ranges shall be reported to the CWB required in HAR, Chapter 11-55, Appendix B, Section 10(c).

HAR, Chapter 11-55, Appendix B, Section 10(c) states:

- (2) *The permittee shall make oral reports by telephone to the Clean Water Branch at (808) 586-4309 during regular office hours which are Monday through Friday, (excluding holidays) from 7:45 a.m. until 4:15 p.m. or the Hawaii State Hospital Operator at (808) 247-2191 outside of regular office hours.*

(3) The permittee shall provide a written report within five days of the time the permittee or its duly authorized representative becomes aware of the circumstances.

Description of Event:

Pearl City Baseyard

Storm water samples were collected from the Pearl City Baseyard's designated discharge monitoring points (PC-1) on May 2, 2018. The storm water discharge lasted from approximately 5:43 a.m. until 9:05 a.m. and discharged approximately 1,440 gallons per day. The oral report via phone call was made to the Department of Health, Clean Water Branch on May 29, 2018 at 8:14 a.m. Discharge limit exceedances are presented in the following table:

Sample Location	Sample Event Date	Parameter (unit)	Analytical Results	Discharge Limit
PC-1	5/2/2018	Turbidity (NTU)	128	8
		Total Nitrogen (mg/L)	1.71	0.55
		Ammonia Nitrogen (mg/L)	0.379	0.02
		Nitrate + Nitrite (mg/L)	0.414	0.04
		Total Phosphorus (mg/L)	0.310	0.13

The source contributing to the parameter exceedances is most likely sediment on the driveway and surrounding drainage channels within the baseyard. Field observations indicated that sheet flow in the baseyard was primarily from drainage channels designed to direct storm water from H-1 Freeway Pearl City Viaduct downspouts through the baseyard and to the discharge point. Minimal sheet flow from direct rainfall onto the baseyard itself was observed.

More frequent removal of sediment from the driveway and surrounding drainage channels will be implemented as part of good housekeeping Best Management Practices (BMPs). Permanent BMPs filters were installed in selected downspouts in Fall 2017. Inspection, cleaning, and maintenance of downspout filters occurs every couple of weeks and after substantial rainfall events. Drainage channels were also installed in Fall 2017 and provide sediment filtration and erosion control. Off-site sources of storm water run-on to the baseyard were also minimized in Fall 2017. Initial discharge point inspection was conducted to determine feasibility of installing a pollutant separating baffle box was conducted in Fall 2017 and budget for a permanent BMP project has been established for design and construction in 2019.

Required parameters will continue to be monitored in subsequent storm events to determine if discharge limits continue to be exceeded.

Mr. Alec Wong, P.E., Chief
May 30, 2018
Page 3

HWY-OW 2.18-0514

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.

Should you have any questions regarding this report, please contact Mr. Kelly Lee Sato of our Oahu District Environmental Management Section at (808) 483-2569.

bc: HWY-O (George Abcede)
HWY-OW (Kelly Lee Sato)
HWY-OM (Ryan Nakata)
EnviroServices and Training Center, LLC. (Kyson Morikuni)

KLS:lk

Attachment B:
Discharge Monitoring Report for
August 24, 2015 Event

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

HI S000001

PERMIT NUMBER

PC-1

DISCHARGE NUMBER

FACILITY Pearl City Baseyard


LOCATION 820 2nd Street
Pearl City, Hawaii 96782

MONITORING PERIOD

FROM

YEAR	MO	DAY	TO	YEAR	MO	DAY
2015	07	01		2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS				
Estimated Flow Rate	SAMPLE MEASUREMENT						25,848	gal/day		1/365	Calc	
	PERMIT REQUIREMENT				Report							
Biochemical Oxygen Demand	SAMPLE MEASUREMENT						9.48	mg/l		1/365	Comp.	
	PERMIT REQUIREMENT				Report							
Chemical Oxygen Demand	SAMPLE MEASUREMENT						370	mg/l		1/365	Comp.	
	PERMIT REQUIREMENT				Report							
Total Suspended Solids	SAMPLE MEASUREMENT						1200	mg/l		1/365	Comp.	
	PERMIT REQUIREMENT				Report							
Total Phosphorus	SAMPLE MEASUREMENT						2.5	mg/l		1/365	Comp.	
	PERMIT REQUIREMENT				0.13							
Total Kjeldahl Nitrogen	SAMPLE MEASUREMENT						4.4	mg/l		1/365	Comp.	
	PERMIT REQUIREMENT				Report							
Nitrate + Nitrite	SAMPLE MEASUREMENT						1.4 B	mg/l		1/365	Comp.	
	PERMIT REQUIREMENT				0.04							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.							TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O								808	831-6703	2017	02	10
TYPED OR PRINTED									SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			AREA CODE

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

B: Compound was found in the blank and the sample

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Form Approved.

OMB No. 2040-0004

ADDRESS 727 Kako'i Street
Honolulu, Hawaii 96819

HI S000001

PERMIT NUMBER

PC-1

DISCHARGE NUMBER

FACILITY Pearl City Baseyard


LOCATION 820 2nd Street
Pearl City, Hawaii 96782

MONITORING PERIOD

FROM

YEAR	MO	DAY	TO	YEAR	MO	DAY
2015	07	01		2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Ammonia Nitrogen	SAMPLE MEASUREMENT						0.17 J	mg/l		1/365	Comp.
	PERMIT REQUIREMENT				0.02						
Cadmium	SAMPLE MEASUREMENT						1.5 J	µg/l		1/365	Comp.
	PERMIT REQUIREMENT				3.0						
Chromium VI	SAMPLE MEASUREMENT						2.1	µg/l		1/365	Comp.
	PERMIT REQUIREMENT				16.0						
Lead	SAMPLE MEASUREMENT						280	µg/l		1/365	Comp.
	PERMIT REQUIREMENT				29.0						
Oil and Grease	SAMPLE MEASUREMENT						ND	mg/l		1/365	Grab
	PERMIT REQUIREMENT				15.0						
pH	SAMPLE MEASUREMENT						7.52*	pH Units		1/365	Grab
	PERMIT REQUIREMENT				5.5 - 8.0						
Turbidity	SAMPLE MEASUREMENT						1360	NTU		1/365	Grab
	PERMIT REQUIREMENT				8						
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.						TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O							808	831-6703	2017	02	10
TYPED OR PRINTED									SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value

*: Measured in field 4 hours after sample event

ND: Not Detected

EPA Form 3320-1 (Rev. 3/99) Previous editions may be used.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved.
OMB No. 2040-0004ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

HI S000001

PERMIT NUMBER

PC-1

DISCHARGE NUMBER

FACILITY Pearl City Baseyard

LOCATION 820 2nd Street
Pearl City, Hawaii 96782

MONITORING PERIOD

FROM

YEAR	MO	DAY		YEAR	MO	DAY
2015	07	01	TO	2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS				
Dissolved Oxygen	SAMPLE MEASUREMENT				8.26*		9.67 H3**	mg/l		1/365	Grab	
	PERMIT REQUIREMENT				Report							
Oxygen Saturation	SAMPLE MEASUREMENT						67.8**	%		1/365	Grab	
	PERMIT REQUIREMENT				Report							
Temperature	SAMPLE MEASUREMENT						10.6*	°C		1/365	Grab	
	PERMIT REQUIREMENT				Report							
Salinity	SAMPLE MEASUREMENT						ND	psu		1/365	Grab	
	PERMIT REQUIREMENT				Report							
Benzene	SAMPLE MEASUREMENT						ND	µg/l		1/365	Grab	
	PERMIT REQUIREMENT				1,800							
Toluene	SAMPLE MEASUREMENT						ND	µg/l		1/365	Grab	
	PERMIT REQUIREMENT				5,800							
Ethylbenzene	SAMPLE MEASUREMENT						ND	µg/l		1/365	Grab	
	PERMIT REQUIREMENT				11,000							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		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.						TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O								808 831-6703		2017	02	10
TYPED OR PRINTED								SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

*: Measured in the field 4 hours after sample event

H3: Measured past holding time

**: Measured in lab

ND: Not Detected

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME Department of Transportation, Highways Division

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved.
OMB No. 2040-0004

ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

HI S000001	PC-1
PERMIT NUMBER	DISCHARGE NUMBER


FACILITY Pearl City Baseyard

LOCATION 820 2nd Street
Honolulu, Hawaii 96819

MONITORING PERIOD						
YEAR	MO	DAY		YEAR	MO	DAY
2015	07	01	FROM	2015	08	24

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Total Nitrogen	SAMPLE MEASUREMENT						5.8	mg/l		1/365	Calc.
	PERMIT REQUIREMENT				0.55						
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
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	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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.			TELEPHONE		DATE		
Pratt Kinimaka District Engineer, HWY-O				808	831-6703	2017	02	10
TYPED OR PRINTED		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	MO	DAY	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Estimated Flow Rate Calculations and Field Parameters

Department of Transportation, Highways Division

Pearl City Baseyard

1. Sample Location: PC-1
2. Date: 8/24/2015
3. Duration of Storm Event: 1:13 (73 minutes)
4. Time Storm Event Began: 0307 am
5. Time Storm Event Ended: 0420 am
6. Magnitude of Rainfall Event: 0.10 inches
7. Date of Last Rain Event Greater than 0.1 inches: 4/20/2015 (days)
8. Water Quality (Storm water discharge and the receiving water will be inspected for the following characteristics):
 - i. Turbidity: Moderate w/ some vegetation and sediment
 - ii. Color: Turbid brown
 - iii. Floating oil and grease: None
 - iv. Floating debris and scum: None
 - v. Materials that will settle: Sediment
 - vi. Substances that will produce taste in the water or detectable off-flavor in fish: None
 - vii. Items that may be toxic or harmful to human or other life: None
9. pH: 7.52 standard units
10. Temperature: 6.0 °C
11. Dissolved Oxygen: 74.2% [10.6 °C] possible error?
12. Oxygen Saturation [% O₂ saturation= (DO of sample) / (maximum possible DO at a given temperature)*100]: 74.35
13. Flow Rate: 25,848 (gallons per day - gpd)

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Irvine

17461 Derian Ave

Suite 100

Irvine, CA 92614-5817

Tel: (949)261-1022

TestAmerica Job ID: 440-119107-1

Client Project/Site: DOT HWY SWPCP

For:

EA Engineering, Science, and Technology

615 Piikoi Street

Suite 515

Honolulu, Hawaii 96814

Attn: Jeff Morrell



Authorized for release by:

9/15/2015 11:43:22 AM

Pat Abe, Senior Project Manager

(808)486-5227

pat.abe@testamericainc.com

Designee for

Craig Pilialoha, Project Manager I

(808)486-5227

craig.pilialoha@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.



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Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
440-119107-1	PC-082415-COMPOSITE	Water	08/24/15 03:10	08/26/15 10:00
440-119107-2	PC-082415-GRAB	Water	08/24/15 03:09	08/26/15 10:00

Case Narrative

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Job ID: 440-119107-1

Laboratory: TestAmerica Honolulu

Narrative

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory unless otherwise stated in the report. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. TestAmerica Analytical Testing Corporation certifies that the analytical results contained herein apply only to the specific sample(s) analyzed.

The Chain(s) of Custody are included and are an integral part of this report. This entire report was reviewed and approved for release.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(808)486-5227

LABORATORY REPORT

At sample receipt, the cooler/sample was 3 degrees C.

TestAmerica has determined that samples which require thermal preservation shall be considered acceptable if the arrival temperature is within 2 degrees C of the required temperature or the method specified range. For samples with a temperature requirement of 4 degrees C, an arrival temperature from 0 degrees C to 6 degrees C meets specifications. Samples that are delivered to the laboratory on the same day that they are collected may not meet these criteria. In these cases, the samples are considered acceptable if there is evidence that the chilling process has begun, such as arrival on ice.

Laboratory: TestAmerica Irvine

Narrative

Job Narrative
440-119107-1

Comments

Samples were transferred into the appropriate containers from the unpreserved autosampler containers per client request.

No additional comments.

Receipt

The samples were received on 8/26/2015 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 3.6° C, 3.9° C, 4.3° C, 4.5° C and 4.7° C.

GC/MS VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

HPLC/IC

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Subcontract non-Sister

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

Method(s) 1664A: Elevated reporting limits are provided for the following sample due to insufficient sample provided for 1664A

Case Narrative

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Job ID: 440-119107-1 (Continued)

Laboratory: TestAmerica Irvine (Continued)

preparation/analysis: PC-082415-GRAB (440-119107-2).

Method(s) 1664A: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 440-277475 and analytical batch 440-277776. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Subcontract Work

Methods BOD 5-Day SM5210B, Dissolved Oxygen 360.1, Oxygen Saturation, Turbidity: These methods were subcontracted to TestAmerica Honolulu. The subcontract laboratory certifications are different from that of the facility issuing the final report.

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Client Sample ID: PC-082415-COMPOSITE

Lab Sample ID: 440-119107-1

Date Collected: 08/24/15 03:10

Matrix: Water

Date Received: 08/26/15 10:00

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	2.1		1.0	0.25	ug/L	-		08/27/15 21:19	1

Method: 200.8 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.5	J	2.0	0.50	ug/L	-	08/28/15 09:23	08/31/15 04:39	2
Lead	280		2.0	1.0	ug/L	-	08/28/15 09:23	08/31/15 04:39	2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	4.4		0.20	0.10	mg/L	-	08/27/15 13:52	08/27/15 22:04	1
Nitrate Nitrite as N	1.4	B	0.050	0.0031	mg/L	-		09/09/15 15:55	1
Phosphorus, Total	2.5		0.50	0.25	mg/L	-	08/31/15 19:05	08/31/15 21:25	1
Chemical Oxygen Demand	370		20	10	mg/L	-		08/27/15 20:06	1
Salinity	ND		2.0	2.0	psu	-		09/01/15 12:00	1
Total Suspended Solids	1200		40	20	mg/L	-		08/28/15 16:23	1
Ammonia (as N)	0.17	J	0.50	0.10	mg/L	-	09/04/15 04:00	09/04/15 06:37	1
Nitrogen, Total	5.8				mg/L	-		09/10/15 15:52	1

Method: EPA 360.1 - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oxygen, Dissolved - measured in lab not in field	9.67	H3	0.100	0.100	mg/L	-	08/24/15 15:02	08/24/15 15:02	1.00

Method: SM 2130 B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	1360		10.0		N.T.U.	-	08/25/15 09:17	08/25/15 09:17	100

Method: SM 4500-O2 - Calculated Analyses

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Oxygen Saturation	67.8		0.0100	0.0100	%	-	09/14/15 14:25	09/14/15 14:25	1.00

Method: SM5210B - General Chemistry Parameters

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	9.48		2.00	0.200	mg/L	-	08/24/15 19:59	08/29/15 16:45	1.00

Client Sample ID: PC-082415-GRAB

Lab Sample ID: 440-119107-2

Date Collected: 08/24/15 03:09

Matrix: Water

Date Received: 08/26/15 10:00

Method: 624 - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L	-		08/31/15 22:35	1
Ethylbenzene	ND		1.0	0.25	ug/L	-		08/31/15 22:35	1
Toluene	ND		1.0	0.25	ug/L	-		08/31/15 22:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		80 - 120		08/31/15 22:35	1
Dibromofluoromethane (Surr)	97		76 - 132		08/31/15 22:35	1
Toluene-d8 (Surr)	102		80 - 128		08/31/15 22:35	1

TestAmerica Irvine

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Client Sample ID: PC-082415-GRAB

Lab Sample ID: 440-119107-2

Date Collected: 08/24/15 03:09

Matrix: Water

Date Received: 08/26/15 10:00

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		6.4	1.8	mg/L	—	09/01/15 08:55	09/02/15 09:39	1

Method Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method	Method Description	Protocol	Laboratory
624	Volatile Organic Compounds (GC/MS)	40CFR136A	TAL IRV
218.6	Chromium, Hexavalent (Ion Chromatography)	EPA	TAL IRV
200.8	Metals (ICP/MS)	EPA	TAL IRV
1664A	HEM and SGT-HEM	1664A	TAL IRV
351.2	Nitrogen, Total Kjeldahl	MCAWW	TAL IRV
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SAC
365.3	Phosphorus, Total	EPA	TAL IRV
410.4	COD	MCAWW	TAL IRV
SM 2520B	Salinity	SM	TAL IRV
SM 2540D	Solids, Total Suspended (TSS)	SM	TAL IRV
SM 4500 NH3 D	Ammonia	SM	TAL IRV
Total Nitrogen	Nitrogen, Total	EPA	TAL IRV
EPA 360.1	General Chemistry Parameters		TAL HON
SM 2130 B	General Chemistry Parameters		TAL HON
SM 4500-O2	Calculated Analyses		TAL HON
SM5210B	General Chemistry Parameters		TAL HON

Protocol References:

1664A = EPA-821-98-002

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaai St. #104, Honolulu, HI 96818, TEL 808-486-5227

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Client Sample ID: PC-082415-COMPOSITE

Date Collected: 08/24/15 03:10

Date Received: 08/26/15 10:00

Lab Sample ID: 440-119107-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	218.6		1	10 mL		276369	08/27/15 21:19	RW	TAL IRV
Total Recoverable	Prep	200.2			25 mL	25 mL	276759	08/28/15 09:23	EN	TAL IRV
Total Recoverable	Analysis	200.8		2	25 mL	25 mL	277198	08/31/15 04:39	RC	TAL IRV
Total/NA	Prep	351.2			25 mL	25 mL	276534	08/27/15 13:52	SN	TAL IRV
Total/NA	Analysis	351.2		1	25 mL	25 mL	276670	08/27/15 22:04	SN	TAL IRV
Total/NA	Analysis	353.2		1			85571	09/09/15 15:55	JCB	TAL SAC
Total/NA	Prep	365.2/365.3/365			5 mL	50 mL	277365	08/31/15 19:05	NC	TAL IRV
Total/NA	Analysis	365.3		1	5 mL	50 mL	277393	08/31/15 21:25	TMB	TAL IRV
Total/NA	Analysis	410.4		1	0.625 mL	2.5 mL	276645	08/27/15 20:06	MSM	TAL IRV
Total/NA	Analysis	SM 2520B		1			277574	09/01/15 12:00	XL	TAL IRV
Total/NA	Analysis	SM 2540D		1	25 mL	1000 mL	276878	08/28/15 16:23	MMH	TAL IRV
Total/NA	Prep	SM 4500 NH3 B			50 mL	50 mL	278258	09/04/15 04:00	YZ	TAL IRV
Total/NA	Analysis	SM 4500 NH3 D		1	50 mL	50 mL	278284	09/04/15 06:37	YZ	TAL IRV
Total/NA	Analysis	Total Nitrogen		1			279404	09/10/15 15:52	TN	TAL IRV
Total	Analysis	EPA 360.1		1.00			15H0067	08/24/15 15:02	JMC	TAL HON
Total	Prep	Default Prep GenChem		1.00	300 mL	300 mL	15H0067_P	08/24/15 15:02	JMC	TAL HON
Total	Analysis	SM 2130 B		100			15H0073	08/25/15 09:17	RHK	TAL HON
Total	Prep	Default Prep GenChem		1.00	25 mL	25 mL	15H0073_P	08/25/15 09:17	RHK	TAL HON
Total	Analysis	SM 4500-O2		1.00			15I0041	09/14/15 14:25	JEC	TAL HON
Total	Prep	Default Prep GenChem		1.00	1 mL	1 mL	15I0041_P	09/14/15 14:25	JEC	TAL HON
Total	Prep	Default Prep GenChem		1.00	300 mL	300 mL	15H0072_P	08/24/15 19:59	JMC	TAL HON
Total	Analysis	SM5210B		1.00			15H0072	08/29/15 16:45	JMC	TAL HON

Client Sample ID: PC-082415-GRAB

Date Collected: 08/24/15 03:09

Date Received: 08/26/15 10:00

Lab Sample ID: 440-119107-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	624		1	10 mL	10 mL	277353	08/31/15 22:35	WC	TAL IRV
Total/NA	Prep	1664A			785 mL	1000 mL	277475	09/01/15 08:55	L1A	TAL IRV
Total/NA	Analysis	1664A		1	785 mL	1000 mL	277776	09/02/15 09:39	L1A	TAL IRV

Laboratory References:

TAL HON = TestAmerica Honolulu, 4429 Malaai St. #104, Honolulu, HI 96818, TEL 808-486-5227

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 440-277353/3

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.25	ug/L			08/31/15 19:35	1
Ethylbenzene	ND		1.0	0.25	ug/L			08/31/15 19:35	1
Toluene	ND		1.0	0.25	ug/L			08/31/15 19:35	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		80 - 120		08/31/15 19:35	1
Dibromofluoromethane (Surr)	96		76 - 132		08/31/15 19:35	1
Toluene-d8 (Surr)	101		80 - 128		08/31/15 19:35	1

Lab Sample ID: LCS 440-277353/4

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	25.0	25.0		ug/L		100	68 - 130
Ethylbenzene	25.0	25.7		ug/L		103	70 - 130
Toluene	25.0	25.4		ug/L		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	98		80 - 128

Lab Sample ID: 440-119433-A-1 MS

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		25.0	23.2		ug/L		93	66 - 130
Ethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130
Toluene	ND		25.0	24.3		ug/L		97	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		80 - 120
Dibromofluoromethane (Surr)	95		76 - 132
Toluene-d8 (Surr)	100		80 - 128

Lab Sample ID: 440-119433-A-1 MSD

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		25.0	23.4		ug/L		94	66 - 130	1	20
Ethylbenzene	ND		25.0	24.5		ug/L		98	70 - 130	0	20
Toluene	ND		25.0	24.2		ug/L		97	70 - 130	1	20

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-119433-A-1 MSD

Matrix: Water

Analysis Batch: 277353

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		80 - 120
Dibromofluoromethane (Surr)	96		76 - 132
Toluene-d8 (Surr)	100		80 - 128

Method: 218.6 - Chromium, Hexavalent (Ion Chromatography)

Lab Sample ID: MB 440-276369/3

Matrix: Water

Analysis Batch: 276369

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent	ND		1.0	0.25	ug/L			08/27/15 05:28	1

Lab Sample ID: LCS 440-276369/2

Matrix: Water

Analysis Batch: 276369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	50.0	49.7		ug/L		99	90 - 110

Lab Sample ID: MRL 440-276369/4

Matrix: Water

Analysis Batch: 276369

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	1.00	1.18		ug/L		118	50 - 150

Lab Sample ID: 440-119107-1 MS

Matrix: Water

Analysis Batch: 276369

Client Sample ID: PC-082415-COMPOSITE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium, hexavalent	2.1		50.0	52.1		ug/L		100	90 - 110

Lab Sample ID: 440-119107-1 MSD

Matrix: Water

Analysis Batch: 276369

Client Sample ID: PC-082415-COMPOSITE

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium, hexavalent	2.1		50.0	51.6		ug/L		99	90 - 110	1	10

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 440-276759/1-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		1.0	0.25	ug/L		08/28/15 09:23	08/31/15 03:53	1

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 440-276759/1-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.50	ug/L		08/28/15 09:23	08/31/15 03:53	1

Lab Sample ID: LCS 440-276759/2-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	80.0	79.6		ug/L		100	85 - 115
Lead	80.0	82.9		ug/L		104	85 - 115

Lab Sample ID: LCSD 440-276759/3-A

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Lab Control Sample Dup

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	80.0	81.3		ug/L		102	85 - 115	2	20
Lead	80.0	83.7		ug/L		105	85 - 115	1	20

Lab Sample ID: 440-117423-A-1-D MS

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Matrix Spike

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		80.0	69.1		ug/L		86	70 - 130
Lead	2.4		80.0	74.9		ug/L		91	70 - 130

Lab Sample ID: 440-117423-A-1-E MSD

Matrix: Water

Analysis Batch: 277198

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total Recoverable

Prep Batch: 276759

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	ND		80.0	66.3		ug/L		83	70 - 130	4	20
Lead	2.4		80.0	71.4		ug/L		86	70 - 130	5	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 440-277475/1-A

Matrix: Water

Analysis Batch: 277776

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277475

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0	1.4	mg/L		09/01/15 08:55	09/02/15 09:39	1

Lab Sample ID: LCS 440-277475/2-A

Matrix: Water

Analysis Batch: 277776

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277475

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	20.0	17.2		mg/L		86	78 - 114

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 1664A - HEM and SGT-HEM (Continued)

Lab Sample ID: LCSD 440-277475/3-A

Matrix: Water

Analysis Batch: 277776

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 277475

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	20.0	17.1		mg/L		86	78 - 114	1	11

Method: 351.2 - Nitrogen, Total Kjeldahl

Lab Sample ID: MB 440-276534/3-A

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 276534

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Kjeldahl Nitrogen	ND		0.20	0.10	mg/L		08/27/15 13:52	08/27/15 21:58	1

Lab Sample ID: LCS 440-276534/4-A

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.00	4.89		mg/L		98	90 - 110		

Lab Sample ID: LCSD 440-276534/5-A

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	5.00	4.88		mg/L		98	90 - 110	0	20

Lab Sample ID: 440-119059-B-1-B MS

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND		5.00	4.98		mg/L		100	90 - 110		

Lab Sample ID: 440-119059-B-1-C MSD

Matrix: Water

Analysis Batch: 276670

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 276534

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Kjeldahl Nitrogen	ND		5.00	5.00		mg/L		100	90 - 110	0	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 320-85571/15

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate Nitrite as N	0.0130	J	0.050	0.0031	mg/L			09/09/15 15:41	1

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 320-85571/16

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.00	0.982		mg/L		98	90 - 110

Lab Sample ID: 440-119144-E-2 MS

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	0.078	B	1.00	1.03		mg/L		95	90 - 110

Lab Sample ID: 440-119144-E-2 MSD

Matrix: Water

Analysis Batch: 85571

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate Nitrite as N	0.078	B	1.00	1.03		mg/L		95	90 - 110	0	20

Method: 365.3 - Phosphorus, Total

Lab Sample ID: MB 440-277365/1-A

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 277365

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phosphorus, Total	ND		0.050	0.025	mg/L		08/31/15 19:05	08/31/15 21:24	1

Lab Sample ID: LCS 440-277365/2-A

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 277365

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	0.502	0.405		mg/L		81	80 - 120

Lab Sample ID: 440-117704-W-1-E MS

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 277365

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phosphorus, Total	ND		0.502	0.503		mg/L		100	75 - 125

Lab Sample ID: 440-117704-W-1-F MSD

Matrix: Water

Analysis Batch: 277393

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 277365

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phosphorus, Total	ND		0.502	0.419		mg/L		84	75 - 125	18	20

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: 410.4 - COD

Lab Sample ID: MB 440-276645/9

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		20	10	mg/L			08/27/15 20:05	1

Lab Sample ID: LCS 440-276645/10

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	200	207		mg/L		103	90 - 110

Lab Sample ID: 440-119059-B-1 MS

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		200	208		mg/L		104	70 - 120

Lab Sample ID: 440-119059-B-1 MSD

Matrix: Water

Analysis Batch: 276645

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chemical Oxygen Demand	ND		200	208		mg/L		104	70 - 120	0	15

Method: SM 2520B - Salinity

Lab Sample ID: 440-119114-B-1 DU

Matrix: Water

Analysis Batch: 277574

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Salinity	ND		ND		psu		NC	20

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 440-276878/1

Matrix: Water

Analysis Batch: 276878

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		1.0	0.50	mg/L			08/28/15 16:23	1

Lab Sample ID: LCS 440-276878/2

Matrix: Water

Analysis Batch: 276878

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Suspended Solids	1000	986		mg/L		99	85 - 115

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 440-118978-B-1 DU

Matrix: Water

Analysis Batch: 276878

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Suspended Solids	240		238		mg/L		2	10

Method: SM 4500 NH3 D - Ammonia

Lab Sample ID: MB 440-278258/2-A

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 278258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia (as N)	ND		0.50	0.10	mg/L		09/04/15 04:00	09/04/15 06:18	1

Lab Sample ID: LCS 440-278258/1-A

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Ammonia (as N)	2.50	2.41		mg/L		96	85 - 115

Lab Sample ID: 440-119591-E-2-B MS

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Ammonia (as N)	ND		2.50	2.41		mg/L		96	75 - 125

Lab Sample ID: 440-119591-E-2-C MSD

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Ammonia (as N)	ND		2.50	2.51		mg/L		100	75 - 125	4	15

Lab Sample ID: 440-119802-A-1-C DU

Matrix: Water

Analysis Batch: 278284

Client Sample ID: Duplicate

Prep Type: Total/NA

Prep Batch: 278258

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Ammonia (as N)	62		57.5		mg/L		8	15

Method: EPA 360.1 - General Chemistry Parameters

Lab Sample ID: 15H0067-DUP1

Matrix: Water - NonPotable

Analysis Batch: 15H0067

Client Sample ID: PC-082415 COMP

Prep Type: Total

Prep Batch: 15H0067_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Oxygen, Dissolved - measured in lab not in field	9.67		9.62	H3	mg/L		0.5	20

TestAmerica Irvine

QC Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Method: SM 2130 B - General Chemistry Parameters

Lab Sample ID: 15H0073-BLK1
Matrix: Water - NonPotable
Analysis Batch: 15H0073

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 15H0073_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Turbidity	0.0600	J	0.100		N.T.U.	-	08/25/15 09:13	08/25/15 09:13	1.00

Lab Sample ID: 15H0073-DUP1
Matrix: Water - NonPotable
Analysis Batch: 15H0073

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 15H0073_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
Turbidity	19.4		19.2		N.T.U.	-	1	20

Method: SM5210B - General Chemistry Parameters

Lab Sample ID: 15H0072-BLK1
Matrix: Water - NonPotable
Analysis Batch: 15H0072

Client Sample ID: Method Blank
Prep Type: Total
Prep Batch: 15H0072_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
BOD - 5 Day	0.510	J	2.00	0.200	mg/L	-	08/24/15 19:37	08/29/15 16:06	1.00

Lab Sample ID: 15H0072-BS1
Matrix: Water - NonPotable
Analysis Batch: 15H0072

Client Sample ID: Lab Control Sample
Prep Type: Total
Prep Batch: 15H0072_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
BOD - 5 Day	198	207		mg/L	-	104	85 - 115

Lab Sample ID: 15H0072-DUP1
Matrix: Water - NonPotable
Analysis Batch: 15H0072

Client Sample ID: Duplicate
Prep Type: Total
Prep Batch: 15H0072_P

Analyte	Sample Result	Sample Qualifier	Duplicate Result	Duplicate Qualifier	Unit	D	RPD	Limit
BOD - 5 Day	4.34		4.33		mg/L	-	0.2	20

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

GC/MS VOA

Analysis Batch: 277353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-2	PC-082415-GRAB	Total/NA	Water	624	
440-119433-A-1 MS	Matrix Spike	Total/NA	Water	624	
440-119433-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	624	
LCS 440-277353/4	Lab Control Sample	Total/NA	Water	624	
MB 440-277353/3	Method Blank	Total/NA	Water	624	

HPLC/IC

Analysis Batch: 276369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	218.6	
440-119107-1 MS	PC-082415-COMPOSITE	Total/NA	Water	218.6	
440-119107-1 MSD	PC-082415-COMPOSITE	Total/NA	Water	218.6	
LCS 440-276369/2	Lab Control Sample	Total/NA	Water	218.6	
MB 440-276369/3	Method Blank	Total/NA	Water	218.6	
MRL 440-276369/4	Lab Control Sample	Total/NA	Water	218.6	

Metals

Prep Batch: 276759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117423-A-1-D MS	Matrix Spike	Total Recoverable	Water	200.2	
440-117423-A-1-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.2	
440-119107-1	PC-082415-COMPOSITE	Total Recoverable	Water	200.2	
LCS 440-276759/2-A	Lab Control Sample	Total Recoverable	Water	200.2	
LCSD 440-276759/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.2	
MB 440-276759/1-A	Method Blank	Total Recoverable	Water	200.2	

Analysis Batch: 277198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117423-A-1-D MS	Matrix Spike	Total Recoverable	Water	200.8	276759
440-117423-A-1-E MSD	Matrix Spike Duplicate	Total Recoverable	Water	200.8	276759
440-119107-1	PC-082415-COMPOSITE	Total Recoverable	Water	200.8	276759
LCS 440-276759/2-A	Lab Control Sample	Total Recoverable	Water	200.8	276759
LCSD 440-276759/3-A	Lab Control Sample Dup	Total Recoverable	Water	200.8	276759
MB 440-276759/1-A	Method Blank	Total Recoverable	Water	200.8	276759

General Chemistry

Analysis Batch: 85571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	353.2	
440-119144-E-2 MS	Matrix Spike	Total/NA	Water	353.2	
440-119144-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	353.2	
LCS 320-85571/16	Lab Control Sample	Total/NA	Water	353.2	
MB 320-85571/15	Method Blank	Total/NA	Water	353.2	

Prep Batch: 276534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	

TestAmerica Irvine

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

General Chemistry (Continued)

Prep Batch: 276534 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	351.2	
LCS 440-276534/4-A	Lab Control Sample	Total/NA	Water	351.2	
LCSD 440-276534/5-A	Lab Control Sample Dup	Total/NA	Water	351.2	
MB 440-276534/3-A	Method Blank	Total/NA	Water	351.2	

Analysis Batch: 276645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1 MS	Matrix Spike	Total/NA	Water	410.4	
440-119059-B-1 MSD	Matrix Spike Duplicate	Total/NA	Water	410.4	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	410.4	
LCS 440-276645/10	Lab Control Sample	Total/NA	Water	410.4	
MB 440-276645/9	Method Blank	Total/NA	Water	410.4	

Analysis Batch: 276670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119059-B-1-B MS	Matrix Spike	Total/NA	Water	351.2	276534
440-119059-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	351.2	276534
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	351.2	276534
LCS 440-276534/4-A	Lab Control Sample	Total/NA	Water	351.2	276534
LCSD 440-276534/5-A	Lab Control Sample Dup	Total/NA	Water	351.2	276534
MB 440-276534/3-A	Method Blank	Total/NA	Water	351.2	276534

Analysis Batch: 276878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-118978-B-1 DU	Duplicate	Total/NA	Water	SM 2540D	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 2540D	
LCS 440-276878/2	Lab Control Sample	Total/NA	Water	SM 2540D	
MB 440-276878/1	Method Blank	Total/NA	Water	SM 2540D	

Prep Batch: 277365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117704-W-1-E MS	Matrix Spike	Total/NA	Water	365.2/365.3/365	
440-117704-W-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	365.2/365.3/365	
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	365.2/365.3/365	
LCS 440-277365/2-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 440-277365/1-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 277393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-117704-W-1-E MS	Matrix Spike	Total/NA	Water	365.3	277365
440-117704-W-1-F MSD	Matrix Spike Duplicate	Total/NA	Water	365.3	277365
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	365.3	277365
LCS 440-277365/2-A	Lab Control Sample	Total/NA	Water	365.3	277365
MB 440-277365/1-A	Method Blank	Total/NA	Water	365.3	277365

Prep Batch: 277475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-2	PC-082415-GRAB	Total/NA	Water	1664A	
LCS 440-277475/2-A	Lab Control Sample	Total/NA	Water	1664A	
LCSD 440-277475/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	

TestAmerica Irvine

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

General Chemistry (Continued)

Prep Batch: 277475 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-277475/1-A	Method Blank	Total/NA	Water	1664A	

Analysis Batch: 277574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 2520B	
440-119114-B-1 DU	Duplicate	Total/NA	Water	SM 2520B	

Analysis Batch: 277776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-2	PC-082415-GRAB	Total/NA	Water	1664A	277475
LCS 440-277475/2-A	Lab Control Sample	Total/NA	Water	1664A	277475
LCSD 440-277475/3-A	Lab Control Sample Dup	Total/NA	Water	1664A	277475
MB 440-277475/1-A	Method Blank	Total/NA	Water	1664A	277475

Prep Batch: 278258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 4500 NH3 B	
440-119591-E-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 B	
440-119591-E-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 B	
440-119802-A-1-C DU	Duplicate	Total/NA	Water	SM 4500 NH3 B	
LCS 440-278258/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 B	
MB 440-278258/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 B	

Analysis Batch: 278284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	SM 4500 NH3 D	278258
440-119591-E-2-B MS	Matrix Spike	Total/NA	Water	SM 4500 NH3 D	278258
440-119591-E-2-C MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 NH3 D	278258
440-119802-A-1-C DU	Duplicate	Total/NA	Water	SM 4500 NH3 D	278258
LCS 440-278258/1-A	Lab Control Sample	Total/NA	Water	SM 4500 NH3 D	278258
MB 440-278258/2-A	Method Blank	Total/NA	Water	SM 4500 NH3 D	278258

Analysis Batch: 279404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total/NA	Water	Total Nitrogen	

WetChem

Analysis Batch: 15H0067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0067-DUP1	PC-082415 COMP	Total	Water - NonPotable	EPA 360.1	15H0067_P
440-119107-1	PC-082415-COMPOSITE	Total	Water	EPA 360.1	15H0067_P

Analysis Batch: 15H0072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-BLK1	Method Blank	Total	Water - NonPotable	SM5210B	15H0072_P
15H0072-BS1	Lab Control Sample	Total	Water - NonPotable	SM5210B	15H0072_P

TestAmerica Irvine

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

WetChem (Continued)

Analysis Batch: 15H0072 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-DUP1	Duplicate	Total	Water - NonPotable	SM5210B	15H0072_P
440-119107-1	PC-082415-COMPOSITE	Total	Water	SM5210B	15H0072_P

Analysis Batch: 15H0073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0073-BLK1	Method Blank	Total	Water - NonPotable	SM 2130 B	15H0073_P
15H0073-DUP1	Duplicate	Total	Water - NonPotable	SM 2130 B	15H0073_P
440-119107-1	PC-082415-COMPOSITE	Total	Water	SM 2130 B	15H0073_P

Analysis Batch: 15I0041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total	Water	SM 4500-O2	15I0041_P

Prep Batch: 15H0067_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0067-DUP1	PC-082415 COMP	Total	Water - NonPotable	Default Prep GenChem	
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Prep Batch: 15H0072_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0072-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
15H0072-BS1	Lab Control Sample	Total	Water - NonPotable	Default Prep GenChem	
15H0072-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Prep Batch: 15H0073_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
15H0073-BLK1	Method Blank	Total	Water - NonPotable	Default Prep GenChem	
15H0073-DUP1	Duplicate	Total	Water - NonPotable	Default Prep GenChem	
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Prep Batch: 15I0041_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-119107-1	PC-082415-COMPOSITE	Total	Water	Default Prep GenChem	

Definitions/Glossary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

WetChem

Qualifier	Qualifier Description
H3	Sample was received and analyzed past holding time.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: DOT HWY SWPCP

TestAmerica Job ID: 440-119107-1

Laboratory: TestAmerica Irvine

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	CA01531	06-30-16
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-16 *
New Mexico	State Program	6	N/A	01-29-16
Northern Mariana Islands	State Program	9	MP0002	01-29-16
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	07-08-18

Laboratory: TestAmerica Honolulu

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
USDA	Federal		HON-S-206	01-31-18

Laboratory: TestAmerica Sacramento

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2928-01	01-31-16
Alaska (UST)	State Program	10	UST-055	12-18-15
Arizona	State Program	9	AZ0708	08-11-16
Arkansas DEQ	State Program	6	88-0691	06-17-16
California	State Program	9	2897	01-31-16
Colorado	State Program	8	N/A	08-31-16
Connecticut	State Program	1	PH-0691	06-30-17
Florida	NELAP	4	E87570	06-30-16
Hawaii	State Program	9	N/A	01-29-16
Illinois	NELAP	5	200060	03-17-16
Kansas	NELAP	7	E-10375	10-31-15
Louisiana	NELAP	6	30612	06-30-16
Michigan	State Program	5	9947	01-31-16
Nevada	State Program	9	CA44	07-31-16
New Jersey	NELAP	2	CA005	09-30-15
New York	NELAP	2	11666	04-01-16
Oregon	NELAP	10	CA200005	01-29-16
Pennsylvania	NELAP	3	9947	03-31-16
Texas	NELAP	6	T104704399-15-9	05-31-16
US Fish & Wildlife	Federal		LE148388-0	02-28-16
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-16
Utah	NELAP	8	QUAN1	02-28-16
Virginia	NELAP Secondary AB	3	460278	03-14-16
Washington	State Program	10	C581	05-04-16
West Virginia (DW)	State Program	3	9930C	12-31-15
Wyoming	State Program	8	8TMS-Q	01-29-16

* Certification renewal pending - certification considered valid.

TestAmerica Irvine

Honolulu

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Suite 104

Honolulu, HI 96826

phone 808.486.5227 fax 808.486.2456

PC-1 (1)

Chain of Custody Record

MYM0078
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact		Project Manager: Jeff Morrell		Site Contact: Jeff Morrell		Date: 8-24-15		COC No:				
Name: Jeff Morrell		Tel/Fax: Jeff Morrell (271-8142)		Lab Contact: Jimson Carr		Carrier:		Job No. of COCs				
Email: jmorrell@east.com		E-mail results to jmorrell@east.com						SDG No.				
HWY-OM Environmental and Safety Program Support		Analysis Turnaround Time										
Phone: (808) 271-8142 Fax: (808) 845-9733		10 Day Turnaround										
Project Name: DOT HWY SWPCP												
Site: Pearl City												
PO # Enviro Services												
Sample Identification		Sample Date	Sample Time	Sample Type	Matrix	# of Cont.	Oil and grease	Benzene, Toluene, Ethylbenzene	Turbidity / Salinity / Oxygen Saturation (Method 6010)	Ammonia Nitrogen / Total Nitrogen	Cadmium / Lead / Chromium VI	Sample Specific Notes:
PC-082415-016 PC-1(1)		82415	0309	grab	Water	1	X					
PC-082415-02 PC-1(2)		8310	comp		Water	1						
PC-082415-03		8311										
PC-082415-04		8312										
PC-082415-05		8313										
PC-082415-06		8314										
PC-082415-07		8322										
PC-082415-08		8323										
PC-082415-09		8324										
PC-082415-10		8334										
PC-082415-11		8337										
PC-082415-12		8351										
Preservation Used (1=I ₂ , 2=HCl; 3=H ₂ SO ₄ ; 4=HNO ₃ ; 5=NaOH; 6=Other)												
Possible Hazard Identification												
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Irritable <input type="checkbox"/> Corrosive <input type="checkbox"/> Toxic <input type="checkbox"/> Other												
Special Instructions/QC Requirements & Comments:												
Lab to Composite bottle												
2 through 12. 1D Composite Sample on PC-082415-Comp.												
Relinquished by: Renee Kueley		Company: EATC	Date/Time: 8-24-15 1230	Received by: [Signature]	Company: TACON	Date/Time: 8/24/15 1230						
Relinquished by: [Signature]		Company: TACON	Date/Time: 8/25/15 1230	Received by: [Signature]	Company: TACON	Date/Time: 8/25/15 1230						
Relinquished by: [Signature]		Company: TACON	Date/Time: 8/25/15 1230	Received by: [Signature]	Company: TACON	Date/Time: 8/25/15 1230						

Fed 17743 65109794

CS 43/47 37/36 39/43 35/39 41/45 TR-75

[illegible]

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 440-119107-1

Login Number: 119107

List Source: TestAmerica Irvine

List Number: 1

Creator: Escalante, Maria I

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 440-119107-1

Login Number: 119107

List Number: 2

Creator: Hytrek, Cheryl

List Source: TestAmerica Sacramento

List Creation: 08/28/15 03:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix B6: Permit-Specific Information – Highways Oahu District

6. Deficiencies

Deficiency Tracking #9 through #15 apply to this permit. Please see pages B6-12 through B6-48.

Appendix B6: Permit-Specific Information – Highways Oahu
District

Final Notice of Deficiency

Deficiency Tracking #: 9

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed metal building materials and rolled fencing stored in uncovered areas at the Kakoi Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photographs of metal storage in uncovered areas observed during the On-Site Audit and associated map indicating locations where photographs were taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP, October 2016

Page 42: "Store metals in covered area or with a tarp to prevent rusting"

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

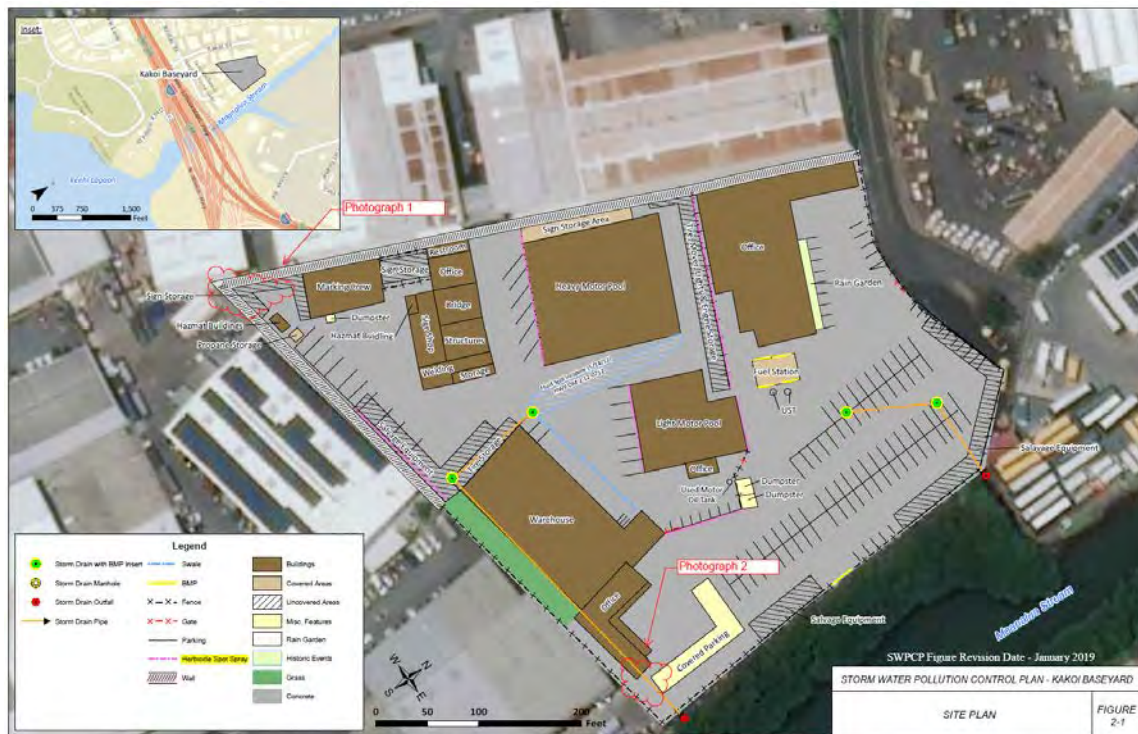
Photograph 1



Photograph 2



Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 9

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Uncovered metal storage areas were covered with a tarp on 16 July 2019 to prevent rusting. This is in accordance with the best management practices described in the Kakoi Baseyard SWPCP (October 2016, Page 42).

Description of Attachments (if applicable):

Photographs of metal storage areas covered with a tarp to prevent rusting.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action



Appendix B6: Permit-Specific Information – Highways Oahu District

Final Notice of Deficiency

Deficiency Tracking #: 10

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed a truck leaking oil west of the warehouse at the Kakoi Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of truck leaking oil observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP, October 2016

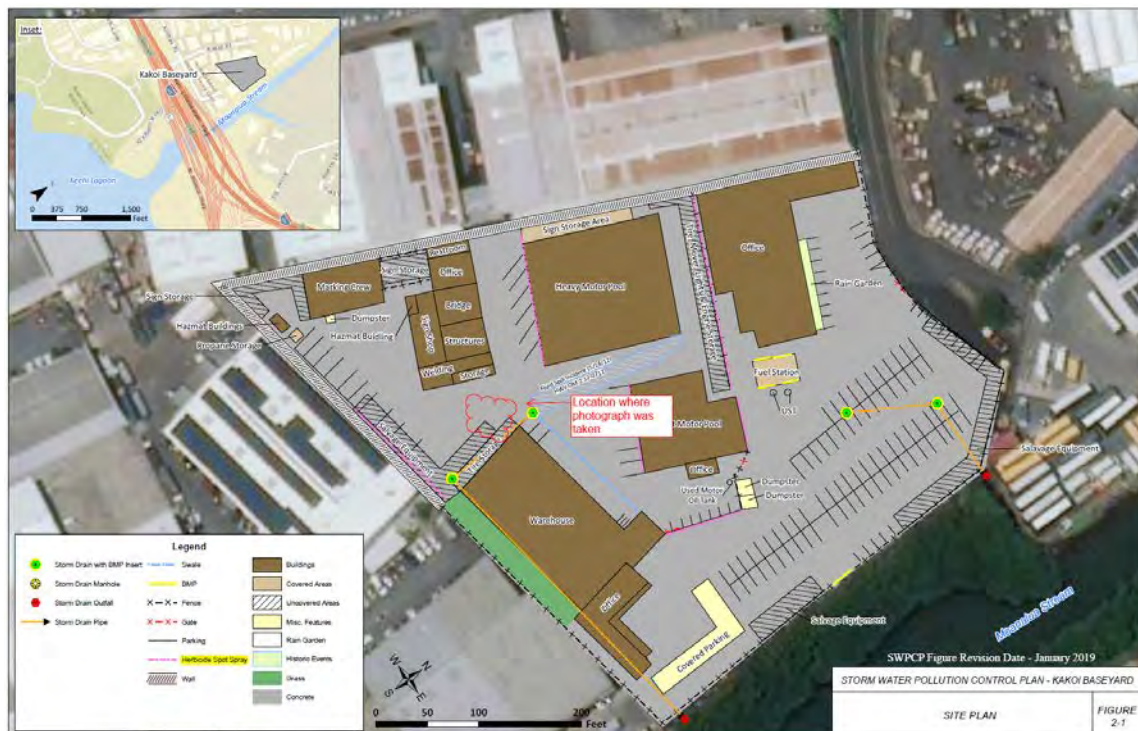
Page 34: "Clean any parking area oil stains that produce a sheen when wet."

Page 40: "Inspect vehicles for leaks and use drip pans where necessary."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 10

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Parking area oil stain was cleaned on 22 May 2019 as to not produce a sheen when wet. This is in accordance with the best management practices described in the Kakoi Baseyard SWPCP (October 2016, Page 34). Vehicles are inspected for leaks and drips pans are used where necessary, in accordance with the best management practices described in the Kakoi Baseyard SWPCP (October 2016, Page 40).

Description of Attachments (if applicable):

Photograph of cleaned oil stain that does not produce a sheen when wet.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action



Appendix B6: Permit-Specific Information – Highways Oahu District

Final Notice of Deficiency

Deficiency Tracking #: 11

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed accumulated sediment and debris southeast of the fuel station at the Kakoi Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photograph of accumulated sediment and debris observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

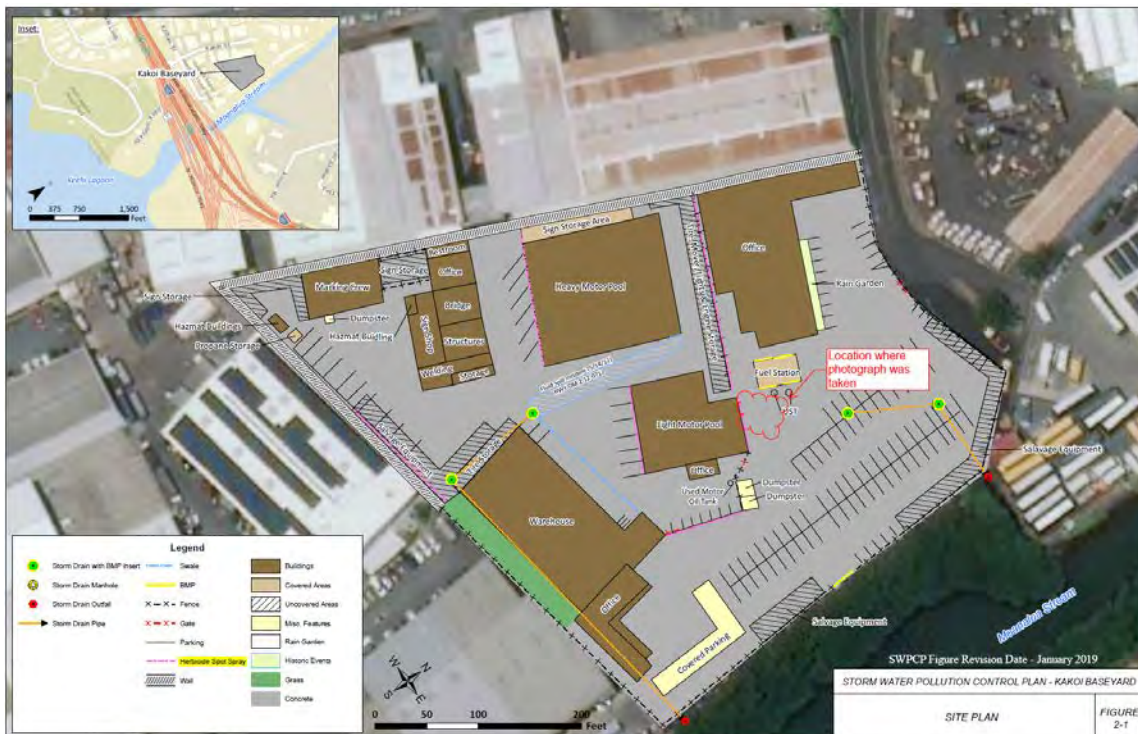
SWPCP, October 2016

Page 33: "Sweep baseyard areas at least once per week and additionally as needed to remove accumulated sediment and debris and to prevent tracking."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 11

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

The parking lot was swept on 24 May 2019 to remove accumulated sediment and debris and to prevent tracking. This is in accordance with the best management practices described in the Kakoi Baseyard SWPCP (October 2016, Page 33).

Description of Attachments (if applicable):

Photograph of swept parking lot.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action



Appendix B6: Permit-Specific Information – Highways Oahu District

Final Notice of Deficiency

Deficiency Tracking #: 12

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed a wet oil stain along the western edge of the Windward Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below) and/or develop and implement additional best management practices as necessary.

Description of Attachments (if applicable):

Photographs of oil stain observed during the On-Site Audit and associated map indicating location where photographs were taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

SWPCP, October 2016

Page 16: "Clean any parking area oil stains that produce a sheen when wet."

Page 20: "Inspect vehicles for leaks and use drip pans where necessary."

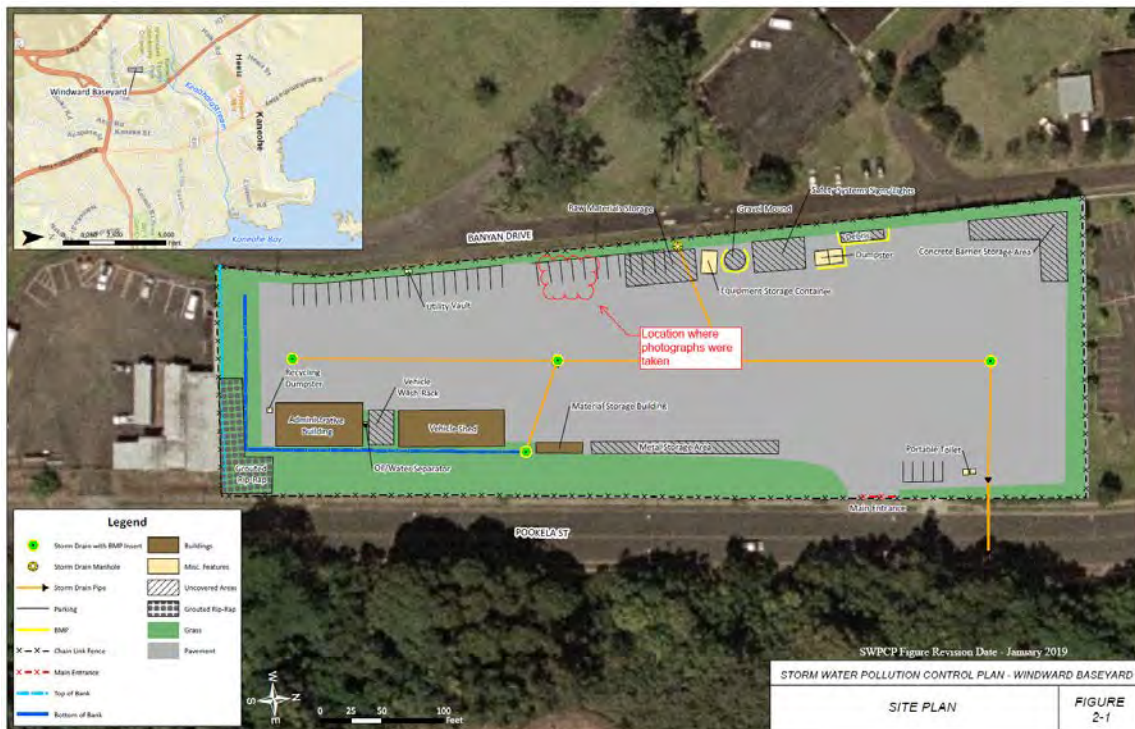
Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 12

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Parking area oil stain was cleaned on 22 May 2019 as to not produce a sheen when wet. This is in accordance with the best management practices described in the Windward Baseyard SWPCP (October 2016, Page 16). Vehicles are inspected for leaks and drips pans are used where necessary, in accordance with the best management practices described in the Windward Baseyard SWPCP (October 2016, Page 20).

Description of Attachments (if applicable):

Photograph of cleaned oil stain that does not produce a sheen when wet.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action



Appendix B6: Permit-Specific Information – Highways Oahu
District

Final Notice of Deficiency

Deficiency Tracking #: 13

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

During the On-Site Audit, the Audit Team observed metals being stored uncovered outside at the Windward Baseyard.

Recommendations for Improvement:

Highways Oahu District should implement the best management practices described in their stormwater pollution control plan (SWPCP, see items below).

Description of Attachments (if applicable):

Photographs of metal storage outside observed during the On-Site Audit and associated map indicating location where photograph was taken.

Applicable Regulatory References

NPDES Permit No.: Not applicable.

SWMPP:

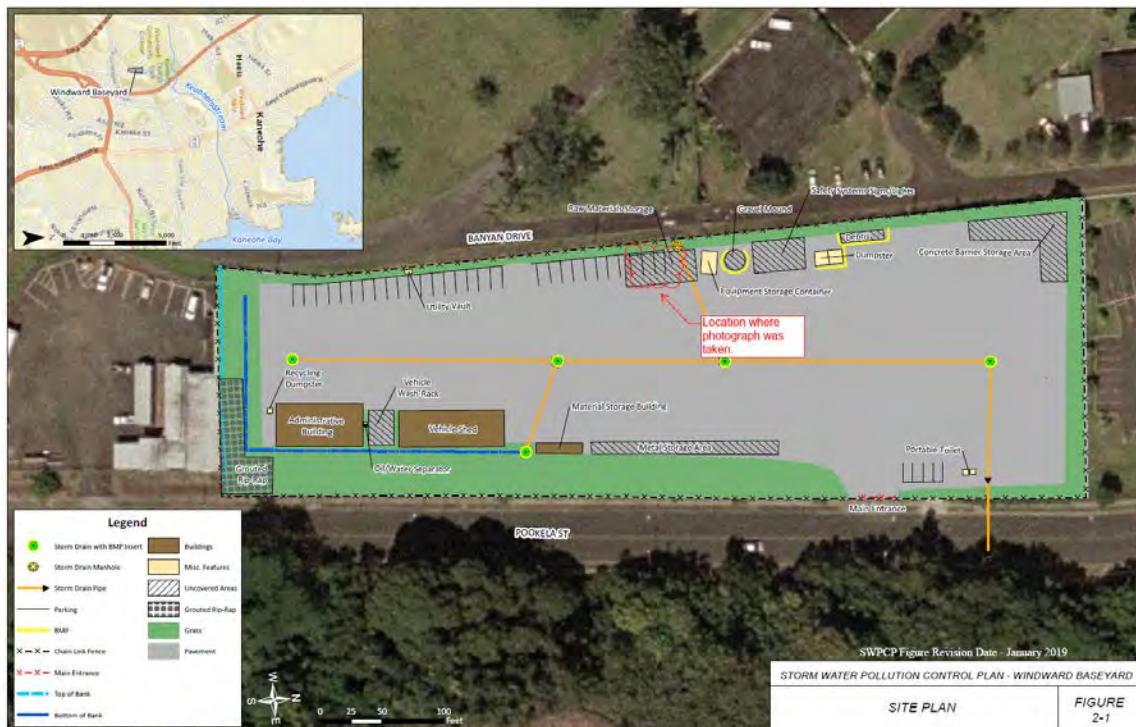
SWPCP, October 2016

Page 21: "Store metals in covered area or with a tarp to prevent rusting."

Hawaii Administrative Rules (HAR): Not applicable.

Code of Federal Regulations (CFR): Not applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District



Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 13

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

Uncovered metal storage areas were covered with a tarp on 16 July 2019 to prevent rusting. This is in accordance with the best management practices described in the Windward Baseyard SWPCP (October 2016, Page 21).

Description of Attachments (if applicable):

Photographs of metal storage areas covered with a tarp to prevent rusting.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action



Appendix B6: Permit-Specific Information – Highways Oahu District

Final Notice of Deficiency

Deficiency Tracking #: 14

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

Highways Oahu District indicated “ND” (short for “Non-Detect”) for several parameters on Discharge Monitoring Reports (DMRs) reviewed for this audit instead of indicating as required by the Hawaii Administrative Rules referenced below that the test result is "less than #," where the # is the lowest detection limit of the test method used”.

Recommendations for Improvement:

In these situations, Highways Oahu District should indicate on DMRs that the test result is "less than #," where the # is the lowest detection limit of the test method used”.

Description of Attachments (if applicable):

Example of a DMR for Windward Baseyard with ND entries circled.

Applicable Regulatory References

NPDES Permit No.:

HI S000001 Part E.1: “baseyards...covered under this permit shall comply with the requirements in HAR, Chapter 11-55, Appendix B.”

SWMPP: Not Applicable.

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Section Part 8.(a)(4)(c): “if the test result is not detectable, indicate that the test result is "less than #,"where the # is the lowest detection limit of the test method used.”

Code of Federal Regulations (CFR): Not Applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)
NAME Department of Transportation, Highways Division

ADDRESS 727 Kakoi Street
Honolulu, Hawaii 96819

FACILITY Windward Baseyard
LOCATION 45-889 Pookela Street
Kaneohe, Hawaii 96744

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

HI S000001
PERMIT NUMBER

WW-1
DISCHARGE NUMBER

MONITORING PERIOD
FROM 2016 07 01 TO 2017 02 06

Form Approved
OMB No 2040-0004

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
Ammonia Nitrogen	SAMPLE MEASUREMENT					ND	mg/l		1/365	Grab
	PERMIT REQUIREMENT					Report				
Cadmium	SAMPLE MEASUREMENT					ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT					3.0				
Chromium VI	SAMPLE MEASUREMENT					5.0	µg/l		1/365	Grab
	PERMIT REQUIREMENT					16.0				
Lead	SAMPLE MEASUREMENT					ND	µg/l		1/365	Grab
	PERMIT REQUIREMENT					29.0				
Oil and Grease	SAMPLE MEASUREMENT					ND	mg/l		1/365	Grab
	PERMIT REQUIREMENT					15.0				
pH	SAMPLE MEASUREMENT					6.35	pH Units		1/365	Grab
	PERMIT REQUIREMENT					5.5 - 8.0				
Turbidity	SAMPLE MEASUREMENT					13 H	NTU		1/365	Grab
	PERMIT REQUIREMENT					15 (Wet Season)				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
Pratt Kinimaka
District Engineer, HWY-O

TYPED OR PRINTED

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.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE
808 831-6703

DATE
2017 03 06

AREA CODE NUMBER YEAR MO DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

ND: Not Detected
H: Sample was prepped or analyzed beyond the specific holding time

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 14

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

NetDMR forms provide a specific location where Highways Oahu District must select a “qualifier” in order to be in compliance with HAR 11-55 Appendix B Section Part 8.(a)(4)(c): “if the test result is not detectable, indicate that the test result is “less than #,” where the # is the lowest detection limit of the test method used.”

Highways Oahu District will select the appropriate qualifier in place of “ND” when completing NetDMR forms for future representative sampling events, if applicable.

Description of Attachments (if applicable):

Screen shot of NetDMR highlighting example locations where “ND” entries will now be indicated as “equal to [=]” or “less than or equal to [<=]” the lowest detection limit of the test method used.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action

Quality or Concentration			
Qualifier 2	Value 2	Qualifier 3	Value 3
	=		23.12
			Req Mon MAXIMUM
	=		128
	<=		8 MAXIMUM
	=		7.5
			Req Mon MAXIMUM
	=		8.2
	<=		8.8 MAXIMUM
	=		1
			Req Mon MAXIMUM
	=		35
			Req Mon MAXIMUM
	=		1.71
	<=		.55 MAXIMUM
	=		0.379
	<=		.02 MAXIMUM
	=		1.3
			Req Mon MAXIMUM

Appendix B6: Permit-Specific Information – Highways Oahu District

Final Notice of Deficiency

Deficiency Tracking #: 15

Related Permit(s): Highways Oahu District

Deficiency Narrative Description:

The Audit Team reviewed the October 2016 Kakoi Baseyard Storm Water Pollution Control Plan (SWPCP) which indicated in Table 3-1 that the selected test method for ammonia nitrogen had a detection limit that was higher than the numeric effluent limit. When the Audit Team brought this to HWY-O's attention, they clarified that this issue was addressed when HWY-O brought on a new analytical laboratory in June 2017. However, the SWPCP was not updated at that time to reflect this change.

Recommendations for Improvement:

Highways Oahu District should review and update the SWPCP as often as needed to comply with their permit requirements.

Description of Attachments (if applicable):

Table 3-1 of the October 2016 SWPCP for Kakoi Baseyard.

Applicable Regulatory References

NPDES Permit No.:

HI S000001 Part E.1: "baseyards...covered under this permit shall comply with the requirements in HAR, Chapter 11-55, Appendix B."

SWMPP: Not Applicable.

Hawaii Administrative Rules (HAR):

HAR 11-55 Appendix B Part 6.(d): "[t]he permittee shall review and update the storm water pollution control plan as often as needed to comply with the conditions of this general permit or conditions of the notice of general permit coverage".

HAR 11-55 Appendix B Part 8.(a)(4)(c): "the permittee shall use test methods with detection limitations that reflect the applicable numerical limitations as specified in chapter 11-54".

Code of Federal Regulations (CFR): Not Applicable.

Appendix B6: Permit-Specific Information – Highways Oahu District

TABLE 3-1: KAKOI BASEYARD MONITORING PARAMETERS

Parameter (unit)	Sample Type	Test Method	Reporting Limit/ Detection Limit	Discharge Limit ¹
Flow (gallons per day)	Calculate / Estimate	Calculate / Estimate	NA	NA ¹⁵
Biochemical Oxygen Demand (5-Day) (mg/L)	Composite	SM 5210B	2.0 / 0.2	NA ¹⁵
Chemical Oxygen Demand (mg/L)	Composite	E410.4	20 / 10	NA ¹⁵
Total Suspended Solids (mg/L)	Composite	SM 2540D	10 / 5.0	NA ¹⁵
Total Phosphorus (mg/L)	Composite	E365.4	0.1 / NA	0.05
Total Kjeldahl Nitrogen (mg/L)	Composite	E351.2	0.5 / NA	NA ¹⁵
Nitrate + Nitrite (mg/L)	Composite	E353.2	0.05 / 0.008	0.025
Ammonia Nitrogen (mg/L)	Composite	SM 4500-NH3 D	1.0 / 0.2	0.01
Total Nitrogen (mg/L)	Composite	Calculation	NA	0.35
Cadmium (µg/L) ¹²	Composite	E200.8	1.0 / 0.11	3.0
Chromium VI (µg/L) ¹²	Composite	E218.6	1.0 / 0.25	16
Lead (µg/L) ¹²	Composite	E200.8	1.0 / 0.3	29
Oil and Grease (mg/L)	Grab	E1664A	5.0 / 1.4	15
pH (unit) ¹³ ¹⁴	Grab	E150.1	0.01 / NA	5.5-8.0
Turbidity (NTU)	Grab	SM 2130B	0.1 / NA	3
Dissolved Oxygen (mg/L) ¹⁴	Grab	E360.1	0.1 / NA	NA ¹⁵
Oxygen Saturation (%)	Grab	Calculation	NA	NA ¹⁵
Temperature (°C) ¹³ ¹⁴	Grab	E170.1	NA	NA ¹⁵
Salinity (ppt)	Grab	SM 2520B	0.1 / NA	NA ¹⁵
Benzene (µg/L)	Grab	E624	0.50 / 0.25	1,800
Toluene (µg/L)	Grab	E624	1.0 / 0.25	5,800
Ethylbenzene (µg/L)	Grab	E624	1.0 / 0.25	11,000

Notes: All parameters will be monitored annually.

¹¹ Discharge limits applied for locations where the receiving water is considered inland or fresh water.

¹² The total recoverable portion of all metals will be tested.

¹³ Ensure that parameter is measured within 15 minutes of obtaining grab sample.

¹⁴ Analysis will be performed in the field.

¹⁵ No limitation at this time. Only monitoring and reporting on the DMR is required.

Appendix B6: Permit-Specific Information – Highways Oahu District

Result of Review:

- ☒ Confirmed Deficiency
 - o Email Notice of Corrective Action sent to EPA/DOH on: **8/7/19**
(Due Within 21 Calendar Days of Deficiency Notification Date)
- ☐ Re-categorized as Potential Violation (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed (see rationale below)
 - o Email Notice sent to EPA/DOH on: _____

Rationale for Re-Categorization or Summary Dismissal:

Appendix B6: Permit-Specific Information – Highways Oahu District

Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☒ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: Potential Violation Notification Date:
(from Notice of Potential Violation Form)

Corrective Action Notification Date:

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

Deficiency Tracking #: 15

HDOT Receipt of Draft PEAR Date: 7/18/19

Corrective Action Notification Date: 8/7/19

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action:

The Ammonia Nitrogen method detection limit (MDL) in Table 3-1 for the October 2016 Kakoi Baseyard SWPCP was updated to match the current procured laboratory MDL of 0.004 milligrams per liter (mg/L), which is below the discharge limit of 0.01 mg/L. This is in accordance with HAR 11-55 Appendix B Part 8.(a)(4)(c): “the permittee shall use test methods with detection limitations that reflect the applicable numerical limitations as specified in chapter 11-54”. The updated SWPCP was submitted to the Department of Health, Clean Water Branch on 17 July 2019.

Description of Attachments (if applicable):

Updated Table 3-1 for the October 2016 Kakoi Baseyard SWPCP.

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action

TABLE 3-1: KAKOI BASEYARD MONITORING PARAMETERS

Parameter (unit)	Sample Type	Test Method	Detection Limit	Discharge Limit ¹
Flow (gallons per day)	Calculate / Estimate	Calculate / Estimate	NA	NA ^[5]
Biochemical Oxygen Demand (5-Day) (mg/L)	Composite	SM 5210B	0.2	NA ^[5]
Chemical Oxygen Demand (mg/L)	Composite	E410.4	10	NA ^[5]
Total Suspended Solids (mg/L)	Composite	SM 2540D	5.0	NA ^[5]
Total Phosphorus (mg /L)	Composite	E365.4	NA	0.05
Total Kjeldahl Nitrogen (mg/L)	Composite	E351.2	NA	NA ^[5]
Nitrate + Nitrite (mg /L)	Composite	E353.2	0.008	0.025
Ammonia Nitrogen (mg /L)	Composite	SM 4500-NH3 D	0.004	0.01
Total Nitrogen (mg /L)	Composite	Calculation	NA	0.35
Cadmium (µg/L) ^[2]	Composite	E200.8	0.11	3.0
Chromium VI (µg/L) ^[2]	Composite	E218.6	0.25	16
Lead (µg/L) ^[2]	Composite	E200.8	0.3	29
Oil and Grease (mg/L)	Grab	E1664A	1.4	15
pH (unit) ^{[3][4]}	Grab	E150.1	NA	5.5-8.0
Turbidity (NTU)	Grab	SM 2130B	NA	3
Dissolved Oxygen (mg/L) ^[4]	Grab	E360.1	NA	NA ^[5]
Oxygen Saturation (%)	Grab	Calculation	NA	NA ^[5]
Temperature (°C) ^{[3][4]}	Grab	E170.1	NA	NA ^[5]
Salinity (ppt)	Grab	SM 2520B	NA	NA ^[5]
Benzene (µg/L)	Grab	E602	0.25	1,800
Toluene (µg/L)	Grab	E602	0.25	5,800
Ethylbenzene (µg/L)	Grab	E602	0.25	11,000

Notes: All parameters will be monitored annually.

[1] Discharge limits applied for locations where the receiving water is considered inland or fresh water.

[2] The total recoverable portion of all metals will be tested.

[3] Ensure that parameter is measured within 15 minutes of obtaining grab sample.

[4] Analysis will be performed in the field.

[5] No limitation at this time. Only monitoring and reporting on the DMR is required.

Appendix C

Revised Audit Work Plan, November 2016

State of Hawaii Department of Transportation

Office of Environmental Compliance



Revised Audit Work Plan

State Project No. OSC-15-01

November 2016

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to allow for double-sided printing.

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List of Acronyms

ACR	Annual Compliance Report
AWPC	Audit Work Plan Commencement
BMP	best management practice
CD	Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC)
CFR	Code of Federal Regulations
DOH	Department of Health
EPA	United States Environmental Protection Agency
HAR	Hawaii Administrative Rules
HARP	Hazard Appraisal and Recognition Plan
HDOT	State of Hawaii Department of Transportation
MEP	maximum extent practicable
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
PEAR	Program Element Audit Report
PM	Project Manager
QA	quality assurance
QC	quality control
SWMPP	Storm Water Management Program Plan

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to allow for double-sided printing.

Section 1: Introduction, Purpose, and Goals

Under Paragraph 10.d of the Consent Decree (Civil Action 1:14-CV-00408-JMS-KSC) entered on 5 November 2014 (CD) with the United States Environmental Protection Agency (EPA) and the State of Hawaii (State) Department of Health (DOH), the State of Hawaii Department of Transportation (HDOT) is required to perform compliance audits of Municipal Separate Storm Sewer System (MS4)¹ permits issued to HDOT's Airports, Highways, and Harbors Divisions (referred to herein as the singular "MS4 Permit Audit"). Specific requirements for the MS4 Permit Audit are defined in Appendix A of the CD and included in Appendix A of this document. The MS4 Permit Audit will be conducted in accordance with this Audit Work Plan (AWP) by Kennedy/Jenks Consultants (Kennedy/Jenks), the selected independent third-party audit firm.

This AWP was conditionally approved by EPA & DOH on 31 October 2016. As memorialized in the conditional approval letter, HDOT will begin the audit on 15 March 2017. This date is hereafter referred to as the AWP Commencement date (AWPC). This AWP includes project milestones with defined dates in some cases (e.g., "15 April 2017") while other dates may be specified relative to the AWPC (e.g., "30 days after AWPC"). All "days" in this AWP refer to calendar days as opposed to business days.

The defined purpose of the MS4 Permit Audit is to assess HDOT's current regulatory and administrative compliance with its MS4 permits, DOH National Pollutant Discharge Elimination System (NPDES) General Permit Coverage Authorizing Discharges of Storm Water and Certain Non-Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Hawaii Small MS4 General Permit), applicable Storm Water Management Program Plans (SWMPs), and the CD.

The defined goals of the MS4 Permit Audit focus on meeting the requirements listed in Appendix A of the CD, including:

- Evaluating compliance with HDOT MS4 permits and the CD
- Identifying information gathered during the MS4 Permit Audit that may be used to promote information and technology transfer between HDOT Divisions
- Identifying Potential Violations (areas where the evaluation found the permittee not in compliance with a specific permit requirement or SWMP commitment) and Deficiencies (items which, if not corrected, may be anticipated to lead to Potential Violations) in HDOT's stormwater programs and assisting with timely self-correction of identified Potential Violations and Deficiencies by HDOT.

¹ The MS4 refers to the conveyance system in addition to the jurisdiction(s) which own/operate the system.

In addition to meeting the CD requirements and EPA & DOH expectations, the overarching goal of the MS4 Permit Audit is to develop internal trust and collaboration within HDOT. The Audit Team will seek HDOT-wide opportunities for improvement rather than focusing on minor issues of non-compliance.

Reporting requirements of the MS4 Permit Audit are defined in Appendix A Section D.7. of the CD and include:

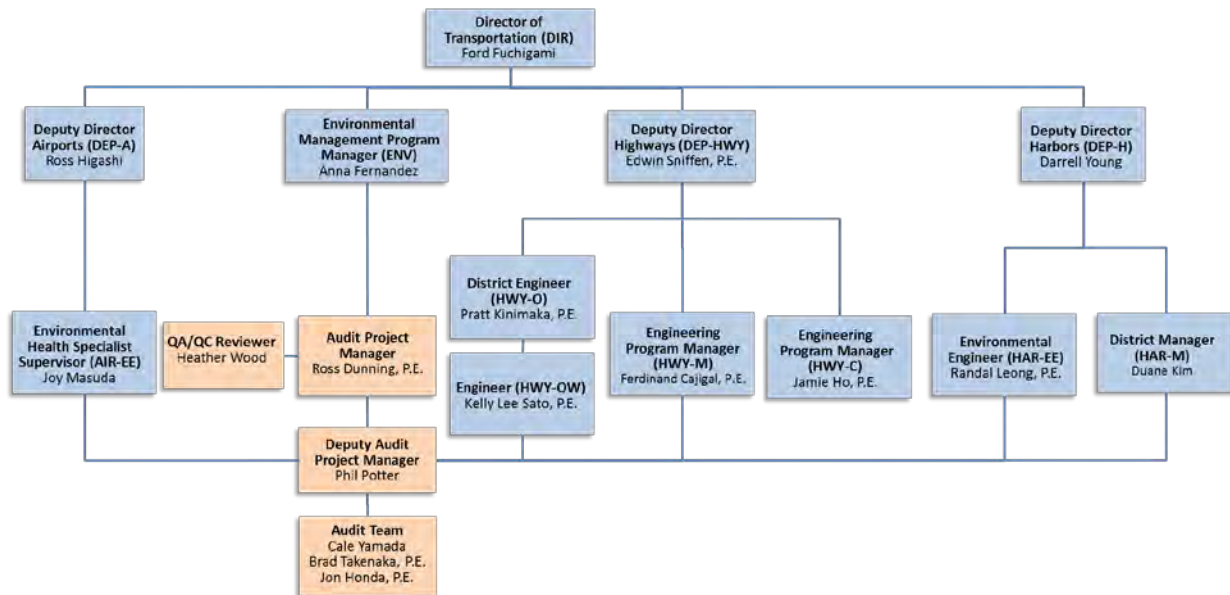
- A specific statement of the procedures followed, HDOT sites and activities visited, and all materials reviewed during the MS4 Permit Audit
- Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and providing recommendations to modify, streamline, or augment them in accordance with what has been learned during the MS4 Permit Audit, as appropriate.
- Identification of Potential Violations and Deficiencies and of MS4 permit conditions, applicable SWMPPs, the CD, and/or other applicable regulations, and providing recommendations for improvements as found to be appropriate
- Identification of best practices and opportunities for information/technology transfer to be applied across the three HDOT Divisions
- An analysis of the practices implemented for each HDOT Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report will clearly describe impediments identified.

In accordance with requirements defined in Appendix A of the CD, EPA's *MS4 Program Evaluation Guidance* (hereinafter EPA (2007) guidance) was consulted in the development of this AWP. The audit protocols included herein are intended to promote consistency among regulated facilities when conducting environmental audits and to validate that the MS4 Permit Audit is conducted in a thorough and comprehensive manner. Program evaluation worksheets (included in Appendix B) were developed to guide the Audit Team while performing the MS4 Permit Audit. Each worksheet addresses a separate program element, and includes key questions derived from the EPA (2007) guidance document recommended to be considered during an MS4 evaluation. While this AWP is based on the EPA (2007) guidance for auditing small MS4s, HDOT has adapted the guidance to focus some aspects of the audit process to reflect the unique nature of HDOT operations.

Section 2: Audit Team and HDOT Personnel

Figure 2-1 provides an organizational chart defining the Audit Team and HDOT staff that will be involved in the MS4 Permit Audit.

Figure 2-1 Organizational Chart



Additional information describing key MS4 Permit Audit personnel is provided below.

HDOT Project Manager – Anna Fernandez

In her role as Environmental Program Manager, Anna Fernandez reports directly to the HDOT Director. She serves as the HDOT Project Manager (PM) for this project. In this role, she administers and manages Kennedy/Jenks in performing the MS4 Permit Audit and their contact with HDOT leaders and stakeholders.

Deputy Director(s)

Deputy Directors report directly to the HDOT Director. They are responsible for facilitating the Audit Team's access to HDOT personnel and facilities within their respective Divisions as appropriate. The following Deputy Directors will be directly involved in the MS4 Permit Audit process:

Airports (DEP-A) – Ross Higashi
Highways (DEP-HWY) – Edwin Sniffen, P.E.
Harbors (DEP-H) – Darrell Young

MS4 Permit Coordinator(s)

MS4 Permit Coordinators are those HDOT personnel responsible for managing compliance with the MS4 permit for each Division, district, or designated MS4 permitted area. The following MS4 Permit Coordinators will be directly involved in the MS4 Permit Audit process:

Airports (AIR-EE) – Joy Masuda (Environmental Health Specialist Supervisor)
Oahu Highways (HWY-OW) – Kelly Lee Sato, P.E. (Engineer)
Maui Highways (HWY-M) – Ferdinand Cajigal, P.E. (Engineering Program Manager)
Oahu Harbors (HAR-EE) – Randal Leong, P.E. (Environmental Engineer)
Maui Harbors (HAR-M) – Duane Kim (District Manager)

Additional Key MS4 Permit Audit Personnel

The following key staff will also be consulted throughout the MS4 Permit Audit Process:

District Engineer (HWY-O) - Pratt Kinimaka, P.E.
Engineering Program Manager (HWY-C) - Jamie Ho, P.E.

Audit Project Manager – Ross W. Dunning, P.E. / Principal (Kennedy/Jenks)

Ross is a Principal of Kennedy/Jenks and leads their companywide stormwater practice. He has assisted many Western U.S. Port authorities for almost 20 years with development of strategies and stormwater management plans to address Clean Water Act and NPDES regulations. He is Kennedy/Jenks' point of contact for the HDOT PM, and manages the Audit Team to verify that MS4 Permit Audit procedures and reports meet CD requirements and are on schedule. The Audit PM is responsible for updating this Audit Work Plan (with the approval of the HDOT PM), producing schedules, preparing audit reports, and maintaining audit records.

Lead Quality Assurance/Quality Control (QA/QC) Reviewer: Heather Wood
(Kennedy/Jenks)

Heather is the former Director of Sustainability for the Port of Virginia, responsible for development of their environmental programs and permit compliance (including NPDES). Heather is also the former Chair of the American Association of Port Authorities Environmental Committee. She is Kennedy/Jenks' Ports and Harbors Sector Leader. In her role as the Lead QA/QC Reviewer, she will direct the review of MS4 Permit Audit work products, including draft and final audit reports, by qualified Kennedy/Jenks staff.

Deputy Audit Project Manager – Phil Potter (Kennedy/Jenks)

Phil is based in Kennedy/Jenks' Honolulu office and leads the firm's stormwater practice in Hawaii. For over 8 years, he has assisted municipal clients including the HDOT Highways Oahu District and the City and County of Honolulu with development and implementation of their NPDES compliance programs. In his role as the Deputy Audit PM, Phil is responsible for assisting the Audit PM in the execution of the Audit Work Plan and will directly coordinate with the HDOT MS4 Permit Coordinators and other stakeholders.

Auditors – Cale Yamada; Brad Takenaka, P.E.; Jon Honda P.E. (Kennedy/Jenks)

Cale, Brad, and Jon are experienced stormwater professionals in Kennedy/Jenks' Honolulu office. Among their many stormwater projects, they currently assist the City and County of Honolulu with ongoing development and implementation of its municipal stormwater program including, but not limited to, providing periodic MS4 program compliance inspections for hundreds of City and County industrial facilities throughout the island of Oahu.

Auditors are responsible for performing inspections of HDOT facilities and documentation, and performing interviews with HDOT employees responsible for MS4 program implementation and management in order to assess compliance with applicable MS4 program and CD requirements. Auditors are also responsible for coordinating with the Audit PM and Deputy Audit PM regarding any Potential Violations and Deficiencies identified. Hereinafter, the "Audit Team" refers to the Kennedy/Jenks' staff introduced above.

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Section 3: Audit Notes and Guidelines

This Section addresses various topics intended to guide the Audit Team in completing the MS4 Permit Audit in a safe and efficient manner.

3.1 Health, Safety, and Site Access Considerations

Prior to initiating onsite evaluations (see Section 5.2), the Audit PM will lead the Audit Team in developing a Hazard Appraisal and Recognition Plan (HARP), following Kennedy/Jenks' standard safety program. The HARP describes how to identify and analyze safety risks associated with field activities, operations, and facilities; approaches for mitigating identified risks; and processes for documenting and reporting accidents, near misses, and potentially unsafe conditions which may be encountered in the field. The HARP is a "living document" which will be updated as appropriate throughout the term of the MS4 Permit Audit. The Audit Team will wear appropriate personal protective equipment (hard hat, safety vest, safety shoes, protective eyewear, and hearing protection as appropriate) while performing the onsite evaluations.

Harbors Facilities

At this time, no special security clearances or requirements are defined to be necessary at Harbors facilities and/or project sites, as long as the Audit Team is escorted by personnel with valid Transportation Worker Identification Credentials (TWIC) and documentation of Maritime Security (MARSEC) Facility Security Awareness training certification. Active loading or unloading of cargo may necessitate additional safety requirements at certain pier locations.

Airports Facilities

At this time, Airports Division facilities to be evaluated are anticipated to be outside secured air operations areas; therefore, no special requirements or clearances are defined to be necessary. Adequate notice will be provided to the Airports Division MS4 Permit Coordinator to arrange security escort as found to be necessary.

Highways Facilities

At this time, there are no defined security restrictions to access Oahu District or Maui District Highway facilities as the Audit Team will be escorted by HDOT personnel at all times.

3.2 Quality Control Procedures

The Audit PM is responsible for ensuring that Kennedy/Jenks' effort and deliverables meet their company's professional mandate to consistently perform work in a technically correct manner, meeting the standard of care for their profession. The standard of care is defined to represent the watchfulness, attention, caution, prudence, and skill that other qualified professionals in the same or similar circumstances would exercise.

Kennedy/Jenks' quality assurance (QA) program includes processes and procedures developed over their near century-old history to achieve and maintain a rigorous level of quality, planning,

application, and verification. Its quality control (QC) program implements this process and QC reviewers will continuously monitor their effort and work products on this project to meet contract and CD requirements, Kennedy/Jenks' QA/QC standards, and HDOT's expectations.

3.3 Photographs

Digital photographs collected and archived during the course of the MS4 Permit Audit will be managed in accordance with EPA's *Digital Camera Guidance for EPA Civil Inspections and Investigations* (2006). Photographs taken will be organized into photograph logs with each photograph numbered with the date and time included. A brief photograph caption will identify the facility or site name, describe what is depicted in the photograph, the location, direction, and other pertinent data (e.g., the location within the facility or site) as appropriate.

3.4 "Maximum Extent Practicable" Concept

Unlike NPDES industrial wastewater permits which typically contain specific end-of-pipe effluent limits based on water quality standards or available treatment technology, HDOT's MS4 permits include programmatic requirements involving the implementation of BMPs in order to reduce pollutants discharged to the "maximum extent practicable" (MEP). In addition, HDOT's permits allow flexibility in the types of BMPs and activities implemented to meet permit requirements. There is also added complexity in evaluating several similar permits applicable to the very different operations conducted at HDOT Highways, Airports, and Harbors facilities. This makes it challenging to assess the true effectiveness of HDOT's several MS4 stormwater programs and how they may be integrated.

Per EPA (2007) guidance, HDOT is considered a non-traditional MS4 permittee, and as such, the evaluation of its MS4 programs will be specific to their particular circumstances and applicable permit requirements. Some HDOT MS4 permits contain broad requirements that outline the basic SWMPP components the permittee is required to implement, giving the permittee the flexibility to develop a program to meet these broad requirements. Other MS4 permits are more prescriptive and specify in detail the minimum activities and best management practices (BMPs) for each program element.

Given these inherent operational differences and challenges, each HDOT permittee has traditionally applied different approaches to comply with specific permit requirements based on MS4-specific traits or issues. For example, EPA regulations require permittees to develop "procedures for site inspection and enforcement" for addressing construction activities. Few MS4 permits specify how the permittee should inventory their active construction projects or track enforcement activities. A permittee with only a few construction projects a year may be able to use a paper system to inventory and track construction projects. A permittee with hundreds or thousands of construction projects would likely need a database or similar electronic tracking system to ensure it was implementing the program to a level considered to meet MEP.

It is relatively straightforward to assess whether HDOT has developed certain programs and conducted various activities that are called for and within the timeframes specified in each of the permits under consideration, as well as activities or programs specified under SWMPPs or other documents prepared by HDOT. The challenge for the Audit Team and HDOT is to assess

whether the programs and activities implemented have or will constitute MEP. EPA (2007) guidance will assist with this determination, but is not definitive. Determination requires application of the Audit Team's best professional judgment.

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Section 4: Audit Structure and Schedule

For each of the six program elements required to be reviewed by the CD, Kennedy/Jenks will review the six permitted MS4 programs concurrently, developing six Program Element Audit Reports (Final PEARs) that represent the culmination of the auditing efforts across the three HDOT Divisions.

Appendix A of the CD defines various project milestones and deadlines, described for ease of reference below:

Table 4-1 CD Appendix A Deadlines

Program Element	Evaluation Complete: ^(a)	Draft PEAR to HDOT: ^(d)	HDOT Review of Draft PEAR: ^(e)	Final PEAR to HDOT: ^(f)
PEAR #1: Post-Construction Runoff Control / Permanent Best Management Practices	3 Months (90 Days) ^(b) After AWPC ^(c) 13 June 2017	135 Days After AWPC 28 July 2017	165 Days After AWPC 27 August 2017	210 Days After AWPC 11 October 2017
PEAR #2: Construction Site Runoff Control	9 Months (270 Days) After AWPC 10 December 2017	315 Days After AWPC 24 January 2017	345 Days After AWPC 23 February 2017	390 Days After AWPC 9 April 2018
PEAR #3: Public Outreach / Public Involvement	15 Months (450 Days) After AWPC 8 June 2018	495 Days After AWPC 23 July 2018	525 Days After AWPC 22 August 2018	570 Days After AWPC 8 October 2018
PEAR #4: Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Programs	21 Months (630 Days) After AWPC 5 December 2018	675 Days After AWPC 19 January 2019	705 Days After AWPC 18 February 2019	750 Days After AWPC 4 April 2019
PEAR #5: Pollution Prevention / Good Housekeeping	27 Months (810 Days) After AWPC 3 June 2019	855 Days After AWPC 18 July 2019	885 Days After AWPC 17 August 2019	930 Days After AWPC 1 October 2019
PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability	33 Months (990 Days) After AWPC 30 November 2019	1035 Days After AWPC 14 January 2020	1065 Days After AWPC 13 February 2019	1110 Days After AWPC 29 March 2020

Notes:

- (a) "Evaluation" as referenced in CD Appendix A Section B.5. is defined in this AWP to represent the conclusion of the Post-Onsite Evaluation Review Period (See Section 5.2.3) for PEARs #1, 2, 4, and 5. For PEARs #3 and 6, no onsite evaluation is required and therefore "evaluation" is defined to represent the date of conclusion of the Records Review period. Please refer to Appendix C for more detail.

- (b) "Months" are based on 30-day months in this AWP.
- (c) AWPC = Audit Work Plan Commencement (15 March 2017)
- (d) Pursuant to CD Appendix A Section D.2., Kennedy/Jenks will complete a draft audit report and transmit it to HDOT within 45 days of completing an audit of a program element (defined in this AWP as the conclusion of "evaluation", as discussed in Note (a)).
- (e) Pursuant to CD Appendix A Section D.3., HDOT will review the draft PEAR to correct any factual inaccuracies within 30 days of receipt.
- (f) Pursuant to CD Appendix A Section D.4., Kennedy/Jenks will complete a final PEAR within 120 days of completing an audit of a program element (defined in this AWP as the conclusion of "evaluation", as discussed in Note (a)).

Section 5: Program Element Audits

Each program element audit will follow a similar schedule and structure, discussed generally in this section. The Program Element Audits will occur over a 37-month period depicted graphically below (Figure 5-1):

Figure 5-1 Program Element Audit Schedule

	2017												2018												2019												2020			
PEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	
1																																								
2																																								
3																																								
4																																								
5																																								
6																																								

Appendices B1 - B6 list the basic information anticipated to be reviewed for each MS4 program element to be audited. The Audit Team will utilize worksheets provided in Appendices B1 - B6 to collect and track information for each MS4 permit and element. References to Appendices C1 - C6 are also included, defining specific schedules for each of the six PEARs. Each Program Element Audit will include three phases (Pre-Audit, Onsite Evaluation, and Reporting), detailed in the following sections.

5.1 Pre-Audit

This Section describes the first phase of each Program Element Audit.

5.1.1 Notice of Audit

The Audit Team will schedule events, confirm appropriate participants, and begin planning the upcoming program element audit with the HDOT PM prior to initiating each Program Element Audit (Appendices C1 - C6 Item 1). The HDOT PM will coordinate with the MS4 Permit Coordinators to provide the following for each of the six MS4 permits:

- Facility or Division-specific SWMPPs
- Recent Annual Reports
- Documentation of required training, inspection reports, legal enforcement correspondence, if any, etc.
- Relevant memoranda of understanding with adjacent or contributing agencies, municipalities, etc.
- Organizational charts specifically listing HDOT staff with MS4 permit authority and responsibility.

The HDOT PM will coordinate with the MS4 Permit Coordinators to identify individuals and stakeholders that should be engaged during the MS4 Permit Audit.

5.1.2 Records Request

The Audit Team will review those sections of the NPDES permits, SWMPPs, guidance documents, the CD, etc. pertinent to the each individual audit element. Based on this review, the Audit Team will develop a records request and submit it to the HDOT PM (Appendices C1 - C6 Item 2). Where documentation is required (completed forms, logs, sign-in sheets, etc.), the Audit Team will request a subset of relevant records for verification. Electronic records are preferred, but physical copies of hard copy records are also acceptable. The HDOT PM will work with the MS4 Permit Coordinators to acquire and provide requested records to the Audit Team (Appendices C1 - C6 Item 3).

5.1.3 Records Review

The Audit Team will compare the program element requirements and commitments identified in the NPDES permits, SWMPPs, CD, annual reports, etc. and the records obtained in the record review (Appendices C1 - C6 Item 4). This review will be informed to the extent appropriate by the interview questionnaire provided in Appendices B1 - B6. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators may be conducted during this period.

5.2 Onsite Evaluation

This Section describes the second phase of each Program Element Audit.

5.2.1 Pre-Onsite Evaluation Conference Call

The Audit Team and HDOT PM will contact each MS4 Permit Coordinator to confirm schedules, address questions and security concerns, confirm personnel safety equipment needed, and organize training and orientation briefings that may be required (Appendices C1 - C6 Item 5).

5.2.2 Onsite Evaluation

For work planning purposes, it is assumed that onsite evaluations for each Program Element will be conducted over the course of five (5) days (except for PEAR #4, which requires an extra day). Detailed activity descriptions and schedules are included in Appendices C1 - C6 (Item 6). It should be noted that following EPA (2007) guidance, PEAR #3 and PEAR #6 do not require onsite evaluations². The onsite evaluations for each Program Element are tentatively scheduled during the following time periods (Table 5-1):

² Although no on-site evaluation is required for PEAR #3 (Public Outreach / Public Involvement Program), the Audit Team will endeavor to identify and attend events such as Harbors' tenant outreach in order to gain a well-rounded understanding of this program.

Table 5-1 Tentative On-Site Evaluation Dates

PEAR	On-Site Evaluation
PEAR #1: Post-Construction / Permanent Best Management Practices	Tuesday 30 May 2017 to Monday 5 June 2017
PEAR #2: Construction Site Runoff Control	Monday 27 November 2017 to Friday 1 December 2017
PEAR #3: Public Outreach / Public Involvement Program	[none required]
PEAR #4: Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program	Monday 19 November 2018 to Wednesday 28 November 2018
PEAR #5: Pollution Prevention / Good Housekeeping Program	Monday 20 May 2019 to Friday 24 May 2019
PEAR #6: Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability	[none required]

5.2.3 Post-Onsite Evaluation Review Period

Following the Onsite Evaluations, the Audit Team will review the findings of the Pre-Audits and Onsite Evaluations and address final evaluation-related tasks that may have been noted (Appendices C1 - C6 Item 7). This review period completes the evaluation of the program element, as referenced in CD Appendix A Section B.5.

5.3 Reporting

This Section describes the third phase of each Program Element Audit.

5.3.1 Draft PEARs

Pursuant to the CD, the Audit Team will prepare draft PEARs documenting the procedures followed, sites and activities visited, materials reviewed, and a summary of major findings from the program element audits of the six HDOT NPDES permits (Appendices C1 - C6 Item 8). The PEARs will be structured so that they may be easily incorporated into each Division's Annual Compliance Report (ACR) (see Section 7).

The Audit Team will endeavor to draw defensible conclusions based on the NPDES permit requirements and conditions, the SWMPP developed to meet the permit goals, measurable achievement of those goals, and the Audit Team's best professional judgment interpretation of compliance with the NPDES regulations.

EPA (2007) guidance describes that, in some cases, it may not be possible to assess compliance with a program component because of the limitations of the MS4 program evaluation process. If this is found to be the case, the draft PEAR for the program element will state that this is the case and provide as much supporting information as possible. Similarly, if there were no findings of note for a particular SWMPP or NPDES component, this fact will be stated in the PEAR.

If the Audit Team identifies what may be a Potential Violation or Deficiency at any point during the Pre-Audit, Onsite Evaluation, or Reporting periods, actions will be taken in accordance with the decision tree defined in Section 6 for the Audit Team, HDOT PM, and MS4 Permit Coordinators to follow. The draft PEAR will describe the two findings as follows:

- Findings reviewed per Section 6 and found to be Potential Violations, reported to DOH/EPA and addressed via Corrective Actions.
- Findings found to be Deficiencies, for which recommendations for improvement will be included.

Each draft PEAR will identify BMPs and opportunities for information/technology transfer that may be considered for application across the three HDOT Divisions. The draft PEARS will also analyze the practices implemented for each HDOT Division's program elements and assess whether identified best practices can be universally implemented across the three HDOT Divisions. If best practices cannot be universally implemented, the draft PEAR report will describe identified impediments (such as legal barriers). The draft PEAR will also identify positive program elements considered to exceed the NPDES requirements and SWMPP. Finally, the draft PEAR will include a retrospective analysis of activities that are considered to be potentially outmoded, ineffective, insufficient, or excessively burdensome. Recommendations to modify, streamline, or expand them in accordance with what has been learned will be listed.

The Audit Team will complete the draft PEAR within 45 days of the completion of the evaluation for each program element. The Audit Team will provide five (5) copies of the draft PEAR and one electronic file copy in Word (Version 2007 or earlier) to the HDOT PM.

5.3.2 HDOT Review

Upon receipt, the HDOT PM will distribute copies of the draft PEARS to the appropriate MS4 Permit Coordinators, who will be responsible for reviewing the reports and distributing the reports to key personnel for their review. The MS4 Permit Coordinators will submit to the HDOT PM a consolidated written request for clarification and corrections to the draft PEAR for their respective permit as found to be necessary (Appendices C1 - C6 Item 9). The HDOT PM will then submit the consolidated requests and corrections to the Audit PM (Appendices C1 - C6 Item 10).

5.3.3 Final Audit Report

Upon receipt of the consolidated requests and corrections, the Audit Team will make appropriate changes to the draft PEARS and submit the final PEARS (Appendices C1 - C6 Item 11).

For PEARs #1 - 5, the Final PEAR is scheduled to be submitted approximately 25 days in advance of the CD deadline. This is intended to afford additional time for the Divisions in each subsequent Program Element Audit. The CD is structured such that, if followed strictly, only 60 calendar days are afforded for Steps 1 to 7 of PEARs #2 - 6. For example, Final PEAR #1 is due at 210 days following AWPC and the evaluation of PEAR #2 is due at 270 days following AWPC. By reducing the time it takes Kennedy/Jenks to write the Final PEAR, an additional 25 days are afforded to the Divisions to fulfill the records request for the subsequent audit (Appendices C2 - C6 Item 3).

The Audit Team will provide five (5) copies of the final PEARs and one electronic file copy in Word (Version 2007 or earlier) to the HDOT PM.

5.3.4 Post-Audit Report Review

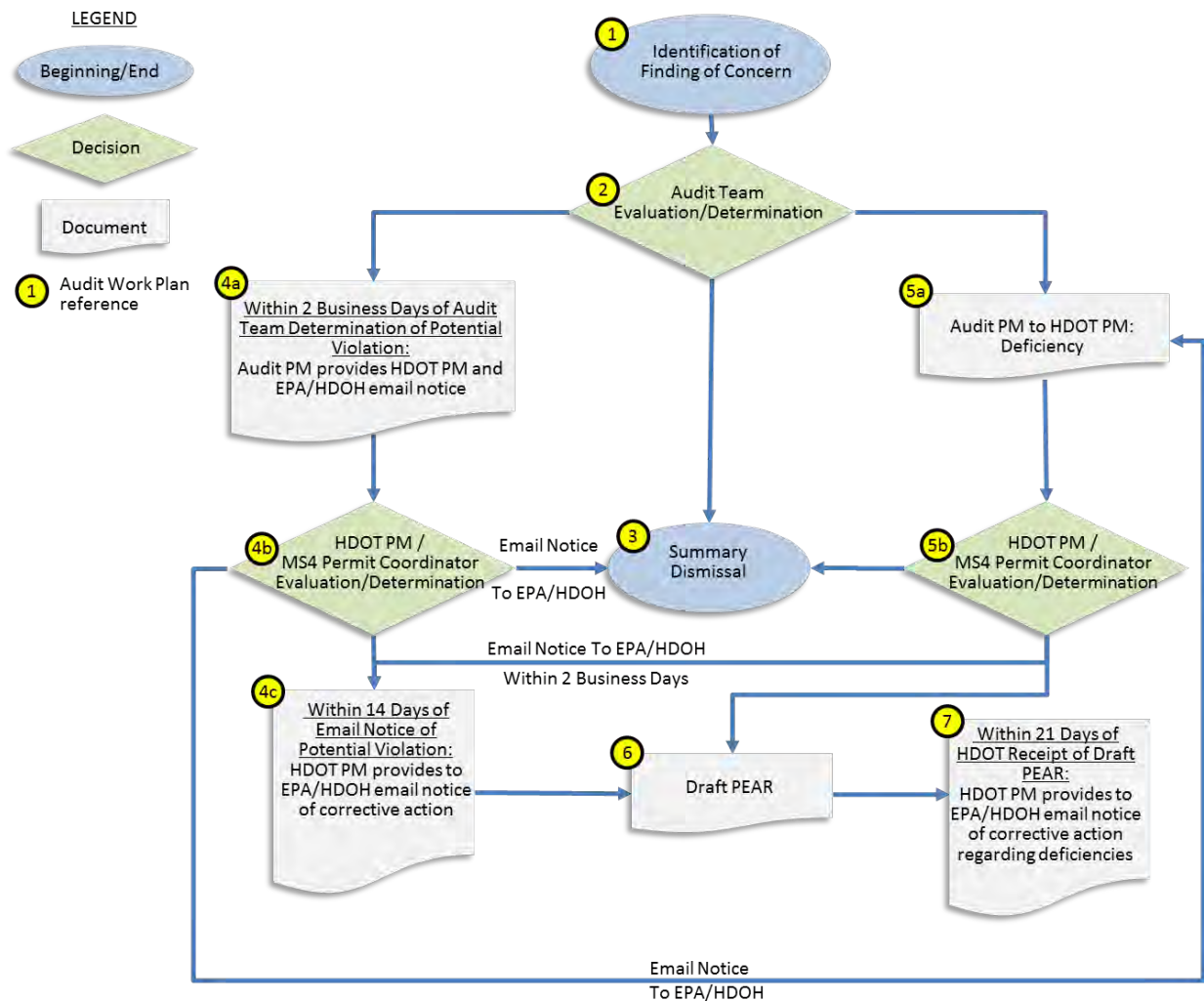
The HDOT PM and Audit PM will meet after the submission of each PEAR to discuss QC procedures and potential improvements to be made prior to the subsequent PEAR.

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Section 6: Potential Violations and Deficiencies

If at any point during the Pre-Audit, Onsite Evaluation or Reporting Periods the Audit Team identifies what may represent a Potential Violation or Deficiency (hereinafter “Finding of Concern”), the Audit Team, HDOT PM, and MS4 Permit Coordinators will follow the decision tree shown on Figure 6-1.

Figure 6-1 Potential Violation and Deficiency Decision Tree



① 6.1 Identification of Finding of Concern

② 6.2 Audit Team Consultation

Upon identification of a Finding of Concern, the Audit Team will consult internally to assess whether the Finding of Concern may represent a Potential Violation, a Deficiency, or whether it summarily merits dismissal.

Potential Violation - The Audit Team will categorize the Finding of Concern as a Potential Violation if it meets the EPA (2007) guidance definition of an “area where the evaluation found the permittee not in compliance with a specific permit requirement or SWMPP commitment”. These occurrences would follow the procedures listed in Section 6.3.

Deficiency – The Audit Team will categorize the Finding of Concern as a Deficiency if it meets the Consent Decree definition of an “item which, if not corrected, will lead to potential violations”¹. These occurrences would follow the procedures listed in Section 6.4.

③ Summary Dismissal – The Audit Team will dismiss the Finding of Concern if it does not meet either the definition of a Potential Violation or a Deficiency. No further action will be required.

¹ EPA (2007) guidance further elaborates that deficiencies are areas of concern impeding effective program implementation. They are typically areas where the permit or SWMPP does not describe specifically how the permittee should conduct an activity, yet the evaluator believes the permittee may consider altering how they conduct the activity to meet water quality goals. Deficiencies can also be areas where future permit violations could result if the permittee continues on its present path. The Audit Team will look for opportunities to enhance program elements (e.g. recommending that MS4 Coordinators perform required annual reviews earlier in the year, thereby allowing time for self-correction).

6.3 Potential Violation Decision Tree

4a Notification: Audit PM to HDOT PM and EPA & DOH

If the Finding of Concern is categorized by the Audit Team as a Potential Violation, the Audit PM will notify the HDOT PM and EPA & DOH via email¹ within 2 business days of making the determination using the form presented in Appendix D1. Additionally, the HDOT PM will be notified via telephone. These notifications will include the following information:

1. Specific details of the Potential Violation
2. Related photographs, if any
3. Applicable regulatory references [i.e., NPDES permit, SWMPP, Hawaii Administrative Rules (HAR), or Code of Federal Regulations (CFR) references, as applicable].

4b Evaluation/Determination

The HDOT PM will consult with the appropriate MS4 Permit Coordinator to further investigate the factual accuracy of the Potential Violation determination. Based on that consultation, the Potential Violation may be summarily dismissed (if found to be factually inaccurate) or re-categorized as a Deficiency (if incorrectly categorized as a Potential Violation). Both of these scenarios would be accompanied by email notification from the HDOT PM to EPA & DOH using the form presented in Appendix D2. The time required for this consultation is included in the 14-day timeline described in Item 4c, below.

4c Determination of Potential Violation

If the Finding of Concern is confirmed to be a Potential Violation, the HDOT PM will then work with the appropriate MS4 Permit Coordinator to assess suitable corrective actions.

Unless otherwise agreed upon with EPA & DOH, HDOT will correct the Potential Violation within 14 days of initial Audit Team email notification to EPA & DOH (see Item 4a above). Email notification of the Corrective Action will be provided to EPA & DOH by the HDOT PM using the forms presented in Appendix D2 and Appendix D3. The Consent Decree allows HDOT the option to request an extension to this reporting deadline. In order for EPA & DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA & DOH.

¹ Per EPA & DOH request, Connor Adams (EPA) and Matthew Kurano (DOH) will be copied on all email notifications to EPA & DOH.

6.4 Deficiency Decision Tree

5a Notification: Audit PM to HDOT PM

If a Finding of Concern is categorized as a Deficiency, the Audit PM will notify the HDOT PM via telephone and email and include the following information:

1. Specific details of the Deficiency
2. Related photographs, if any
3. Applicable regulatory references (i.e., NPDES permit, SWMPP, HAR, or CFR references, as applicable).

5b Evaluation/Determination

The HDOT PM will consult with the appropriate MS4 Permit Coordinator to further investigate the factual accuracy of the Deficiency determination. Based on that consultation, the Deficiency may be summarily dismissed (if found to be factually inaccurate) or re-categorized as a Potential Violation (if incorrectly categorized as a Deficiency). The latter scenario will be accompanied by an email notification to EPA & DOH within 2 business days of making the determination using the form presented in Appendix D2.

6 Deficiency

If the finding is confirmed to be a Deficiency, this finding (along with confirmed Potential Violations) will be documented in the appropriate draft PEAR. The HDOT PM will work with the appropriate MS4 Permit Coordinator to assess the appropriate corrective actions.

7 Unless otherwise agreed upon with EPA & DOH, HDOT will correct Deficiencies within 21 days of receiving the draft PEAR (Appendices C1 - C6 Item 8). Email notification of the Corrective Action will be provided to EPA & DOH by the HDOT PM using the form included in Appendix D3. The CD allows HDOT the option to request an extension to this reporting deadline. In order for EPA & DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA & DOH.

Section 7: Annual Compliance Report

Due to the differences in Division operations, not all portions of each PEAR will be applicable to all MS4 permittees. As such, the PEARs will be structured so that they may be easily incorporated into each Division's Annual Compliance Report (ACR). The HDOT PM will work with each permittee to ensure that the appropriate PEAR content is included in each individual ACR. Each ACR will include a detailed summary of actions taken as a result of the audit reports and dates at which corrective actions, if warranted, were taken.

Additionally, pursuant to CD Appendix A Section D.5., the HDOT PM will submit each original draft and final PEAR to EPA & DOH at the same time that ACRs are submitted. Within the draft and final PEAR, an authorized HDOT official will certify that, to the best of the official's knowledge and information, the MS4 Permit Audit was conducted in accordance with this AWP. If items have not been corrected, HDOT will provide a schedule for implementing corrective measures.

References

- United States Environmental Protection Agency. 2005. Small SM4 Stormwater Program Overview. December. Accessed online at <<https://www3.epa.gov/npdes/pubs/fact2-0.pdf>>.
- United States Environmental Protection Agency. 2006. Digital Camera Guidance for EPA Civil Inspections and Investigations. July. Accessed online at <<https://www.epa.gov/sites/production/files/2013-09/documents/digitalcameraguide.pdf>>.
- United States Environmental Protection Agency. 2007. *MS4 Program Evaluation Guidance*. Accessed online at <https://www3.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf>.

Appendix A

Consent Decree Sections Pertaining to Audit
(10.d Page and Appendix A)

Divisions. HDOT shall ensure that HDOT Office of Environmental Compliance staff have the training and professional qualifications, sufficient to assess compliance, to identify actual or potential non-compliance, and to identify and require implementation of remedies.

d. The HDOT Office of Environmental Compliance staff shall perform audits of each operational division of HDOT in accordance with Appendix A.

11. Stormwater Management Plan (SWMP)

a. Modification of Stormwater Management Plan Elements

i. HDOT-Harbors shall modify the 2009 SWMPs for Honolulu Harbor and Kalaeloa Barbers Point Harbor to integrate changes described below. The modified SWMPs shall be provided to EPA and HDOH no later than 90 days of entry of the Consent Decree. HDOT-Harbors may choose to develop one SWMP for both Harbors.

ii. Within 90 days of entry of the Consent Decree, HDOT-Harbors shall post the SWMPs on HDOT-Harbors' stormwater management website. HDOT-Harbors shall solicit comments from Tenants and the public, through a variety of mechanisms. HDOT-Harbors shall provide a schedule for receipt of comments, not to exceed 45 days. Among other mechanisms, HDOT-Harbors shall solicit comments on the SWMP by publishing notices regarding its availability for review and comment in one local newspaper. HDOT-Harbors shall continue to maintain records of comments received as described in SWMP Section 3.2.

APPENDIX A

ENVIRONMENTAL COMPLIANCE AUDITS

A. General Provisions

1. This Appendix provides details of the NPDES MS4 compliance audits required by Paragraph 10.d of the Consent Decree. The audits shall include evaluation of common stormwater program elements at each of HDOT's three divisions (Airports, Highways and Harbors), as stated in Paragraph A.3 below, throughout the state on a per element schedule. The audits shall be completed to fulfill the following goals:
 - a. Determine compliance with the federal regulations and state MS4 permits and regulations and this Consent Decree (see Paragraph A.2, below);
 - b. Ensure information gathered during the audits is used to promote information and technology transfer between divisions; and
 - c. Identify deficiencies and potential violations that are discovered by the third party auditor and allow for timely self-correction of the deficiencies and potential violations by HDOT.
2. The audits shall be designed to assess current regulatory and administrative compliance with the following items throughout each of HDOT's divisions:
 - a. The Hawaii NPDES General Permit Authorizing Discharges of Storm Water and Certain Non-Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Hawaii Small MS4 General Permit), Hawaii Administrative Rules, chapter 11-55, Appendix K;
 - b. NPDES permit, Permit No. HI S000001, MS4 Permit for the HDOT-Highways, Oahu District;
 - c. NPDES Permit, Permit No. HIS000005, MS4 Permit for the HDOT-Airports, Honolulu International Airport;
 - d. Applicable Storm Water Management Plans (SWMPs); and
 - e. This Consent Decree.
 - f. Future NPDES MS4 permits and SWMPs issued to HDOT. This obligation shall not delay or prevent termination of the Consent Decree.
3. The audits shall include, but not be limited to, an evaluation of the following MS4 Program Elements as they relate to compliance at each of HDOT's three divisions:
 - a. Public Education/Outreach and Participation/Involvement
 - b. Illicit Discharge Detection and Elimination (including commercial/tenant oversight programs)
 - c. Construction Site Runoff Control
 - d. Post-Construction Runoff Control/ Permanent BMPs
 - e. Pollution Prevention/ Good Housekeeping
 - f. An analysis of how Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability impact MS4 compliance
4. HDOT shall audit Program Elements for the Harbors, Airports and Highways Divisions in accordance with the schedule defined in the Work Plan described in Paragraph B.1, below.

5. The audits shall be conducted by a qualified third party environmental consulting firm retained by HDOT and selected by a committee consisting of representatives of the HDOH and HDOT. The selection committee shall choose an audit firm which is experienced with environmental auditing and the permits and regulations described in Paragraph A.2, above.
6. The requirements of this Appendix related to the consulting firm's qualifications, authority to conduct the audits, and production of the HDOT Audit Reports (Audit Reports) shall be incorporated in any contract relating to the audits entered into by HDOT and the selected consulting firm to the extent allowed by State Procurement Code.
7. Any violations by HDOT discovered through the execution of the Environmental Compliance Audit detailed in this Appendix are neither "voluntarily discovered" within the terms of EPA's revised *Incentives for Self-Policing: Discovery, Disclosure, Correction and Prevention of Violations Policy* (Audit Policy) nor voluntarily disclosed to EPA under EPA penalty policies. Accordingly, any such violations are ineligible for penalty mitigation or other favorable treatment under the Audit Policy.
8. HDOT agrees not to attempt to use any state audit and/or privilege laws to restrict EPA's or HDOH's ability to review the Audit Reports at HDOT facilities to determine if the audits have been properly completed and HDOT has corrected any uncorrected non-compliance, potential violation, or deficiency as per its certification (see Paragraph F below). Also, HDOT agrees not to attempt to use any state audit and/or privilege laws to restrict EPA's or HDOH's ability to obtain, review and/or use the Audit Reports in any action to enforce the audit provisions of the Consent Decree. Neither information contained in the Audit Reports, nor underlying information upon which the Audit Reports relied, that indicates regulatory violations at any HDOT facility, shall be claimed as confidential business information by HDOT or its consulting firm.

B. Procurement of Services/Audit Work Plan

1. HDOT shall advertise a Request for Qualifications from third party audit firms to conduct the audits. Advertisement for the Request for Qualifications shall not exceed forty-five (45) days.
2. Within thirty (30) days of the end of the Request for Qualifications period, the HDOT and HDOH selection committee shall conduct the professional services selection of an audit firm and provide the recommendation to the Director.
3. Within fifteen (15) days of the selection committee recommendation to the Director of Transportation, or another length of time agreed to by EPA and HDOH, HDOT shall notify the potential audit firm with a letter of selection, pending negotiation of fees.
4. Within thirty (30) days or another length of time agreed to by EPA and HDOH, HDOT shall, as approved by the Director of Transportation, award the selected audit firm and proceed to process the contract for the audit work. Within seven (7) days of each milestone, HDOT shall notify EPA and HDOH by email that the following milestones were completed:
 - a. Request for Qualifications advertisement;
 - b. Awarding of contract between HDOT and the selected audit firm;
 - c. Notice to Proceed on the Audit.
5. On or before September 16, 2016, HDOT shall submit a draft audit work plan (Audit Work Plan) to EPA and HDOH for review and approval. In developing the Audit Work Plan, HDOT shall consult EPA's guidance on auditing small MS4s:

http://www.epa.gov/npdes/pubs/ms4guide_withappendixa.pdf The Audit Work Plan shall include the following audit schedule and describe each task necessary to accomplish the Audit Scope with targeted time frames for the consulting firm to complete:

- a. 3 months after the Audit Work Plan is approved: Evaluation of Post Construction/Permanent BMP programs for all three HDOT divisions;
 - b. 9 months after the Audit Work Plan is approved: Evaluation of Construction Site Runoff Control programs for all three HDOT divisions;
 - c. 15 months after the Audit Work Plan is approved: Evaluation of Public Outreach/Public Involvement for all three HDOT divisions;
 - d. 21 months after the Audit Work Plan is approved: Evaluation of Illicit Discharge Detection and Elimination, Industrial Commercial Activities/Tenant Programs for all three HDOT Divisions;
 - e. 27 months after the Audit Work Plan is approved: Evaluation of Pollution Prevention/Good Housekeeping for all three HDOT Divisions;
 - f. 33 months after the Audit Work Plan is approved: Evaluation of Staffing, Funding, Organizational Structure, Availability of Resources and Storm Water Program Sustainability for all three HDOT divisions.
6. The Audit Work Plan shall include, but is not limited to: the minimum documents to be reviewed (e.g. SWMPs, training records, inspection reports, etc.), minimum number of field verifications, as necessary, for each program element evaluated, deliverables (notices of potential violations, draft and final audit reports), and reporting deadlines.
 7. EPA, after consultation with HDOH, may reject the draft Audit Work Plan in whole or in part. If EPA rejects the Audit Work Plan or any portion of it, EPA shall identify the reason(s) in writing to HDOT for such rejection and may require HDOT to redraft the Audit Work Plan in its entirety or part. EPA shall provide any comments to HDOT within forty-five (45) days.
 8. If EPA and HDOH reject the Audit Work Plan in whole or part, HDOT shall resubmit a revised Audit Work Plan within one hundred and twenty (120) days. After submission of the revised Audit Work Plan, EPA, after consultation with HDOH, shall provide any comments to HDOT within forty-five (45) days. HDOT will review all comments and make all required modifications to the revised Audit Work Plan. If EPA does not provide written comments, the revised Audit Work Plan shall be deemed approved by EPA and HDOH.

C. Audits

1. HDOT shall take all appropriate measures to facilitate the audit firm in performing the audits in accordance with the approved Audit Work Plan.
2. HDOT shall grant the audit firm full access to and unrestricted review of all HDOT records, documents and information that the audit firm requires to complete the audits.

D. Reporting/Audit Reports

1. HDOT shall require the audit firm to provide preliminary written notice of any potential violations identified in any audit to HDOT, EPA and HDOH within 2 business days following an audit of a program element in Paragraph B.1, above.
2. HDOT shall require the audit firm to complete a draft audit report to HDOT within 45 days of completing an audit of a program element.
3. HDOT shall review the draft audit report to correct any factual inaccuracies within 30 days after receiving the draft audit report.
4. HDOT shall require the audit firm to complete a final audit report within 120 days, or another length of time agreed to by EPA and DOH, of completing an audit of a program element.
5. HDOT shall submit original draft and final audit reports to EPA and HDOH with the Annual Compliance Report (ACR).
6. HDOT shall provide a detailed summary of any actions taken as a result of the audit reports and dates at which those actions were taken with the ACR.
7. The HDOT Audit Reports shall contain:
 - a. A specific statement of the procedures followed, HDOT sites and activities visited and all materials reviewed during the audits;
 - b. Retrospective analysis of activities that may be outmoded, ineffective, insufficient, or excessively burdensome, and recommendations to modify, streamline, or expand them in accordance with what has been learned;
 - c. An identification of deficiencies (items which, if not corrected, will lead to potential violations) and potential violations with the applicable SWMPs, this Consent Decree, and/or applicable permit and regulations, and recommendations for improvement;
 - d. Identification of best practices and opportunities for information/technology transfer to be applied across all divisions; and
 - e. An analysis of the practices implemented for each Division's program elements and a determination as to whether identified best practices can be universally implement across all three Divisions. If best practices cannot be universally implemented, the report shall clearly describe the identified impediments.
8. HDOT shall correct any deficiency or potential violation identified in the Audit Reports or otherwise discovered by HDOT as part of the audit process set forth herein within the time frames identified in Paragraph E below.

E. Corrections of Potential Violations and Deficiencies

1. HDOT shall correct any potential violations within 14 days of notification as described in D.1 of this Appendix, or another period of time agreed to by EPA and DOH. In order for EPA and DOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA and HDOH.
2. HDOT shall correct any deficiencies within 21 days of receiving the draft Audit Report, or another period of time agreed to by EPA and HDOH. In order for EPA and HDOH to agree to an extension, HDOT must provide a corrective action workplan, including a final compliance date, to EPA and HDOH.
3. If HDOT corrects any violation discovered through the Audit process within the time frames described above, it shall not be subject any related stipulated penalties under Paragraph 30.

4. Notwithstanding anything in E.3 of this Appendix, the United States and HDOH reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree or to obtain penalties or injunctive relief under the Act or its implementing regulations, or under other federal or State laws, regulations, or permit conditions, if HDOH or EPA independently discovers a violation of a permit, law, or statute.
5. Similarly, United States and HDOH, reserve all legal and equitable remedies available to enforce the provisions of this Consent Decree or to obtain penalties or injunctive relief under the Act or its implementing regulations, or under other federal or State laws, regulations, or permit conditions, if an activity or violation poses an immediate threat to human health or the environment.

F. Certifications

1. HDOT shall provide the following information and certifications to EPA and HDOH regarding completion of each audit and correction of any non-compliance or potential violation identified in the Audit Reports or otherwise discovered by HDOT as part of the audit process within an Environmental Compliance Audit section of the ACR. An authorized HDOT official shall certify that, to the best of the official's knowledge and information, the audits were conducted in accordance with the Work Plan described above, the Audit Reports are submitted to HDOT, EPA and HDOH in the ACR as described above, and all items of non-compliance identified in the Audit Reports have been corrected or steps have been taken to correct them. If all items have not been corrected, HDOT must include a schedule for correcting the issue.

Appendix B

PEAR 1 through 6 Guiding Questions

B1: PEAR #1 – Post-Construction /
Permanent Best Management Practices

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Overall Approach						
A1	Discuss the process chronologically in the order that a project would occur. Walk us through the process as if we were a developer proposing a project.						
B	Laws/Rules/Regulations/Policies						
B1	What legal authority does the permittee have to require post-construction BMPs on development sites and to ensure maintenance?						
B2	Does the permittee’s legal authority address post-construction requirements for all projects disturbing one acre or more?						
B3	Does the legal authority require site design, source control, and stormwater treatment BMPs?						
B4	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
B5	What procedures for alternative compliance (i.e., planning-level BMPs and other non-structural controls) are allowed?						
B6	Does the legal authority authorize the permittee to require stormwater management plans to address post-construction impacts?						
B7	Do the laws/rules/regulations/policies outline the contents of an approvable plan and responsibilities for operation and maintenance of approved BMPs?						
C	Post-Construction BMP Standards						
C1	What technical guidance (e.g., BMP manual) does the permittee use as the standard for design and selection of post-construction BMPs? Note: It is not necessary to do a thorough review of the manual or standards used by the permittee.						
C2	Are project proponents required to follow a technical guidance manual?						
C3	Does the guidance provide siting and use criteria for the BMPs to ensure proper and adequate BMPs are being selected and implemented?						
C4	Does the guidance provide siting and use criteria for BMP selection based on the development context (i.e., BMP selection appropriate for ultra urban-areas versus those more appropriate for more rural settings with larger parcels)?						
C5	Are pollutants of concern that are typically generated by the proposed development type considered when selecting or approving BMPs?						
C6	Does the technical manual provide guidance on sizing, performance, and location of BMPs?						
C7	When was the BMP manual last updated?						
C8	Does the permittee have different requirements or standards for different types of developments (e.g., specific post-construction requirements for gas stations or automobile repair facilities)?						
C9	Does the permittee have design manuals related to land-efficient site designs (e.g. better site design, better models for large retailers)?						
C10	Does the permittee promote source control and site design standards to reduce the generation of pollutants in addition to treatment BMPs?						
C11	Does the permittee include in standards and manuals specifications for innovative site design practices, such as low-impact development and other techniques that manage runoff on-site?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
C12	Are project applicants encouraged or required to use vegetative BMPs that promote infiltration, such as swales, biofiltration practices, etc., where possible?						
C12	Does the permittee offer financial incentives to support post-construction stormwater goals (e.g., programs to support redevelopment, such as enterprise zones, or stormwater utility credits)?						
D	Plan Review and Approval Procedures						
D1	Which Division/District is responsible for post-construction stormwater plan review?						
D2	How many plan reviewers are there?						
D3	How many plans submitted for review (private and public projects) each year?						
D4	What is the project size threshold for the permittee to require post-construction BMPs?						
D5	Does the permittee apply standard conditions that incorporate post-construction installation and maintenance requirements into its plan review process?						
D6	Do plan reviewers use specific criteria or a checklist when reviewing plans?						
D7	Does the permittee consider pollutants of concern or whether the project discharges to a 303(d) listed impaired water when determining which BMPs are required?						
D8	Does the permittee consider such regional concerns as smart growth initiatives, watershed master plans, and other larger-scale planning efforts to ensure that each new development and redevelopment plan is consistent with the goals of these initiatives?						
D9	For up to three sets of post-construction plans provided by permittee:						
D9a	Are adequate BMPs included on plans, details, and drawings?						
D9b	What types of standard conditions or notes are included?						
D9c	Are maintenance requirements specified?						
D9d	Do the location of BMPs hinder maintenance?						
D10	What types of projects must be reviewed by the permittee for post-construction stormwater controls?						
D11	Does the permittee have a process to identify priority projects identified in the MS4 NPDES permit?						
D12	What types of standards or technical guidance do the permittee’s reviewers use to review projects?						
D13	Does the permittee condition improvements to existing developments with requirements for post-construction stormwater controls? How are these redevelopment requirements triggered?						
E	Post-Construction BMP Inventory						
E1	How does the permittee track the installation and maintenance of post-construction BMPs?						
E2	Is your post-construction BMP inventory managed in a database and/or linked to GIS?						
E3	What information is collected?						
F	BMP Inspection & Maintenance						
F1	Does the permittee require maintenance agreements for all projects with post-construction BMPs?						
F2	Are as-built inspections conducted at the conclusion of a project to ensure the BMP has been built properly? What Division/District is responsible for this?						
F3	Do staff conduct these inspections or are they self-certified?						
F4	Does the permittee inspect private facilities or require inspections by owner/operators?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
F5	If the permittee performs the inspections, how often are they performed?						
F6	If owner/operators are required to inspect and maintain their BMPs, how is this authorized? Through a MOU? Through conditions of approval? Through another type of agreement?						
F7	How does the permittee ensure inspections are occurring? Reminder notices? Inspection reports?						
F8	Who is responsible for structural stormwater BMP maintenance (public and private)? Permittee? Owner?						
G	Enforcement						
G1	How does the permittee require proper maintenance and repair after the inspection?						
G2	What types of enforcement actions are provided by laws/rules/regulations/policies (e.g., notices of violation, abatement)?						
G3	Is the permittee’s enforcement authority limited (e.g., limits on the dollar amount of fines, inability to issue civil penalties)?						
G4	How many enforcement actions have been taken in the past year due to lack of BMP maintenance?						
H	Public Construction Projects						
H1	For staff:						
H1a	Are plan reviewers trained on post-construction BMPs and requirements?						
H1b	What type of training do staff performing “as built” and post-construction inspections receive?						
H1c	How often are the trainings conducted?						
H1d	How many staff have been trained?						
H1e	What type of training or education does the permittee provide to developers and engineers on post-construction requirements?						
H2	For developers and plan designers:						
H2a	What types of educational materials have been developed and distributed to developers and designers regarding post-construction BMPs and application requirements?						
H2b	How are the materials distributed? At the permit desk? During inspections?						
H2c	What type of training does the permittee provide or advertise to local developers and designers?						
H2d	How often is this training conducted?						
H2e	How many developers and designers have been trained?						
H2f	Are they required to attend?						
I	Consent Decree Questions						
I1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
I1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
I2a	Have deficiencies or potential violations been identified?						
I2b	What are recommendations for correcting these deficiencies or potential violations?						
I4	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						

Appendix B1: PEAR #1 – Post-Construction / Permanent Best Management Practices

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
15	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
16	If best practices cannot be universally implemented, what are the identified impediments?						

B2: PEAR #2 – Construction Site Runoff Control

Appendix B2: PEAR #2 – Construction Site Runoff Control

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Laws/Rules/Regulations/Policies						
A1	What legal authority does the permittee have to require erosion and sediment control BMPs on construction sites and to ensure compliance?						
A2	Does the permittee’s legal authority address stormwater quality for all projects disturbing at least 1 acre?						
A3	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
A4	Does the legal authority authorize the permittee to require erosion and sediment control plans?						
B	Construction Site Inventory						
B1	How does the permittee track construction projects?						
B2	Is the following information collected?						
B2a	The number and status (active/inactive/completed) of construction sites						
B2b	The number, frequency, results, and follow-up actions resulting from inspections						
B2c	The actions taken to resolve the issues and dates when compliance was achieved.						
B2d	The number and type of enforcement actions taken at sites in violation						
B2e	Complaints submitted by the public						
B3	Does the inventory include construction sites disturbing less than 1 acre?						
B4	What is the threshold for tracking projects?						
B5	Does the inventory track which sites have submitted an NOI for coverage under a state/EPA construction general permit?						
B6	How is the inventory updated? How often?						
B7	Does the permittee prioritize projects for more frequent or targeted inspections? If yes, based on what criteria?						
C	Construction Requirements and BMPs						
C1	What technical guidance (e.g., BMP manual or fact sheets) does the permittee use as the standard for design and selection of nonstructural and structural construction BMPs?						
C2	Are project applicants required to follow these technical manuals?						
C3	Does the guidance set minimum operation and maintenance requirements for BMPs?						
C4	Does the guidance include installation requirements for the BMPs?						
C5	Does the guidance provide proper siting and use criteria for BMPs to ensure that adequate BMPs are being selected and implemented?						
C6	Does the permittee provide guidance as to recommended BMPs to be used?						
C7	Does the permittee have different requirements or standards for different times of the year (i.e., during the rainy season vs. the dry season)?						
D	Plan Review Procedures						
D1	Does the permittee hold pre-application meetings on any construction project? Are stormwater and erosion and sediment control requirements addressed at these meetings?						
D2	What is the permittee’s threshold for plan review? (For example, does the permittee review plans for all projects disturbing greater than 1 acre, or do they use another threshold?)						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
D3	Does the permittee apply standard conditions that incorporate erosion and sediment control requirements into its plan review process?						
D4	Do the plan reviewers verify whether the project applicant has submitted an NOI to the state or EPA? Is evidence of NOI submission required before a plan can be approved or a local permit issued?						
D5	Do plan reviewers use specific criteria or a checklist when reviewing plans?						
D6	Does the permittee consider during the review process whether the construction project discharges to a TMDL/impaired water?						
D7	For up to two construction plans provided:						
D7a	Are adequate BMPs included on plans?						
D7b	What types of standard conditions or notes are included?						
D7c	Are maintenance requirements specified?						
D7d	Are BMPs addressing other construction activities, such as materials storage and waste disposal, incorporated into the construction plans?						
D7e	Do the plans include notes addressing the prohibition of non-stormwater discharges?						
D7f	Were comments provided by the permittee to the project proponent reasonable and appropriate?						
E	Construction Site Inspections						
E1	Does the permittee adequately inspect the following phases of construction?						
E1a	Clearing and grubbing and site preparation						
E1b	Mass grading and public infrastructure/utility construction						
E1c	Building construction and final grading						
E1d	Final stabilization						
E2	What group is charged with erosion and sediment control inspections?						
E3	Do the inspectors use a checklist or inspection form during each inspection?						
E4	How many inspectors does the permittee use to verify erosion and sediment control compliance at construction sites?						
E5	Does this number appear adequate to assess active construction occurring in the permitted area? Compare this to the total number of construction sites that need to be inspected at any one time (number of inspections per construction site per year). Consider project durations and phasing, local conditions (e.g., dry vs. wet seasons), and additional duties assigned to inspectors.						
E6	Does the permittee have an established prioritization process for establishing inspection frequency? If so, on what factors is the prioritization based (i.e., size, proximity to water body, sensitive areas)?						
E7	How often are sites inspected?						
E8	Does the permittee target inspections during and immediately after wet weather events? If so:						
E8a	What size rain event triggers an inspection?						
E8b	How soon after a rain event?						
E9	Is there an established rainy season for the area? Are sites inspected prior to the start of the rainy season to determine preparedness?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
F	Program Support and Resources						
F1	Does the program have a dedicated source of funding to support plan review staff and inspectors?						
G	Enforcement						
G1	What types of enforcement actions are provided for in applicable laws/rules/regulations/policies (e.g., notices of violation, “stop work” orders, fines)?						
G2	Is use of these actions outlined in an established, escalating enforcement policy?						
G3	Review with the permittee statistics on enforcement of construction site erosion and sediment controls.						
G3a	How many enforcement actions are taken per year?						
G3b	Are follow-up inspections conducted to verify compliance?						
G4	Are there limitations on the permittee’s enforcement authority (e.g., limits on the dollar amount of fines, inability to issue civil penalties)?						
G5	Do staff feel that their enforcement authority is adequate to achieve compliance on construction projects?						
H	Training and Education						
H1	For staff:						
H1a	What type of training do construction inspectors receive? Are plan reviewers trained on erosion and sediment control BMPs and requirements?						
H1b	How often is training conducted?						
H1c	How many staff have been trained?						
H1d	What type of follow-up is conducted by the permittee to verify that the training is effective?						
H2	For construction operators:						
H2a	What types of educational materials have been developed and distributed to construction operators?						
H2b	How are the educational materials distributed?						
H2c	What type of training does the permittee provide or advertise to local construction operators?						
H2d	How often is this training conducted? How many construction site operators have been trained?						
H2e	Are contractors and developers required to attend?						
H2f	Are training sessions held in cooperation with other local permittees or regional authorities?						
I	Public Construction Projects						
I1	Do RFPs or contracts include language specifying stormwater requirements?						
I2	Are inspection and maintenance requirements specified in the contract?						
I3	What oversight does the permittee implement to ensure the contractor is implementing all requirements appropriately and adequately?						
I4	What penalties are in place to require compliance from the permittee’s contractors?						
J	Consent Decree Questions						
J1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						

Appendix B2: PEAR #2 – Construction Site Runoff Control

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
J1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
J2a	Have deficiencies or potential violations been identified?						
J2b	What are recommendations for correcting these deficiencies or potential violations?						
J3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
J4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
J5	If best practices cannot be universally implemented, what are the identified impediments?						

B3: PEAR #3 – Public Outreach / Public Involvement

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
A	Goals and Objectives						
A1	Does the permittee have a strategy document for education and participation?						
A2	Does the document include specific goals?						
A3	On what are the goals based?						
A4	Are the goals measurable? How?						
B	Message Development						
B1	Have specific messages been developed for stormwater outreach?						
B2	On what are the messages based? Pollutants of concern? General awareness? Problem target audience? All of the above?						
B3	Are different messages used for different target audiences (i.e., children, homeowners, industry, etc.) or is one central message used for all?						
B4	Do the messages encourage participation in stormwater-related activities?						
B5	Do the messages educate about behavior changes that the audience can make to contribute to a solution?						
B6	Have messages been developed specific to reducing illicit discharges with information about how to report them to the appropriate authorities?						
B7	Have messages been developed to educate pesticide, fertilizer, and herbicide applicators (including homeowners) about ways to reduce stormwater pollution?						
C	Target Audiences						
C1	Has the permittee identified target audiences for outreach efforts? How are these target audiences selected? What are the target audiences?						
C2	What land use groups (i.e., industry, commercial businesses) has the permittee targeted?						
C3	Have certain ethnic groups or nationalities been identified as audiences to be targeted based on an evaluation of local demographics?						
C4	Have the target groups been reevaluated based on evaluation of the strategy and progress that has been made?						
C5	For Phase I permittees: have they targeted pesticide, herbicide, and fertilizer applicators (including homeowners) and construction site operators for outreach?						
C6	For Phase II permittees: have they targeted industries or commercial businesses of concern for outreach?						
D	Message Packaging						
D1	Does the permittee have a variety of written educational materials?						
D2	Does the permittee have a variety of other packages (i.e., Web site, presentations, displays) for educational materials?						
D3	Did the permittee produce the education and outreach materials in the different languages that are spoken in the community?						
D4	Do the permittee's materials explain stormwater issues in easy-to-understand terms?						

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E	Distribution Mechanisms						
E1	Does the permittee track distribution of materials to measure effectiveness?						
E2	Is the permittee focused solely on distribution or is an effort made to evaluate the impact of the messages?						
E3	Does the permittee use a variety of distribution mechanisms to target various audiences?						
F	Evaluation Methods						
F1	How does the permittee evaluate the effectiveness of the outreach strategy?						
F2	Has the permittee conducted a public awareness survey?						
F3	Which outreach materials have been the most effective in soliciting public involvement and participation? Changing audience behaviors? Increasing general stormwater awareness?						
F4	Have any changes been made to the outreach strategy or materials based on an evaluation of effectiveness?						
G	Public Participation Activities						
G1	What opportunities does the permittee give to the public to review and comment on any changes to the SWMP, such as public comment via a Web site, a public meeting, or a stormwater advisory group?						
G2	What volunteer opportunities (i.e., stream cleanups, storm drain stenciling) does the permittee coordinate or publicize to encourage the public to participate in stormwater-related activities?						
G3	Does the permittee sponsor or promote any of the following activities?						
G3a	Beach/stream/lake cleanups						
G3b	Volunteer stream monitoring						
G3c	Stream clean-ups or equivalent activities						
G3d	Stormwater citizen panel						
H	Consent Decree Questions						
H1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
H1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
H2a	Have deficiencies or potential violations been identified?						
H2b	What are recommendations for correcting these deficiencies or potential violations?						
H3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
H4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
H5	If best practices cannot be universally implemented, what are the identified impediments?						

B4: PEAR #4 – Illicit Discharge Detection and
Elimination (IDDE) Program Element and
Industrial Commercial Activities/Tenant (I/C) Program

Appendix B4: PEAR #4 – Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
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A	Legal Authority (IDDE)						
A1	Does the permittee have laws/rules/regulations/policies to prohibit illicit discharges and dumping to the MS4?						
A2	What exclusions are included in laws/rules/regulations/policies?						
A3	What enforcement mechanisms are authorized in the event of an illicit discharge being detected?						
A4	Has an enforcement escalation plan been developed?						
B	Mapping (IDDE)						
B1	Does the permittee have a map showing storm drain pipes, outfalls, and storm drain inlets?						
B2	Is the map readily available to the personnel who would respond to an illicit discharge incident?						
B3	Does the permittee have a map of the storm drain system showing the locations of outfalls and municipally maintained structural stormwater controls?						
C	Field Screening (IDDE)						
C1	How are field screening areas identified?						
C2	Are areas of the MS4 prioritized based on incidents of illicit discharges, land use, dumping reports, etc.?						
C3	How often are field screening areas evaluated?						
C4	Are outfalls inspected during dry weather to identify any potential dry-weather discharges? What does the inspection include?						
C5	If dry-weather flows are present, are they being sampled to determine potential sources of pollutants? For what parameters?						
C6	Does the permittee have a database (or other method) to track locations of illicit discharges, spills, and illegal dumping?						
C7	Does the database track dry-weather monitoring or screening data?						
D	Investigation of Potential Illicit Discharges (IDDE)						
D1	Does the permittee have a procedure for tracing the source of an active illicit discharge?						
D2	Who performs the investigations?						
D3	Are these procedures written in a document or plan?						
D4	What equipment does the permittee use to find illicit discharges?						
D5	Does the permittee have equipment to videotape storm drains, or can it quickly contract out this work?						
D6	How are investigations tracked?						
D7	Has an enforcement response plan been adopted for use when an illicit discharge source has been located?						
E	Spill Response and Prevention (IDDE)						
E1	Does the permittee have a clear set of procedures in place that details who is responsible for responding to spills and emergency situations?						
E2	Do field staff have spill containment supplies in their vehicles, and are they trained to contain minor spills?						

Appendix B4: PEAR #4 – Illicit Discharge Detection and Elimination (IDDE) Program Element and Industrial Commercial Activities/Tenant (I/C) Program

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E3	Is a contractor or other entity available for larger spills?						
E4	Does the permittee have the ability to collect cleanup and abatement costs from the responsible party?						
E5	How are spills and spill response tracked to ensure adequate reporting?						
F	Public Awareness and Reporting Program (IDDE)						
F1	Does the permittee prioritize subwatersheds or neighborhoods and assign resources for educational efforts based on frequency and types of illicit discharge incidents?						
F2	Is there a general phone number or “hotline” in the phone book or Web site that people can call to report a spill or dumping?						
F3	What types of public outreach materials are available to publicize public reporting?						
F4	Does the permittee track the number of public calls or complaints reporting illicit discharges?						
G	Preventing Sanitary Sewer Discharges (IDDE)						
G1	Has the permittee conducted any studies or evaluations to determine whether sanitary sewers are contributing pollutants to the MS4?						
G2	What is the extent of infiltration and inflow into the sanitary sewer system? How is this impacting discharge from the MS4?						
G3	If the permittee also operates a sanitary sewer system, do they have procedures to prevent sewage spills and SSOs to the MS4?						
H	Education and Training (IDDE)						
H1	What type of training do field staff (e.g., storm sewer maintenance crews, street sweepers) receive on spill response and IDDE?						
H2	Are staff generally educated about what illicit discharges are and how to report them?						
I	Legal Authority (I/C)						
I1	Does the Phase I permittee have the authority to require industrial and commercial facilities to implement stormwater BMPs?						
I2	Does the Phase I permittee have the authority to conduct inspections and enforce requirements?						
I3	What laws/rules/regulations/policies provide this legal authority?						
I4	What types of facilities are covered under this legal authority?						
I5	Who (e.g., specific staff, Division/District, etc.) has the authority to enforce the laws/rules/regulations/policies and/or inspect the facilities?						
I6	What exemptions do the laws/rules/regulations/policies or other legal authority allow?						
J	Facility Inventory (I/C)						
J1	Has the permittee completed an inventory of industrial/commercial facilities discharging to the stormwater system?						
J2	What types of facilities are included on the inventory?						
J3	What sources were used to create the inventory?						
J3A	Facilities that filed NOIs for EPA MSGP or state industrial general permit coverage?						
J3B	Significant industrial users within the pretreatment program?						

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J3C	Business licenses?						
J3D	Phone book?						
J3E	“Windshield” survey?						
J4	Does the inventory include all the industrial/commercial facilities subject to the industrial general permit?						
J5	Does the permittee periodically check to see if new facilities that must be covered by an industrial stormwater general permit have filed an NOI?						
J6	What is the process for notifying the permitting authority of non-filers?						
J7	If applicable, does the inventory include all the facilities specified as required in the MS4 NPDES permit?						
J8	How is the inventory updated? How often?						
J9	What information is maintained about the facilities?						
J10	How is the inventory maintained and stored?						
J11	Does the permittee prioritize the facilities?						
J12	Is the prioritization based on facility type, past inspection or enforcement results, proximity to receiving waters, potential pollutant sources on-site, and so forth?						
J13	Is the prioritization used to determine frequency of inspections?						
J14	Has the permittee mapped the locations of prioritized facilities to cross-reference reports of dumping, illicit discharges, or other water quality issues?						
K	Standards, BMPs and Outreach (I/C)						
K1	Has the permittee adopted standards or BMPs that industrial/commercial facilities are required to implement (e.g., all car dealerships must install a wash rack plumbed to the sanitary sewer)?						
K2	Are the requirements for new developments only or are they triggered by improvements of existing facilities? Are there schedules for implementing retrofits?						
K3	Are these standards applicable to existing facilities, new facilities, or both?						
K4	Does the permittee refer facility operators to specific stormwater BMP or standards guidance documents?						
K5	What type of educational program has been developed for industrial and commercial facility operators?						
K6	What type of brochures, handouts, or guidance on BMPs is provided to these facilities by the permittee?						
K7	When is this information provided? During inspections? During training events? During professional organization presentations?						
L	Staff Training (I/C)						
L1	What type of training do the industrial and commercial inspectors receive?						
L2	How often?						
L3	If additional inspectors are used (e.g., food safety inspectors for restaurant inspections, pretreatment inspectors), are they trained specifically on stormwater BMPs and requirements? By whom?						

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M	Inspections (I/C)						
M1	Who performs inspections and for what types of facilities (e.g., health inspectors for restaurants, pretreatment inspectors for industrial facilities with a pretreatment permit)						
M2	How often are industrial and commercial facilities inspected? How is the frequency determined?						
M3	Does the permittee’s industrial/commercial inspector(s) use a standard checklist during inspections?						
M4	Is a report written after the inspection? How is the inspection documented in the file?						
M5	Does the permittee verify NPDES permit coverage for facilities?						
M6	For industrial facilities, does the inspector review the SWPPP and monitoring data during the inspection?						
M7	Does the permittee refer non-filers to the permitting authority?						
M8	Do inspectors provide educational materials during inspections? What types?						
M9	If multiple Divisions/Districts perform inspections, how is information transferred or cataloged?						
N	Program Support and Resources (I/C)						
N1	Does the program have a dedicated source of funding to support inspectors?						
O	Enforcement (I/C)						
O1	In instances of noncompliance, do the inspection staff use a formalized, approved enforcement escalation procedure?						
O2	How was the enforcement escalation procedure developed? Is it used? Is it effective?						
O3	Who is authorized to apply various enforcement procedures (e.g., NOVs, fines)?						
O4	What types of penalties are readily available to the inspection staff?						
O5	What is the most common method of gaining compliance (e.g., NOVs, fines, abatement)?						
O6	Can the permittee describe a recent non-compliance issue at an industrial/commercial facility? If so, how was compliance achieved?						
O7	At what point are non-compliance cases referred to the NPDES permitting authority? How many have been referred in the last 12 months?						
P	Consent Decree Questions						
P1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
P1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
P2a	Have deficiencies or potential violations been identified?						
P2b	What are recommendations for correcting these deficiencies or potential violations?						
P3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
P4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
P5	If best practices cannot be universally implemented, what are the identified impediments?						

B5: PEAR #5 – Pollution Prevention / Good Housekeeping Program

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		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
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A	Infrastructure Mapping and Characterization						
A1	Does the permittee have a map showing all inlets, outfalls, storm drain conduits, stormwater management facilities, and receiving water bodies?						
A2	Does this map include catch basins and structural stormwater controls?						
A3	Is the map readily available and used by maintenance field staff when performing maintenance activities?						
A4	Is the map in hard copy format only or is it also in a geographic information system (GIS)?						
A5	Are infrastructure assets or components named or numbered to better track necessary maintenance and repairs?						
A6	Is information regarding stormwater infrastructure maintained in a database or mapping system? What types of data are maintained?						
A6a	Type of structure or asset						
A6b	Location (address, latitude/longitude)						
A6c	Photo						
A6d	Date built						
A6e	Date last inspected						
A6f	Date last cleaned/maintained						
B	Catch Basin Cleaning						
B1	Does the permittee have a schedule for routine maintenance or cleaning of catch basins?						
B1a	How many are cleaned and how often?						
B1b	Has the permittee targeted certain areas for more frequent maintenance?						
B1c	Does the permittee set goals for how many basins are inspected and cleaned each year?						
B1d	How does the permittee track and record cleaning and maintenance needs?						
B1e	What information is documented? Does the permittee track which catch basins are cleaned, how much material is removed, and so forth?						
B1f	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency? Are they used to identify areas for targeted outreach?						
B2	What are the permittee's procedures for disposing of waste removed from catch basins or storm drains?						
B2a	Does the permittee flush material that could potentially discharge to surface water?						
B2b	If the material is removed using a wet vacuum, how is the material dewatered? How is the decanted water disposed?						
B3	Does the permittee have a schedule for routine maintenance or inspection of storm drain pipes?						
B4	What are the permittee's maintenance procedures for cleaning clogged storm drain pipes?						
C	Stormwater Management Structures						
C1	Are catch basins and other inlet structures marked so that the public knows they drain to surface waters?						

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C2	Has the permittee inventoried the type and location of public stormwater management structures in its jurisdiction? How are the data collected and stored?						
C2a	Pump stations						
C2b	Drainage structures (debris basins, detention basins, regional ponds, etc.)						
C2c	Structural treatment controls						
C2d	Open channels						
C3	How is vegetation maintained in grassed swales, rain gardens, pond perimeters, and other vegetated stormwater controls?						
C4	Has the permittee mapped private stormwater management structures?						
C5	How often are these facilities inspected?						
C6	Are the stormwater management structures regularly maintained by the permittee?						
C6a	Are records kept of material and debris removed during maintenance?						
C6b	How is maintenance conducted? Are chemicals used to maintain vegetation and pests?						
C7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency? Are they used to identify areas for targeted outreach based on type and volume of materials removed?						
D	Street Sweeping						
D1	Does the permittee regularly sweep streets? Public parking lots?						
D2	What is the schedule for street sweeping?						
D3	Are areas scheduled for sweeping based on aesthetics only or is consideration given for reducing impacts on the stormwater management infrastructure and surface water?						
D4	What types of sweepers are used? Wet or dry?						
D5	How is street-sweeping debris disposed? If the debris is dewatered, how is this done? How is the decanted water disposed?						
D6	Are records kept of the amount of debris collected?						
D7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize cleaning frequency?						
E	Public Streets, Roads and Highway Maintenance						
E1	What types of public streets, roads, and highways operation and maintenance practices and procedures are performed by the permittee?						
E2	Are BMPs used by field crews to minimize stormwater impacts during road maintenance or repair activities?						
E3	What types of BMPs are used? Discuss BMPs used for such activities as:						
E3a	Ditch cleaning						
E3b	Sidewalk repair						
E3c	Asphalt patching						
E3d	Curb and gutter repair						
E3e	Street striping						

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E3f	Sign painting						
E3g	Maintaining dirt and gravel roads (preventing erosion, dust control)						
F	Facility Inventory						
F1	Does the permittee have an inventory of public facilities? At a minimum, this list should include the following, as applicable:						
F1a	Public works yards						
F1b	Public transit facilities						
F1c	Wastewater and domestic water treatment plants						
F1d	Sanitary sewer system overflow locations						
F1e	Public parks/open areas						
F1f	Public parking lots						
F1g	Public buildings						
F1h	Landfills and hazardous waste disposal sites, transfer locations, or storage facilities						
F2	Have the facilities been inspected and assessed for water quality impacts?						
F3	Are any facilities required to apply for coverage under a general industrial permit? Do these facilities have SWPPPs?						
G	Chemical and Hazardous Material Use and Disposal						
G1	What types of chemicals or hazardous materials are used by the permittee?						
G2	Where are these materials stored?						
G3	Has the permittee implemented an alternative materials program to reduce the use of hazardous materials?						
G4	Has the permittee implemented an inventory reduction program to reduce the quantity of chemicals and hazardous materials stored and used?						
G5	Does the permittee have a household hazardous waste collection center for the public?						
G5a	Are records of the quantity of materials collected maintained by type of material?						
G5b	How does the permittee notify the public of these sites?						
G6	Does the permittee have special household hazardous waste collection days?						
G7	How does the permittee use the data collected to further its program or evaluate program effectiveness? Are the data used to help prioritize maintenance frequency? Are they used to identify areas of targeted outreach?						
H	Pesticide, Herbicide and Fertilizer Application and Management						
H1	What kind of program has been established to address pollutants associated with the application of pesticides, herbicides, and fertilizer at public facilities?						
H2	Are the permittee's fertilizer/pesticide applicators certified? Are permits or other certifications required?						
H3	Where are the chemicals stored? Are appropriate procedures and secondary containment followed?						
H4	Is there a pesticide/fertilizer application plan?						
H5	Does the permittee practice integrated pest management (IPM) or use alternatives to pesticides?						

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H6	How does the permittee implement alternative landscaping to minimize the use of fertilizers and pesticides?						
H7	What types of educational activities does the permittee conduct for applicators?						
H8	What types of BMPs are used during application of pesticides in public rights-of-way?						
H9	What types of BMPs are used during application of pesticides at municipal facilities such as parks?						
I	Municipal Staff						
I1	Have standard operating procedures or their equivalent been developed to ensure that municipal field staff integrate stormwater quality BMPs into their daily activities?						
I2	Have BMPs or standards been officially adopted by the permittee for use by municipal field staff?						
I3	What reference materials or guidance documents are provided to field staff regarding BMP specifications and details?						
I4	How does the permittee ensure that staff are fulfilling their responsibilities as outlined in standard operating procedures? Do managers provide oversight on a regular basis?						
J	Contracted Services Staff						
J1	Does the permittee require contractors to incorporate stormwater quality BMPs into their activities?						
J2	How are BMPs required? Are the requirements outlined in requests for proposals? Are they included in contracts?						
J3	Have BMPs or standards been officially adopted by the permittee for use by contractual staff?						
J4	What reference materials or guidance documents are provided to contractual staff regarding BMP specifications and details?						
J5	How does the permittee ensure that contractors are fulfilling their responsibilities as outlined in their contracts? Are inspections performed? Are periodic reports submitted?						
K	Training and Education						
K1	What type of general stormwater training is provided to staff that are not involved in field activities? How often?						
K2	How are new employees trained?						
K3	What types of activity-specific training is provided to field staff? Is information on specific BMPs provided?						
K4	Is any training provided to contract staff?						
L	Consent Decree Questions						
L1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
L1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
L2a	Have deficiencies or potential violations been identified?						
L2b	What are recommendations for correcting these deficiencies or potential violations?						
L3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						

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L4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
L5	If best practices cannot be universally implemented, what are the identified impediments?						

B6: PEAR #6 – Staffing, Funding, Organizational Structure,
Availability of Resources, and Storm Water Program Sustainability

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A	SWMP Planning Documents						
A1	Has a SWMP Plan been developed? If so, when? Last revised?						
A2	Is there a schedule for revision of the SWMP plan?						
A3	Is there an additional MS4-wide document, plan, or program? Who developed it?						
A4	How were internal and external stakeholders included in the development or revision of the SWMP plan?						
B	Staff Inventory and Organization						
B1	Does the permittee have a person designated to lead and coordinate the stormwater program and activities?						
B2	Does the SWMP planning document include an organization chart listing responsible parties for each SWMP component?						
C	Performance Standards or Goals						
C1	Has the permittee established measurable goals or performance standards for program components?						
C2	If performance standards have been established, are they measurable or are they essentially BMP recommendations with level of service (i.e., number of miles swept) requirements?						
C3	Does the permittee attempt to quantify or assess a program or a BMP’s water quality impact or effectiveness as opposed to merely tracking level of service?						
D	Prioritization of Resources						
D1	Has the permittee identified specific pollutants of concern for its local water bodies?						
D2	Are these pollutants of concern consistent with priorities identified in the 303(d)-listed impairments for local water bodies?						
D3	Are these pollutants of concern consistent with any water quality monitoring data or studies conducted by the permittee or another agency?						
D4	Has the permittee developed strategies to specifically address those pollutants?						
D5	How does the permittee decide on program priorities? Are these reassessed periodically?						
D6	Does the SWMP include a schedule of activities?						
D7	Does the MS4 discharge to a water body on the state’s list of impaired waters?						
D7a	What pollutants are identified on the list?						
D7b	Has stormwater been identified as a source?						
D7c	Does the SWMP specifically address this pollutant?						
D7d	Does the SWMP identify BMPs specifically for sources or discharges to the listed water body						
D8	Has a TMDL been developed for a water body to which the MS4 discharges and for which stormwater has been identified as a pollutant source?						
D8a	What pollutants are addressed in the TMDL?						
D8b	Does the TMDL specifically address (or include wasteload allocations for) stormwater?						
D8c	Has the corrective action plan or other planning to address TMDLs been reviewed for integration with the SWMP?						

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D8d	Does the permittee’s stormwater program address the pollutants of concern identified in the TMDL?						
D9	Is the permittee participating in any watershed planning efforts?						
D10	Have any goals been developed based on watershed issues, strategies, or challenges?						
D11	Has the permittee established a set of indicators or parameters to assess progress toward meeting the goal(s) of the watershed plan?						
D12	Is the permittee’s stormwater program implemented on a watershed basis?						
E	Assessment and Evaluation of Programs						
E1	Does the permittee regularly measure progress against the established performance standards and goals?						
E2	Are the goals quantifiable?						
E3	Is the permittee analyzing data in the annual report to identify program activities that may need to change to address problem areas?						
E4	Has the SWMP been altered based on this evaluation?						
F	Assessment and Evaluation of BMPs						
F1	Is the permittee able to track both structural BMPs and non-structural BMPs and activities?						
F2	Has the permittee set measurable goals or performance standards to evaluate individual BMPs and activities or suites of BMPs that address a particular pollutant source?						
F3	Is there a process to evaluate or revise individual BMPs and suites of BMPs when receiving water outcomes or endpoints are not being met?						
F4	Do assessments evaluate impacts of BMPs on ground water?						
F5	Is the permittee analyzing data in the annual report to identify individual BMPs or suites of BMPs that may need to change to address problem areas?						
G	Assessment and Evaluation of Water Quality						
G1	Has the permittee documented environmental, water quality, stream corridor, habitat, or other types of improvements?						
G2	Has the permittee estimated reductions in pollutant loadings from the MS4 or other quantifiable water quality benefits expected as the result of the municipal stormwater program?						
H	Dry & Wet Weather Outfall Screening and Monitoring (If Applicable)						
H1	Does the permittee conduct dry or wet weather screening at outfalls to characterize stormwater flows from the MS4?						
H2	Does the permittee have written screening procedures?						
H3	What is the permittee’s schedule for screening the sites?						
H4	Are parts of the permit area prioritized for screening based on incidents of illicit discharges, land use, dumping reports, etc.?						
H5	What parameters are being tested?						
H6	How does the permittee prioritize sites for follow-up (e.g., magnitude and nature of suspected discharge)?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
H7	Who conducts the sampling? What kind of training have sampling personnel received?						
H8	What type of records are kept?						
H8a	Analytical results						
H8b	Date and duration (in hours) of the storm events sampled (rainfall data)						
H8c	Rainfall measurements or estimates (in inches) of the storm event which generated the sampled runoff (rainfall data)						
H8d	Duration (in hours) of the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (rainfall data)						
H8e	Estimate of the total flow of the discharge sampled (stage and velocity)						
H9	What analytical methods are used (i.e., 40 CFR Part 136)?						
H10	What are the results of the initial sampling and analysis?						
H11	Has the permittee made any changes to the monitoring program based on past results and experience?						
H12	How have monitoring results been used to assess program components?						
H13	Are monitoring data used to estimate pollutant loads for a TMDL?						
I	Biological Monitoring (If Applicable)						
I1	Does the permittee perform biological sampling?						
I2	Has a plan been developed to conduct biological sampling? If so, does the plan include the following:						
I2a	Identification of sampling stations and rationale for selection						
I2b	Location of known major MS4 outfalls discharging to water bodies in which sampling stations were chosen						
I2c	Land use activities near sampling stations						
I2d	Frequency of monitoring						
I3	Who conducts biological sampling and what training have they received?						
I4	Has the permittee made any changes to the monitoring program based on past results and experience?						
I5	How have monitoring results been used to assess program components?						
J	Ambient Monitoring (If Applicable)						
J1	Does the permittee conduct ambient monitoring to characterize water quality conditions in receiving waters?						
J2	How were the sampling sites selected?						
J3	Is sampling conducted both during dry weather and wet weather?						
J4	What is the frequency of sampling?						
J5	What parameters are analyzed? What sampling and analytical methods have been used?						
J6	Does the permittee have a written protocol or procedures for this sampling program?						
J7	Who conducts the sampling and what training have they received?						
J8	Has the permittee made any changes to the monitoring program based on past results and experience?						

Question Number	Question	Airports		Harbors		Highways	
		Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
		Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
		HI 14KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
J9	How have monitoring results been used to assess program components?						
J10	Are monitoring data used to estimate pollutant loads for a TMDL?						
K	Data Collection and Reporting						
K1	What reporting requirements are included in the MS4 NPDES permit?						
K2	For co-permittees or Phase II permittees that rely on other entities to implement required elements of the program, how are data provided or reported?						
K3	How are the required data collected, tracked, and reported?						
K3a	Is there a database?						
K3b	Are there reporting forms?						
K4	Are there internal reporting deadlines within the municipal program structure?						
K5	Are the appropriate data being collected by the permittee to be able to measure effectiveness and determine if performance standards are being met?						
K6	How are data disseminated to those who use them, if at all?						
L	Consent Decree Questions						
L1a	Have activities been identified that may be outmoded, ineffective, insufficient, or excessively burdensome?						
L1b	What are recommendations to modify, streamline, or expand such activities in accordance with what has been learned?						
L2a	Have deficiencies or potential violations been identified?						
L2b	What are recommendations for correcting these deficiencies or potential violations?						
L3	Have best practices and opportunities for information/technology transfer to be applied across all Divisions been identified? If so, describe.						
L4	Can identified best practices be universally implemented across all three Divisions? Why or why not?						
L5	If best practices cannot be universally implemented, what are the identified impediments?						

Appendix C

PEAR 1 through 6 Schedule

C1: PEAR #1 – Schedule for Post-Construction /
Permanent Best Management Practices

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

1. Notice of Audit

- Within 7 Days of AWPC
- Within 7 Days of Last Milestone
- By Wednesday 22 March 2017

2. Records Request

- Within 14 Days of AWPC
- Within 7 Days of Last Milestone
- By Wednesday 29 March 2017

3. Fulfillment of Records Request

- Within 43 Days of AWPC
- Within 29 Days of Last Milestone
- By Thursday 27 April 2017

4. Records Review Complete

- Within 57 Days of AWPC
- Within 14 Days of Last Milestone
- By Thursday 11 May 2017

5. Pre-Onsite Evaluation Conference Call

- Within 64 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 18 May 2017

6. Completion of Onsite Evaluation

- Within 82 Days of AWPC
- Within 18 Days of Last Milestone
- By Monday 5 June 2017

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaheo Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
76 Days After AWPC	77 Days After AWPC	79 Days After AWPC	82 Days After AWPC	76 Days After AWPC	78 Days After AWPC
Tuesday 30 May 2017	Wednesday 31 May 2017	Friday 2 June 2017	Monday 5 June 2017	Tuesday 30 May 2017	Thursday 1 June 2017
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>BMP 1: OGG CONRAC, location tentative</i>	<i>BMP 1: Pervious pavement and bioswale systems, NDWP New Employee Parking Lots at Elliott St.</i>	<i>BMP 1: Alaska Marine Lines, Pier 29</i>	<i>BMP 1: GLP Asphalt Facility</i>	[BMPs will be inspected only if they are installed by this time] <i>See Records Request. No BMPs to inspect. Meeting only.</i>	<i>BMP 1: University Ave. Bioswales, In median of H-1 ramps to University Ave. on makai side of freeway</i>
<i>BMP 2: Wash rack, location tentative</i>	<i>BMP 2: Contech CDS 2025 System and FloGuard drop inlet filtration insert, NDWP Diamondhead Site Improvements, GSE Lot fronting Hardstand 3</i>	<i>BMP 2: Matson Auto Facility, Pier 32</i>	[Additional BMPs will be inspected only if they are installed by this time] <i>Spencer Yim confirmed via phone on 4-18-17 that no additional BMPs have been installed.</i>		<i>BMP 2: Fort Weaver Rd. CDS Units, Fort Weaver Rd., Ewa</i>
[An additional BMP will be inspected only if one is installed by this time]	<i>BMP 3: Bioswale system, Kalewa St Storage Lots 1-6, Corner of Lagoon and Kalewa St.</i>	<i>BMP 3: HC&D Facility, Pier 60</i> <i>Replaced with UH Marine Center Pier 35, per 4-18-17 Call with Spencer Yim</i>			<i>BMP 3: Luluku Storm Water Treatment System, H-3/Likelike interchange, Kaneohe</i>
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C1: Schedule for PEAR #1 – Post-Construction / Permanent Best Management Practices

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) The Audit Team will then verify that up to three (3) structural and source control BMPs approved by each permittee and subject to post-construction requirements were installed and are being maintained properly in the field. Approved plans and inspection records for each BMP will have been reviewed ahead of the onsite evaluation (during the records review period). The BMPs identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 90 Days of AWPC
- **Consent Decree Deadline: Within 90 Days of AWPC**
- Within 8 Days of Last Milestone
- By Tuesday 13 June 2017

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 135 Days of AWPC
- **Consent Decree Deadline: Within 135 Days of AWPC**
- Within 45 Days of Last Milestone
- By Friday 28 July 2017

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 162 Days of AWPC
- Within 27 Days of Last Milestone
- By Thursday 24 August 2017

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 163 Days of AWPC¹
- **Consent Decree Deadline: Within 165 Days of AWPC**
- Within 1 Days of Last Milestone
- By Friday 25 August 2017

11. Completion of Final PEAR

- Within 183 Days of AWPC²
- **Consent Decree Deadline: 210 Days of AWPC**
- Within 20 Days of Last Milestone
- By Thursday 14 September 2017

¹ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

² The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C2: PEAR #2 – Schedule for Construction Site Runoff Control

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

1. Notice of Audit

- Within 190 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 21 September 2017

2. Records Request

- Within 197 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 28 September 2017

3. Fulfillment of Records Request

- Within 226 Days of AWPC
- Within 29 Days of Last Milestone
- By Friday 27 October 2017

4. Records Review Complete

- Within 239 Days of AWPC
- Within 13 Days of Last Milestone
- By Thursday 9 November 2017

5. Pre-Onsite Evaluation Conference Call

- Within 246 Days of AWPC
- Within 7 Days of Last Milestone
- By Thursday 16 November 2017

6. Completion of Onsite Evaluation

- Within 261 Days of AWPC
- Within 15 Days of Last Milestone
- By Friday 1 December 2017

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
257 Days After AWPC	258 Days After AWPC	260 Days After AWPC	261 Days After AWPC	257 Days After AWPC	259 Days After AWPC
Monday 27 November 2017	Tuesday 28 November 2017	Thursday 30 November 2017	Friday 1 December 2017	Monday 27 November 2017	Wednesday 29 November 2017
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>Construction Site #1: OGG Consolidated Rent A Car Facility, Kahului Airport, Near Hemaloa St and Keolani Pl.</i>	<i>Construction Site #1: HNL Consolidated Rent A Car Facility, Rent-A-Car Lots, Corner of Aolele, Rodgers, Paiea St.</i>	<i>Construction Site #1: New Kapalama Container Yard, Kapalama, Honolulu Harbor</i>	[Unable to forecast construction projects; will be re-contacted by Kennedy/Jenks Consultants closer to the date]	<i>Construction Site #1: Kuihelani Highway Resurfacing</i>	[Unable to forecast construction projects; will be re-contacted by Kennedy/Jenks Consultants closer to the date]
<i>Construction Site #2: OGG Vehicle Washrack Installation, AOA side, Near Cargo Building and Triturator</i>	<i>Construction Site #2: HNL NDWP IIT Mauka Extension, Mauka Interisland Terminal, Existing Commuter Air Terminal</i>	<i>Construction Site #2: Piers 24-29 Utilities</i>		[An additional construction site will be inspected only if one is active at this time]	
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C2: Schedule for PEAR #2 - Construction Site Runoff Control

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) The Audit Team will then accompany construction inspectors as they conduct up to two (2) inspections. The purpose of the field evaluation is to assess the permittee's construction inspection program—how knowledgeable the inspectors are about stormwater requirements and BMPs, how thorough of an inspection they conduct, and how they handle problems identified at construction sites. The construction sites identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 268 Days of AWPC¹
- **Consent Decree Deadline: Within 270 Days of AWPC**
- Within 7 Days of Last Milestone
- By Friday 8 December 2017

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 313 Days of AWPC²
- **Consent Decree Deadline: Within 315 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 22 January 2018

9. Written Request for Clarification and Corrections

MS4 Permit Coordinators to HDOT PM

- Within 338 Days of AWPC
- Within 25 Days of Last Milestone
- By Friday 16 February 2018

10. Written Request for Clarification and Corrections

HDOT PM to Audit PM

- Within 342 Days of AWPC²
- **Consent Decree Deadline: Within 345 Days of AWPC**
- Within 4 Days of Last Milestone
- By Tuesday 20 February 2018

11. Completion of Final PEAR

- Within 362 Days of AWPC³
- **Consent Decree Deadline: 390 Days of AWPC**
- Within 20 Days of Last Milestone
- By Monday 12 March 2018

¹ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

² The deadline is ahead of the CD Deadline due to the required shift in the #7 deadline.

³ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C3: PEAR #3 – Schedule for Public Outreach / Public Involvement

Appendix C3: Schedule for PEAR #3 - Public Outreach / Public Involvement Program

1. Notice of Audit

- Within 369 Days of AWPC
- Within 7 Days of Last Milestone
- By Monday 19 March 2018

2. Records Request

- Within 377 Days of AWPC
- Within 8 Days of Last Milestone
- By Tuesday 27 March 2018

3. Fulfillment of Records Request

- Within 420 Days of AWPC
- Within 43 Days of Last Milestone
- By Wednesday 9 May 2018

4. Records Review Complete

- Within 450 Days of AWPC
- **Consent Decree Deadline: Within 450 Days of AWPC**
- Within 30 Days of Last Milestone
- By Friday 8 June 2018

For this Program Element, the end of the records review period represents the completion of evaluation. No onsite evaluation will occur for this program element. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators may be conducted during the records review period. If requested by the Audit Team or MS4 Permit Coordinator, an in-person meeting may be scheduled during this period.

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.	Between 19 March 2018 and 8 June 2018, conference calls and in-person meetings will be scheduled as needed.

Appendix C3: Schedule for PEAR #3 - Public Outreach / Public Involvement Program

5. – 7. Not Applicable (See #4)

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 495 Days of AWPC
- **Consent Decree Deadline: Within 495 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 23 July 2018

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 523 Days of AWPC
- Within 28 Days of Last Milestone
- By Monday 20 August 2018

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 525 Days of AWPC
- **Consent Decree Deadline: Within 525 Days of AWPC**
- Within 2 Days of Last Milestone
- By Wednesday 22 August 2018

11. Completion of Final PEAR

- Within 545 Days of AWPC¹
- **Consent Decree Deadline: 570 Days of AWPC**
- Within 20 Days of Last Milestone
- By Tuesday 11 September 2018

¹ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C4: PEAR #4 – Schedule for Illicit Discharge Detection and
Elimination (IDDE) Program Element and
Industrial Commercial Activities/Tenant (I/C) Program

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

1. Notice of Audit

- Within 552 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 18 September 2018

2. Records Request

- Within 559 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 25 September 2018

3. Fulfillment of Records Request

- Within 583 Days of AWPC
- Within 24 Days of Last Milestone
- By Friday 19 October 2018

4. Records Review Complete

- Within 597 Days of AWPC
- Within 14 Days of Last Milestone
- By Friday 2 November 2018

5. Pre-Onsite Evaluation Conference Call

- Within 604 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 9 November 2018

6. Completion of Onsite Evaluation

- Within 623 Days of AWPC
- Within 19 Days of Last Milestone
- By Wednesday 28 November 2018

The table below provides a preliminary schedule for the onsite evaluation period.

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaheo Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit HI 4KE349	Individual Permit HI S000005	Small MS4 Permit HI 03KB482	Small MS4 Permit HI 03KB488	Small MS4 Permit HI 14KE352	Individual Permit HI S000001
614 Days After AWPC Monday 19 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Near baseyard, Keolani Place <i>Outfall #2:</i> Sampling #G, Basin G 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> UPS, 9682 Hemaloa Pl. <i>I/C Facility #2:</i> ASIC-HFFC, 761 Kaonawai Pl. 4pm – 5pm I/C Debrief Meeting [See Note (d)]	616 Days After AWPC Wednesday 21 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Near Iolana Place, Off Lagoon Drive <i>Outfall #2:</i> Aolewa Place, Near Access A 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> UPS, 128 Mokeua Pl. <i>I/C Facility #2:</i> United Airlines, 110 Lauhoe Pl. 4pm – 5pm I/C Debrief Meeting [See Note (d)]	621 Days After AWPC Monday 26 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> SDDH035050, Pier 38 <i>Outfall #2:</i> SDDH0517960, Pier 51 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> Young Brothers Maintenance Facility, Pier 39 <i>I/C Facility #2:</i> Matson Maintenance Facility, Piers 52-53 4pm – 5pm I/C Debrief Meeting [See Note (d)]	622 Days After AWPC Tuesday 27 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> SDDBP043660, Pier P-4 [Outfall #1 is the only accessible outfall at this harbor, due to safety concerns] 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> Marisco <i>I/C Facility #2:</i> Grace Pacific 4pm – 5pm I/C Debrief Meeting [See Note (d)]	615 Days After AWPC Tuesday 20 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> Outlet No. 1 <i>Outfall #2:</i> DP3 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH [I/C Program not evaluated, as Maui Highways does not have an I/C Program] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> First Hawaiian Bank, 94-205 Leoku St., Waipahu, HI <i>I/C Facility #2:</i> CM Recycling, 204 Sand Island Access Rd., Honolulu, HI 4pm – 5pm I/C Debrief Meeting [See Note (d)]	623 Days After AWPC Wednesday 28 November 2018 8am – 9am IDDE Kickoff Meeting [See Note (a)] 9am – 11am IDDE Onsite Evaluation [See Note (b)] <i>Outfall #1:</i> PID 304162 Jarrett White Rd., north of Mahiole St., <i>Outfall #2:</i> PID 301831, Kaahele St., north of Moanalua Rd. 11am – 12pm IDDE Debrief Meeting [See Note (d)] 12pm – 1pm LUNCH 1pm – 2pm I/C Kickoff Meeting [See Note (a)] 2pm – 4pm I/C Onsite Evaluation [See Note (c)] <i>I/C Facility #1:</i> First Hawaiian Bank, 94-205 Leoku St., Waipahu, HI <i>I/C Facility #2:</i> CM Recycling, 204 Sand Island Access Rd., Honolulu, HI 4pm – 5pm I/C Debrief Meeting [See Note (d)]

Appendix C4: Schedule for PEAR #4 - Illicit Discharge Detection and Elimination Program Element and Industrial Commercial Activities/Tenant Program

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meetings. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) Illicit Discharge Detection and Elimination (IDDE) Program: The Audit Team will accompany inspectors in the field as they conduct up to two (2) dry-weather outfall screenings. The outfalls identified in this Appendix are preliminary and are subject to modification.

(c) Industrial/Commercial (I/C) Program: The Audit Team will accompany inspectors in the field as they inspect up to two (2) industrial/commercial facilities. The facilities identified in this Appendix are preliminary and are subject to modification.

(d) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 630 Days of AWPC
- **Consent Decree Deadline: Within 630 Days of AWPC**
- Within 7 Days of Last Milestone
- By Wednesday 5 December 2018

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 674 Days of AWPC¹
- **Consent Decree Deadline: Within 675 Days of AWPC**
- Within 44 Days of Last Milestone
- By Friday 18 January 2019

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 700 Days of AWPC
- Within 26 Days of Last Milestone
- By Wednesday 13 February 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 702 Days of AWPC²
- **Consent Decree Deadline: Within 705 Days of AWPC**
- Within 2 Days of Last Milestone
- By Friday 15 February 2019

11. Completion of Final PEAR

- Within 723 Days of AWPC³
- **Consent Decree Deadline: 750 Days of AWPC**
- Within 21 Days of Last Milestone
- By Friday 8 March 2019

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

² The deadline is ahead of the CD Deadline due to the required shift in the #8 deadline.

³ The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C5: PEAR #5 – Schedule for Pollution Prevention /
Good Housekeeping Program

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

1. Notice of Audit

- Within 730 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 15 March 2019

2. Records Request

- Within 737 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 22 March 2019

3. Fulfillment of Records Request

- Within 762 Days of AWPC
- Within 25 Days of Last Milestone
- By Tuesday 16 April 2019

4. Records Review Complete

- Within 776 Days of AWPC
- Within 14 Days of Last Milestone
- By Tuesday 30 April 2019

5. Pre-Onsite Evaluation Conference Call

- Within 783 Days of AWPC
- Within 7 Days of Last Milestone
- By Tuesday 7 May 2019

6. Completion of Onsite Evaluation

- Within 800 Days of AWPC
- Within 17 Days of Last Milestone
- By Friday 24 May 2019

The table below provides a preliminary schedule for the onsite evaluation week.

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
796 Days After AWPC	797 Days After AWPC	799 Days After AWPC	800 Days After AWPC	796 Days After AWPC	798 Days After AWPC
Monday 20 May 2019	Tuesday 21 May 2019	Thursday 23 May 2019	Friday 24 May 2019	Monday 20 May 2019	Wednesday 22 May 2019
8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]	1pm – 2pm Kickoff Meeting [See Note (a)]	8am – 9am Kickoff Meeting [See Note (a)]
9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]	2pm – 4pm Onsite Evaluation [See Note (b)]	9am – 11am Onsite Evaluation [See Note (b)]
<i>Facility #1:</i> OGG Baseyard, Keolani Pl.	<i>Facility #1:</i> HNL Baseyard, 2919 Aolele St.	<i>Facility #1:</i> Sand Island Baseyard, 48 Sand Island Access Road	<i>Facility #1:</i> Kalaeloa Storage Facility	<i>Facility #1:</i> HWY-M Kahului Baseyard, 650 Palapapa Dr.	<i>Facility #1:</i> Kakoi Baseyard, 727 Kakoi St.
<i>Facility #2:</i> ARFF Station, Onsite	<i>Facility #2:</i> Crash Fire Station 2, off Lagoon Drive	[DOT-HAR only operates one maintenance facility at Honolulu Harbor]	[DOT-HAR only operates one maintenance facility at Kalaeloa Harbor]	<i>Facility #2:</i> HAR-M Kahului Harbor, 103 Ala Luina St.	<i>Facility #2:</i> Windward Baseyard, 45-889 Pookela St.
11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]	4pm – 5pm Debrief Meeting [See Note (c)]	11am – 12pm Debrief Meeting [See Note (c)]

Appendix C5: Schedule for PEAR #5: Pollution Prevention / Good Housekeeping Program

Notes:

(a) MS4 Permit Coordinators will have the opportunity to present information on their program during the Kickoff Meeting. At least a half hour should be available for MS4 Permit Coordinators (or their designees) to present.

(b) After the Kickoff Meeting, the Audit Team will conduct a walk-through of up to two (2) permittee owned or operated facilities (maintenance yards, chemical storage facilities, etc.) with a facility supervisor and/or other key staff to verify that activities are performed as described in the SWMPP. The facilities identified in this Appendix are preliminary and are subject to modification.

(c) The Debrief Meeting will be limited to discussing any findings that need clarification and any required communication moving forward.

7. End of Post-Onsite Evaluation Review Period

- Within 810 Days of AWPC
- **Consent Decree Deadline: Within 810 Days of AWPC**
- Within 10 Days of Last Milestone
- By Tuesday 3 June 2019

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 855 Days of AWPC
- **Consent Decree Deadline: Within 855 Days of AWPC**
- Within 45 Days of Last Milestone
- By Thursday 18 July 2019

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 882 Days of AWPC
- Within 27 Days of Last Milestone
- By Wednesday 14 August 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 884 Days of AWPC¹
- **Consent Decree Deadline: Within 885 Days of AWPC**
- Within 2 Day of Last Milestone
- By Friday 16 August 2019

11. Completion of Final PEAR

- Within 905 Days of AWPC²
- **Consent Decree Deadline: 930 Days of AWPC**
- Within 21 Days of Last Milestone
- By Friday 6 September 2019

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

² The main Audit Work Plan Section 5.3.3 provides an explanation of why this document is submitted ahead of the CD deadline.

C6: PEAR #6 – Schedule for Staffing, Funding, Organizational Structure,
Availability of Resources, and Storm Water Program Sustainability

Appendix C6: Schedule for PEAR #6 - Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

1. Notice of Audit

- Within 912 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 13 September 2019

2. Records Request

- Within 919 Days of AWPC
- Within 7 Days of Last Milestone
- By Friday 20 September 2019

3. Fulfillment of Records Request

- Within 961 Days of AWPC
- Within 42 Days of Last Milestone
- By Friday 1 November 2019

4. Records Review Complete

- Within 989 Days of AWPC¹
- **Consent Decree Deadline: Within 990 Days of AWPC**
- Within 28 Days of Last Milestone
- By Friday 29 November 2019

For this Program Element, the end of the records review period represents the completion of evaluation. No onsite evaluation will occur for this program element. It is expected that several conference calls between the Audit Team, HDOT PM, and MS4 Permit Coordinators will be conducted during the records review period. If requested by the Audit Team or MS4 Permit Coordinator, an in-person meeting may be scheduled during this period.

Airports		Harbors		Highways	
Kahului Airport	Honolulu International Airport	Honolulu Harbor	Kalaeloa Barbers Point Harbor	Maui District	Oahu District
Small MS4 Permit	Individual Permit	Small MS4 Permit	Small MS4 Permit	Small MS4 Permit	Individual Permit
HI 4KE349	HI S000005	HI 03KB482	HI 03KB488	HI 14KE352	HI S000001
Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.	Between 13 September 2019 and 29 November 2019, conference calls and in-person meetings will be scheduled as needed.

5. – 7. Not Applicable (See #4)

¹ This deadline is 1 day ahead of the CD Deadline as the CD Deadline falls on a Saturday.

Appendix C6: Schedule for PEAR #6 - Staffing, Funding, Organizational Structure, Availability of Resources, and Storm Water Program Sustainability

8. Completion of Draft PEAR & Distribution to MS4 Permit Coordinators

- Within 1034 Days of AWPC²
- **Consent Decree Deadline: Within 1035 Days of AWPC**
- Within 45 Days of Last Milestone
- By Monday 13 January 2020

9. Written Request for Clarification and Corrections MS4 Permit Coordinators to HDOT PM

- Within 1058 Days of AWPC
- Within 24 Days of Last Milestone
- By Thursday 6 February 2019

10. Written Request for Clarification and Corrections HDOT PM to Audit PM

- Within 1064 Days of AWPC²
- **Consent Decree Deadline: Within 1065 Days of AWPC**
- Within 6 Days of Last Milestone
- By Wednesday 12 February 2020

11. Completion of Final PEAR

- Within 1108 Days of AWPC³
- **Consent Decree Deadline: 1110 Days of AWPC**
- Within 44 Days of Last Milestone
- By Friday 27 March 2020

² The deadline is ahead of the CD Deadline due to the required shift in the #4 deadline.

³ This deadline is 2 days ahead of the CD Deadline as the CD Deadline falls on a Sunday.

Appendix D

Notices to EPA & DOH

D1: Draft Notice of Potential Violation

State of Hawaii Department of Transportation
MS4 Permit Audit
Draft Notice of Potential Violation

Potential Violation Tracking #: _____

Determination of Potential Violation Date: _____

Potential Violation Notification Date: _____
(Today's Date)

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Description of Attached Photographs (if applicable):

Applicable Regulatory References

NPDES Permit No.: _____

SWMPP: _____

Hawaii Administrative Rules (HAR): _____

Code of Federal Regulations (CFR): _____

D2: Final Notice of Potential Violation

State of Hawaii Department of Transportation
MS4 Permit Audit
Final Notice of Potential Violation

Potential Violation Tracking #: _____

Determination of Potential Violation Date: _____

Potential Violation Notification Date: _____
(Today's Date)

The Audit Team must submit this notice within 2 business days of determining that a potential violation has occurred.

Potential Violation Narrative Description:

Description of Attached Photographs (if applicable):

Applicable Regulatory References

NPDES Permit No.: _____

SWMPP: _____

Hawaii Administrative Rules (HAR): _____

Code of Federal Regulations (CFR): _____

Result of HDOT PM Review:

- ☐ Confirmed Potential Violation
 - o Email Notice of Corrective Action sent to EPA/DOH on: _____
(Due Within 14 Calendar Days of Potential Violation Notification Date)
- ☐ Re-categorized as Deficiency
 - o Email Notice sent to EPA/DOH on: _____
- ☐ Summarily Dismissed
 - o Email Notice sent to EPA/DOH on: _____

D3: Notice of Corrective Action

State of Hawaii Department of Transportation
MS4 Permit Audit
Notice of Corrective Action

Corrective Action in Response to:

- ☐ Potential Violation (complete Section A & C)
- ☐ Deficiency (complete Section B & C)

SECTION A – Corrective Action in Response to Potential Violation

Potential Violation Tracking #: _____ Potential Violation Notification Date: _____
(from Notice of Potential Violation Form)

Corrective Action Notification Date: _____
(Today's Date)

HDOT must submit this notice within 14 calendar days of the Potential Violation Notification Date.

SECTION B – Corrective Action in Response to Deficiency

HDOT Receipt of Draft PEAR Date: _____

Corrective Action Notification Date: _____
(Today's Date)

HDOT must submit this notice within 21 calendar days of receiving the relevant Draft PEAR.

SECTION C

Description of Corrective Action

Description of Attached Photographs (if applicable):
