San Diego County Regional Airport Authority

SIC Codes	4581
Primary Activity	Facility Maintenance
Drainage Areas	0, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Nearest MS4 Inlet	< 200 ft.
Address	3835 North Harbor Dr. San Diego, CA 92101

Contact Information

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Facility Description and Activities

1. Road sweeping: Cannon is contracted to sweep the roads into and out of the airport Monday through Friday, 1 am - 4 am, using a 600Tymco sweeper. Cannon sweeps all the roads in front of the Terminals including the Commuter Terminal, overpasses leading into and exiting the airport, and from McCain Road to P-18 gate. Cannon does not sweep Harbor Drive, as it is handled by the City, or any Parking Lots own or leased by the airport, which are handled by the Authorities Ground Transportation Department and contracted through ACE. Sweepings are collected and disposed at the Sycamore Landfill. Cannon Pacific performs daily pre-trip and post- trip inspections of their equipment. All records of sweeping activities are kept by Cannon Pacific and the Airport Environmental Department, records are updated monthly through invoices that have all the information on them. ACE is contracted to sweep and maintain all parking areas including the cell phone parking lot. ACE did not know who will be responsible for maintaining the parking areas currently under construction.

2. Ramp sweeping: Facilities Maintenance sweeps all areas inside the AOA gates, perimeter roads, and construction areas. Sweeping is done 7 days a week during evening hours. Sweeping alternates weeks between each ramp area - Terminal 1, Terminal 2, Cargo areas, and North Ramp. Within each area, each terminal and taxiway is swept at least once week. Some areas are swept twice in a week on request. Two machines (Tennats) operate on Regen-Air technology. Sweeping equipment is inspected weekly by GES. FMD also inspects and sweeps each terminal building, up against the building every other month, as a part of the ramp walk program. The debris/sweepings are vacuumed up into the unit and are disposed of in the lowboy container located on the NE corner of the air traffic control tower. FMD notifies Environmental Affairs when the dumpster needs to be emptied. 2. Ramp scrubbing: Flagship performs ramp scrubbing every 6 months using a 3,500 psi industrial pavement wash. The wash water is collected using storage containers and collected by Ocean Blue who filters and reuses the water.

3. Runway rubber removal: Is conducted by Abhe & Svoboda, every 6-8 weeks, depending on skidometer testing results. They are an all in one system which sprays on the rubber removal solution, scrubs the runway, rinses and vacuums up the rubber particles, removal solution and water. The rubber removal solution is a biodegradable chemical (DC101), 55 gallons of the solution is used for every 10,000 square feet of surface. Only the solution needed is brought on site during each rubber removal. Ocean Blue is responsible for disposal of waste and waste water generated.

4. Oil/water separators: There are 7 oil water separators at the airport: 2 on the North Ramp, 1 by American Airlines maintenance area, 1 near Delta in T2, 1 on the Commuter Terminal ramp, 1 in Allied Aviation's operational area, and 1 by ASIG's remote fueling facility. The oil water separator on the west ramp north of Terminal 2 West has been removed due to construction. Each installed oil water separator

has an alarm system. If the oil reaches a certain level, or oil leaks to the ground, an alarm goes off. Alarms are checked monthly. FMD knew of only one time when an oil water separator was pumped out, and did not recall the contractor. Ocean Blue is contracted to clean these. They have not been contacted to clean oil/water separators since 2010. Inspection of the oil/water separators was last conducted on July 16, 2014. Environmental Affairs has assumed responsibility for inspecting oil/water separators, but it may be FMD in the future. Criteria used for cleanout is the amount of sediment at the bottom of the tanks and the amount of oil & grease & floatables at the top of the tank. The criteria are generally based on whether or not the units function properly and would be expected to function properly for an upcoming rainy season given the amount of sediment/oil/floatables/etc.

5. FMD (contact David Niccum) contracts Diamond to perform maintenance of the 18 grease interceptors, scheduled for every 30 to 90 days (dependent on the size). 3,000- Gallon grease receptacles at the airport: (Interceptors (1) Terminal 2 between the West and East connector (2) Terminal 1. A 2,000 gallon interceptor installed at the Terminal 2 West under Gate 48. Terminal 1 between gates 1 and 2 has a 320-gallon grease interceptor. The grease receptacles have 3 baffles in tandem. The wastewater from restaurants enters the receptacles and goes to the first baffle then the second, and then the third. Ten 25 to 50-gallon grease traps on the airside of the Terminals 1 and 2; some below ground and some above ground. There are also some inside the buildings, close to the restaurants. These also have the baffle system. Grease is vacuumed out of the small traps every 4 weeks, the rest between 2 to 3 months, as required by the City of San Diego, and then they are rinsed in a similar procedure to the grease receptacles, but on a smaller scale, using a 400-gallon tank. Beyond the baffle system, the units are linked to the sanitary sewer.

6. Downstream Services is contracted to clean the storm drains. Types of storm drains include: Drop inlet, Curb inlet, Trench drains, Slit drains, and Separators. Drop inlet, Curb inlet, Trench drains, Slit drains, are cleaned quarterly. Inspections of all storm water conveyance systems occur annually. Separators and underground storm drain pipes leading to city of San Diego drainage systems are cleaned annually. Records are updated after each cleaning event. Records are stored in the Facilities Management and in the environmental affairs department. Contractor vehicles are equipped with large waste water storage capacity and reclamation devices. Wastes from storm drain cleaning are measured for silt, green waste, trash, heavy metals and amount of water consumed to perform the cleaning operation. The contractor is responsible for all waste disposal. Ocean Blue maintains designated drains the tarmack side: 1) SW trash compactor on South side of the fence (SUMP) 2) ASIG facility oil/water separator (Storm drain goes into Oil/Water separator) 3)Least Turn area oval house (Storm Drain). All are inspected daily. If they see a problem somewhere else, they report it to environmental department. These are cleaned as needed in the dry season. During the rainy season they are cleaned monthly and after each rain event. Methods used for cleanout are to pump dry and rinse out, and maintain filter cloths and gravel bags.

7. TCBMPs: Inspection and maintenance of the pervious services and swales consist of regular cleaning by the landscape contractor and the parking lot management contractor. These have not yet been incorporated into a more detailed inspection/maintenance program. Other than the pervious surfaces and swales, TCBMPs are meant to be captured in the contract with Downstream Services. Environmental Affairs has not gotten them completely into the inspection/maintenance program.

8. Fire hydrant flushing: The City of San Diego is responsible for fire hydrant flushing at the airport once a year.

9. Fire suppression system testing is done quarterly. All water flows to dirt area and evaporates or infiltrates. If no dirt area is available, then it is taken to the sewer.

10. Trash/recycling managed by Amiel Porta: Flagship is contracted to collect trash and recyclables. All

trash is taken to the Terminal 1 compactor area. Flagship also that sorts trash and recycle if any bags were dumped in the wrong tipper container. The sorter is responsible of keeping all staged compactor areas clean and free of debris and creating cardboard bails. Signs are posted at the disposal sites in the kitchens and restaurants, on the containers, carts and compactors, and at the central waste and recycling center. Allied waste services removes the waste from the airport. All compactors and dumpsters 1-3X per week (depending on the location). Additional bins are available for metal, wood, cardboard, and food waste. Flagship cleans the tipper containers and gondolas used to stage and haul trash from the terminals to the compactor area. Tippers containers are cleaned 1x per week using a hot water pressure washer, gondolas are cleaned everyday once they are emptied at the end of a shift. The tipper compactors are cleaned in the Terminal 1 compactor area. Wash water is diverted to a sanitary sewer system located in Terminal 1 compactor area. Dumpsters and compactors are cleaned and pressure washed by Allied Waste quarterly as well as needed basis on site. Fleetwash removes the storm water and dispose of it as part of their service. The Food waste compactor is cleaned at the facility when serviced. Daily visual audit is performed as part of the drivers' duty. They report repairs/exchanges needed in a weekly report and they get submitted to our container department to perform such repairs/replace dumpsters. **Dumpsters are replaced on the contract anniversary (November 8th of each year) and all open top front load dumpsters are replaced on a yearly basis. Next replacement is scheduled to be completed between 11/3/14 and 11/7/14.

11. Spill kits: spill response materials (kits contain kitty litter, sandbags, plastic tarps, absorbent sox and pads, shovels, and brooms). They are located in various places on the Air Field. There are three spill kits. One is by the North Ramp, one by Gate 26, and one is by the T1 waste segregation area. Ocean Blue is responsible for stocking the Spill Kits when they run low on equipment.

12. Significant materials storage: the machining/welding shop (Shop 2 on Winship Lane). Pesticides, diesel, gasoline, and turpentine are stored in flammable materials storage lockers near the runway generator area east of the Commuter Terminal, and paints and a non-skid spray for metal steps are stored in a metal shed in the Bone yard area. Metal parts and other materials are stored in the boneyard area and near the runway generator area east of the Commuter Terminal and covered in shop 2, not all are covered and on pallets.

13. Vehicle maintenance is conducted by ASIG. Hawthorn Electric maintains runway closure signs, and is contracted to maintain the light towers and generators, and do onsite oil changes.

14. ASIG fuels maintenance vehicles at four places: Maintenance shop at 2412, 2415 and 2417 Winship Lane, the Commuter Terminal and the valet lot by p18. They also fuel all light towers and generators.

15. FMD maintains the triturator area. ****Note: A new triturator area will be installed next to the waste segregation area. Construction will start in July 2014. The project is expected to be completed in 3 to 5 months.

16. Roundup is used for weed control. Aztec Landscaping performed landscaping services. They bring their own pesticides and remove their landscape wastes. There are 2 dumpster s used by Aztec on the east side of the parking lot next of our Security Gate P-18. P-18 is at the end of Windship Road. They use Roundup for weed control, they perform landscaping services, and they bring their own pesticides and remove their landscape wastes. FMD also sprays for weeds and uses surflan and Kleenup pro.

17. Spill response materials are not on all vehicles.

18. Hazardous wastes are stored at the bone yard in clamshell containers. Ocean Blue is contracted to collect hazardous wastes as needed.

19. All chemicals are stored in shop 1 or in the specific trades shops (shop 2).

20. Stormwater pollution prevention training is performed annually by the Environmental Affairs Department.

21. Storm drain inspections are performed quarterly and before/after the rainy seasons.

22. FMD staff are trained to protect storm drains when performing maintenance and construction activities.

23. Pressure Washing: Flagship performs pressure washing Tuesdays through Saturdays between 11:00 pm and 4:00 am. Locations that receive pressure washing include terminal smoking areas and all baggage claim sidewalks. Due to the high volume of foot traffic in these areas (approximately 50,000 passengers daily) that leaves spills, stains, cigarette butts/ashes, and debris, it is a health and safety risk not to pressure wash these areas. In 2014, the Airport Authority began recovering condensate – liquid created by condensation – from air conditioning units installed in passenger boarding bridges. The Airport Authority works with Flagship to use AC condensation water for the pressure washing operation. The AC condensation water is collected into 55 gallon drums, and once full the water is transferred to the pressure washer reservoirs. In 2014, more than 5,225 gallons of AC condensate was recovered and reused for a variety of purposes in airport maintenance, including pressure washing. The pressure washers used by Flagship are equipped with a water recollection and filtration system. They are designed to collect all residual water, filter, recycle and re-use the water throughout the operation of the equipment. An estimated 80–100 gallons of recovered AC condensate water is used per day washing occurs. The reclaimed AC condensate is not potable water and therefore not a violation of state and city water restrictions. Before starting the pressure washing operation, Flagship staff locates all storm water run offs and covers the areas with berms or mats. They then remove and sweep all trash, debris and cigarette butts. Next, staff will determine the path that the water will run and will funnel the water using berms and bags into the vacuum/reclaim system. Once the job is complete, the wash water is vacuumed up, hoses are drained into the sanitary sewage system and equipment is cleaned.

Significant Materials/Activities Potentially Exposed to Storm Water

Potential Pollutant Sources	Potential Pollutants
Aircraft sanitary services	Adhesives
Building & Ground maintenance	Anti Freeze
Cargo handling	Asphalt Debris
Drainage system maintenance	Battery Acid
Equipment storage	Brake Fluid
Fluid leaks	Caulking
Fuel spills,Fuel transfer	Cement
Fuel storage	Cleaning Solutions
Herbicide usage	Fire Fighting Foam
Material loading/unloading	Fuel
Outdoor apron washdown	Galvanizing Compound
Outdoor waste storage	Hydraulic Fluids

Pesticide usage	Landscape Wastes
Potable water flushing	Lavatory Chemicals
Ramp/Taxiway scrubbing	Lavatory Wastes
Runway rubber removal	Lubricants
Tank fuel transfer	Metals
Trash collection	Oil & Grease
Vehicle parking	Paints
Water/Fuel mixture within berm	Pesticides/Herbicides/Fertilizers
	Purple K
	Rubber Particulates
	Sealants
	Solvents
	Trash
	Turpentine

Best Management Practices Applicable to Facility

Activities	BMPs
Non-Storm Water Management	SC01 - 1, 2, 3, 4
Outdoor Equipment Ops Maintenance Areas	SC02A - 1, 2
Aircraft, Ground Vehicle & Equipment Maintenance	SC02B - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Aircraft, Ground Vehicle & Equipment Fueling	SC03 - 1, 2, 3, 4, 5, 6, 8
Aircraft, Ground Vehicle & Equipment Cleaning	SC04 - 1, 2, 3
Outdoor Loading/Unloading of Materials	SC06 - 1, 2, 3, 4, 6, 7
Outdoor Material Storage	SC07 - 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12
Waste Handling & Disposal	SC08 - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14
Building & Ground Maintenance	SC09 - 1, 2, 3
Employee Training	SC10 - 1, 2, 3, 4
Lavatory Service Operation	SC11 - 1, 2, 3, 4, 7, 9
Outdoor Wash down/Sweeping	SC12 - 1, 2, 3, 4, 5, 6, 7, 8, 9
Potable Water System Flushing	SC14 - 1, 2, 3
Runway Rubber Removal	SC15 - 1, 2, 3, 4
Parking Lots	SC16 - 1, 2, 3, 4, 5, 6, 11, 12
Drainage System Maintenance	SC17 - 1, 2, 3, 4, 5, 6, 7
	SC18 - 1, 2, 3, 4, 5, 6, 7, 8, 9

Housekeeping	SC19 - 1, 2
Safer/Alternative Products	SR01 - 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
Spill Prevention, Control & Clean Up	TC01 - 1, 2, 3, 4
Structural Treatment Control BMPs	

* Appendix B provides descriptions for each BMP category.

Structural Control measures used by facility:

Concrete curbing is used to direct stormwater away from covered storage area and trash compactor area and into the sanitary sewer.
Concrete curbing with valves around diesel storage tanks to contain leaks.
Portable booms are used during washing of dumpster areas to funnel water to collection point where it is removed before entering MS4.
Trench drain in Terminal 2 West dumpster area is connected to sanitary sewer.
Triturator area is covered and sloped to prevent contact with storm water.
Located within the Airport are below grade box structures, drain inserts, curb inlet screen covers, oil water separators, infiltration structures or surfaces, media filters, bioswales, hydrodynamic separators, porous pavement, porous pavers, and modular wetland treatment systems.

Materials Storage Area

Maintenance shop 1
Maintenance shop 2
Bone Yard (north ramp)
Rain proof shelters in generator area
Flammable materials storage locker at facilities maintenance

Materials Storage Amounts

Oil and grease stored in:

1 3000 gallon grease receptacle at Terminal 1
1 6000 gallon grease receptacle at Terminal 2 East
1 5000 gallon grease receptacle at Terminal 2 West
4 grease receptacles between 100 and 1000 gallons (2 at the old Commuter Terminal, 3 in Terminal 1)
6 smaller grease traps in Terminal 1 and 2

Rubber particulates stored in covered lowboy in north ramp, emptied every 6-8 weeks

Shipping/Receiving Area

Bradford and/or Facilities Maintenance shop

PROJECT NO.: 5025-13-0031 DATE: JUNE 2015 DRAWN BY: RMH CHECKED BY: AJA	amec foster wheeler	**SDCRAA Operating Areas** **San Diego International Airport**	FIGURE E-25

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