

Appendix B – Best Management Practices

BMP TC01	TREATMENT CONTROLS	
<p>PURPOSE: Eliminate non-storm water discharges to the storm water collection system and remove petroleum compounds, grease, sediments, trash and debris, metals and other contaminants from storm water through the use of structural treatment control BMPs.</p>	<p>TARGETED ACTIVITIES:</p> <ul style="list-style-type: none"> ➔ Aircraft Deicing/Anti-Icing ➔ Aircraft Lavatory Service ➔ All Fueling ➔ All Maintenance ➔ All Storage ➔ All Washing ➔ Cargo Handling ➔ Equipment Cleaning ➔ Fire Fighting Equip. Testing ➔ Floor Washdowns ➔ Garbage Collection ➔ Outdoor Washdown ➔ Painting/Stripping ➔ Potable Water System Flush ➔ Runway Rubber Removal 	
<p>POLLUTION PREVENTION:</p>	<p>POLLUTANTS of CONCERN:</p> <ul style="list-style-type: none"> ➔ Aircraft Fire Fighting Foam ➔ Battery Acid ➔ Cleaning Solution ➔ Deicing/Anti-Icing Fluid ➔ Fuel ➔ Heavy Metals ➔ Hydrocarbons ➔ Lavatory Chemicals ➔ Metals ➔ Oil and Grease ➔ Paint ➔ Pesticides/Herbicides/ Fertilizers ➔ Potable Water System Chemicals ➔ Solvents ➔ Vehicle Fluids 	
<p>Implement the following pollution prevention practices and BMPs to reduce pollutants in storm water and non-storm water discharges and to maintain the proper functioning of structural treatment control BMPs:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Properly dispose of any standing water and accumulated waste removed during cleaning operations in accordance with federal, state, and local requirements. <input type="checkbox"/> CASQA recommends cleaning of water quality inlets (which includes oil water separators (OWS)) at least twice during the wet season. However, the schedule depends on the operating conditions of the SDIA OWS. <input type="checkbox"/> Inspect and maintain OWS as follows: <ol style="list-style-type: none"> 1. Inspect OWS regularly to establish trends in operating conditions of the SDIA OWS. 2. Prior to the wet season, inspect for sediment accumulation in the pre-separator and/or separator chambers, and if it is greater than 12 inches deep, remove the accumulated material (for example, with a vactor truck), characterize it, and properly dispose of it. 3. Prior to the wet season, inspect for oil accumulation in the oil chamber, and if it is more than 50 percent of the chamber volume, remove the oil and grease, characterize it, and properly dispose of it. 4. Inspect coalescer for debris and gummy deposits. If these are present, wash the coalescer in an appropriate area with high pressure hot water. 5. Inspect for general mechanical integrity per manufacturer’s guidelines at least annually and operate each mechanical component to ensure proper operation. Repair as needed. 		

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	<p><input type="checkbox"/> Inspect and maintain drain inserts as follows:</p> <ol style="list-style-type: none"> 1. Inspect inserts every 3 months in the dry season and prior to every storm event in the wet season. Remove any trash and debris that could interfere with the proper functioning of the insert. 2. Replace inserts if sediment reaches a depth of greater than 6 inches, or if rips or tears are observed. Properly characterize and dispose of the insert and sediment. 3. Inspect monthly for saturation of any oil absorbent material. Upon saturation, replace absorbent material. <p><input type="checkbox"/> Inspect and maintain Contech CDS units as follows:</p> <ol style="list-style-type: none"> 1. Inspect CDS unit every 6 months. 2. Check for blockages or obstructions in inlet and separation screen. 3. Clean CDS unit during dry weather conditions when level of sediments reach 75% of capacity in isolated sump or when a sufficient level of hydrocarbon and trash has accumulated. Using a vactor truck is recommended. 4. Properly characterize and dispose of accumulated wastes. <p><input type="checkbox"/> Inspect and maintain Contech StormFilter units as follows:</p> <ol style="list-style-type: none"> 1. Inspect and maintain StormFilter unit annually during the dry season or more frequently depending on high sediment accumulation after major storms. Maintenance will be done every 3 years as minimum. 2. Check level of sediment accumulation on vault floor and top of cartridge. Use vactor truck to remove sediments if sediment loading is >4” on vault floor or >1/4” on top of cartridge. 3. Check if cartridges are submerged 24 hours after rain event, and for plugged media, extended bypass condition, or pronounced scum line present above top cap; replace cartridges. 4. Properly characterize and dispose of accumulated wastes. <p><input type="checkbox"/> Inspect and maintain Clearwater BMP unit as follows:</p> <ol style="list-style-type: none"> 1. Inspect and maintain BMP unit every 2 months during the rainy season and at the end of the rainy season. 2. Check hydrocarbon sock for full absorption. Replace if hard when squeezed. 3. Remove trash and debris in trash collection baskets. 4. Clean primary settling chamber of floatables and sediments when it is 50% full. Recommend using vactor truck to remove sediment area thoroughly. 5. Replace filter canister and filter media bag when media is spent. Replace filter matt if condition is poor. 6. Properly characterize and dispose of accumulated wastes and spent parts. <p><input type="checkbox"/> Inspect and maintain Bioclean trench drain filters as follows:</p> <ol style="list-style-type: none"> 1. Inspect and maintain trench drain filters every 3 months for cleaning and debris removal. Remove all trash, debris, organics, and sediments collected and dispose of properly. 	

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	<p>2. Inspect and replace hydrocarbon booms in trench drain filters every 6 months. Properly dispose hydrocarbon boom as hazardous waste.</p> <p><input type="checkbox"/> Inspect and clean Bioclean inlet skimmers at least once during the dry season. Clean catch basin filters that are at least 50% full of trash and debris and dispose of properly. Vactor truck is recommended for cleanout.</p> <p><input type="checkbox"/> Inspect permeable surfaces and swales at least every 6 months and maintain permeable surfaces and swales by removing accumulations of sediments and debris, replacement of mulch, removal of dead plants, pruning or mowing, temporary watering, sweeping, or filling potholes or fill material.</p> <p><input type="checkbox"/> Contact vector control agency if mosquito breeding is observed or suspected.</p>	
OPERATIONS:		APPLICABLE TENANTS/ DEPARTMENTS:
<p>Sub-BMPs</p> <p>- 01 <input type="checkbox"/></p> <p>- 02 <input type="checkbox"/></p> <p>- 03 <input type="checkbox"/></p> <p>- 04 <input type="checkbox"/></p>	<p>Regularly inspect, clean, and maintain all structural treatment control BMPs to prevent the accumulation or resuspension of oil, grease, floating debris and sediments.</p> <p>During cleaning operations, close any effluent valves at the treatment control device and properly dispose of any standing water and accumulated waste that are removed. Replace oil absorbent pads in the treatment control device prior to the start of the wet season and as needed.</p> <p>Document and maintain records for all inspections, cleaning, and maintenance of structural treatment control BMPs.</p> <p>Perform an annual inventory of all structural treatment control BMPs.</p>	<p>→ Allied Aviation</p> <p>→ Bradford</p> <p>→ Conrac</p> <p>→ FedEx</p> <p>→ SDCRAA</p> <p>→ Signature</p>
<p>BMP FREQUENCIES/EQUIPMENT/TOOLS: Treatment control BMP inspections and maintenance frequencies are described in Section 6.0. Equipment/tools to implement BMPs include measuring devices, flashlights, gloves, vactor trucks, sweepers, new parts for proprietary BMPs (e.g., cartridges), spill kits, brooms, and drums.</p>		
<p>AUTHORIZED LOCATIONS TO IMPLEMENT TREATMENT CONTROL BMPs AND TO MAINTAIN TREATMENT CONTROL BMPs:</p>		
	<p><input type="checkbox"/> To implement BMPs for the prevention of non-storm water discharges, and to reduce pollutants in storm water discharges, inspect and maintain water structural treatment control BMPs located within the designated areas as shown in the attached map.</p>	
Date:	Version: 2.0	

Individual BMP From:
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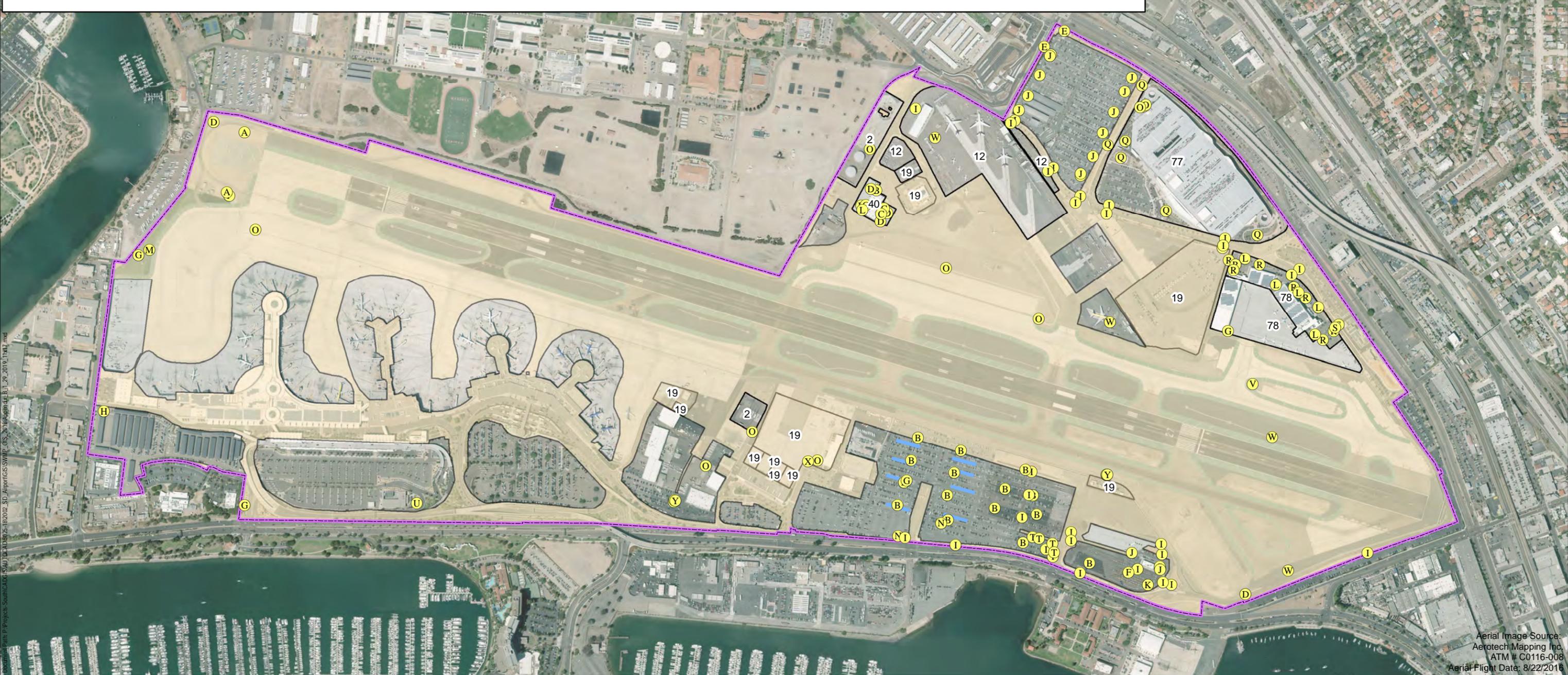
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**Tenants Implementing TC-01 BMP:
Structural Treatment Control BMPs**

2 - Allied Aviation 12 - FedEx 19 - SDCRAA 40 - Bradford 77 - Conrac 78 - Signature

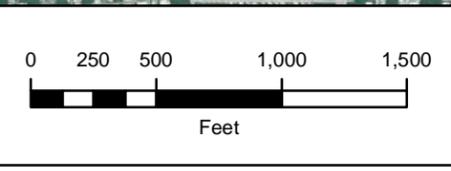
- | | | | | |
|--|--|---------------------------------------|--|---|
| A Inlet Filter | F Infiltration Trench | K Detention Basin | P Pervious Gravel | U OldCastle/Kristar Perfilter Unit |
| B Permeable Surface | G Contech Storm Filter | L Bioswale | Q Bioretention Basin | V Contech Jellyfish Unit |
| C Trench Drain Filter | H Contech CDS | M Artificial Turf Infiltration | R Subsurface Infiltration Basin | W CleanWay Metalzorb |
| D Bio Clean Grate Inlet Skimmer Box | I ClearWater Solutions BMP Unit | N Aquashield HDS | S Curb Inlet Box | X Activated Alumina Filter Bags |
| E Bio Clean Curb Inlet Skimmer Box | J Modular Wetland System | O Oil Water Separator | T Curb Cut with Rock Infiltration Bed | Y Biochar Boom |

— Permeable Strip ■ SDCRAA ■ SDIA Boundary



Aerial Image Source:
Aerotech Mapping Inc.
ATM # C0116-008
Aerial Flight Date: 8/22/2016

PROJECT NO.:
5025-18-2002
DATE:
JANUARY 2019
DRAWN BY:
CAB
CHECKED BY:
AA/NP



**STORM WATER MANAGEMENT PLAN
AT SAN DIEGO INTERNATIONAL AIRPORT**
San Diego, California

**TC-01 BMP:
Structural Treatment Control BMPs**

FIGURE
TC-01

Individual BMP From:
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