APPENDIX B
BEST MANAGEMENT PRACTICES

SAN DIEGO
INTERNATIONAL AIRPORT
LET'S GO.

BMP SC01	NON-STORM WATER MANAGEMENT

PURPOSE:
Eliminate non-storm water discharges to the storm water collection system.

TARGETED ACTIVITIES:

- Aircraft Deicing/Anti-Icing
- Aircraft Lavatory Service
- All Cleaning
- All Fueling
- All Maintenance
- All Storage
- All Washing
- Cargo Handling
- Fire Fighting Equipment Testing
- Floor Washdowns
- Garbage Collection
- Landscape Irrigation
- Painting/Stripping
- Potable Water System Flush
- Runway Rubber Removal

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent non-storm water discharges to the storm water collection system (also see Section 3 for authorized and unauthorized non-storm water discharges, and BMPs to control them):

- ☐ Perform visual inspections of discharge points to the storm drain system – observe uncharacteristic volumes, any staining, colors, turbidity, odors, deposition, floatables, and foaming characteristics of any flow.
- ☐ Locate illicit connections to the storm drain system by visual inspections, CCTV survey, smoke testing, dye testing, and electromagnetic radio frequency testing.
- ☐ Isolate problem areas and plug illicit discharge points.
- ☐ Post “No Dumping” signs with a phone number for reporting dumping and disposal.
- ☐ Use “dry” cleaning and surface preparation techniques where feasible.
- ☐ Inspect waste and material containers frequently for leaks and proper closure seal.
- ☐ Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may occur.
- ☐ Investigate the use of automatic rain shutoff devices or smart controllers, micro irrigation systems, or low water use landscaping to minimize irrigation runoff.
  Experiment in new technologies and practices to conserve water.
  Implement mandatory water conservation measures.

POLLUTANTS of CONCERN:

- Aircraft Fire Fighting Foam
- Bacteria
- Battery Acid
- Deicing/Anti-Icing Fluid
- Dumpster Wastes
- Floatables
- Oil and Grease
- Fuel
- Landscape Waste
- Lavatory Chemical Wastes
- Metals
- Nutrients
- Paint
- Pesticides/Herbicides/Fertilizers
- Potable Water System Chemicals
- Rubber Particles
- Sediment
- Solvents/Cleaning Solutions
- Vehicle Fluids

BMP SC01	NON-STORM WATER MANAGEMENT	
☐	Use recycled or non-potable water for construction purposes when available.	
☐	Authorized non-stormwater discharges include the following (provided that BMPs are in place to control them): fire-hydrant and fire prevention or response system flushing; potable water sources and system flushing; drinking water fountains; air conditioning, refrigerator or compressor condensation; landscape irrigation watering provided that Integrated Pest Management practices have been used, seawater infiltration, incidental windblown cooling tower mist, and uncontaminated natural springs, groundwater, foundation drainage, and footing drainage. All other non-stormwater discharges are prohibited. **NEVER HOSE DOWN OR BURY MATERIAL SPILLS**	
OPERATIONS:		**APPLICABLE TENANTS/ DEPARTMENTS:**
Sub-BMPs		✈ ACE ✈ Air Canada ✈ Alaska ✈ Allegiant ✈ Allied Aviation ✈ American Airlines ✈ ARFF ✈ Bradford ✈ British Airways ✈ Cartwright ✈ Conrac ✈ Delta ✈ DHL ✈ Edelweiss ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HFF ✈ HMS Host ✈ JAL ✈ Jet Blue ✈ Lufthansa ✈ Menzies ✈ Mission Yogurt ✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS
- 01 ☐	Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if there is any evidence of illicit connections or illegal discharges.	
- 02 ☐	Provide the appropriate level of employee, tenant and public training or education in non-storm water discharge management, i.e., spill response and prevention, non-storm water pollution prevention, and hazardous materials management.	
- 03 ☐	Limit the availability of outdoor water supplies (e.g. hose bibs, faucets) and post with appropriate use signs to discourage uses that may pollute the storm drain system/receiving water.	
- 04 ☐	Ensure the site is free of illicit connections and illegal discharges.	
- 05 ☐	Do not irrigate during forecasted rain events and 48 hours following a rain event.	
- 06 ☐	Periodically inspect and maintain irrigation systems and landscaped areas to prevent prohibited over-irrigation and to repair any leaks.	
- 07 ☐	Direct air conditioning or refrigerator condensation to landscaping, porous surface, into the sanitary sewer, or for reuse.	
- 08 ☐	Irrigate using the satellite water-tracking system to reach proper levels of soil moisture applicable for landscaping, and follow City water restriction guidelines.	
- 09 ☐	Use a hand-held hose equipped with positive shut-off nozzle, handheld water container, or timed sprinkler system to irrigate landscaped areas.	
- 10 ☐	Prohibit over-irrigation of landscaped areas	

BMP SC01	NON-STORM WATER MANAGEMENT	
		✈ WestJet
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Observations of illicit discharges and connections are on a continual, ad hoc basis, during normal operations, and reported when observed. Formal inspections are conducted as described in Section 3.0 and Appendix D-2. Training frequencies and tools are described in Sections 7.0 and 9.0. Irrigation frequencies and tools are described in Section 3.0.		
AUTHORIZED LOCATIONS TO IMPLEMENT BMPs TO PREVENT NON-STORM WATER DISCHARGES:		
☐	Implement BMPs for the prevention of non-storm water discharges within the entire airport boundary. In particular, do not discharge non-storm water to the designated areas (storm drains) as shown on the attached map.	
Date:		Version: 2.0

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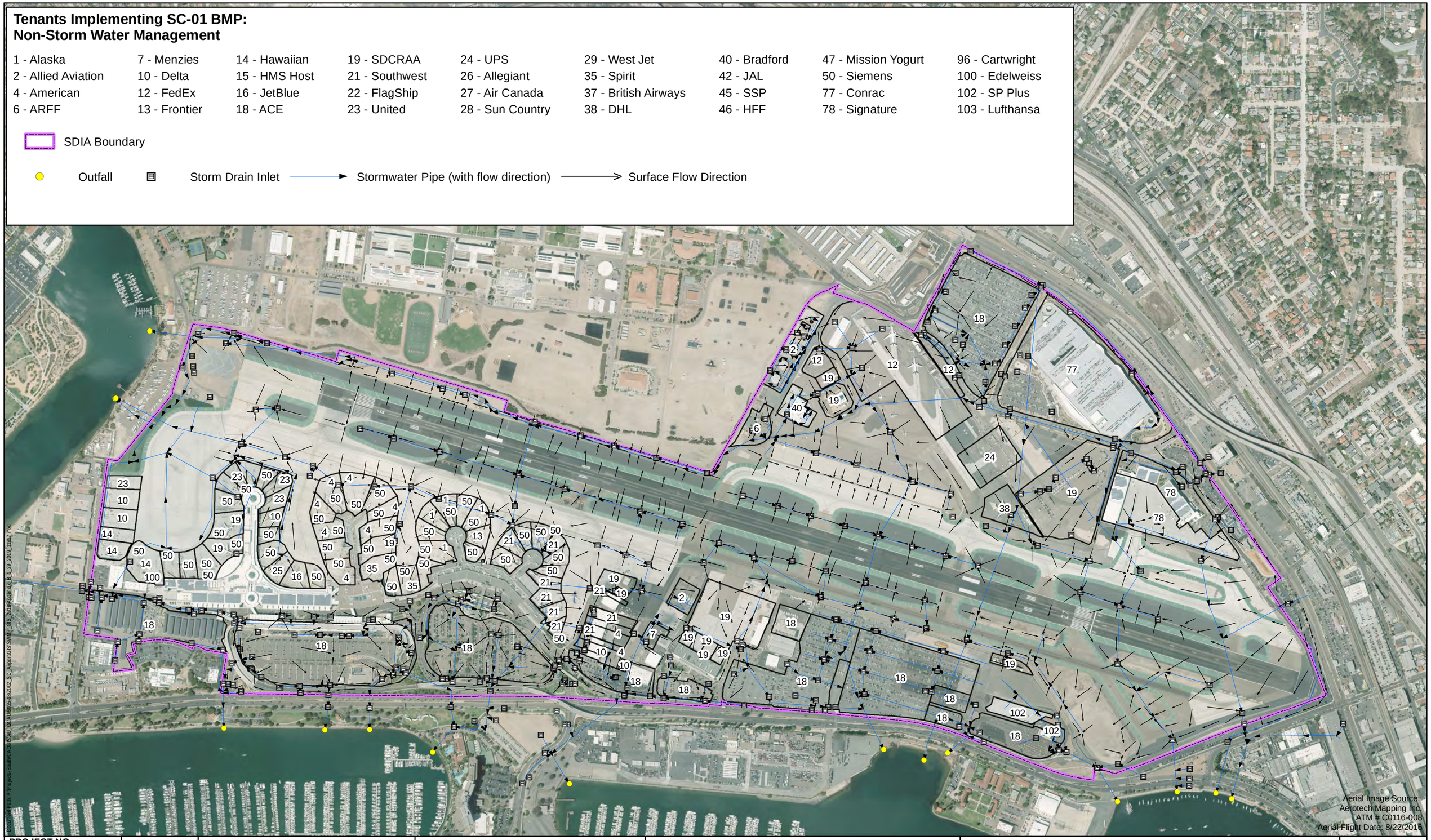
Tenants Implementing SC-01 BMP:
Non-Storm Water Management

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	47 - Mission Yogurt	96 - Cartwright
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	50 - Siemens	100 - Edelweiss
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	77 - Conrac	102 - SP Plus
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	46 - HFF	78 - Signature	103 - Lufthansa

SDIA Boundary

Outfall Storm Drain Inlet Stormwater Pipe (with flow direction) Surface Flow Direction



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

SC-01 BMP:
Non-Storm Water Management

FIGURE
SC-01

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BMP SC02A	OUTDOOR EQUIPMENT OPERATIONS AND MAINTENANCE AREAS

PURPOSE:
To prevent the discharge of pollutants to storm water from outdoor equipment operations and general maintenance facilities.

TARGETED ACTIVITIES:

- All Outdoor Equipment Operations
- All Maintenance

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants from outdoor equipment operations and maintenance activities to the storm water collection system:

☐ Provide covered maintenance areas when designing new facilities or upgrading existing facilities. If possible utilize indoor areas, lean-tos, or portable covers.

☐ Perform the activity during dry periods.

☐ Use non-toxic, biodegradable chemicals or products for maintenance, minimize or eliminate the use of solvents and substitute materials with less hazardous properties where feasible.

☐ Use absorbent materials at potential problem areas. Adequately collect/remove absorbent materials from area after use and dispose of them in an appropriate manner.

☐ **DO NOT HOSE DOWN WORK AREAS TO THE STORM DRAIN SYSTEM.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any evidence of the disposal of solvents or cleaning solutions to the storm drain has occurred.

POLLUTANTS of CONCERN:

- Bacteria
- Battery Acid
- Fuel
- Metals
- Nutrients
- Oil and Grease
- Organics
- Paint
- Sediments
- Solvents/Cleaning Solutions
- Trash
- Vehicle Fluids

OPERATIONS:

Sub-BMPs

- 01 ☐ Equipment operations and maintenance areas should not be located directly in the path of storm drains.

- 02 ☐ Perform equipment operations and maintenance in designated areas with overhead cover for pollutant sources and/or activity areas.

SEE ALSO BMP SC02B

APPLICABLE TENANTS/ DEPARTMENTS:

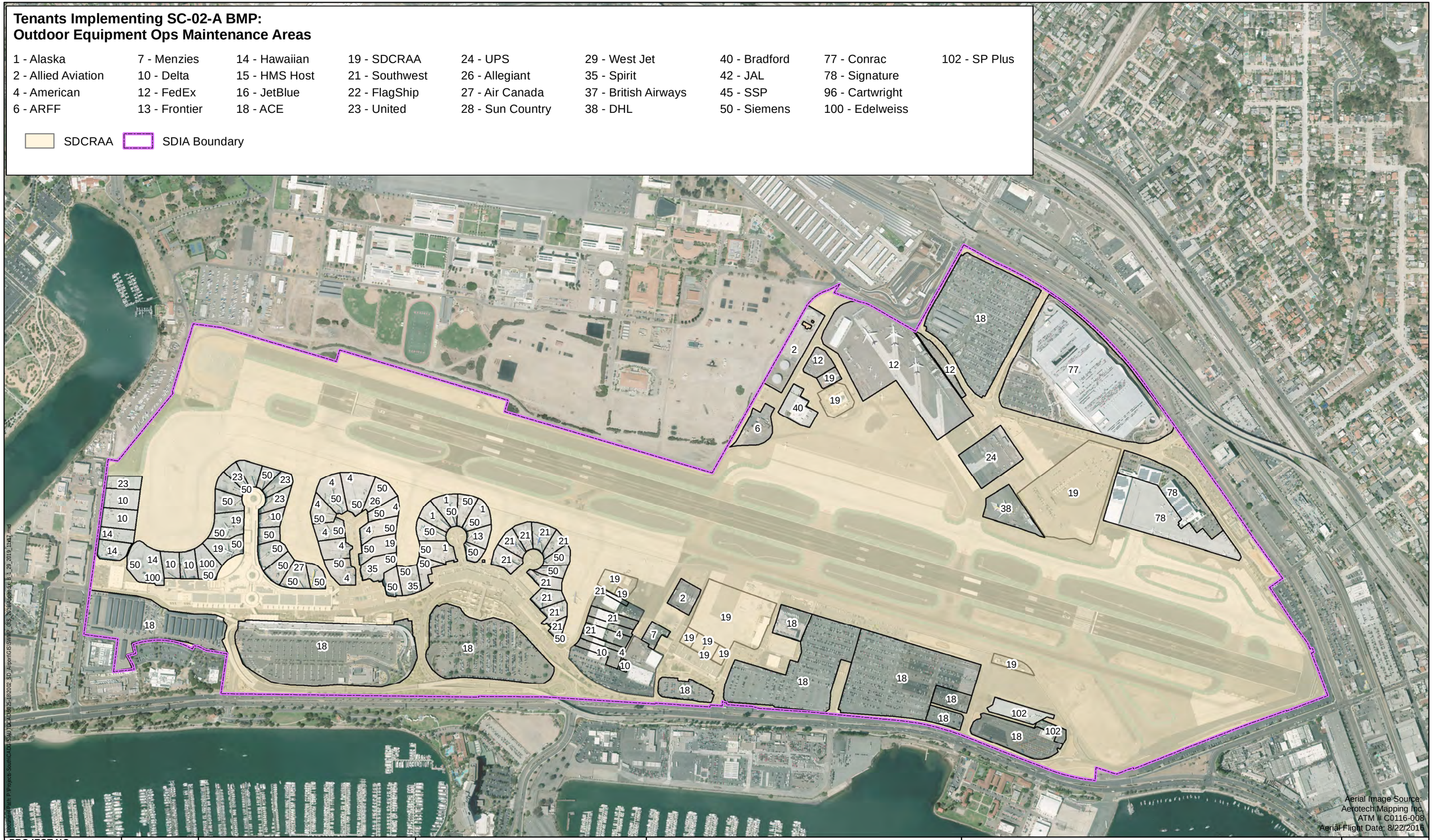
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Cartwright
- Conrac
- Delta
- DHL
- Edelweiss
- FedEx
- Flagship
- Frontier

BMP SC02A	OUTDOOR EQUIPMENT OPERATIONS AND MAINTENANCE AREAS	
		✈ Hawaiian ✈ HMS Host ✈ JAL ✈ Jet Blue ✈ Menzies ✈ SDCRAA ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Maintenance is conducted as needed using either indoor shops, or under temporary or permanent cover when available and feasible.		
AUTHORIZED OUTDOOR OPERATIONS AND MAINTENANCE LOCATIONS:		
☐	Use only the designated areas for outdoor operations and maintenance activities as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-02-A BMP:
Outdoor Equipment Ops Maintenance Areas

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	77 - Conrac	102 - SP Plus
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	78 - Signature	
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	96 - Cartwright	
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	50 - Siemens	100 - Edelweiss	

SDCRAA SDIA Boundary



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

SC-02-A BMP:
Outdoor Equipment Ops Maintenance Areas

FIGURE
SC-02-A

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BMP SC02B	AIRCRAFT, GROUND VEHICLE, AND EQUIPMENT MAINTENANCE

PURPOSE:
To prevent or reduce the discharge of pollutants to storm water from any type of aircraft, vehicle, or equipment maintenance and repair, including ground vehicle and equipment painting/stripping and floor washdowns.

TARGETED ACTIVITIES:

- Aircraft Maintenance
- Vehicle Maintenance
- Equipment Maintenance

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants to the storm water collection system:

☐ Provide covered maintenance areas when designing new facilities or upgrading existing facilities. Utilize indoor areas, lean-tos, or portable covers.

☐ Perform the activity during dry periods.

☐ Use non-toxic, biodegradable chemicals or products for maintenance, minimize or eliminate the use of solvents and substitute materials with less hazardous properties where feasible (e.g. non-chlorinated solvents or water-based solvents instead of chlorinated solvents, non-caustic detergents instead of caustic cleaners, or cleaning without liquid cleaners like a wire brush).

☐ Recycle or properly dispose of the following: greases, oils, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries and transmission fluid. Drain and crush oil filters and oil containers before recycling or disposal. Store crushed oil filters, empty lubricant containers, and cracked batteries in a covered, acid-proof container (for batteries), and leak-proof covered secondary containment (for all waste).

DO NOT HOSE DOWN WORK AREAS TO THE STORM DRAIN SYSTEM. Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if there is any evidence of the disposal of solvents, cleaning solutions or other materials to the storm drain, or hosing down of work areas.

POLLUTANTS of CONCERN:

- Battery Acid
- Fuel
- Metals
- Nutrients
- Oil and Grease
- Organics
- Paint
- Sediments
- Solvents/Cleaning Solutions
- Vehicle Fluids

OPERATIONS:

Sub-BMPs

- 01 ☐ Employees are trained in safe vehicle and equipment operations and maintenance.
- 02 ☐ Aircraft, vehicle and equipment maintenance areas should not be located directly in the path of storm drains.
- 03 ☐ Perform maintenance of aircraft, ground vehicles and equipment in designated areas that are either indoors or are covered, bermed, enclosed, or sloped/positioned away from the MS4.
- 04 ☐ Perform regular equipment inspection and testing.

APPLICABLE TENANTS/ DEPARTMENTS:

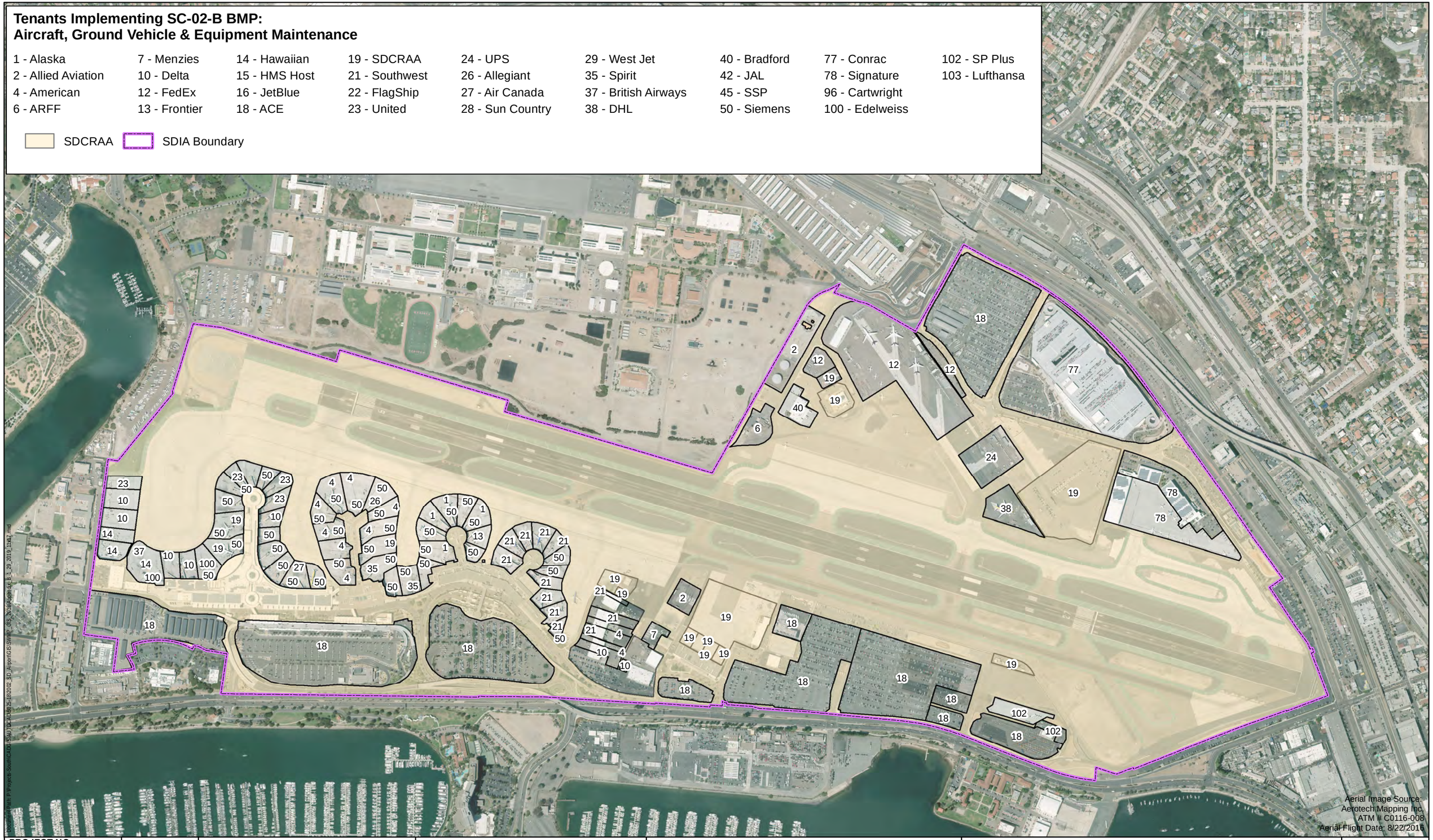
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Cartwright
- Conrac
- Delta

BMP SC02B	AIRCRAFT, GROUND VEHICLE, AND EQUIPMENT MAINTENANCE	
- 05 ☐	Inspect aircraft, vehicles and equipment on a regular basis for fluid leaks. Place drip pans under leaks as needed.	✈ DHL ✈ Edelweiss ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HMS Host ✈ JAL ✈ JetBlue ✈ Lufthansa ✈ Menzies ✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
- 06 ☐	Maintain aircraft, vehicles and equipment in good condition to prevent or correct any leakage of oil or other fluids.	
- 07 ☐	Use drip pans during maintenance.	
- 08 ☐	Do not leave drip pans containing fluids or other open containers lying around. Regularly transfer fluids for recycling or proper disposal.	
- 09 ☐	Minimize the use of solvents or use less toxic solvents whenever possible. If solvents cannot be avoided, clean or drain parts in self-contained sinks or drum units, and check those units regularly for leaks.	
- 10 ☐	Store mechanical parts, equipment and vehicles awaiting repair/removal under cover and away from storm drains.	
- 11 ☐	Store spill response materials in maintenance areas and on maintenance vehicles. Adequately collect/remove absorbent materials from area after use and dispose of them in an appropriate manner.	
- 12 ☐	Remove fluids and batteries from salvage vehicles and equipment and dispose of properly.	
- 13 ☐	Properly dispose of obsolete and inoperable vehicles and equipment.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Maintenance is conducted as needed using either indoor shops, or under temporary or permanent cover when available and feasible. Equipment/tools to implement BMPs include drip pans, outdoor sheds, storage containers, tarps, secondary containment devices, spill kits and drums.		
AUTHORIZED AIRCRAFT, GROUND VEHICLE AND EQUIPMENT MAINTENANCE LOCATIONS:		
☐	Use only the designated areas for aircraft, ground vehicle and equipment maintenance as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-02-B BMP:
Aircraft, Ground Vehicle & Equipment Maintenance

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	77 - Conrac	102 - SP Plus
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	78 - Signature	103 - Lufthansa
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	96 - Cartwright	
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	50 - Siemens	100 - Edelweiss	

SDCRAA SDIA Boundary



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Feet

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

SC-02-B BMP:
Aircraft, Ground Vehicle & Equipment Maintenance

FIGURE
SC-02-B

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BMP SC02C	ELECTRIC VEHICLE MAINTENANCE

PURPOSE:
To prevent or reduce the discharge of pollutants to storm water from electric ground vehicle charging, maintenance and repair.

TARGETED ACTIVITIES:

- Vehicle Maintenance
- Battery Charging

POLLUTION PREVENTION:

☐	Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants to the storm water collection system:
☐	Develop a battery maintenance plan to provide procedures for cleaning and maintenance, develop a schedule for service, and to correct any issues that can potentially arise.
☐	Investigate use of smart chargers with multi-stage charging capability.

POLLUTANTS of CONCERN:

- Battery Acid
- Battery Acid Neutralizing Agents
- Metals
- Vehicle Fluids

OPERATIONS:

Sub-BMPs	
- 01 ☐	Do not overcharge batteries in electric vehicles.
- 02 ☐	Park electric vehicles in cool and dry areas (e.g. shade under building) when not in use.
- 03 ☐	Use acid resistant drip pans sprinkled with battery acid neutralizing agent (e.g. lime or baking soda) when filling or cleaning electric vehicle batteries and dispose of waste properly.
- 04 ☐	Maintain battery acid neutralizing kits adjacent to charging stations. Adequately recover spill response material from area after use and dispose of them in an appropriate manner.
-05 ☐	Avoid overfilling electric vehicle batteries.
-06 ☐	Do not fill batteries or perform electric vehicle maintenance during rain events.
-07 ☐	Store batteries inside in a cool and dry place if possible. If batteries are stored outside, store in a non-reactive container with a cover.
-08 ☐	Clean battery case and terminals regularly or when there is a buildup of corrosion with a rag dampened with a solution of water and battery acid neutralizing agent. Capture any wastewater to be treated as hazardous waste.
-09 ☐	Apply petroleum jelly or grease on battery terminals to slow down corrosion process.

SEE ALSO BMP SC02B

APPLICABLE TENANTS/ DEPARTMENTS:

- ACE
- Air Canada
- Alaska
- Allegiant
- American Airlines
- Delta
- JAL
- SDCRAA
- Siemens
- Signature
- Southwest
- Spirit
- SSP
- United
- WestJet

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

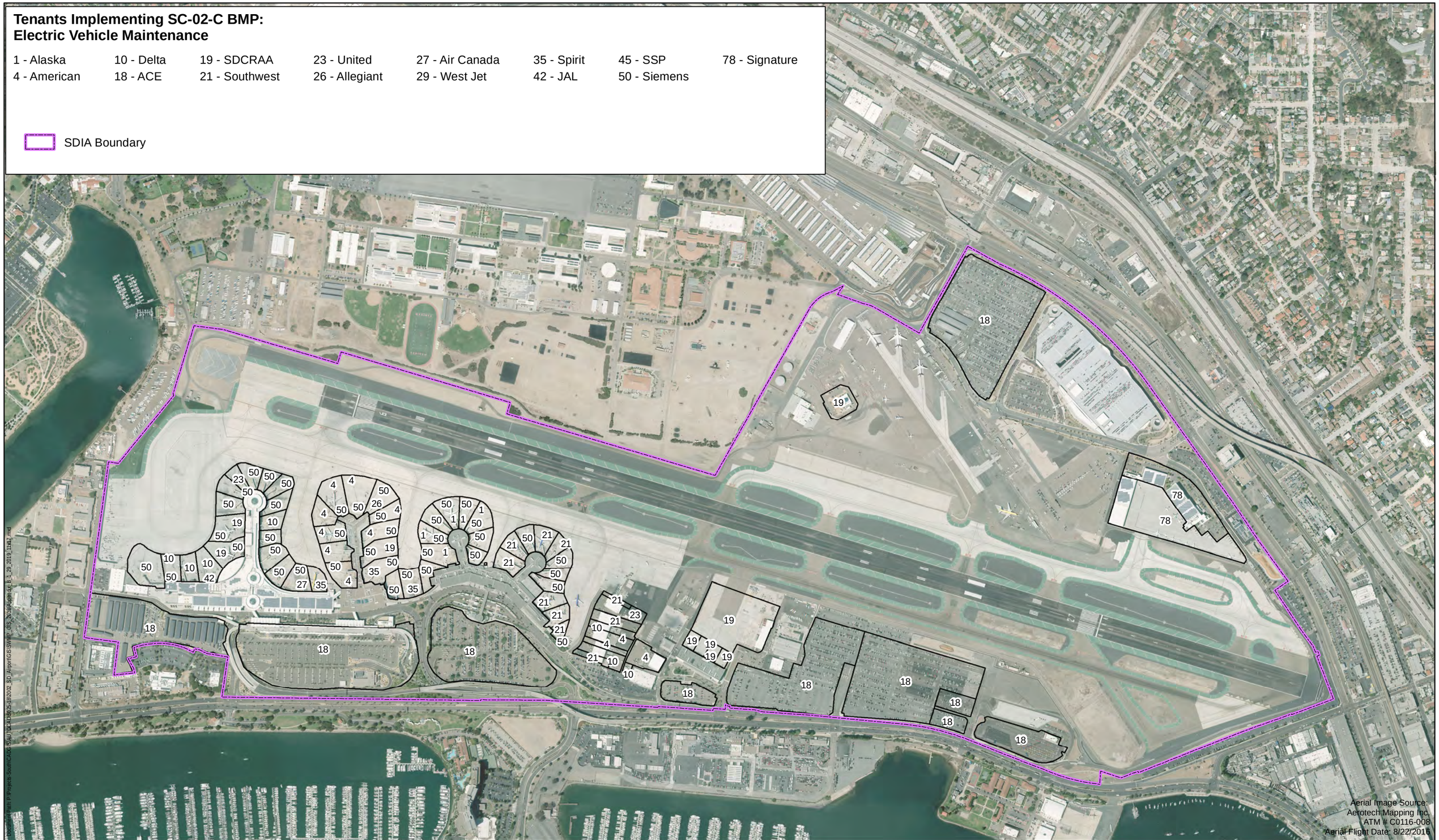
BMP FREQUENCIES/EQUIPMENT/TOOLS: Equipment/tools to implement BMPs include drip pans, neutralizing kits, outdoor sheds, storage containers,

BMP SC02C	ELECTRIC VEHICLE MAINTENANCE	
appropriate secondary containment devices, spill kits and drums.		
AUTHORIZED ELECTRIC VEHICLE MAINTENANCE LOCATIONS:		
☐	Use only the designated areas for electrical vehicle maintenance as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-02-C BMP:
Electric Vehicle Maintenance

1 - Alaska	10 - Delta	19 - SDCRAA	23 - United	27 - Air Canada	35 - Spirit	45 - SSP	78 - Signature
4 - American	18 - ACE	21 - Southwest	26 - Allegiant	29 - West Jet	42 - JAL	50 - Siemens	

SDIA Boundary



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

SC-02-C BMP:
Electric Vehicle Maintenance

FIGURE
SC-02-C

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BMP SC03	AIRCRAFT, GROUND VEHICLE, AND EQUIPMENT FUELING

PURPOSE:
To prevent fuel spills and leaks, and reduce their impacts to storm water.

TARGETED ACTIVITIES:

- Aircraft Fueling
- Vehicle Fueling
- Equipment Fueling

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent fuel discharges to the storm water collection system:

- ☐ Use pigs/mats over storm drains during fueling activities.
- ☐ Fuel pumps should be posted with signs stating "No Topping Off" to prevent overflow.
- ☐ Use absorbent materials and spot cleaning for small spills, and properly dispose of the spill response materials.
- ☐ Properly dispose of any fuel spills and leaks. If feasible, collect any fuel spills through vacuum equipment / trucks.
- ☐ Report leaking vehicles to fleet maintenance.
- ☐ Develop and implement a Spill Prevention, Control and Countermeasure (SPCC) Plan if required under guidelines set forth in 40 CFR, Section 112.
- ☐ **DO NOT DISCHARGE FUEL TO A CATCH BASIN OR STORM DRAIN.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any fuel spill or leak is observed.

POLLUTANTS of CONCERN:

- Fuel
- Metals
- Oil and Grease
- Organics

OPERATIONS:

Sub-BMPs

- 01 ☐ Perform aircraft, ground vehicle and equipment fueling in the designated areas that are covered, bermed, enclosed, or sloped/positioned away from the MS4.
- 02 ☐ Fueling areas should not be located directly in the path of storm drains.
- 03 ☐ Label, regularly inspect and keep in good condition all tanks, piping and valves.
- 04 ☐ Store absorbent booms, spill kits, or vacuum equipment in fueling areas or on fueling vehicles.
- 05 ☐ Regularly inspect fueling areas.
- 06 ☐ Monitor major fueling operations.
- 07 ☐ Use secondary containment or cover when transferring fuel from a

APPLICABLE TENANTS/ DEPARTMENTS:

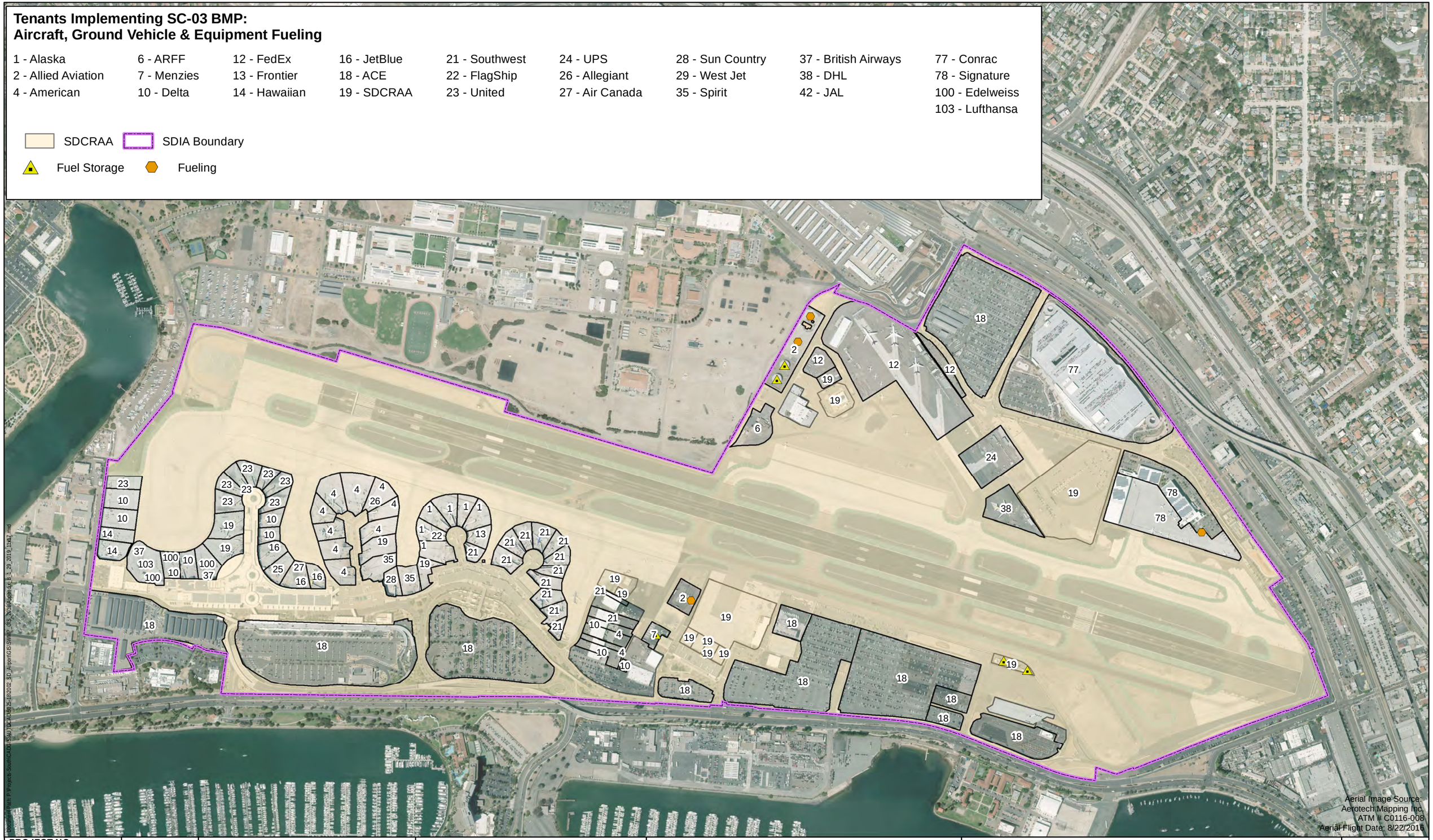
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- British Airways
- Conrac
- Delta
- DHL
- Edelweiss
- FedEx
- Flagship
- Frontier
- Hawaiian
- JAL

BMP SC03	AIRCRAFT, GROUND VEHICLE, AND EQUIPMENT FUELING	
	tanker truck to a fuel tank.	✈ JetBlue ✈ Lufthansa ✈ Menzies ✈ SDCRAA ✈ Signature ✈ Southwest ✈ Spirit ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
- 08 ☐	Use leak detection, overfill protection and spill prevention devices for tanks and piping.	
- 09 ☐	Use automatic shut-off mechanisms for fuel tankers and hose connections.	
- 10 ☐	Do not top off fuel tanks.	
-11 ☐	Restrict access to fuel tanks and fueling vehicles.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Fueling is conducted as needed using bermed, sloped areas or under cover if and where possible. Equipment/tools to implement BMPs include drip pans, pigs/mats, secondary containment devices, spill kits, shut-off mechanisms and drums.		
AUTHORIZED AIRCRAFT, GROUND VEHICLE AND EQUIPMENT FUELING LOCATIONS:		
☐	Use only the designated areas for aircraft, ground vehicle and equipment fueling as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-03 BMP:
Aircraft, Ground Vehicle & Equipment Fueling

1 - Alaska	6 - ARFF	12 - FedEx	16 - JetBlue	21 - Southwest	24 - UPS	28 - Sun Country	37 - British Airways	77 - Conrac
2 - Allied Aviation	7 - Menzies	13 - Frontier	18 - ACE	22 - FlagShip	26 - Allegiant	29 - West Jet	38 - DHL	78 - Signature
4 - American	10 - Delta	14 - Hawaiian	19 - SDCRAA	23 - United	27 - Air Canada	35 - Spirit	42 - JAL	100 - Edelweiss
								103 - Lufthansa

SDCRAA
SDIA Boundary
Fuel Storage
Fueling



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

SC-03 BMP:
Aircraft, Ground Vehicle & Equipment Fueling

FIGURE
SC-03

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BMP SC04	AIRCRAFT, GROUND VEHICLE, AND EQUIPMENT CLEANING

PURPOSE:

Prevent or reduce the discharge of pollutants to storm drains from aircraft, vehicle, and equipment washing, and equipment degreasing.

TARGETED ACTIVITIES:

- Aircraft Washing
- Vehicle Washing
- Equipment Washing
- Equipment Degreasing

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges from the cleaning of aircraft, ground vehicles and equipment to the storm water collection system:

- ☐ Store significant cleaning materials in leak-free containers and within areas of secondary containment.
- ☐ Use biodegradable, phosphate-free, non-toxic cleaning solutions.
- ☐ Follow water conservation practices when performing cleaning.
- ☐ Wash vehicles at a commercial car wash when possible.
- ☐ **DO NOT DISCHARGE WASTE WASH WATER OR CLEANING AGENTS TO A CATCH BASIN OR STORM DRAIN.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any non-storm water discharges from cleaning activities to the storm drain system are observed.

POLLUTANTS of CONCERN:

- Cleaning Solutions
- Oil and Grease
- Solvents
- Vehicle Fluids
- Metals

OPERATIONS:

Sub-BMPs

- 01 ☐ Keep vehicles, equipment, and washing areas clean and free of waste.
- 02 ☐ Use dry washing and surface preparation techniques where feasible.
- 03 ☐ Wash areas should not be located directly in the path of storm drains.
- 04 ☐ Use pigs and cover mats to cover all catch basins in the surrounding area to contain the wash water during washing activities.
- 05 ☐ Perform all washing activities in designated areas that capture, filter and recycle water (e.g. at new Wash Bay Facility), or use reclaimed water and divert wash water to a structural treatment control BMP, sanitary sewer or dead end sump with pump.
- 06 ☐ Perform routine visual observations of washing activities and inspect nearby storm drains to detect and prevent discharges from cleaning activities.
- 07 ☐ Remove all excess materials such as drippings and residue by
- 08 ☐

APPLICABLE TENANTS/ DEPARTMENTS:

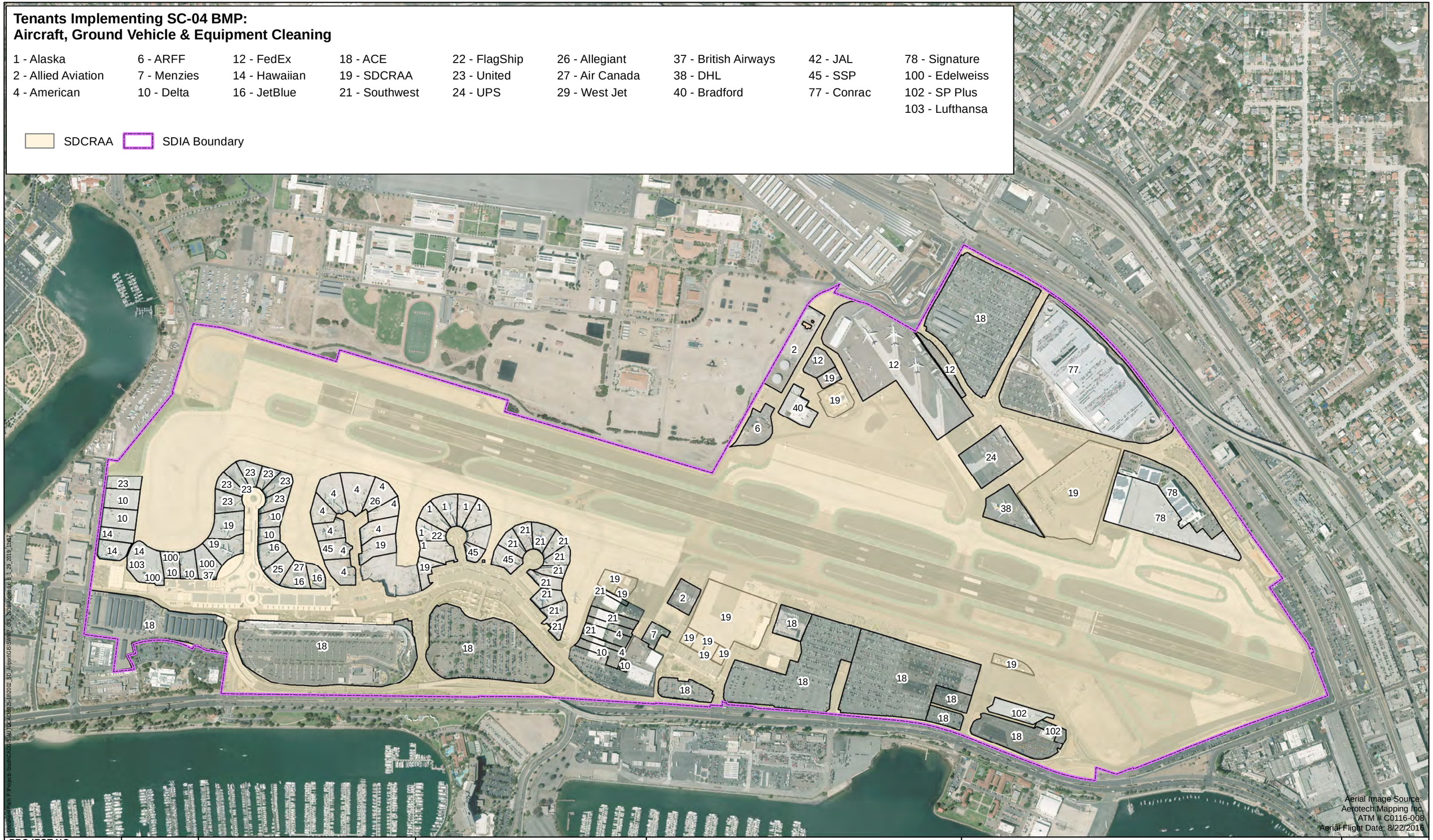
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Conrac
- Delta
- DHL
- Edelweiss
- FedEx
- Flagship
- Hawaiian
- JAL
- JetBlue
- Lufthansa
- Menzies
- SDCRAA
- Signature
- Southwest

BMP SC04	AIRCRAFT, GROUND VEHICLE, AND EQUIPMENT CLEANING	
- 09 ☐	using vacuum methods. Properly dispose of all waste materials. Use a hand-held hose equipped with positive shut-off nozzle to wash vehicles. Wash vehicles, aircraft, and equipment between 4pm to 10am from November 1 to May 31 and between 6pm to 10am from June 1 to October 31.	✈ SP Plus ✈ SSP ✈ United ✈ UPS ✈ WestJet
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Cleaning is conducted as needed. Equipment/tools to implement BMPs include rags, the closed loop system wash rack or the aircraft wash rack, pigs and cover mats, and shop vacuums.		
AUTHORIZED AIRCRAFT, GROUND VEHICLE AND EQUIPMENT CLEANING:		
☐	Use only the designated areas for aircraft, ground vehicle and equipment cleaning as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-04 BMP:
Aircraft, Ground Vehicle & Equipment Cleaning

1 - Alaska	6 - ARFF	12 - FedEx	18 - ACE	22 - FlagShip	26 - Allegiant	37 - British Airways	42 - JAL	78 - Signature
2 - Allied Aviation	7 - Menzies	14 - Hawaiian	19 - SDCRAA	23 - United	27 - Air Canada	38 - DHL	45 - SSP	100 - Edelweiss
4 - American	10 - Delta	16 - JetBlue	21 - Southwest	24 - UPS	29 - West Jet	40 - Bradford	77 - Conrac	102 - SP Plus
								103 - Lufthansa

SDCRAA SDIA Boundary



PROJECT NO.: 5025-18-2002	N	0 250 500 1,000 1,500 Feet	wood.	STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT San Diego, California
DATE: JANUARY 2019				SC-04 BMP: Aircraft, Ground Vehicle & Equipment Cleaning
DRAWN BY: CAB				FIGURE SC-04
CHECKED BY: AA/NP				

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BMP SC05	AIRCRAFT DEICING/ANTI-ICING

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from aircraft deicing and anti-icing procedures.

TARGETED ACTIVITIES:

- Aircraft Deicing
- Aircraft Anti-Icing

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges to the storm water collection system from aircraft deicing and anti-icing activities:

- ☐ Depending on conditions, apply only enough fluid to surfaces to ensure the safe operation of the aircraft. Excess fluid dripped to the ground contaminates soil and water if not properly contained.
- ☐ Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may occur.
- ☐ Recycle or dispose of the fluids in accordance with local, state, and federal regulations.
- ☐ Implement forthcoming recommendations of the FAA technical committee on deicing.
- ☐ Provide the appropriate level of employee training in the following areas: spill response and prevention, storm water pollution prevention education, right-to-know awareness training, and hazardous materials management.
- ☐ **DO NOT OVERSPRAY OR ALLOW ANY DISCHARGE OF DEICING/ANTI-ICING AGENTS TO A CATCH BASIN OR STORM DRAIN.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any discharges of aircraft deicing or anti-icing fluids have occurred.

POLLUTANTS of CONCERN:

- Ethylene Glycol
- Propylene Glycol

OPERATIONS:

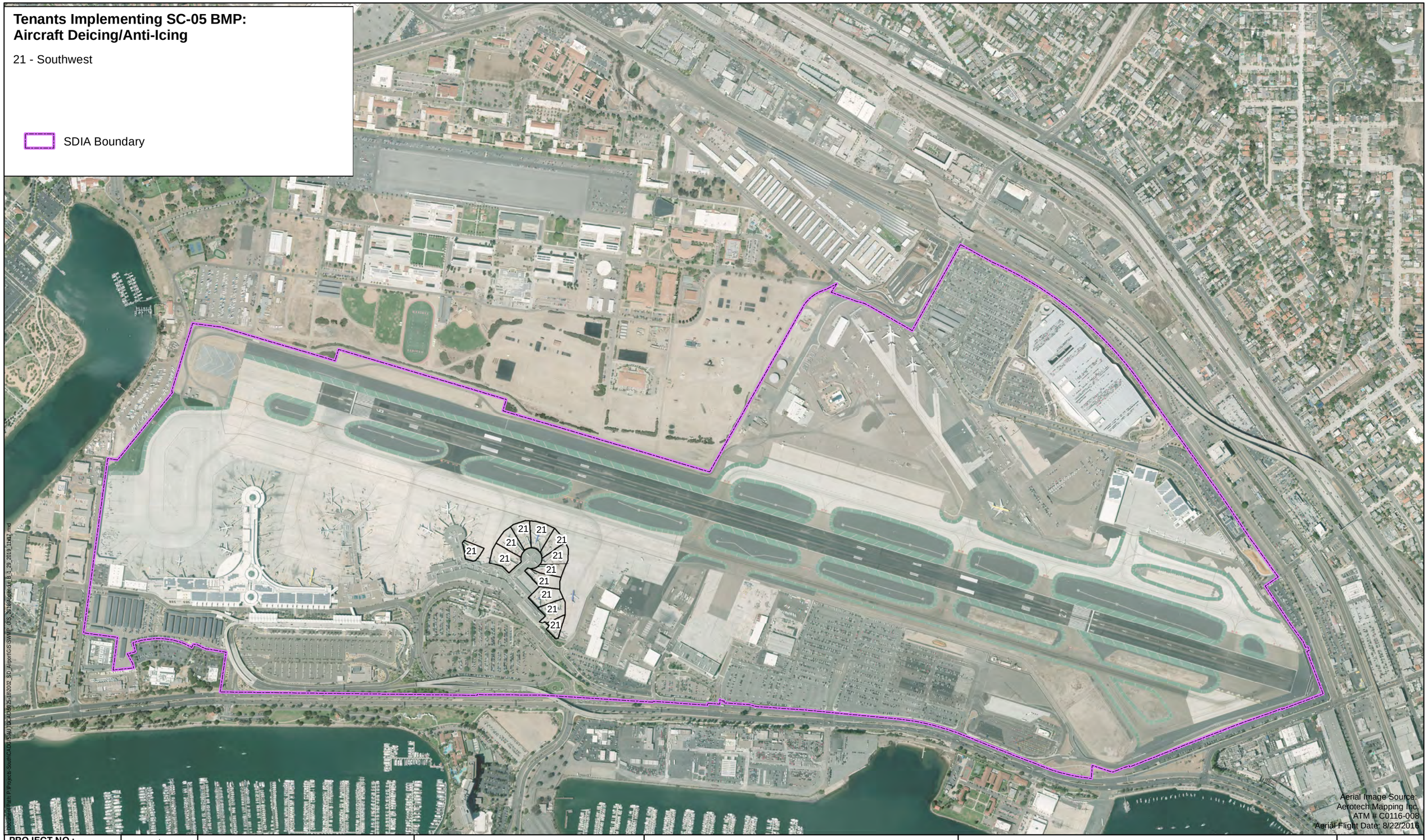
Sub-BMPs

- 01 ☐ Perform all anti-icing and deicing operations only in designated areas that are covered, bermed, enclosed or sloped/positioned away from the MS4.
- 02 ☐ Monitor deicing and anti-icing operations regularly to ensure quantities of fluids used are at a minimum while not jeopardizing aircraft safety and operation.
- 03 ☐ All fluids are captured or diverted to a structural treatment control BMP, recycling system, sanitary sewer or dead end sump with pump.
- 04 ☐ Clean the designated anti-icing and deicing ramp areas following deicing/anti-icing operations with wet-type sweepers to remove deicing fluids from the paved areas.

APPLICABLE TENANTS/ DEPARTMENTS:

- Southwest

BMP SC05	AIRCRAFT DEICING/ANTI-ICING	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Aircraft deicing is conducted as needed away from storm drains. Equipment/tools to implement BMPs include capture devices, spill kits, ramp scrubbers, and drums.		
AUTHORIZED LOCATIONS TO PERFORM AIRCRAFT ANTI-ICING AND DEICING ACTIVITIES:		
☐	Use only the designated areas for aircraft anti-icing and deicing activities as shown in the attached map.	
Date:		Version: 2.0



PROJECT NO.: 5025-18-2002	N	0 250 500 1,000 1,500 Feet	wood.	STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT San Diego, California	SC-05 BMP: Aircraft Deicing/Anti-Icing
DATE: JANUARY 2019					FIGURE
DRAWN BY: CAB					SC-05
CHECKED BY: AA/NP					

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BMP SC06	OUTDOOR LOADING/UNLOADING OF MATERIALS

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from loading and unloading of material and cargo.

TARGETED ACTIVITIES:

- Cargo Handling
- Fuel Storage
- Chemical Storage
- Equipment Storage

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent non-storm water discharges of pollutants from outdoor loading and unloading of materials to the storm water collection system:

- ☐ Transfer materials in paved areas, away from storm drain inlets.
- ☐ Contain and absorb leaks during transfers and spillage from hose disconnections; dispose of residue properly.
- ☐ Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any evidence of illegal discharges from outdoor material loading and unloading is observed.

POLLUTANTS of CONCERN:

- Fuel
- Pesticides/Herbicides/Fertilizers
- Oil and Grease
- Solvents/Cleaning Solutions
- Battery Acid

OPERATIONS:

Sub-BMPs

- 01 ☐ Contractors and haulers should be made aware of and adhere to BMPs specifications that are relevant to the loading and unloading of materials.
- 02 ☐ Loading and unloading areas should not be located directly in the path of storm drains.
- 03 ☐ Loading and unloading areas should be graded, bermed, covered or otherwise protected to prevent contact with rainfall and storm water run-on and runoff.
- 04 ☐ Equipment used for loading and unloading should be checked on a regular basis for leaks.
- 05 ☐ Use drip pans or other containment measures under hoses.
- 06 ☐ Keep loading and unloading areas free of spills and debris by containing and absorbing leaks during transfers and spillage from hose disconnections or cargo pallets; dispose of residue or debris properly.
- 07 ☐ Spill kits or other measures are available in accessible locations near areas where spills may be likely to occur to contain spills and/or prevent tracking off-site.

APPLICABLE TENANTS/ DEPARTMENTS:

- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- Bradford
- British Airways
- Conrac
- Delta
- DHL
- FedEx
- Flagship
- Frontier
- Hawaiian
- HFF
- HMS Host
- JAL
- JetBlue
- Lufthansa
- Menzies
- Mission Yogurt
- SDCRAA
- Signature
- Southwest
- Spirit
- SSP

BMP SC06	OUTDOOR LOADING/UNLOADING OF MATERIALS	
		✈ Sun Country ✈ United ✈ UPS ✈ WestJet
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Loading/unloading is conducted as on a daily basis. Equipment/tools to implement BMPs include capture devices, drip pans, spill kits, brooms, and drums.		
AUTHORIZED LOCATIONS FOR THE OUTDOOR LOADING AND UNLOADING OF SIGNIFICANT MATERIALS:		
☐	Use only the designated areas for outdoor loading and unloading of significant materials as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-06 BMP:
Outdoor Loading/Unloading of Materials

1 - Alaska	7 - Menzies	13 - Frontier	16 - JetBlue	22 - FlagShip	26 - Allegiant	29 - West Jet	38 - DHL	45 - SSP	77 - Conrac
2 - Allied Aviation	10 - Delta	14 - Hawaiian	19 - SDCRAA	23 - United	27 - Air Canada	35 - Spirit	40 - Bradford	46 - HFF	78 - Signature
4 - American	12 - FedEx	15 - HMS Host	21 - Southwest	24 - UPS	28 - Sun Country	37 - British Airways	42 - JAL	47 - Mission Yogurt	103 - Lufthansa

SDCRAA SDIA Boundary

PROJECT NO.: 5025-18-2002	N	0 250 500 1,000 1,500 Feet	wood.	STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT San Diego, California
DATE: JANUARY 2019				SC-06 BMP: Outdoor Loading/Unloading of Materials
DRAWN BY: CAB				FIGURE SC-06
CHECKED BY: AA/NP				

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BMP SC07	OUTDOOR MATERIAL STORAGE

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from outdoor storage areas for significant material (e.g., fuels, chemicals, bagged material on pallets, soils or asphalt materials bulk storage, deicing, compounds, etc.)

TARGETED ACTIVITIES:

- Aircraft/Vehicle/Equipment Maintenance
- Aircraft/Vehicle Fueling
- Fuel/Chemical/Equipment Storage
- Cargo Handling

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants from outdoor storage areas to the storm water collection system:

- ☐ Store all significant materials indoors or under cover areas with secondary containment (e.g. dog house design).
- ☐ Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan if required.
- ☐ Install overflow protection devices on ASTs to warn the operator or install automatic shut-off transfer pumps.
- ☐ Restrict access to AST, piping, valves.
- ☐ Properly label all storage containers
- ☐ Train personnel in the handling and management of hazardous materials.
- ☐ Store hazardous materials away from high-traffic areas to prevent accidental spills or damage to storage containers. Make storage containers highly visible to traffic with traffic cones or posts.
- ☐ Use tarpaulins, plastic sheeting (e.g. storm resistant polyethylene, polypropylene, or hypalon covering), roofs, buildings, and other enclosures for temporary or permanent coverings that are effective in preventing storm water contamination.
- ☐ Stack storage containers in accordance with the manufacturers' directions.
- ☐ In hazardous materials storage areas ensure sufficient aisle space to provide access for inspections and to improve the ease of material transport.
- ☐ Place adequate spill kits in appropriate locations.

POLLUTANTS of CONCERN:

- Fuel
- Solvents/Cleaning Solutions
- Deicing/Anti-Icing Fluids

BMP SC07	OUTDOOR MATERIAL STORAGE

OPERATIONS:		APPLICABLE TENANTS/ DEPARTMENTS:
Sub-BMPs		✈ ACE ✈ Air Canada ✈ Alaska ✈ Allegiant ✈ Allied Aviation ✈ American Airlines ✈ ARFF ✈ Cartwright ✈ Delta ✈ DHL ✈ Edelweiss ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HMS Host ✈ JAL ✈ JetBlue ✈ Lufthansa ✈ Menzies ✈ SDCRAA ✈ Signature ✈ Southwest ✈ Spirit ✈ SSP ✈ United ✈ UPS ✈ WestJet
- 01 ☐	Outdoor material storage areas and equipment should not be located directly in the path of storm drains.	
- 02 ☐	Outdoor material storage areas have areas with overhead cover and secondary containment.	
- 03 ☐	Outdoor material storage areas are prevented from contacting stormwater run-on and run-off (e.g., by the use of berms, wood pallets etc).	
- 04 ☐	Cover and contain material stockpiles or implement erosion control practices at the perimeter of the site and at any inlets or catch basins to prevent the off-site transport of eroded material.	
- 05 ☐	Cover wood products treated with preservative chemicals with tarps or store them indoors.	
- 06 ☐	Install protection guards (bollards, posts, or guardrails) around ASTs and piping to prevent damage from vehicles or forklifts and any subsequent release.	
- 07 ☐	Regular inspections are performed on tanks, storage containers, and berms to check for corrosion, structural failure, loose fittings, poor welds, leaks etc. Repairs or replacements are performed as needed.	
- 08 ☐	Liquid materials in ASTs should be stored in double-walled, valved storage tanks or within concrete bermed secondary containment areas to provide the capacity to contain the entire volume of the single largest container, with sufficient freeboard to contain precipitation. The area inside the curb should slope to a locked or valved drain.	
- 09 ☐	Precipitation from bermed areas should be drained to the sanitary sewer if available, or inspected and tested according to applicable regulations prior to its release to a storm drain. The drain must have a positive control, such as a lock, valve, or plug, below the product level in the tank to prevent release of contaminated liquids.	
- 10 ☐	Properly dispose of ponded storm water removed from bermed or containment areas.	
- 11 ☐	The facility/operation has and displays a County hazardous materials permit for hazardous materials storage.	
- 12 ☐	Maintain an accurate, up-to-date inventory of the materials delivered and stored on site.	
- 13 ☐	Do not permanently store equipment and materials in the bed of a pickup truck. If storing temporarily, provide cover and containment.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on		

BMP SC07	OUTDOOR MATERIAL STORAGE	
structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Outdoor material storage occurs on a daily basis. Equipment/tools to implement BMPs include spill pallets, outdoor sheds, overpack containers, tarps, flammable materials storage lockers, bermed or containment areas, indoor or covered storage areas, fiber rolls, wooden pallets, spill kits, brooms, and drums.		
AUTHORIZED LOCATIONS FOR THE OUTDOOR STORAGE OF SIGNIFICANT MATERIALS:		
☐	To implement BMPs for the prevention of discharges of pollutants from outdoor storage areas, store significant materials at the designated storage areas as shown in the attached map.	
Date:		Version: 2.0

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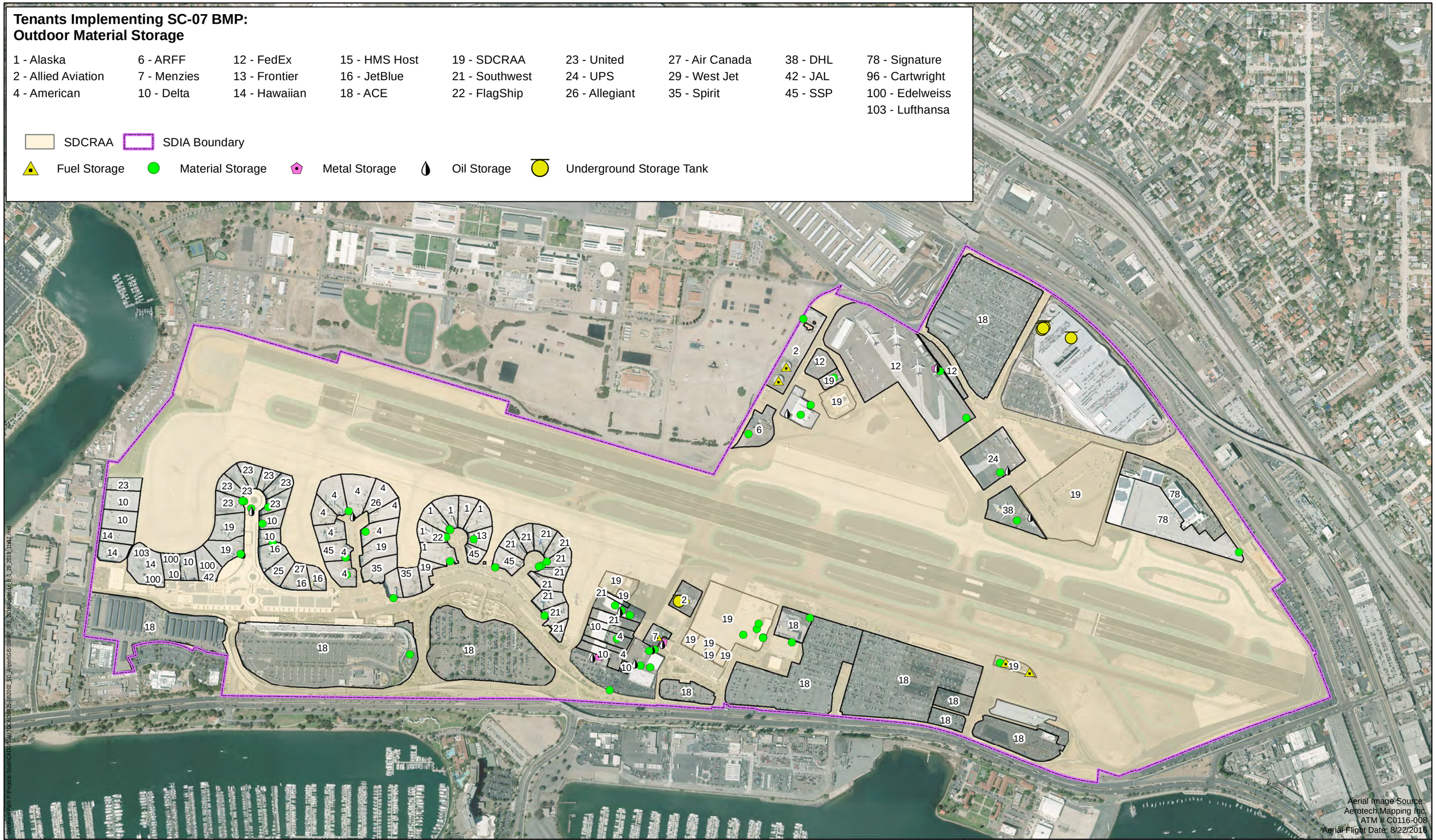
Tenants Implementing SC-07 BMP:
Outdoor Material Storage

1 - Alaska	6 - ARFF	12 - FedEx	15 - HMS Host	19 - SDCRAA	23 - United	27 - Air Canada	38 - DHL	78 - Signature
2 - Allied Aviation	7 - Menzies	13 - Frontier	16 - JetBlue	21 - Southwest	24 - UPS	29 - West Jet	42 - JAL	96 - Cartwright
4 - American	10 - Delta	14 - Hawaiian	18 - ACE	22 - FlagShip	26 - Allegiant	35 - Spirit	45 - SSP	100 - Edelweiss
								103 - Lufthansa

SDCRAA
SDIA Boundary
Fuel Storage
Material Storage
Metal Storage
Oil Storage
Underground Storage Tank



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

N

0 250 500 1,000 1,500
Feet

wood.

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

SC-07 BMP:
Outdoor Material Storage

FIGURE
SC-07

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BMP SC08	WASTE HANDLING AND DISPOSAL

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from waste handling, storage and disposal by through source reduction, re-use, and recycling; and preventing run-on and runoff from waste management areas, including waste/garbage collection areas.

TARGETED ACTIVITIES:

- Fuel/Chemical/Oil Waste Storage
- Painting/Stripping
- Waste/Garbage Collection

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants from waste handling, storage and disposal to the storm water collection system:

- ☐ Inspect on a regular basis waste/garbage collection areas for spills and waste/garbage management containers for leaks.
- ☐ Enclose or berm waste/garbage storage areas, if possible, to prevent contact with storm water run-on and run-off.
- ☐ Place adequate spill kits in appropriate locations.
- ☐ Engage in waste reduction programs (e.g. recycling and food waste composting). Investigate new processes and techniques to turn waste into a resource for others in order to reduce the impact people have on the environment.

POLLUTANTS of CONCERN:

- Oil and Grease
- Paints
- Solvents/Cleaning Solutions
- Trash and Debris
- Vehicle Fluids

OPERATIONS:

Sub-BMPs

- 01 ☐ Reduce the amount of waste generated (e.g., use only amount needed, use solvents more than once, practice good inventory control, do not over-buying, purchase long-lasting products, etc.).
- 02 ☐ Recycle materials whenever possible.
- 03 ☐ Designate waste/recycling areas with restrict access.
- 04 ☐ Do not locate waste/recycling areas directly in the path of storm drains.
- 05 ☐ Provide secondary containment and cover for wastes.
- 06 ☐ Wastes that are not contained or covered are prevented from contacting storm water and run-on and run-off by the use of berms.
- 07 ☐ All dumpsters are covered and kept closed and any drain holes plugged.
- 08 ☐ Inspect on a frequent basis all waste collection and storage containers for evidence of leaks, spills, compromised structural integrity, and proper closure seal.
- 09 ☐ Train all employees in the proper handling and disposal of waste materials.

APPLICABLE TENANTS/ DEPARTMENTS:

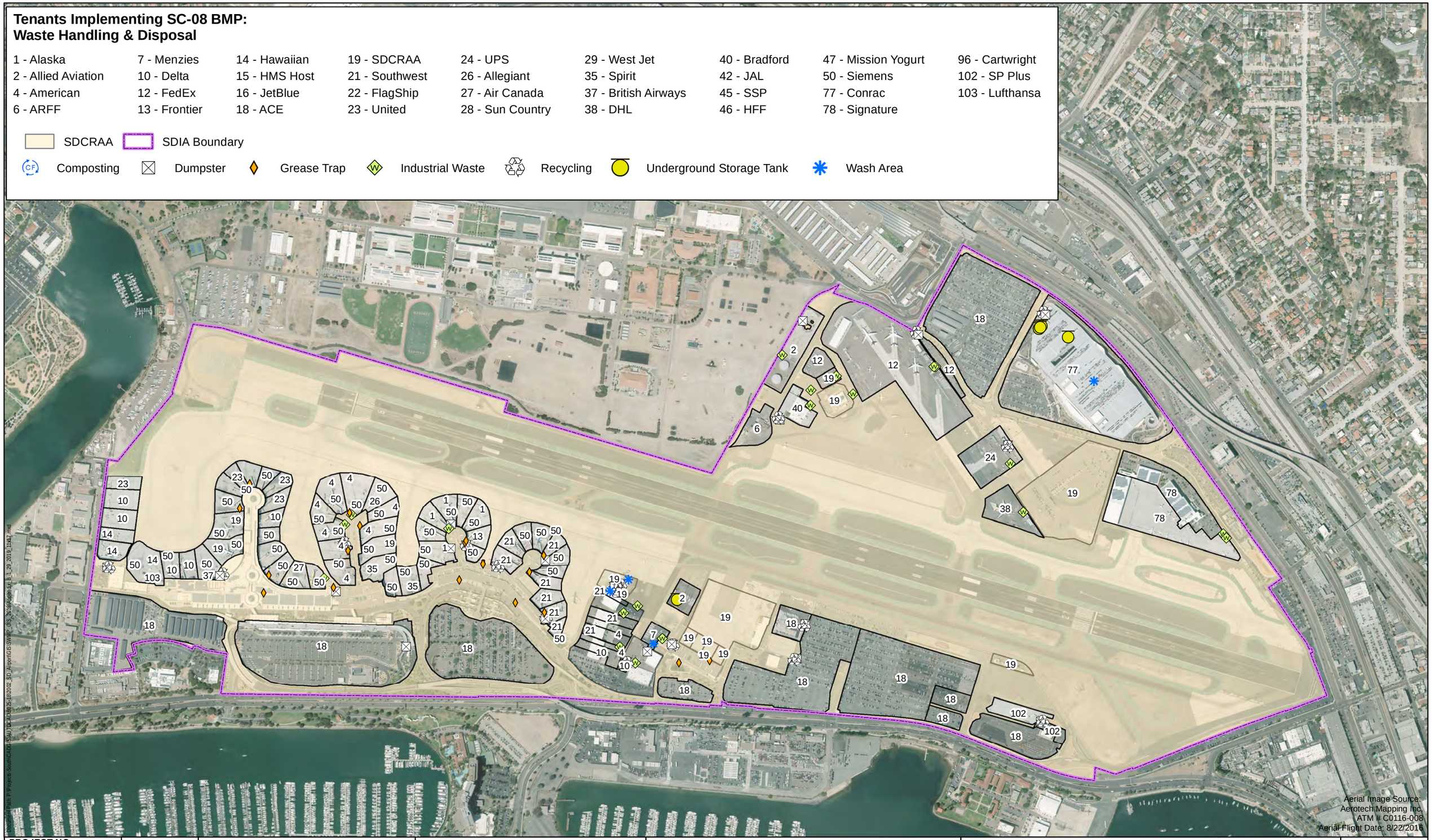
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Cartwright
- Conrac
- Delta
- DHL
- FedEx
- Flagship
- Frontier
- Hawaiian
- HFF
- HMS Host
- JAL
- JetBlue
- Lufthansa
- Menzies
- Mission Yogurt

BMP SC08	WASTE HANDLING AND DISPOSAL	
- 10 ☐	Store wastes and recyclable materials in appropriate containers and segregate and properly labeled them.	✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
- 11 ☐	Wastes are properly characterized and disposed.	
- 12 ☐	Prevent overflow of waste containers by timely pickup/service and removal.	
- 13 ☐	Perform dumpster cleaning in designated areas that are bermed to contain wash water. Properly dispose of all fluids collected or discharge to the sanitary sewer.	
- 14 ☐	Track waste generated, stored, and disposed.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Waste handling and disposal occurs on a daily basis. Equipment/tools to implement BMPs include spill pallets, outdoor sheds, overpack containers, tarps, bermed or containment areas, sumps and underground tanks, wooden pallets, covered dumpsters, covered storage areas, spill kits, brooms, and drums.		
AUTHORIZED LOCATIONS FOR WASTE HANDLING AND DISPOSAL:		
☐	Conduct waste handling and disposal activities in the designated areas as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-08 BMP:
Waste Handling & Disposal

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	47 - Mission Yogurt	96 - Cartwright
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	50 - Siemens	102 - SP Plus
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	77 - Conrac	103 - Lufthansa
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	46 - HFF	78 - Signature	

SDCRAA
SDIA Boundary
Composting
Dumpster
Grease Trap
Industrial Waste
Recycling
Underground Storage Tank
Wash Area



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

N

0 250 500 1,000 1,500
Feet

wood.

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

SC-08 BMP:
Waste Handling & Disposal

FIGURE
SC-08

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BMP SC09	BUILDING AND GROUNDS MAINTENANCE

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from building and grounds maintenance by washing and cleaning up with as little water as possible, preventing and cleaning up spills immediately, keeping debris from entering storm drains, and maintaining the storm water collection system.

TARGETED ACTIVITIES:

- Building Maintenance
- Grounds Maintenance

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants from building and grounds maintenance to the storm water collection system:

☐ Regularly clean paved surfaces that are exposed to industrial activity. Use "dry" cleaning techniques, such as sweeping, whenever possible.

☐ Clean any catch basins that receive runoff from maintenance areas on a regular basis. Use a vacuum truck to remove accumulated materials. Do not flush wastes into the storm drain system.

☐ Minimize use of pesticides, herbicides, and fertilizers and use according to directions. Seek less harmful/toxic products to replace ones currently used.

☐ Reduce the exposure of galvanized metal structures to rainfall. Possible actions to reduce exposure include; application of a coating of inert paint to the metal surface, replace uncoated galvanized metal fence with vinyl coated galvanized steel or polyester coated galvanized steel.

☐ Investigate the use of downspout filters on roof downspouts to minimize pollutants in roof runoff.

☐ Use safer non-toxic products for the outside painting of buildings and grounds maintenance. Recycle residual paints, solvents, lumber, and other materials (such as landscape waste) as much as possible.

☐ Reduce the exposure of galvanized metal structures to rainfall, by using coated galvanized structures or coating or painting existing structures with non-toxic paints or coatings.

☐ Encourage proper xeriscaping management and landscaping, including the use of native vegetation, to reduce irrigation needs.

☐ When applying pesticides, use the following practices: Do not use pesticides if rain is expected or is occurring, do not mix or prepare pesticides for application near storm drains, and apply pesticides only when wind speed is low.

☐ Prohibit over-irrigation of landscaped areas

POLLUTANTS of CONCERN:

- Pesticides/Herbicides/ Fertilizers
- Oil and Grease
- Sediment
- Landscape Waste
- Metals
- Cleaning Solutions
- Bacteria

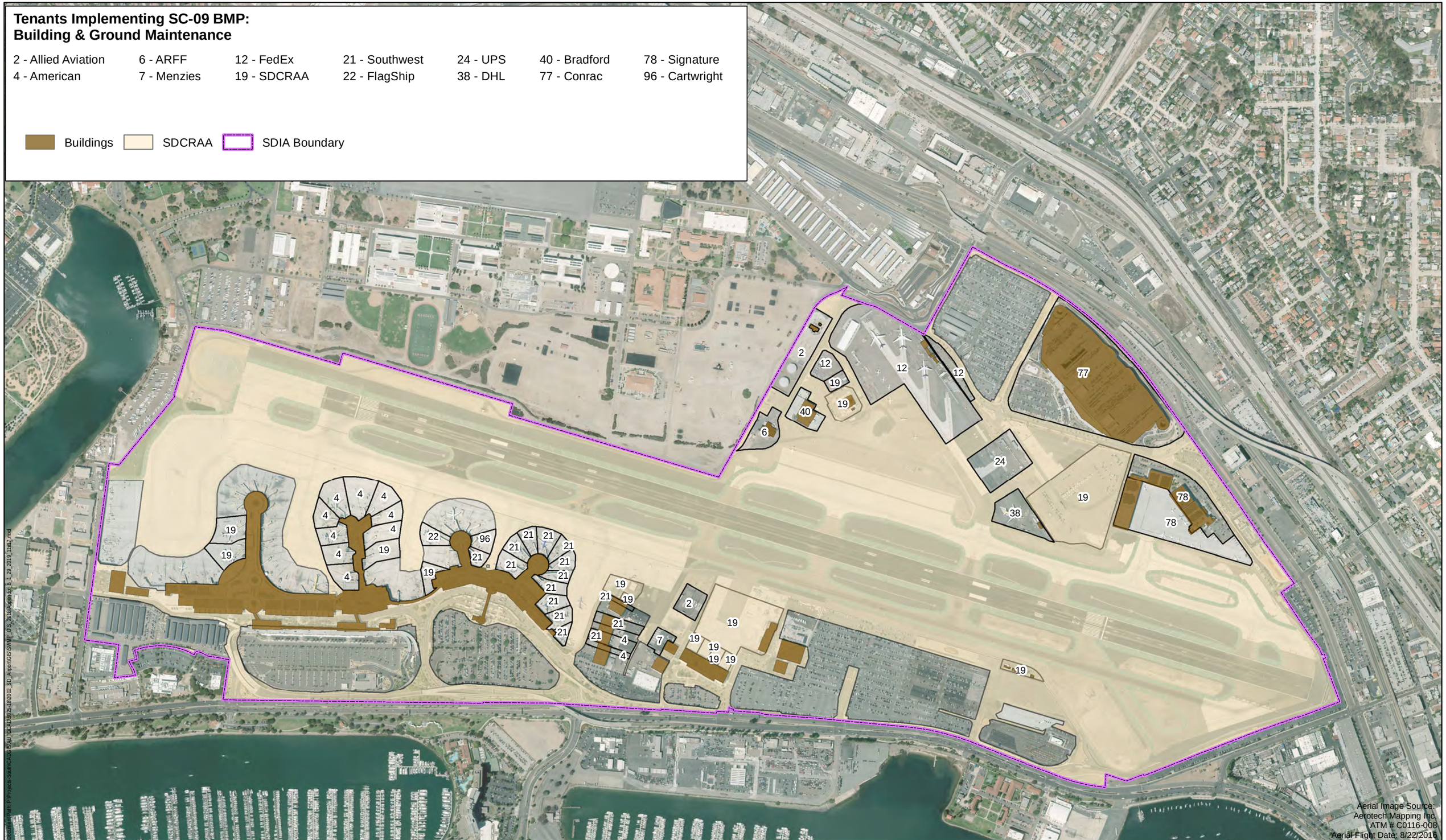
BMP SC09	BUILDING AND GROUNDS MAINTENANCE

OPERATIONS:		APPLICABLE TENANTS/ DEPARTMENTS:
Sub-BMPs		✈ Allied Aviation ✈ American ✈ ARFF ✈ Bradford ✈ Cartwright ✈ Conrac ✈ DHL ✈ FedEx ✈ Flagship ✈ Menzies ✈ SDCRAA ✈ Signature ✈ Southwest ✈ UPS
- 01 ☐	Landscape, re-vegetate, or install erosion and sediment controls in areas of exposed soil.	
- 02 ☐	Use hand weeding when practical.	
- 03 ☐	Implement integrated pest management methods, minimize the use of pesticides, herbicides, and fertilizers and use according to directions.	
- 04 ☐	Use temporary BMPs such as portable booms and vacuum trucks to contain water from outdoor building or structure washdown activities. Use reclaimed water, where possible, and collect and properly dispose of all waste water through a permitted connection to the sanitary sewer.	
- 05 ☐	Compost or recycle grass trimmings, leaves, sticks, or other collected vegetation, where possible, or dispose of appropriately.	
- 06 ☐	Remove temporary stockpiled materials at the end of the day or place away from watercourses and drainage inlets, and berm and cover stockpiles to prevent material releases to the storm drain.	
- 07 ☐	Clean pavement or sidewalk (using dry methods or reclaimed water) of any residual materials or spills before applying irrigation water, and capture and properly dispose of any wash water.	
- 08 ☐	Repair damaged asphalt when degradation is observed.	
- 09 ☐	Reduce the exposure of galvanized or rusty metal structures to rainfall, where possible.	
	SEE ALSO BMP SC12	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Building and grounds maintenance occurs on a daily basis. Equipment/tools to implement BMPs include portable booms, vacuum trucks, tarps, and fiber rolls.		
AUTHORIZED BUILDING AND GROUNDS MAINTENANCE LOCATIONS:		
☐	To implement BMPs for the prevention of discharges or pollutants from buildings and grounds maintenance, perform maintenance activities within the designated areas as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-09 BMP:
Building & Ground Maintenance

2 - Allied Aviation	6 - ARFF	12 - FedEx	21 - Southwest	24 - UPS	40 - Bradford	78 - Signature
4 - American	7 - Menzies	19 - SDCRAA	22 - FlagShip	38 - DHL	77 - Conrac	96 - Cartwright

Buildings | 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

N

0 250 500 1,000 1,500
Feet

wood.

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

SC-09 BMP:
Building & Ground Maintenance

FIGURE
SC-09

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BMP SC10	EMPLOYEE TRAINING

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from activities through implementing an education program targeting employees, tenants, vendors, contractors and the public.

TARGETED ACTIVITIES:

- All Maintenance
- All Fueling
- All Washing
- Equipment Cleaning
- Cargo Handling
- All Storage
- Painting/Stripping
- Floor Washdowns
- Aircraft Deicing/Anti-Icing
- Garbage Collection
- Aircraft Lavatory Service
- Fire Fighting Equipment Testing
- Potable Water System Flush
- Runway Rubber Removal

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent non-storm water discharges to the storm water collection system:

☐ Implement an annual storm water pollution prevention education program for employees, tenants, contractors and the public that cover storm water issues, BMPs, spill cleanup, hazardous materials management, right-to-know awareness, and SWPPP implementation.

☐ Provide adequate implementation training for facilities with a Spill Prevention Control and Countermeasure (SPCC) Plan.

☐ Adequately train employees in the use of spill response equipment and materials.

☐ Train construction contractors on the regulations prohibiting cross connections between sanitary sewers and storm drains.

POLLUTANTS of CONCERN:

- Oil and Grease
- Vehicle Fluids
- Fuel
- Solvents/Cleaning Solutions
- Deicing/Anti-Icing
- Battery Acid
- Pesticides/Herbicides/ Fertilizers
- Paint
- Aircraft Fire Fighting Foam
- Metals
- Dumpster Wastes
- Sediment
- Landscape Waste\
- Floatables
- Lavatory Chemical Wastes
- Potable Water System Chemicals
- Rubber Particles

OPERATIONS:

Sub-BMPs

- 01 ☐ Update the Authority SWMP and tenant SWPPPs covering the facility or operation on a periodic basis and complete and insert the amendment pages for the SWMP or SWPPP, as needed.

- 02 ☐ Train Authority and tenant employees and contractors in storm water pollution prevention education covering all storm water issues, implementation and effectiveness of BMPs, spill prevention and cleanup, hazardous materials management, right-to-know awareness, and SWMP or SWPPP implementation.

- 03 ☐ Implement additional training programs for relevant Authority and

APPLICABLE TENANTS/ DEPARTMENTS:

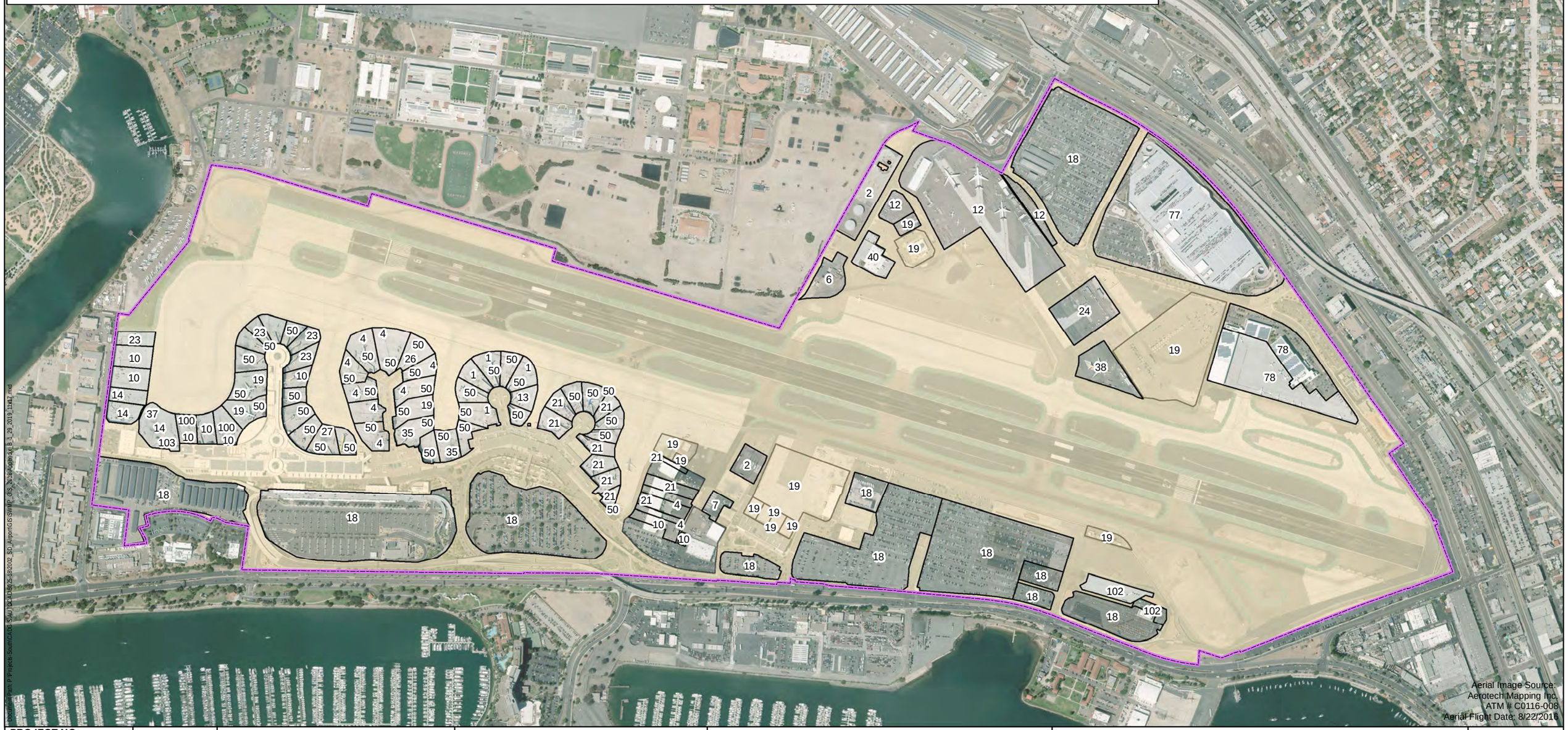
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Cartwright

BMP SC10	EMPLOYEE TRAINING	
- 04 ☐	tenant employees and contractors covering any Spill Plan implementation, the prohibition on cross-connections between sanitary sewers and storm drains, and contractor responsibility to comply with adopted BMPs. Maintain training records for 5 years of current employees that have participated in the storm water pollution prevention education program and other related training programs.	✈ Conrac ✈ Delta ✈ DHL ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HFF ✈ HMS Host ✈ JAL ✈ JetBlue ✈ Lufthansa ✈ Menzies ✈ Mission Yogurt ✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Training frequencies and tools are described in Sections 7.0 and 9.0.		
AUTHORIZED LOCATIONS TO IMPLEMENT BMPs TO PREVENT NON-STORM WATER DISCHARGES:		
☐	To implement BMPs for the prevention of non-storm water discharges, put into practice all lessons learnt from training in the designated areas as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-10 BMP:
Employee Training

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	47 - Mission Yogurt	96 - Cartwright
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	50 - Siemens	100 - Edelweiss
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	77 - Conrac	102 - SP Plus
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	46 - HFF	78 - Signature	103 - Lufthansa

SDCRAA SDIA Boundary



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DATE:	JANUARY 2019
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wood.

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

SC-10 BMP:
Employee Training

FIGURE
SC-10

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BMP SC11	LAVATORY SERVICE OPERATION

PURPOSE:
Eliminate discharges to the storm drain system associated with ground servicing of aircraft lavatory facilities.

TARGETED ACTIVITIES:

- Aircraft Lavatory Service
- Lavatory Truck/Cleanout Backflushing

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges to the storm drain system associated with ground servicing of aircraft lavatory facilities:

☐ Use only surfactants and disinfectants approved for discharge to the sanitary sewer system.

POLLUTANTS of CONCERN:

- Lavatory Chemicals
- Lavatory Waste
- Lavatory Truck Wash Water

OPERATIONS:

Sub-BMPs	
- 01 ☐	Triturator facilities are covered and have low roll-over type berming.
- 02 ☐	Triturator facilities should not be located directly in the path of storm drains.
- 03 ☐	Perform regular inspections of all hoses and fittings used for transferring lavatory waste and keep the equipment in good condition.
- 04 ☐	Absorbent booms, spill kits and other containment equipment are present on lavatory service equipment and at the triturator facility.
- 05 ☐	Perform all mixing and transfers of surfactants and disinfectants within the covered and bermed triturator area or under a cover.
- 06 ☐	Use drip pans when draining aircraft lavatory systems. Immediately dump the collected drippage into the bulk storage tank on the lavatory service cart or lavatory service truck.
- 07 ☐	Immediately clean and properly dispose of all spills of lavatory wastes and lavatory chemicals at the triturator facility.
- 08 ☐	Secure all hoses, valves, and equipment when transporting lavatory waste.
- 09 ☐	Perform lavatory truck cleanouts/backflushing and lavatory waste discharging to sanitary sewer connections ONLY at triturator facilities.
- 10 ☐	Completely drain all hoses.
- 11 ☐	Use lavatory service cart or truck with spill prevention equipment installed, where possible.

APPLICABLE TENANTS/ DEPARTMENTS:

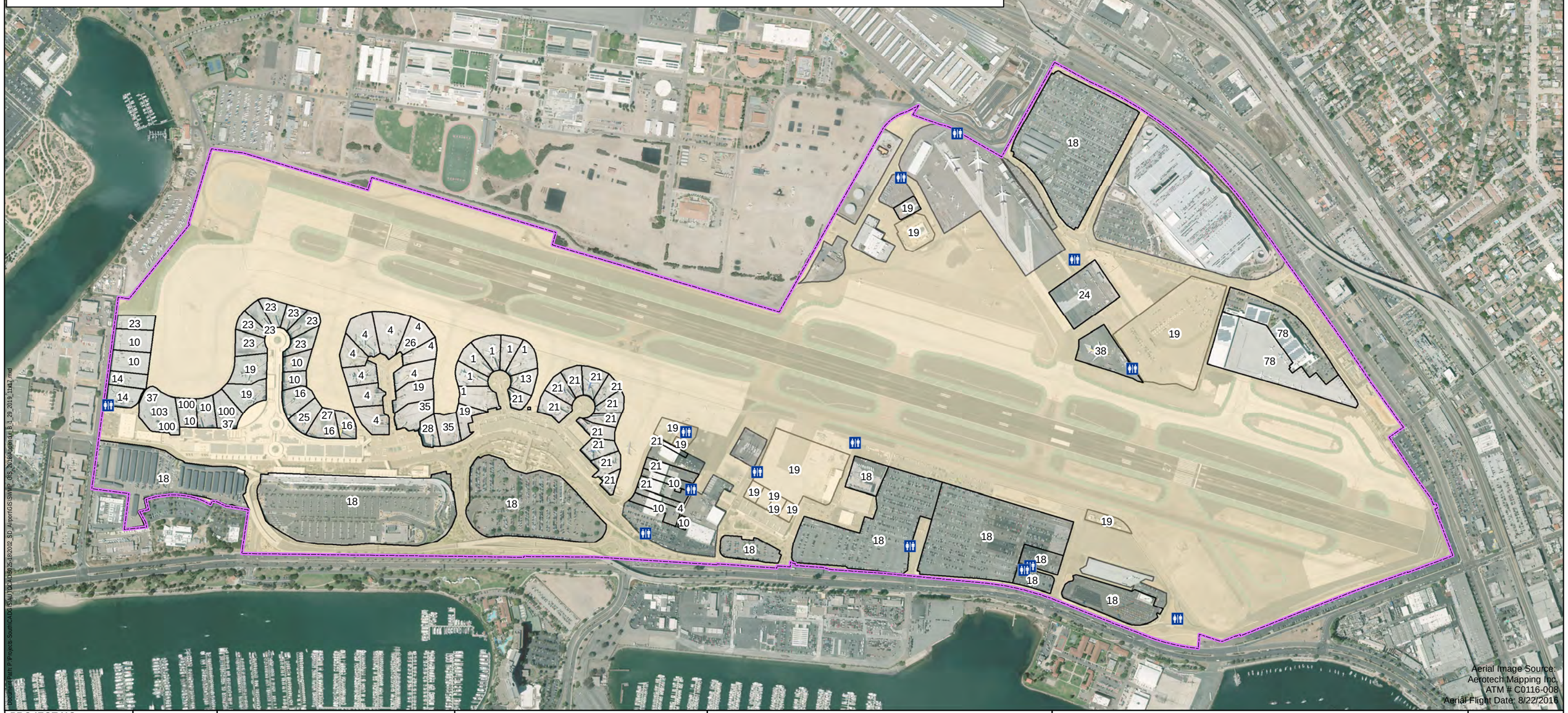
- ACE
- Air Canada
- Alaska
- Allegiant
- American Airlines
- British Airways
- Delta
- DHL
- Edelweiss
- Frontier
- Hawaiian
- JAL
- Jet Blue
- Lufthansa
- SDCRAA
- Signature
- Southwest
- Spirit
- Sun Country
- United
- UPS
- WestJet

BMP SC11	LAVATORY SERVICE OPERATION	
- 12 ☐	Temporary sanitary facilities must have secondary containment and be located away from watercourses, drainage facilities, traffic circulation and high wind areas.	
- 13 ☐	Regularly inspect temporary sanitary facilities for leaks and spills and clean or replace when necessary.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Lavatory service operations occur on a daily basis. Equipment/tools to implement BMPs include secondary containment, bermed areas, overhead cover at triturator, drip pans, spill kits, and drums.		
AUTHORIZED LOCATIONS FOR LAVATORY SERVICE OPERATIONS:		
☐	Use only the designated areas for ground servicing of aircraft lavatory facilities as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-11 BMP:
Lavatory Service Operation

1 - Alaska	13 - Frontier	18 - ACE	23 - United	27 - Air Canada	35 - Spirit	42 - JAL	103 - Lufthansa
4 - American	14 - Hawaiian	19 - SDCRAA	24 - UPS	28 - Sun Country	37 - British Airways	78 - Signature	
10 - Delta	16 - JetBlue	21 - Southwest	26 - Allegiant	29 - West Jet	38 - DHL	100 - Edelweiss	

SDCRAA
SDIA Boundary
Portable Toilet



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

SC-11 BMP:
Lavatory Service Operation

FIGURE
SC-11

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BMP SC12	OUTDOOR WASHDOWN/SWEEPING (APRON WASHING, RAMP SCRUBBING)

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from outdoor washdown and sweeping operations.

TARGETED ACTIVITIES:

- Apron Washing
- Ramp Scrubbing
- Outdoor Washdown
- Road Sweeping
- Ramp Sweeping

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent non-storm water discharges of pollutants from outdoor washdown and sweeping operations to the storm water collection system:

- ☐ Use biodegradable or non-toxic cleaning products for outdoor washdown activities.
- ☐ Investigate newer sweeping technologies such as high-efficiency sweepers or the CASQA-recommended regenerative air and vacuum-assisted dry sweepers.
- ☐ Investigate non-potable or alternative sources of water when performing outdoor washdowns. Reuse water as much as possible before disposing it.
- ☐ Follow water conservation practices when performing washdowns.
- ☐ **DO NOT DISCHARGE WASH WATER TO A STORM DRAIN.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any discharges associated with outdoor washdowns have occurred.

POLLUTANTS of CONCERN:

- Oil and Grease
- Solvents/Cleaning Solutions
- Fuel
- Aircraft Fire Fighting Foam
- Deicing/Anti-Icing Fluids
- Sediment
- Floatables

OPERATIONS:

Sub-BMPs

- 01 ☐ Inspect and maintain sweeping and scrubbing equipment regularly to ensure effectiveness at removing pollutants and to avoid leaks.
- 02 ☐ Roads, ramp areas, apron areas, and, if feasible, runway/taxiway areas are swept on a regular basis.
- 03 ☐ Perform sweeping during dry weather using dry sweeping techniques where feasible.
- 04 ☐ Operate sweepers at manufacturer-recommended optimal speeds.
- 05 ☐ Properly dispose of debris and sediment from sweeping.
- 06 ☐ Berm outdoor washdown areas to contain the wash water and to prevent run-on to adjacent areas.
- 07 ☐ Minimize the amount of water used during outdoor washdown

APPLICABLE TENANTS/ DEPARTMENTS:

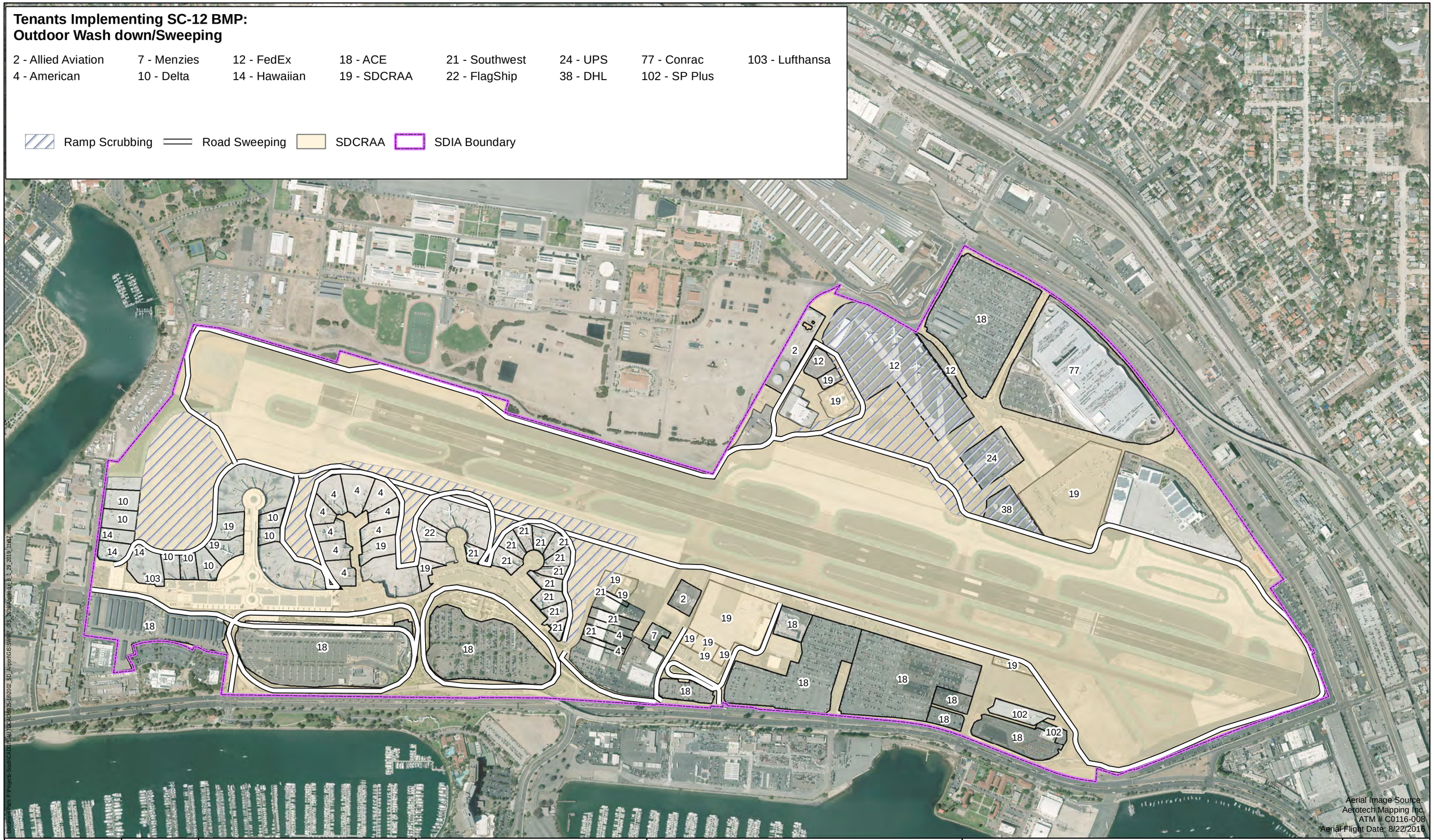
- ACE
- Allied Aviation
- American Airlines
- Conrac
- Delta
- DHL
- FedEx
- Flagship
- Hawaiian
- Lufthansa
- Menzies
- SDCRAA
- SP Plus
- UPS

BMP SC12	OUTDOOR WASHDOWN/SWEEPING (APRON WASHING, RAMP SCRUBBING)	
	activities.	
- 08 ☐	Wash water is collected and filtered and reused, or discharged to the sanitary sewer system through a permitted connection at designated and approved discharge facilities (i.e., dewatering bin).	
- 09 ☐	Maintain records of the sweeping or scrubbing activities including the miles swept or scrubbed and the amount of waste collected.	
- 10 ☐	Do not use a running hose to wash down sidewalks, or other hard surface areas. A water-efficient, filtering and recycling device must be used and all wash water must be prevented from entering the storm drain system (curb gutters, streets, alleys, and inlets).	
- 11 ☐	Use reclaimed or recycled/filtered water.	
- 12 ☐	Roads, ramp areas, and apron areas are scrubbed on an as-needed basis.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Outdoor washdown/sweeping occurs on a daily basis. Equipment/tools to implement BMPs include recycling/filtering power washers, ramp scrubbers, mechanical and regenerative air sweepers, booms, containment devices, spill kits, brooms, dumpsters, dewatering bins and drums.		
AUTHORIZED LOCATIONS FOR OUTDOOR WASHDOWN AND SWEEPING ACTIVITIES:		
☐	To implement BMPs for the prevention of non-storm water discharges, perform outdoor washdown and sweeping activities in the designated areas as shown on the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-12 BMP:
Outdoor Wash down/Sweeping

2 - Allied Aviation	7 - Menzies	12 - FedEx	18 - ACE	21 - Southwest	24 - UPS	77 - Conrac	103 - Lufthansa
4 - American	10 - Delta	14 - Hawaiian	19 - SDCRAA	22 - FlagShip	38 - DHL	102 - SP Plus	

Ramp Scrubbing | Road Sweeping | SDCRAA | SDIA Boundary



PROJECT NO.:	5025-18-2002
DATE:	JANUARY 2019
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wood.

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

SC-12 BMP:
Outdoor Wash down/Sweeping

FIGURE
SC-12

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BMP SC13	FIRE FIGHTING FOAM DISCHARGE

PURPOSE:
To prevent the discharge of pollutants to storm water associated with flushing or testing of fire fighting foam.

TARGETED ACTIVITIES:

- Fire Fighting Foam Testing

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants from fire fighting foam testing entering the storm water collection system:

- ☐ Preform fire fighting foam testing during dry weather and in designated areas only.
- ☐ Before performing fire fighting foam testing, block off all storm drain inlets within the designated testing area.
- ☐ All discharges should be collected and disposed of properly.
- ☐ **DO NOT DISCHARGE AFFF OR WASTEWATER TO A CATCH BASIN OR STORM DRAIN.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any discharges of AFFF have occurred.

POLLUTANTS of CONCERN:

- Aircraft Fire Fighting Foam (AFFF)

OPERATIONS:

Sub-BMPs

- 01 ☐ Do not perform fire fighting foam testing directly in the path of storm drains.
- 02 ☐ Inspect and test fire fighting equipment on a regular basis.
- 03 ☐ Perform fire fighting foam testing ONLY in a designated area that captures or divers all foam waste to a structural treatment control, sanitary sewer, or dead end sump with pump.
- 04 ☐ Service sump(s) and/or oil/water separators on a regular basis.
- 05 ☐ Prevent all designated testing areas from contacting storm water run on and run-off or from reaching storm drains (e.g. by the use of berms and sandbags).

APPLICABLE TENANTS/ DEPARTMENTS:

- Allied Aviation
- ARFF

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

BMP FREQUENCIES/EQUIPMENT/TOOLS: Firefighting operation frequencies and tools are described in Section 3.0.

AUTHORIZED LOCATIONS FOR FIRE FIGHTING FOAM TESTING:

- ☐ Use only the designated areas for fire fighting foam testing as shown in the attached map.

Date:	Version: 2.0

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DATE:	JANUARY 2019
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Feet

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STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT

San Diego, California

SC-13 BMP:
Fire Fighting Foam Discharge

FIGURE
SC-13

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BMP SC14	POTABLE WATER SYSTEM FLUSHING

PURPOSE:
To prevent the discharge of pollutants to storm water drains associated with flushing and cleaning of aircraft potable water systems.

TARGETED ACTIVITIES:

- Aircraft potable water system cleaning and flushing
- Water truck cleaning and flushing

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges from potable water system flushing:

☐ Perform flushing activities within designated areas that divert the flushed water away from the storm drain system whenever possible.

☐ **DO NOT DISCHARGE WASTE WATER OR CLEANING AGENTS TO A CATCH BASIN OR STORM DRAIN.** Notify Airport Operations (619-400-2710) and the Airport Authority Environmental Affairs Department (619-400-2784) if any discharges associated with flushing and cleaning of aircraft potable water systems have occurred.

POLLUTANTS of CONCERN:

- Chlorine Bleach
- Purine

OPERATIONS:

Sub-BMPs

- 01 ☐ The aircraft potable water system and water truck flushing/cleaning areas should not be located directly in the path of storm drains.
- 02 ☐ Perform potable water system flushing only in designated flushing/cleaning areas that capture or divert all wastewater away from storm drains, or to a structural treatment control, sanitary sewer, or dead end sump with pump.
- 03 ☐ Prevent flushing/cleaning areas from contacting storm water run-on and run-off.

APPLICABLE TENANTS/ DEPARTMENTS:

- Air Canada
- Alaska
- Allegiant
- American Airlines
- British Airways
- Edelweiss
- FedEx
- Frontier
- Hawaiian
- Jet Blue
- Southwest
- Spirit
- WestJet

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

BMP FREQUENCIES/EQUIPMENT/TOOLS: Potable water system flushing frequencies and tools are described in Section 3.0.

AUTHORIZED LOCATIONS FOR POTABLE WATER SYSTEM FLUSHING/CLEANING:

☐ Use only the designated areas for aircraft potable water system flushing/cleaning as shown in the attached map.

Date:	Version: 2.0

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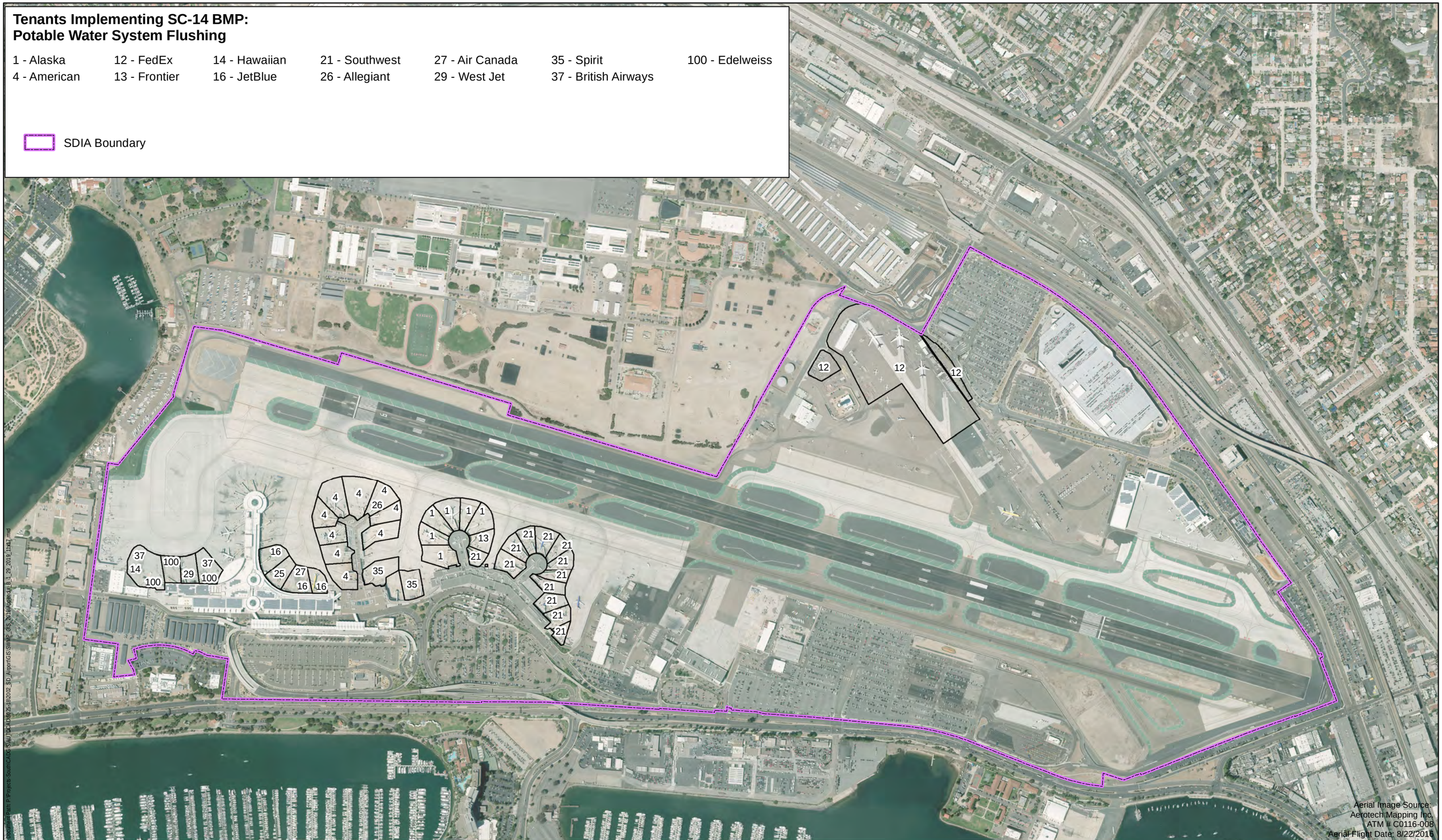
Tenants Implementing SC-14 BMP:
Potable Water System Flushing

1 - Alaska	12 - FedEx	14 - Hawaiian	21 - Southwest	27 - Air Canada	35 - Spirit	100 - Edelweiss
4 - American	13 - Frontier	16 - JetBlue	26 - Allegiant	29 - West Jet	37 - British Airways	

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
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Feet

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

SC-14 BMP:
Potable Water System Flushing

FIGURE
SC-14

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BMP SC15	RUNWAY RUBBER REMOVAL

PURPOSE:
Eliminate discharges to the storm drain of particulate rubber and other pollutants generated by runway rubber removal activities.

TARGETED ACTIVITIES:

- Runway Rubber Removal

POLLUTION PREVENTION:

☐	Implement the following pollution prevention practices and BMPs to prevent non-storm water discharges of particulate rubber and other pollutants generated by runway rubber removal activities to the storm water collection system:
☐	Use biodegradable or non-toxic cleaning products for runway rubber removal activities.

POLLUTANTS of CONCERN:

- Rubber particles
- Dirt particles
- Metals

OPERATIONS:

Sub-BMPs	
- 01 ☐	Minimize the amount of water used during runway rubber removal activities.
- 02 ☐	Prevent waste water produced from runway rubber removal activities from entering the storm drainage system by immediately collecting and properly disposing of it.
- 03 ☐	Use manual or mechanical cleaning methods such as mechanical street sweepers to remove rubber particulates from the runway and adjacent paved areas following runway rubber removal activities.
- 04 ☐	Inspect storm drain inlets, catch basins, and runway drainage areas following runway rubber removal activities for any resulting debris, and remove and properly dispose of debris.
- 05 ☐	Use reclaimed water, where possible.

APPLICABLE TENANTS/ DEPARTMENTS:

- SDCRAA

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

BMP FREQUENCIES/EQUIPMENT/TOOLS: Runway rubber removal frequencies and tools are described in Section 7.0.

AUTHORIZED LOCATIONS FOR RUNWAY RUBBER REMOVAL ACTIVITIES:

☐	Perform all runway rubber removal activities in the designated areas as shown in the attached map.

Date:	Version: 2.0

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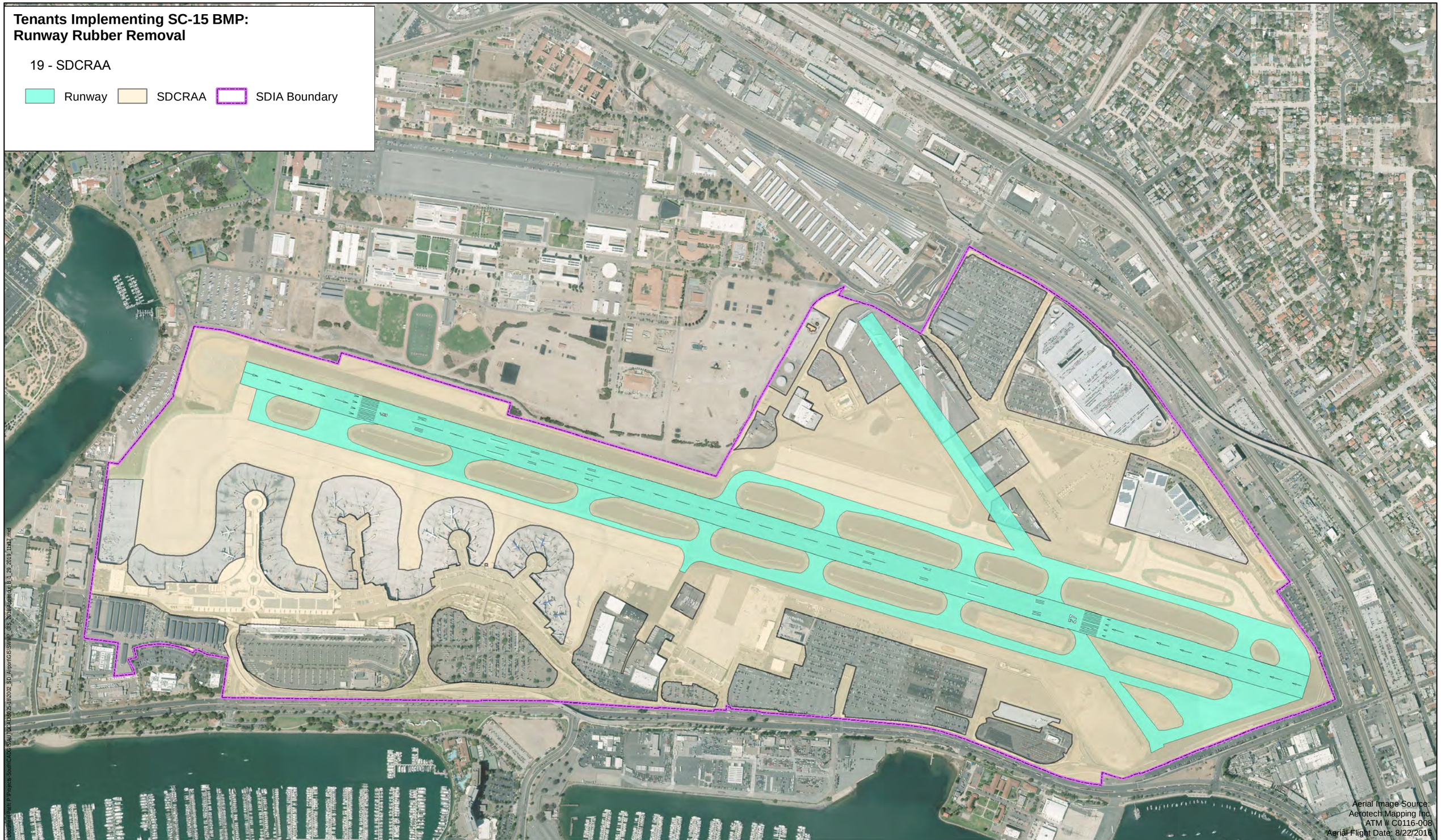

PROJECT NO.: 5025-18-2002	N	0 250 500 1,000 1,500 Feet	wood.	STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT San Diego, California	SC-15 BMP: Runway Rubber Removal
DATE: JANUARY 2019					FIGURE
DRAWN BY: CAB					SC-15
CHECKED BY: AA/NP					

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BMP SC16	PARKING LOTS

PURPOSE:
Prevent and reduce the discharge of pollutants from parking areas.

TARGETED ACTIVITIES:

- Vehicle parking
- Surface cleaning and maintenance
- Litter control

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent non-storm water discharges from parking areas to the storm water collection system:

- ☐ Install treatment control BMPs, where practicable, in parking lot areas to treat parking lot runoff.
- ☐ Design parking lot areas to include semi-permeable hardscape and Low Impact Development practices.
- ☐ Inspect and maintain sweeping equipment regularly to ensure effectiveness at removing pollutants and to avoid leaks.
- ☐ Sweep parking lots regularly and before onset of wet season.
- ☐ Prohibit over-irrigation of landscaped areas

POLLUTANTS of CONCERN:

- Trash
- Suspended solids
- Hydrocarbons
- Oil and grease
- Heavy Metals
- Bacteria
- Sediment
- Pesticides

OPERATIONS:

Sub-BMPs

- 01 ☐ Post "No Littering" signs around parking lots and regularly empty trash receptacles. Trash receptacles must be covered.
- 02 ☐ Sweep all parking lot areas on a regular basis to remove accumulated debris and sediment.
- 03 ☐ Operate sweepers at manufacturer-recommended optimal speeds.
- 04 ☐ Perform sweeping in parking lot areas when the number of parked vehicles is lowest to maximize areas swept.
- 05 ☐ Maintain records of the sweeping activities including the miles swept and the amount of waste collected.
- 06 ☐ Clean oily spots from parking lot surfaces with absorbent materials.
- 07 ☐ Perform all repairs to parking lot surfaces during periods of dry weather.
- 08 ☐ Cover and seal nearby storm drain inlets, catch basins, and manholes during parking lot repairs.
- 09 ☐ Use drip pans and absorbent materials to catch and collect drips and leaks from paving equipment that are not in use.

APPLICABLE TENANTS/ DEPARTMENTS:

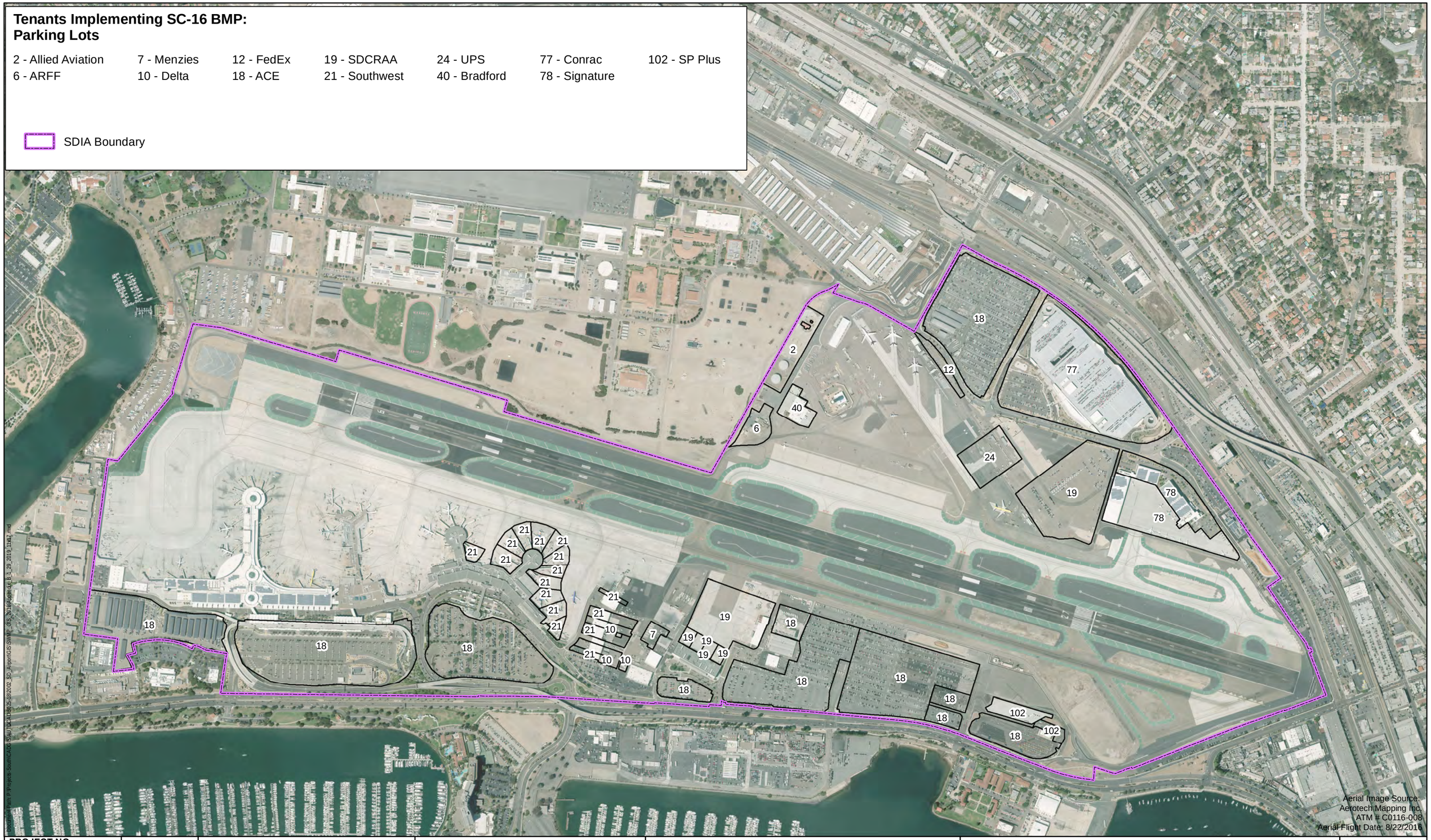
- ACE
- Allied Aviation
- ARFF
- Bradford
- Conrac
- Delta
- FedEx
- Menzies
- SDCRAA
- Signature
- Southwest
- SP Plus
- UPS

BMP SC16	PARKING LOTS	
- 10 ☐	Hot bituminous materials used for parking lot repairs are to be preheated and transferred or loaded away from storm drain inlets.	
- 11 ☐	Properly dispose of used absorbent materials, debris, and collected drips.	
- 12 ☐	Avoid draining rooftop downspout drains onto paved parking lot surfaces.	
- 13 ☐	Sweep, vacuum, or use other dry methods to remove waste materials generated from repairs.	
- 14 ☐	Temporarily store waste materials and debris generated from parking lot repairs in containers or in stockpiles with cover and berm around them and away from storm drain inlets.	
	SEE ALSO BMP SC21	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Sweeping of parking lots occurs five days a week or as described in Section 6.0. Equipment/tools to implement BMPs include mechanical and regenerative air sweepers, drip pans, spill kits, brooms, and drums.		
AUTHORIZED LOCATIONS TO IMPLEMENT BMPs FOR PARKING LOTS:		
☐	To reduce pollutants in parking lot storm water discharges, implement BMPs in areas as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-16 BMP:
Parking Lots

2 - Allied Aviation	7 - Menzies	12 - FedEx	19 - SDCRAA	24 - UPS	77 - Conrac	102 - SP Plus
6 - ARFF	10 - Delta	18 - ACE	21 - Southwest	40 - Bradford	78 - Signature	

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

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0 250 500 1,000 1,500
Feet

wood.

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

SC-16 BMP:
Parking Lots

FIGURE
SC-16

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BMP SC17	STORM DRAIN MAINTENANCE

PURPOSE:
Maintain catch basins, storm water inlets, and other storm water conveyance structures on a regular basis to remove pollutants, reduce high pollutant concentrations during the first flush of storms, prevent clogging of the downstream conveyance system, restore catch basins' sediment trapping capacity, and ensure the system functions properly hydraulically to avoid flooding.

TARGETED ACTIVITIES:

- Storm water conveyance system

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to remove pollutants, sediment, and debris from the storm water collection system:

☐ Look for evidence of illegal dumping, illegal discharges or illicit connections during routine inspection, cleaning, and maintenance of the storm drainage system and drainage structures.

POLLUTANTS of CONCERN:

- Trash
- Suspended solids
- Hydrocarbons
- Oil and grease
- Heavy Metals
- Bacteria
- Organics

OPERATIONS:

Sub-BMPs

- 01 ☐ Stencil storm drains with "No Dumping" messages.
- 02 ☐ Conduct routine self-inspections of the storm drainage system. The Authority should inspect the entire MS4 at least annually, between the dates of May 1 and September 30.
- 03 ☐ Use appropriate measures to prevent discharges during MS4 cleaning and maintenance.
- 04 ☐ Clean and maintain storm drain inlets, catch basins, pipes, and other conveyance structures before the wet season and as needed.
- 05 ☐ Clear open channels of accumulated litter in a timely manner.
- 06 ☐ Properly dispose of all accumulated sediments, contaminants, debris and waste water from cleaning and maintenance activities.
- 07 ☐ Maintain records for all inspections, cleaning, and maintenance, including the quantity of waste removed.

APPLICABLE TENANTS/ DEPARTMENTS:

- ACE
- Allied Aviation
- ARFF
- Cartwright
- Delta
- SDCRAA
- Signature
- SP Plus

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

BMP FREQUENCIES/EQUIPMENT/TOOLS: Storm drain maintenance frequencies are described in Section 6.0. Equipment/tools to implement BMPs include stenciling equipment, measuring devices, flashlights, vactor trucks, spill kits, brooms, and drums.

BMP SC17	STORM DRAIN MAINTENANCE	
AUTHORIZED LOCATIONS FOR STORM DRAIN MAINTENANCE:		
☐	To implement BMPs for the removal of pollutants, sediment, and debris from the storm drain system, maintenance of the storm drain system will be performed at the designated areas as shown on the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-17 BMP:
Drainage System Maintenance

2 - Allied Aviation | 6 - ARFF | 10 - Delta | 18 - ACE | 19 - SDCRAA | 78 - Signature | 96 - Cartwright | 102 - SP Plus

Outfall | Storm Drain Inlet | Stormwater Pipe (with flow direction)

SDCRAA | SDIA Boundary

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

N

0 250 500 1,000 1,500
Feet

wood.

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

SC-17 BMP:
Drainage System Maintenance

FIGURE
SC-17

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BMP SC18	HOUSEKEEPING

PURPOSE:
Implement good housekeeping measures to eliminate non-storm water discharges and reduce the potential for pollutants to enter the storm water collection system.

TARGETED ACTIVITIES:

- Aircraft Deicing/Anti-Icing
- Aircraft Lavatory Service
- All Fueling
- All Maintenance
- All Storage
- All Washing
- Cargo Handling
- Equipment Cleaning
- Fire Fighting Equipment Testing
- Floor Washdowns
- Garbage Collection
- Painting/Stripping
- Potable Water System Flushing
- Runway Rubber Removal

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to eliminate non-storm water discharges and reduce the potential for pollutants to enter the storm water collection system:

- ☐ Clean operation areas and facilities using dry methods.
- ☐ Maintain adequate supplies of spill response equipment and absorbent materials in accessible locations where significant materials are stored and used.
- ☐ Apply integrated pest management mechanical and cultural controls to control for pests and reduce the need of pesticides. Cultural controls targets pest attractants using sanitation practices, education, and communication. Mechanical controls creates physical barriers as a means of prevention. Create partnerships with other organizations for better implementation of an integrated pest management program.
- ☐ **NEVER HOSE DOWN PAVED AREAS TO THE STORM DRAINS.**

POLLUTANTS of CONCERN:

- Aircraft Fire Fighting Foam
- Battery Acid
- Cleaning Solution
- Deicing/Anti-Icing Fluid
- Dirt particles
- Dumpster Wastes
- Floatables
- Fuel
- Heavy Metals
- Hydrocarbons
- Landscape Waste
- Lavatory Chemicals
- Lavatory Chemical Waste
- Lavatory Truck Wash Water
- Lavatory Waste
- Metals
- Oil and Grease
- Paint
- Pesticides/Herbicides/ Fertilizers
- Potable Water System Chemicals
- Rubber Particles
- Sediment
- Solvents
- Suspended solids
- Trash
- Vehicle Fluids

BMP SC18	HOUSEKEEPING

OPERATIONS:		APPLICABLE TENANTS/ DEPARTMENTS:
Sub-BMPs		✈ ACE ✈ Air Canada ✈ Alaska ✈ Allegiant ✈ Allied Aviation ✈ American Airlines ✈ ARFF ✈ Bradford ✈ British Airways ✈ Cartwright ✈ Conrac ✈ Delta ✈ DHL ✈ Edelweiss ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HFF ✈ HMS Host ✈ JAL ✈ JetBlue ✈ Lufthansa ✈ Menzies ✈ Mission Yogurt ✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
- 01 ☐	Perform and document on a regular basis self-inspections and evaluations of the implemented BMPs.	
- 02 ☐	Keep all facility and operation areas clean and orderly.	
- 03 ☐	Place trash receptacles that have covers in appropriate locations.	
- 04 ☐	Sweep all facility and operation areas at least once per week to prevent the accumulation of sediments, debris, and contaminants.	
- 05 ☐	Properly dispose of all debris and sediment from sweeping.	
- 06 ☐	Store significant materials in the appropriate containers that are properly sealed and labeled.	
- 07 ☐	Store significant materials within secondary containment.	
- 08 ☐	Store significant materials in a restricted access area.	
- 09 ☐	Material Safety Data Sheets (MSDSs) are readily available for all significant materials.	

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

BMP FREQUENCIES/EQUIPMENT/TOOLS: Good housekeeping occurs on a daily basis. Equipment/tools to implement BMPs include trash receptacles, spill pallets, outdoor sheds, overpack containers, tarps, flammable materials storage lockers, bermed or containment areas, indoor or covered storage areas, fiber rolls, wooden pallets, spill kits, brooms, and drums.

AUTHORIZED LOCATIONS TO IMPLEMENT HOUSEKEEPING BMPs:

BMP SC18	HOUSEKEEPING	
☐	Prevent non-storm water discharges, and contact of pollutants with storm water discharges by implementing good housekeeping BMPs in the designated areas as shown in the attached map.	
Date:		Version: 2.0

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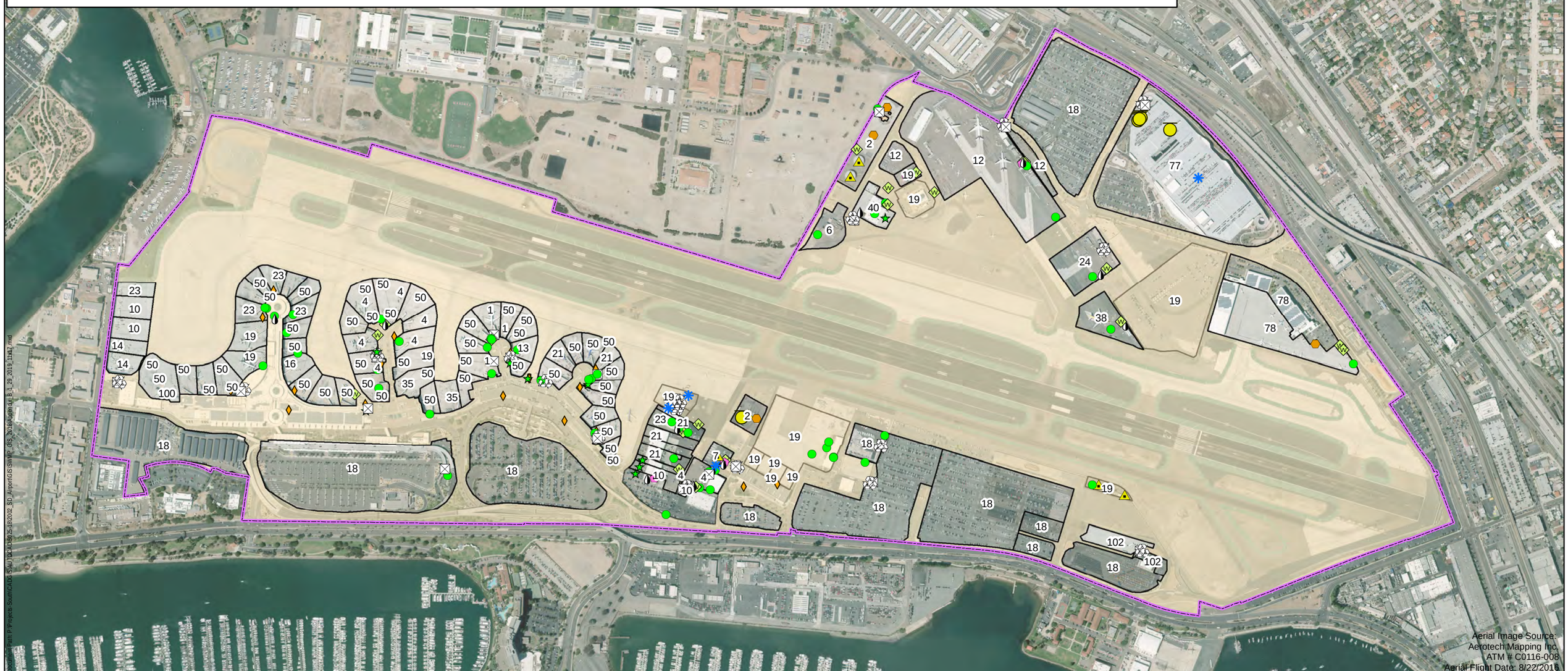
Tenants Implementing SC-18 BMP:
Housekeeping

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	47 - Mission Yogurt	96 - Cartwright
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	50 - Siemens	100 - Edelweiss
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	77 - Conrac	102 - SP Plus
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	46 - HFF	78 - Signature	103 - Lufthansa

SDCRAA
SDIA Boundary
Composting
Fuel Storage
Grease Trap
Loading
Metal Storage
Recycling
Wash Area
Dumpster
Fueling
Industrial Waste
Material Storage
Oil Storage
Underground Storage Tank



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

N

0 250 500 1,000 1,500
Feet

wood.

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

SC-18 BMP:
Housekeeping

FIGURE
SC-18

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BMP SC19	SAFER/ALTERNATIVE PRODUCTS

PURPOSE:
Reduce the use of harmful, toxic and non-biodegradable products that could pollute storm water runoff.

TARGETED ACTIVITIES:

- 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

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent toxic, non-biodegrabable materials from entering the storm water collection system:

☐ Develop an Environmentally Preferable Purchasing Program to (1) minimize the purchase of products containing hazardous ingredients, (2) maximize the purchase of alternative products that pose less risk to employees and to the environment, and (3) maximize the purchase of products containing recycled materials.

POLLUTANTS of CONCERN:

- 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

OPERATIONS:

Sub-BMPs

- 01 ☐ Whenever possible, use alternative products that are "Regionally Accepted" and are identified as being non-toxic, less toxic, or biodegradable.

- 02 ☐ Whenever possible, maximize the purchase and use of products containing recycled materials.

APPLICABLE TENANTS/ DEPARTMENTS:

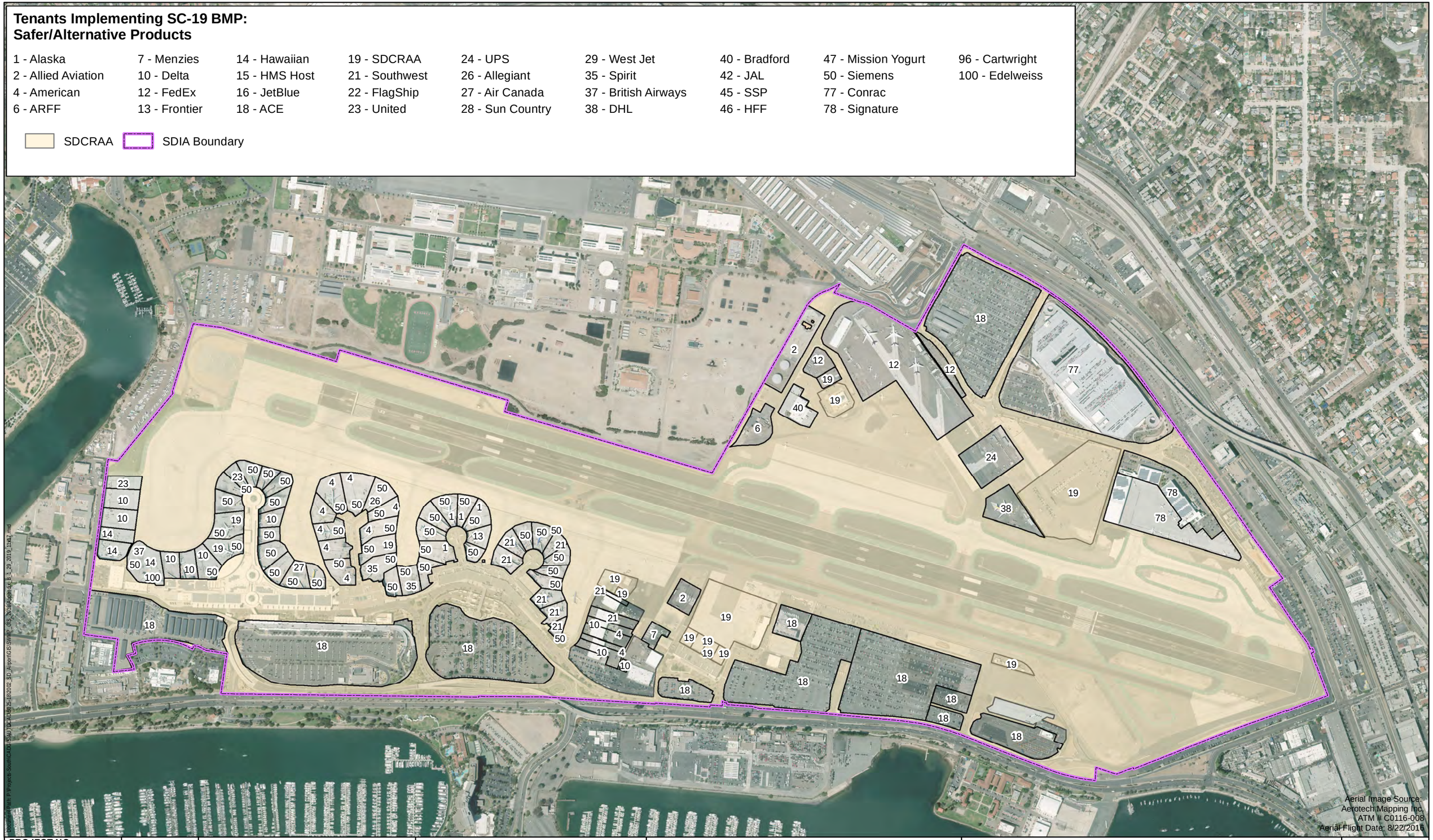
- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Cartwright

BMP SC19	SAFER/ALTERNATIVE PRODUCTS	
		✈ Conrac ✈ Delta ✈ DHL ✈ Edelweiss ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HFF ✈ HMS Host ✈ JAL ✈ Jet Blue ✈ Menzies ✈ Mission Yogurt ✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Safer/alternative products are used whenever possible and according to the Authority's and tenant's policies.		
AUTHORIZED LOCATIONS TO USE SAFER/ALTERNATIVE PRODUCTS:		
☐	Use non-toxic, less toxic, biodegradable, alternative products whenever possible in the designated areas shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SC-19 BMP:
Safer/Alternative Products

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	47 - Mission Yogurt	96 - Cartwright
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	50 - Siemens	100 - Edelweiss
4 - American	12 - FedEx	16 - JetBlue	22 - FlagShip	27 - Air Canada	37 - British Airways	45 - SSP	77 - Conrac	
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	46 - HFF	78 - Signature	

SDCRAA SDIA Boundary



PROJECT NO.:	5025-18-2002
DATE:	JANUARY 2019
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STORM WATER MANAGEMENT PLAN
AT SAN DIEGO INTERNATIONAL AIRPORT
San Diego, California

SC-19 BMP:
Safer/Alternative Products

FIGURE
SC-19

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BMP SC20	ERODIBLE AREAS

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from erodible areas by implementation of erosion control BMPs to stabilize soils and reduce pollutant discharges. This does not apply to natural, undeveloped areas, except where erosion is occurring as a direct result of onsite human activity, such as paving, land disturbance, or vegetation removal.

TARGETED ACTIVITIES:

- Erodible Areas
- Grounds Maintenance
- Construction Activities

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent discharges of pollutants from building and grounds maintenance to the storm water collection system:

☐ Minimize site operations on erodible areas.

POLLUTANTS of CONCERN:

- Sediment

OPERATIONS:

Sub-BMPs

- 01 ☐ Implement erosion control BMPs to stabilize soils.
- 02 ☐ Implement wind erosion control BMPs to control dust.
- 03 ☐ Maintain effective perimeter controls.
- 04 ☐ Stabilize loose soils and slopes prior to a forecasted storm event.
- 05 ☐ Prevent material tracking offsite.
- 06 ☐ Divert all storm water away from erodible materials.

APPLICABLE TENANTS/ DEPARTMENTS:

- SDCRAA

STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.

BMP FREQUENCIES/EQUIPMENT/TOOLS: Erosion and sediment controls, and diversionary measures are used as needed. Equipment/tools to implement BMPs include various erosion and sediment controls, as applicable for the area, such as fiber rolls.

AUTHORIZED BUILDING AND GROUNDS MAINTENANCE LOCATIONS:

☐ To implement BMPs for the prevention of discharges or pollutants from grounds maintenance, erodible areas and construction activities, perform maintenance activities within the designated areas as shown in the attached map.

Date:	Version: 2.0

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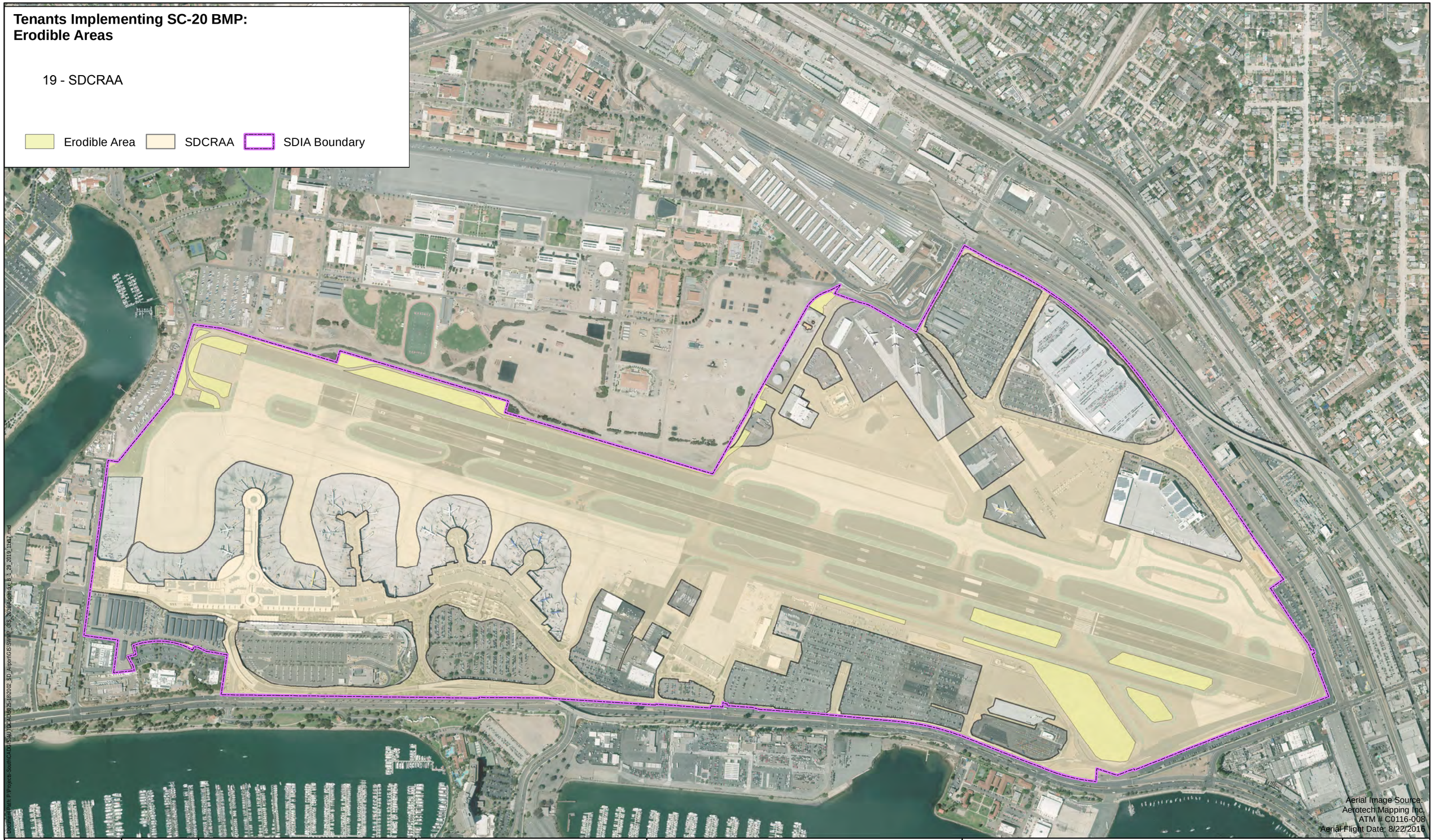

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Feet

wood.

STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT

San Diego, California

SC-20 BMP: Erodible Areas

FIGURE

SC-20

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BMP SC21	BUILDING REPAIR AND CONSTRUCTION

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water from site modifications such as minor and normal building repair and remodeling to construction of new facilities by using soil erosion controls, enclosing or covering building materials storage areas, using good housekeeping practices, using safer alternative products, and training employees.

TARGETED ACTIVITIES:

- Building Remodeling/Repair
- Construction Activities

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to eliminate non-storm water discharges and reduce the potential for pollutants to enter the storm water collection system:

- ☐ Implementation of erosion control BMPs for temporary stabilization of inactive areas.
- ☐ Implementation of sediment control BMPs for perimeter control, runon/runoff control, and inlet protection.
- ☐ Implementation of tracking control BMPs to prevent offsite tracking.
- ☐ Implementation of wind erosion control BMPs to control dust that can contribute to air pollution.
- ☐ Implementation of materials and waste management BMPs to properly manage materials and waste on site.
- ☐ Implementation of non-stormwater BMPs to prevent discharge of pollutants and properly manage wastewater or wash water generated from the construction activities such as equipment or vehicle maintenance and fueling; saw cutting and grinding from pavement removal; pavement paving and sealing; concrete curing etc.
- ☐ Use recycled or non-potable water for construction purposes when available.

POLLUTANTS of CONCERN:

- Asphalt
- Basic Materials
- Concrete
- Construction Materials
- Construction Debris
- Floatables
- Fuel
- Metals
- Oil and Grease
- Paint
- Sediment
- Sealants
- Septic Wastes
- Solvents
- Suspended solids
- Synthetic Organics
- Trash
- Vehicle Fluids

OPERATIONS:

Sub-BMPs

- 01 ☐ Avoid outdoor repairs and construction during rain events or during any period for which the National Weather Service is forecasting a 50% chance of precipitation.
- 02 ☐ Stabilize inactive areas (where there will be no construction for 14 days) or finished slopes or erodible areas with erosion control.
- 03 ☐ Implement wind erosion control BMPs to control dust, and limit traffic to stabilized roadways within the site, where possible.
- 04 ☐ Maintain effective perimeter and run-on controls.
- 05 ☐ Maintain effective inlet protection.

APPLICABLE TENANTS/ DEPARTMENTS:

- SDCRAA
- Any tenant conducting targeted activities

BMP SC21	BUILDING REPAIR AND CONSTRUCTION	
- 06 ☐	Install a stabilized construction entrance to prevent offsite tracking.	
- 07 ☐	Sweep streets of any loose dirt or materials.	
- 08 ☐	Cover and contain all chemicals, liquids, erodible landscape materials, and fertilizers when not in use.	
- 09 ☐	Discontinue use of erodible landscape material within 2 days prior to forecasted rain event or when it's raining.	
- 10 ☐	Cover and berm material and waste stockpiles when inactive and before the onset of a rain event. Use plastic under-sheets when appropriate.	
- 11 ☐	Cover waste containers at the end of each work day and prior to a rain event, and have waste recycled or collected and properly disposed of frequently.	
- 12 ☐	Perform concrete washout in designated areas away from inlets and drainage courses, and in appropriately sized and designed pits or containers. Empty regularly.	
- 13 ☐	Temporary sanitary facilities must have secondary containment and be located away from storm drains and traffic circulation.	
- 14 ☐	Minimize water usage and use reclaimed water where possible.	
- 15 ☐	Contain any particulate generating activities.	
- 16 ☐	Designate areas for fueling equipment and vehicles away from inlets and drainage courses, or perform offsite.	
	SEE ALSO BMP SC20 AND INDIVIDUAL CONSTRUCTION SWPPPs OR WPCPs	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Building repair and construction BMPs are used as needed and as outlined in the SWPPPs or WPCPs. Equipment/tools to implement BMPs include fiber rolls, gravel bags, straw waddles, silt fences, mulch, hydraulic mulch, water trucks, rumble plates, sweepers, brooms, spill kits, drums, secondary containment devices, tarps, cover, covered dumpsters etc.		
AUTHORIZED LOCATIONS TO IMPLEMENT HOUSEKEEPING BMPs:		
☐	Prevent non-storm water discharges, and contact of pollutants with storm water discharges by implementing remodeling/repair, and construction BMPs in the designated areas as shown in the attached map.	
Date:		Version: 2.0

PROJECT NO.: 5025-18-2002	N	0 250 500 1,000 1,500 Feet	wood.	STORM WATER MANAGEMENT PLAN AT SAN DIEGO INTERNATIONAL AIRPORT San Diego, California
DATE: JANUARY 2019				SC-21 BMP: Building Repair & Construction
DRAWN BY: CAB				FIGURE SC-21
CHECKED BY: AA/NP				

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BMP SR01	SPILL PREVENTION, CONTROL, AND CLEAN-UP

PURPOSE:
Prevent or reduce the discharge of pollutants to storm water resulting from spills, leaks and improper cleanup of significant and other materials.

TARGETED ACTIVITIES:

- 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
- Runway Rubber Removal

POLLUTION PREVENTION:

Implement the following pollution prevention practices and BMPs to prevent spills and leaks of significant and other materials to the storm water collection system:

☐ Provide formal training in execution of the Spill Plan(s) to key personnel, with additional training for first responder level personnel. All employees should have basic knowledge of spill control procedures and potential dangers of spills on human health and the environment. Incorporate spill control procedures in regular safety meetings to reinforce practices.

☐ Maintain an inventory of appropriate cleanup materials and equipment on-site and strategically deploy cleanup materials and equipment based on the type and quantities of chemicals present.

POLLUTANTS of CONCERN:

- 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

OPERATIONS:

Sub-BMPs	
- 01 ☐	Develop, implement and keep current Spill Plan, and develop facility spill prevention and response procedures.
- 02 ☐	Post a summary of the Spill Plan and spill response procedures, at key locations, identifying the spill cleanup coordinators, location of cleanup equipment, and phone numbers of regulatory agencies to be contacted in the event of a spill.
- 03 ☐	Train relevant employees and contractors in the implementation of the Spill Plan, if applicable, or spill control procedures.
- 04 ☐	Use leak and spill prevention devices.

APPLICABLE TENANTS/ DEPARTMENTS:

- ACE
- Air Canada
- Alaska
- Allegiant
- Allied Aviation
- American Airlines
- ARFF
- Bradford
- British Airways
- Cartwright

BMP SR01	SPILL PREVENTION, CONTROL, AND CLEAN-UP	
- 05 ☐	Place adequate spill kits in appropriate locations.	✈ Conrac ✈ Delta ✈ DHL ✈ Edelweiss ✈ FedEx ✈ Flagship ✈ Frontier ✈ Hawaiian ✈ HFF ✈ HMS Host ✈ JAL ✈ Jet Blue ✈ Lufthansa ✈ Menzies ✈ Mission Yogurt ✈ SDCRAA ✈ Siemens ✈ Signature ✈ Southwest ✈ SP Plus ✈ Spirit ✈ SSP ✈ Sun Country ✈ United ✈ UPS ✈ WestJet
- 06 ☐	Notify Airport Operations (619-400-2710), the Airport Authority Environmental Affairs Department (619-400-2784), and any agencies or companies identified in the Spill Plan or facility spill prevention and response procedures in the event of a spill.	
- 07 ☐	In the event of a spill or release, immediately follow procedures identified in the Spill Plan or facility spill prevention and response procedures.	
- 08 ☐	Use only dry cleaning methods.	
- 09 ☐	Properly dispose of all used spill control and clean-up materials.	
- 10 ☐	Waste water from washing activities is captured by vacuum and properly disposed of, or is diverted to a structural treatment control, sanitary sewer, or dead end sump with pump.	
STRUCTURAL TREATMENT BMPs: Refer to BMP TC01 for information on structural treatment BMPs.		
BMP FREQUENCIES/EQUIPMENT/TOOLS: Spill prevention and control occurs on a daily basis. Clean up is as needed. Equipment/tools to implement BMPs include spill pallets, outdoor sheds, overpack containers, tarps, flammable materials storage lockers, bermed or containment areas, fiber rolls, shop vacuums, spill kits, brooms, and drums.		
AUTHORIZED LOCATIONS TO IMPLEMENT SPILL PREVENTION, CONTROL AND CLEANUP BMPs:		
☐	Implement BMPs for the prevention of non-storm water discharges from spills, leaks or improper cleanups at the designated areas as shown in the attached map.	
Date:		Version: 2.0

Tenants Implementing SR-01 BMP:
Spill Prevention, Control & Clean Up

1 - Alaska	7 - Menzies	14 - Hawaiian	19 - SDCRAA	24 - UPS	29 - West Jet	40 - Bradford	47 - Mission Yogurt	96 - Cartwright
2 - Allied Aviation	10 - Delta	15 - HMS Host	21 - Southwest	26 - Allegiant	35 - Spirit	42 - JAL	50 - Siemens	100 - Edelweiss
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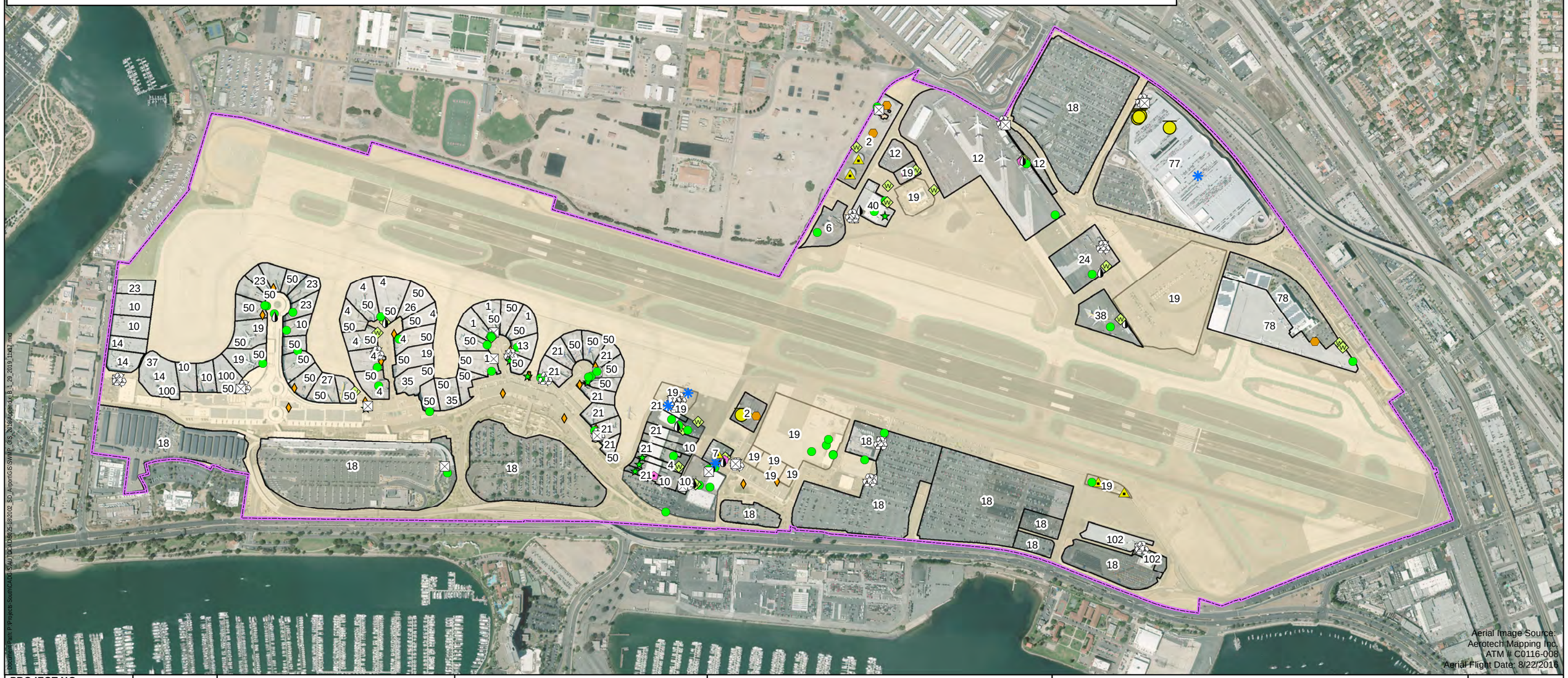
6 - ARFF	13 - Frontier	18 - ACE	23 - United	28 - Sun Country	38 - DHL	46 - HFF	78 - Signature	103 - Lufthansa

SDCRAA
SDIA Boundary

Composting
Fuel Storage
Grease Trap
Loading
Metal Storage
Recycling
Wash Area
Dumpster
Fueling
Industrial Waste
Material Storage
Oil Storage
Underground Storage Tank



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

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0 250 500 1,000 1,500
Feet

wood.

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

SR-01 BMP:
Spill Prevention, Control & Clean Up

FIGURE
SR-01

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BMP TC01	TREATMENT CONTROLS

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.

TARGETED ACTIVITIES:

- 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

POLLUTION PREVENTION:

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:

☐ Properly dispose of any standing water and accumulated waste removed during cleaning operations in accordance with federal, state, and local requirements.

☐ 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.

☐ Inspect and maintain OWS as follows:

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.

POLLUTANTS of CONCERN:

- 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

BMP TC01	TREATMENT CONTROLS	
☐	Inspect and maintain drain inserts as follows: 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.	
☐	Inspect and maintain Contech CDS units as follows: 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.	
☐	Inspect and maintain Contech StormFilter units as follows: 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.	
☐	Inspect and maintain Clearwater BMP unit as follows: 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.	
☐	Inspect and maintain Bioclean trench drain filters as follows: 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.	

BMP TC01	TREATMENT CONTROLS	
	2. Inspect and replace hydrocarbon booms in trench drain filters every 6 months. Properly dispose hydrocarbon boom as hazardous waste.	
☐	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.	
☐	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.	
☐	Contact vector control agency if mosquito breeding is observed or suspected.	
OPERATIONS:		**APPLICABLE TENANTS/ DEPARTMENTS:** ✈ Allied Aviation ✈ Bradford ✈ Conrac ✈ FedEx ✈ SDCRAA ✈ Signature
Sub-BMPs		
- 01 ☐	Regularly inspect, clean, and maintain all structural treatment control BMPs to prevent the accumulation or resuspension of oil, grease, floating debris and sediments.	
- 02 ☐	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.	
- 03 ☐	Document and maintain records for all inspections, cleaning, and maintenance of structural treatment control BMPs.	
- 04 ☐	Perform an annual inventory of all structural treatment control BMPs.	
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.		
AUTHORIZED LOCATIONS TO IMPLEMENT TREATMENT CONTROL BMPs AND TO MAINTAIN TREATMENT CONTROL BMPs:		
☐	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.	
Date:		Version: 2.0

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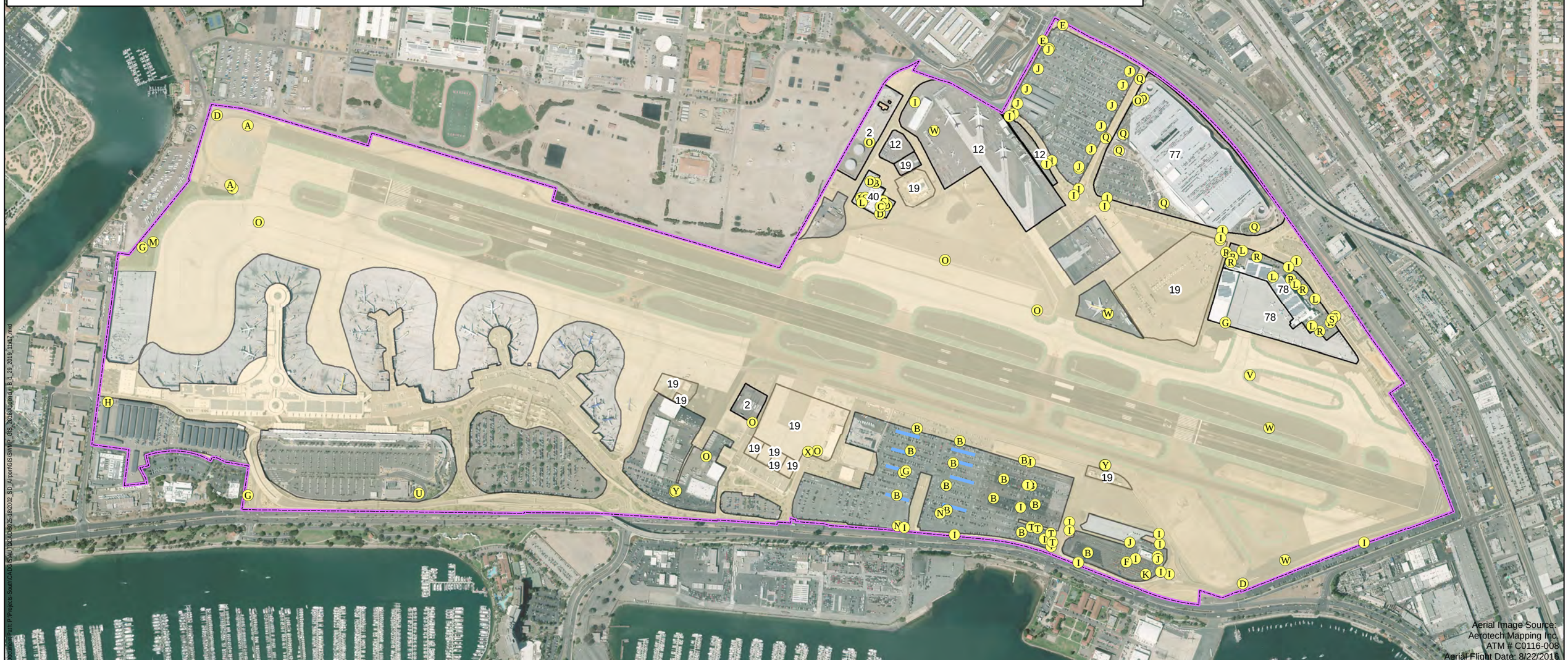
Tenants Implementing TC-01 BMP:
Structural Treatment Control BMPs

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

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

Permeable Strip SDCRAA SDIA Boundary



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

N

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Feet

wood.

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

TC-01 BMP:
Structural Treatment Control BMPs

FIGURE
TC-01

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