

APPENDIX E
Best Management Practices and DOA Policies and Procedures

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

Baseline BMPs		Page No
SC1	General – Baseline Best Management Practices	E-1
 Activity-Specific BMPs and DOA Policies and Procedures		
SC2	Prevention of Illicit Non-visible Non-Storm Water Discharges	E-2
SC3	Aircraft, Ground Service Equipment, and/or Vehicle Maintenance	E-3
SC4	Aircraft, Ground Service Equipment, and/or Vehicle Fueling/Defueling	E-6
SC5	Aircraft, Ground Service Equipment, and/or Vehicle Washing and/or Degreasing	E-8
SC6	Aircraft, Ground Service Equipment, and/or Vehicle Staging and Storage	E-10
SC7	Aircraft and Airfield De/Anti-icing, Deicing Recovery and Fluids Storage	E-12
SC8	Material Handling	E-14
SC9	Storage of Significant Materials	E-16
SC10	Waste Handling and Disposal	E-18
SC11	Building and Grounds Maintenance	E-21
SC12	Lavatory Service Operations	E-24
SC13	Pavement Washdown	E-26
SC14	Painting	E-27
SC15	Airfield Pavement De-rubberizing	E-29
SC16	Fire Fighting Equipment Testing and/or Training	E-30
 Treatment Control BMPs and DOA Policies and Procedures		
TC1	Oil/Water Separators	E-31
TC2	Water Quality Ponds	E-32

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC1 GENERAL – BASELINE BEST MANAGEMENT PRACTICES (BMPS)

PURPOSE:

Storm water regulations are designed to protect storm water quality through the use of both “activity-specific” best management practices (BMPs) and “baseline” BMPs. Baseline BMPs are those practices that are applicable to all Tenants, regardless of the specific industrial operations conducted. Baseline BMPs are developed in recognition of the fact that, through improper or sloppy practices and inadequate training, inspection, and preventative maintenance programs, all Tenants have the potential to cause adverse impact to storm water quality. Baseline BMPs, therefore, provide a foundation over which other BMPs are built.

DOA POLICIES AND PROCEDURES:

- All Airport Tenants must adhere to the policies and procedures contained in the SWP3.

BEST MANAGEMENT PRACTICES:

The following is a list of baseline BMPs that are applicable to all ABIA Industrial Tenants.

- *Good Housekeeping* - Employ good housekeeping practices to ensure facility grounds and equipment are maintained in a neat and orderly fashion and significant materials are not unnecessarily exposed to storm water. Good housekeeping practices include such actions as frequent equipment cleanings, maintaining clean floor and pavement areas, proper centralized storage of chemical containers, etc. Good housekeeping practices must be utilized by all employees involved in the management and handling of significant materials.
- *Employee Training* - Develop and implement internal employee training programs designed to educate all appropriate personnel regarding storm water regulations and to meet TPDES program requirements. The training programs should inform the employee of the regulatory requirements and the potential consequences for non-compliance, as well as the desired result of the prescribed protocols. Pursuant to TPDES requirements, ABIA has developed guidelines for employee training, which must be followed by each SWP3 Tenant. The training requirements are presented in Section 8 of this SWP3.
- *Preventive Maintenance* - Implement internal preventive maintenance programs designed to reduce the occurrence of equipment failures that could result in a release of potential storm water pollutants. The programs should focus on identifying and proactively replacing worn or deteriorated parts, such as hydraulic hoses, valves, pipes, chemical containers, etc.
- *Inspections* - Develop and implement internal inspection programs designed to identify, and prevent or mitigate facility, equipment, and operational conditions that do not meet applicable activity-specific BMPs or minimum TPDES compliance requirements. In addition, adhere to the storm water related inspection schedules and protocol that have been developed by the DOA and are specified in Section 12 of this SWP3.
- *Spill Prevention and Response* - Implement procedures and practices designed to prevent spills, and in the event of a spill, follow proper spill notification and response procedures in accordance with ABIA's existing Spill Response Plan. The Spill Response Plan is provided in Appendix F of this SWP3.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP#SC2 PREVENTION OF ILLICIT NON-VISIBLE NON-STORM WATER DISCHARGES

PURPOSE:

Within storm water terminology, the term “illicit non-visible” refers to unauthorized discharges that occur through non-visible sources such as sub-grade drainage piping. A primary cause of such discharges is cross connections that may exist between sanitary and storm sewers. For instance, through a cross connection, floor drains located in operational areas may unknowingly be connected to the storm drain system. Discharges through these cross connections may be inadvertent because the operator may be unaware of the cross connections.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policy regarding prevention of illicit discharges:

- The washing of aircraft, GSE, or vehicles is prohibited in areas where there is known, or the potential for, cross connections between sanitary and storm sewer lines.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to eliminate illicit non-visible non-storm water discharges. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their given operations.

1. Inspect existing drainage pipe configurations to identify cross connections.
2. Modify operations to eliminate discharges in areas where cross connections may exist. Eliminate cross connections by plugging or reconfiguring the pipeline connections.
3. Inspect all sub-grade drainage piping and liquid storage structures for leaks.
4. Post instructional signs, such as “DO NOT DUMP. LEADS TO STORM SEWER” at floor drains and other inlet structures where cross connections are known or suspected to exist.
5. Design new construction such that cross connections between sanitary sewer piping or other sub-grade liquid handling structures and the storm sewer piping system do not occur.
6. Apply for a separate permit for the discharge of unauthorized non-storm waters.
7. Direct the discharge to a sanitary sewer system. Check with the sanitary sewer system operator first to see if the material to be discharged is approved for acceptance.
8. Block storm drain inlets with mats, plugs, etc. during maintenance activities to prevent wastes or materials from entering storm drainage systems.

In addition to adhering to DOA policies and employing applicable BMPs, Operators must always comply with applicable local, state, and federal regulations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC3 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE
MAINTENANCE**

PURPOSE:

Aircraft, vehicle, and ground service equipment (GSE) maintenance routinely involve activities such as parts cleaning, engine repairs, and replacement of fluids (oil, oil filters, hydraulic fluids, transmission fluids and radiator fluids). These activities involve the use or handling of a variety of chemicals including solvents, acids, caustics, new and used lubricating oils and fuels. Many of the facilities conduct GSE maintenance activities outside due to current indoor space limitations. Therefore, the manner in which the maintenance activities are being conducted can have a direct impact to storm water quality. The ABIA Tenants that have been identified as conducting aircraft, ground vehicle and/or equipment maintenance activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established certain policies regarding aircraft, GSE, and vehicle maintenance, as follows:

Aircraft Maintenance

- Minor maintenance activities are permitted on the Terminal, Air Cargo, FBO, and SAPB, Aprons. Minor maintenance includes addition of fluids, changing tires, batteries and hoses, and other actions that do not produce pollutants. No fluid changes are permitted in the above noted locations.
- Major maintenance is permitted inside UFC specified facilities or on the Maintenance Apron. Major maintenance includes fluid changes, engine repairs or disassembly.

Ground Service Equipment (GSE) Maintenance

- GSE maintenance of any kind is prohibited on the terminal apron.
- GSE maintenance that involves potential pollutant materials must be performed in approved locations or off site. Maintenance should be performed indoors if such facilities are available. Approved locations include a GSEM facility, cargo apron, SAPB apron, FBO ramps, TANG ramp, maintenance ramp and other DOA pre-approved locations. Proper environmental controls include performing maintenance activities on paved surfaces with the use of drip pans and absorbent materials. Outdoor maintenance areas must be cleaned as appropriate or power washed on a regular basis.

Vehicle Maintenance

- Vehicle maintenance of any kind is prohibited on all aprons, Trash Compactor Site, and at the Belly Freight Facility.
- Vehicle maintenance that involves potential pollutant materials must be performed in approved locations or off site. Maintenance should be performed indoors if such facilities are available. Approved locations include on-site GSEM facilities or other DOA pre-approved locations. Proper environmental controls include performing maintenance activities on paved surfaces with the use of drip pans and absorbent materials. Outdoor maintenance areas must be cleaned as appropriate or power washed on a regular basis.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC3 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE
MAINTENANCE**

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to prevent storm water from contacting contaminants associated with outdoor maintenance activities. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility in consideration of their specific operations.

1. Move maintenance activities indoors to designated GSE facilities.
2. Provide cover over outdoor work areas.
3. Conduct maintenance activity off airport property.
4. Maintain equipment in clean condition and store in suitable designated areas.
5. Use "dry" cleaning and surface preparation techniques.
6. Use water-based cleaning agents or non-chlorinated solvents to clean equipment parts.
7. Eliminate excessive buildup of oil and grease on vehicles, equipment and work area surfaces.
8. Conduct maintenance in areas equipped with runoff controls that prevent discharges to storm sewers or directly to receiving waters.
9. Do not perform maintenance activities or stage equipment near any drainage feature.
10. Install and maintain catch basin filter inserts that assist in the removal of oil and grease, sediments and floating contaminants that may discharge from maintenance work area surfaces.
11. Use drip pans, absorbent materials, booms, etc. to collect fluid drippings.
12. Use absorbent materials at potential problem areas. Collect/remove absorbent and spill materials from areas promptly and dispose of them in a salvage drum for appropriate off-site disposal.
13. Drain and crush oil filters (and oil containers) before recycling or disposal. Store crushed oil filters and empty lubricant containers in a leak-proof container staged on secondary containment indoors. Hydraulic oil cans/filters/used absorbent materials are not to be placed in trash carts or trash receptacles/dumpsters.
14. Regularly clean any catch basins that receive runoff from a maintenance area, especially after larger storms. Do not flush wastes into receiving waters.
15. Store all parts and equipment indoors and provide secondary containment.
16. Drain and properly dispose of all fluids. Remove batteries from salvage aircraft, vehicles, and equipment.
17. Recycle or properly dispose of the following: greases, oils, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters.
18. Use biodegradable products and substitute materials with less hazardous properties.
19. Post instructional signs identifying "Do Not Dump. Leads to Storm Drain" on floor drains and on other inlets that lead to storm drains.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC3 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE
MAINTENANCE**

20. Power wash outdoor areas where maintenance occurs, on a regular basis. All wash waters are to be reclaimed and properly disposed.

In addition to implementing DOA policies, each Tenant must also employ appropriate BMPs and comply with applicable local, state, and federal regulations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC4 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE
FUELING/DEFUELING**

PURPOSE:

Aircraft, ground service equipment (GSE) and vehicle fueling operations create an opportunity for diesel, gasoline, and jet fuels to be released to the environment. Primary causes for such releases include spills and overfills. Another source is residual buildup of hydrocarbons on the fueling equipment itself. When in contact with storm water, these fuels can be transported into the storm water drainage system. The ABIA Tenants that have been identified as conducting aircraft, GSE and/or vehicle fueling activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for aircraft, ground service equipment and/or vehicle fueling/defueling operations:

- All fueling operations must be conducted in designated areas.
- All fuel trucks must be equipped with spill response kits.
- Manually overriding volumetric top-off valves on fuel trucks is prohibited.
- Topping off aircraft, GSE or vehicle fuel tanks is prohibited.
- Defueling of aircraft is permitted on all aprons, with approval from DOA Operations Division and ARFF, provided such actions are conducted in accordance with the Uniform Fire Code (UFC) using proper environmental controls. Proper environmental controls include the use of secondary containment devices and absorbent materials. Additional restrictions may apply. DOA Operations Division and ARFF must be contacted prior to commencing defueling operations.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to prevent storm water from contacting contaminants associated with fueling activities. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility in consideration of their specific operations.

1. Provide cover for outdoor fueling areas.
2. If a dead-end sump or containment is not used to collect spills, install an appropriately sized oil/water separator to operate under storm water runoff design conditions. (Check with regulatory agencies and obtain required approvals prior to implementation.)
3. Divert storm water runoff away from fueling areas through the use of grade control, berms, or curbing to avoid storm water contact with contaminated surfaces.
4. Use fuel dispensing equipment equipped with "breakaway" hose connections that provide emergency shutdown of flow should the fueling connection be broken.
5. Use automatic shutoff valves on fuel tankers.
6. Post "No Topping Off" signs on fuel pumps intended for vehicular fueling to prevent overfills.
7. Provide secondary containment and cover where fuel is transferred between tank trucks and bulk fuel storage tanks.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC4 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE
FUELING/DEFUELING**

8. Develop and implement policies and procedures prohibiting the “topping off” of GSE to prevent venting of fuel during the summer season.
9. Use absorbents, drain blocking devices (i.e., mats), gate valves at catch basins, or other means of containment during fueling to prevent spilled fuel from entering storm drains.
10. Collect and properly dispose of any spilled fuel.
11. Provide and maintain an adequate supply of spill response materials and equipment in fueling areas and on all fuel trucks.
12. Manage the disposal of water that collects in fuel tanks and fueling hydrant sumps according to applicable regulations.
13. Record all maintenance activities and inspections relating to fueling equipment, containers and containments in dedicated logbooks for each tank battery and fuel truck.
14. Test and monitor fuel storage tanks as required by federal and state laws.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC5 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE WASHING
AND/OR DEGREASING**

PURPOSE:

Through their use over time, aircraft, ground service equipment (GSE) and vehicles, and general equipment all accumulate contaminants such as solids, oils, and greases. When washed, these contaminants are picked up and carried away by the wash water. If the wash water is permitted to settle on the ground surface, or if the wash water stream flows directly into the storm water drainage system, these contaminants then become sources for storm water contamination. The ABIA Tenants that have been identified as conducting aircraft, ground vehicle and/or equipment washing and/or degreasing activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for aircraft, ground service equipment and/or vehicle washing and/or operations:

Aircraft Washing

- Aircraft washing is prohibited on the Terminal Apron except between the hours of 12:00 am and 5:00 am.
- Aircraft washing is permitted on the FBO, SAPB, Air Cargo, TANG, and Maintenance Aprons and at approved wash racks, provided all washwaters and rinsate are reclaimed and disposed in accordance with applicable environmental rules and regulations.

Ground Service Equipment Washing

- GSE washing is prohibited on the Terminal Apron.
- GSE washing is permitted on the FBO, SAPB, TANG, Air Cargo and Maintenance Aprons and at approved wash racks, provided all washwaters and rinsate are reclaimed and disposed in accordance with applicable environmental rules and regulations. GSE washing may also be performed at a washrack with a permitted connection to the waste water system.

Vehicle Washing

- Vehicle washing is prohibited on the Terminal Apron.
- Vehicle washing is permitted on most paved surfaces provided all wash waters and rinsate are reclaimed and disposed in accordance with applicable environmental rules and regulations. Vehicle washing may also be performed at a washrack with a permitted connection to the waste water system
- Pre-washing of vehicles must be performed inside a designated wash facility.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for wash water contaminants to impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC5 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE WASHING
AND/OR DEGREASING**

1. Utilize off-site commercial cleaning facilities when possible, if comparable facilities are not available on site.
2. Use designated indoor wash areas, or covered and bermed outdoor facilities with appropriate collection or treatment facilities.
3. Use a DOA Approved Contractor for washing and degreasing, provided all wash waters are reclaimed and properly disposed.
4. Use "dry" cleaning and surface preparation techniques. Remove all materials, drippings and residue from dry cleaning and dispose of these materials properly.
5. Collect outdoor washdown water and properly dispose of it through a permitted connection to an approved treatment facility. Obtain approval from treatment facility prior to discharge.
6. Use absorbents, drain blocking devices (i.e., mats), or valves at catch basins during washing to facilitate the reclamation of wash water.
7. Provide secondary containment for containers of washing and steam cleaning additives.
8. Use only biodegradable phosphate-free detergents.
9. Limit the availability of outdoor water supplies (hose bibs).
10. Post signs at outdoor water sources stating the appropriate uses and discouraging uses that would introduce pollutants to the storm drain system/receiving waters.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC6 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE STAGING
AND STORAGE**

PURPOSE:

Aircraft, vehicles, and ground service equipment (GSE) are routinely staged or stored outdoors on airport aprons, parking lots and staging areas. Staging is temporary; storage is typically longer term. It is a common occurrence for materials, such as motor oils, hydraulic fluids, battery acids, and greases, to leak onto the paved surface from the aircraft, GSE, and vehicles. Storm water that comes in contact with the paved surfaces will pick up contaminants resulting from this leakage. The ABIA Tenants that have been identified as conducting aircraft, ground vehicle and/or staging or storing activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for aircraft, ground service equipment and/or vehicle staging and storage operations:

- All aircraft, GSE and vehicles must be stored on paved surfaces.
- Well maintained, non-leaking GSE and vehicles may be staged in unpaved areas as long as vegetative cover is not affected.
- Drip pans must be placed under leaky stored aircraft, GSE and vehicles to capture fluid leaks and or drips. Alternatively, all fluids must be drained from aircraft, GSE and vehicles.
- All storage areas must be cleaned as appropriate or power washed on a regular basis.
- Storage of old, broken down or non-functioning aircraft, GSE or vehicles for extended periods of time is prohibited on airport property. A 30-day grace period will be provided from the date of notification to remove the aircraft, GSE or vehicle.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for wash water contaminants to impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Move storage/staging areas indoors.
2. Provide a cover over outdoor storage/staging areas.
3. Conduct storage/staging off-airport property.
4. Maintain stored/staged aircraft, vehicles and GSE in clean condition.
5. Drain and properly dispose of fluids and remove batteries from stored aircraft, vehicles, and GSE. Conduct these pre-storage maintenance activities indoors.
6. Designate suitable storage/staging areas for aircraft, vehicle, and GSE awaiting maintenance.
7. Repair or remove disabled aircraft, vehicles and GSE from ABIA promptly after tag out. Temporarily tarp or otherwise cover stored/staged vehicles and GSE.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC6 AIRCRAFT, GROUND SERVICE EQUIPMENT, AND/OR VEHICLE STAGING
AND STORAGE**

8. Place absorbents in areas of leaks. Replace absorbents before they become saturated and remove absorbents before any threat of inclement weather or any condition occurs that would cause them or absorbed fluids to be dispersed.
9. Inspect equipment for evidence of leaks and repair or empty remaining fluids to prevent further leaks.
10. Implement routine washing of all storage areas. Collect all wastes generated from washing and dispose of in accordance with applicable regulations.
11. Eliminate excessive buildup of significant materials from storage activities on vehicles, equipment and work area surfaces.
12. Do not store/stage vehicles or GSE near any drainage feature.
13. Install and maintain catch basin filter inserts that assist in the removal of oil and grease, sediments and floating contaminants that may discharge from storage/staging area surfaces.
14. Provide secondary containment for stored equipment that is known to be leaking when stored if it may yield even small amounts of contaminants (i.e., oil or grease).
15. Minimize storm water run-on by building a berm or other diversion structure on the upgradient side of the staging/storage area.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC7 AIRCRAFT AND AIRFIELD DE/ANTI-ICING, DEICING RECOVERY AND FLUIDS STORAGE

PURPOSE:

Aircraft de/anti-icing activities involve the outdoor application of chemical solutions, typically containing an approximate 50/50 mix of propylene glycol and water, which prevent potential operational problems associated with the buildup of ice. Airfield pavement de/anti-icing involves application of urea or potassium acetate to airfield pavements where ice build-up may endanger the operation of aircraft during colder weather. During these de-icing/anti-icing activities, excess fluids will drip to the ground surface and de/icing chemicals can become a source of storm water contamination. The ABIA Tenants that have been identified as conducting aircraft and runway de/anti-icing activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for de/anti-icing operations:

- Aircraft de-icing/anti-icing must be performed in approved designated areas. Approved areas include the cargo apron and the terminal apron between the trench drain and the terminal building.
- Aircraft de-icing fluid and water ratios should be correlated to temperature to reduce the amount of glycol used per de-icing/anti-icing event.
- Employees must be properly trained on aircraft de-icing/anti-icing procedures to ensure that over application of fluid does not occur.
- All de-icing/anti-icing AST must be manufactured to meet UL 142 standards and be equipped with secondary containment.
- All de-icing/anti-icing AST must be stored at approved locations.
- Long-Term storage of de-icing/anti-icing fluids on the Terminal, SAPB, FBO, TANG and Maintenance Aprons is prohibited.
- Drums containing de-icing/anti-icing fluids must be stored in areas not subject to precipitation events in facilities that meet the Uniform Fire Code and applicable environmental rules and regulations.
- During periods of inclement weather, de-icing/anti-icing trucks and materials may be temporarily staged at the designated area of application.
- The use of de-icing/anti-icing trucks to store de-icing/anti-icing materials during off peak periods must be undertaken in accordance with Uniform Fire Code and applicable environmental rules and regulations.
- DOA Operations Division must be notified prior to conducting de-icing/anti-icing operations.
- Completed ABIA de-icing/anti-icing form must be faxed to the DOA Environmental Section within 24 hours of applying de-icing/anti-icing fluids.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for de/anti-icing fluids to impact storm water quality. The list is purposely exhaustive with the understanding that Operators

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

**BMP# SC7 AIRCRAFT AND AIRFIELD DE/ANTI-ICING, DEICING RECOVERY AND
FLUIDS STORAGE**

must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Perform de/anti-icing only in those areas designated by the DOA as appropriate for such activities. These areas are the Terminal and Cargo Area Aprons.
2. Apply only enough fluid to surfaces to ensure the safe operation of the aircraft.
3. Clean ramp areas following de/anti-icing operations. Wet-type sweepers are effective in removing de-icing fluids from paved areas. Dispose of or recycle the fluids in accordance with applicable regulations.
4. Implement recommendations of the FAA technical committee on deicing.
5. Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
6. Surround airfield pavements that may have de/anti-icing chemical run-off with vegetative filter strips or other treatment controls.
7. Make chemical substitutions and use more environmentally friendly chemicals to replace ethylene glycol and urea.
8. Adjust de-icing/anti-icing mix ratios to correspond with weather conditions.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC8 MATERIAL HANDLING

PURPOSE:

With regard to storm water, outdoor material handling activities represent a potential contaminant source because of the type of materials (i.e. significant materials) being handled and/or because of the equipment or procedures being used to handle the materials. Materials may be spilled, or leaked during loading and unloading operations. These materials can accumulate on the ground surface, or collect on the equipment, and can be picked up by rainfall runoff, or washdown waters. The ABIA Tenants that have been identified as conducting outdoor material handling activities are listed in Table 5-1. **This BMP does not apply to material handling associated with routine aircraft operations, such as fueling.**

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for outdoor material handling:

- All outdoor materials handling areas must be cleaned as appropriate or power washed on a regular basis to remove material buildup. All wash water and rinsate must be reclaimed and disposed in accordance with applicable environmental rules and regulations.
- An adequate supply of spill response kits must be maintained in areas where spills are likely to occur.
- Materials may not be transferred at locations in close proximity to storm water inlets.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for contaminants to impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Protect all material handling activities including loading and unloading from rainfall, run-on and wind dispersal to the maximum extent practicable. Viable options are:
 - a. Conduct under existing cover.
 - b. Cover areas/docks to reduce exposure of materials.
 - c. Move indoors.
2. Position tank trucks or delivery vehicles so that possible spills or leaks can be contained.
3. Use door seals or skirts between vehicles and structures to prevent material exposure to rain.
4. Contain and absorb leaks during transfers and spillage from hose disconnects; dispose of residue properly.
5. Use drip pans under hose connections.
6. Transfer liquids on paved surfaces. Locations with concrete paving should be used if the liquid is asphalt reactive.
7. Provide contractors and haulers with copies of pertinent BMPs. Require contractor/hauler adherence to BMP specifications.
8. Contract maintenance operations for material handling equipment.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC8 MATERIAL HANDLING

9. Require contractors to perform material handling and equipment maintenance activities off-site or indoors at GSEM.
10. Verify proper waste disposal practices of contractors.
11. Include spill kits on appropriate material handling vehicles and equipment.
12. Develop and implement a written operations plan that describes loading/unloading procedures.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC9 STORAGE OF SIGNIFICANT MATERIALS

PURPOSE:

Significant materials (e.g., fuels, chemicals, bagged materials on pallets, compounds, etc.) stored outdoors represent a potential source for storm water pollutants. Materials may be stored temporarily as part of a short-term project, or permanently as part of routine operations. Outdoor storage operations commonly involve transferring of liquids from one container to the other, filling of containers, relocating materials, temporary coverings, and other activities that create a potential for exposure to rainfall. Currently, significant materials stored outdoors include chemicals that are stored in drums, tanker trucks, and bulk tanks. The ABIA Tenants that have been identified as conducting outdoor storage of significant materials are listed in Table 5-1. **(See related BMP#SC7 for management practices for de/anti-icing fluids)**

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for outdoor storage of significant materials:

- Materials must be stored in designated areas or in buildings where possible. If materials cannot be stored indoors, the area must be paved, covered and equipped with secondary containment.
- Storage of empty drums outdoors in unapproved locations is prohibited.
- All newly installed ASTs utilized for fuel (Jet A, Gasoline, Diesel, AV Gas, etc.) storage must be equipped with secondary containment systems that meet applicable city, state and federal regulations.
- Storage tanks, including USTs and secondary containment systems must be tested and monitored as required by Federal and State laws.
- Storm water collected from secondary containment areas must be discharged according to applicable regulations.
- Significant materials must not be staged near drainage features.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants from outdoor storage of significant materials to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Protect all significant materials from rainfall, run-on, runoff and wind dispersal to the maximum extent practicable. Viable options include:
 - a. Store material indoors.
 - b. Cover the storage area with a roof.
 - c. Cover the material with a temporary covering made of polyethylene, polypropylene, or hypalon.
 - d. Minimize storm water run-on by enclosing the area or building a berm around the area.
2. Reduce the quantities of significant materials stored outside to the minimum volume required based on variables such as use, shelf life, and the potential to release contaminants.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC9 STORAGE OF SIGNIFICANT MATERIALS

3. Avoid dispensing from drums positioned horizontally in cradles. Dispensing materials from upright drums equipped with hand pumps is preferred. Always use drip pans and self-closing spigots if dispensing from horizontally positioned drums.
5. Store drums and containers on containment pallets or other structures to keep container and any leakage out of contact with storm water. Provide run-on/run-off containment dikes for storage tankers, ASTs, drums, and containers.
6. Use drum lids and closure caps to prevent rainfall from washing materials and drippage from the top of containers to the storm drain system.
7. Post clearly visible signs at all chemical storage locations noting the materials stored, emergency contacts, and spill cleanup procedures.
8. Install and maintain catch basin filter inserts.
9. Store all materials in their original containers or containers approved for that use.
10. Seal all containers appropriately between uses. All empty containers shall be stored indoors, under cover, or promptly removed from ABIA premises.
11. Properly label all chemical containers with information as required by applicable regulations, including contents, hazards, appropriate spill response and first aid procedures, manufacturer's name and address, and storage requirements.
12. Provide MSDSs for any materials stored and/or handled by the Tenant's contractors.
13. Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan as required under guidelines set forth in 40 CFR, Section 112.3(a), (b).
14. Where significant materials are handled outdoors, sweep and collect debris from the area or wash the area and provide reclamation of wash water.
15. Store all de/anti-icing chemicals appropriately indoors within Tenant facilities equipped with proper controls.
16. Tanks should be equipped with monitoring devices such as level indicators and gauges, overflow protection with alarms, and/or interstitial leak detection for double walled tanks.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC10 WASTE HANDLING AND DISPOSAL

PURPOSE:

Many of the ABIA industrial operations generate waste materials that contain chemical or suspended solid pollutants. Among others, common waste materials include soil or other material stockpiles, spent solvents, used oils and hydraulic fluids, excess de/anti-icing fluids, used oil filters, batteries, and tires, discarded equipment, and lavatory waste fluids. If these materials are not handled and disposed of properly, they can become a source of storm water pollutants. The ABIA Tenants that have been identified as conducting waste handling and disposal activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for waste handling and disposal operations:

- Storage of waste materials on all aprons is prohibited.
- If possible, waste storage and disposal areas must be located indoors and equipped with secondary containment. If wastes cannot be stored indoors, the area must be paved, covered and equipped with secondary containment.
- Documentation that tracks all materials storage, waste generation, storage and disposal must be maintained, as required by State and Federal rule and regulations.
- Retain a licensed EPA or TNRCC Waste transporter and disposal facility for removal and disposal of all chemical wastes and absorbent materials.
- Place spent absorbent, batteries, and filters and in appropriate secondary containment at a designated waste disposal area within your leasehold. Do not dispose of such materials in ABIA dumpsters.
- RCRA empty chemical containers with a capacity of less than 5 gallons may be placed in ABIA waste receptacles.
- Maintain adequate supplies of spill response kits in accessible locations near areas where spills are likely to occur.
- Trash compactor carts must be sealed and lined.
- All storage areas must be cleaned appropriately or power washed utilizing reclamation technologies on a regular basis.

BEST MANAGEMENT PRACTICES:

The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Track chemical inventories. SARA Title III, Section 313 requires inventory reporting for hundreds of listed chemicals and compounds. This Federal requirement can be used to track these chemicals although it is not as accurate a means as other approaches.
2. Maintain minimal inventories of required chemicals.
3. Reduce waste generation through substitutions for harmful chemicals, source reduction, reuse, and recycling.
4. Properly dispose of unusable chemical inventory.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC10 WASTE HANDLING AND DISPOSAL

5. Prevent run-on and runoff from waste management areas.
6. Track chemical storage, waste generation, waste storage, and waste disposal. Maintain the following information at the Tenants ABIA facilities for review upon request.
 - Waste streams characterization.
 - The process generating the waste.
 - Waste manifests, bills of lading, biennial reports, permits, environmental audits, emission reports, Material Safety Data Sheets (MSDS), NPDES discharge monitoring reports.
 - Inventory reports.
 - Chemical spill data.
 - Emissions.
 - Shelf life expiration.
7. Maintain an inventory of the types and amounts of material disposed.
8. Segregate waste based on type and compatibility.
9. Inspect waste management areas for spills and leaks.
10. Avoid waste handling and storage in areas near storm drain inlets/catch basins.
11. Schedule waste pickup as frequently as necessary to keep storage of waste to a minimum and to avoid overloaded/overfilled disposal containers.
12. Promptly remove empty containers from ABIA premises.
13. Prevent sediments and wastes from being washed, leached, or otherwise carried off-site.
14. Stencil "No Dumping" warnings on storm drain inlets.
15. Minimize spills and fugitive losses such as dust or mist from loading areas.
16. Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan as required under guidelines set forth in 40 CFR, Section 112.3(a), (b).
17. Equip waste transport vehicles with spill containment equipment.
18. Perform and document in a Tenant logbook, periodic inspections of hazardous and non-hazardous waste storage areas. Inspect for the following:
 - External corrosion and /or structural failure.
 - Spills and overfills due to operator error.
 - Failure of piping system (pipes, pumps, flanges, couplings, hoses, and valves).
 - Leaks or spills during pumping of liquids or gases.
 - Loose linings, poor welds, and/or improper or poorly fitted gaskets on new tanks or containers.
 - Integrity of tank foundations, storage area coatings, and containment.
19. Collect outdoor washdown water and properly dispose of it through a permitted connection to an approved treatment facility. Obtain approval from the treatment facility operator prior to discharge.
20. Drain fluids from parts prior to disposal.
21. Maintain copies of all manifests, bills of lading, receipts and other related documents at the Tenants' ABIA facility for review upon request.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC10 WASTE HANDLING AND DISPOSAL

22. Perform regular sweeping or cold water wash (with no additives) of all non-chemical solid waste staging areas. Where functioning sediment traps and vegetative filters are used in lieu of collection of such wash waters, ensure that such controls receive regular debris removal and maintenance for proper operation.
23. Keep dumpster lids closed to prevent rainfall infiltration and leakage.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC11 BUILDING AND GROUNDS MAINTENANCE

PURPOSE:

Building and ground maintenance operations involve a wide variety of activities, including weed and pest control, landscaping and irrigation, structural maintenance and repairs, mechanical sweeping and cleaning of paved surfaces, and cleaning of catch basins. These activities can involve the use of chemicals such as pesticides and herbicides, fertilizers, washdown waters, paints, and solvents, and the generation of associated waste materials. The ABIA Tenants that have been identified as conducting building and ground maintenance activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for building and ground maintenance operations:

Pesticides and Fertilizers

- The use of pesticides and fertilizers must be performed by licensed applicators with prior approval of the DOA.
- Track chemical inventories and usage. More specifically, track application date, time, location, personnel, target result and chemical mix, type and quantity.
- Application of chemicals before precipitation events and during windy conditions is prohibited.
- Application of chemicals within 150 feet of springs or wetlands is prohibited.

Erosion Control

- Utilize erosion and sedimentation control measures detailed in the City of Austin approved manual for maintenance activities and for all stockpile areas. Erosion and sedimentation control measures include, but are not limited to, the installation of silt fence, rock berms and inlet protection.

Structural Mechanical Maintenance and Repairs

- Where appropriate, conduct structural mechanical maintenance and repairs in designated areas equipped with proper environmental controls. Proper environmental controls include performing maintenance activities on paved surfaces with the use of drip pans and absorbent materials. Outdoor maintenance areas must be cleaned as appropriate or power washed on a regular basis.

Structural Washing

- Water from routine washing of buildings where detergents or other chemicals are used must not enter the storm water system. This provision also applies to routine washing of air conditioning systems.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants from building and ground maintenance operations to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC11 BUILDING AND GROUNDS MAINTENANCE

1. Wash and clean non-contaminated structures using as little cold water (no additives) as possible and ensure that water is conveyed to a vegetative strip. Runoff must not enter ABIA's storm water system or conveyances.
2. Prevent and clean up spills promptly.
3. Keep debris from entering storm drains.
4. Maintain the storm water collection system on a regular basis. Remove debris and clean any catch basins that receive runoff from maintenance areas. Use a vacuum truck to remove accumulated materials. Do not flush wastes into receiving waters.
5. The following applies to fertilizer and pesticide/herbicide use by DOA Field Maintenance and the ABIA Golf Course:
 - Minimize chemical use. Calibrate application equipment.
 - Utilize integrated grounds maintenance and pest management procedures whereby a least toxic control evaluation is made.
 - Introduce and support a target pest's natural predators
 - Use maintenance practices, such as, frequent mowing, thinning or removal of underbrush or changing of plant species in lieu of chemical applications.
 - Use chemicals that pose minimal hazards.
 - Keep transportation of concentrated chemicals to a minimum.
 - Apply chemicals at the appropriate time of year.
 - Apply chemicals according to manufacturer directions and do not exceed recommended application rates.
 - Only apply the amount necessary for the job.
 - Record quantity, location and date of applications.
 - DO NOT apply chemicals before or during precipitation events or during windy conditions.
 - DO NOT apply chemicals within 50 feet of waterways or within 150 feet of springs or wetlands.
6. Maintain MSDS files on chemicals that have been used or are planned for use.
7. Clean equipment where discharges approved for acceptance by the wastewater authority will drain to an approved connection to the sanitary sewer; otherwise collect wash water for appropriate off site disposal.
8. Store chemical containers indoors. Store liquid containers on pallets. Store liquid containers on secondary containment pallets when containers are in use.
9. Properly seal and label chemical containers.
10. Regularly sweep and remove collected materials from paved surfaces.
11. Properly dispose of landscape waste, wash water, sweepings, and sediments.
12. Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may occur.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC11 BUILDING AND GROUNDS MAINTENANCE

13. Regularly clean paved surfaces that are exposed to industrial activity. Collect outdoor washdown water from pavements and industrial areas and properly dispose of according to applicable regulations.
14. Ensure terminal food vendors understand and follow proper procedures for grease disposal.
15. Perform periodic inspection of grease traps. Pump grease traps on a regular maintenance schedule as determined based upon inspections.
16. Perform periodic inspection of sewer lines. Snake lines if inspection indicates obstructions.
17. Block storm drains during cold water pressure cleaning activities to divert wash water overland rather into storm drains.
18. Employ “dry” cleaning methods.
19. Inspect liquid waste and product containers frequently for leaks and proper closure seal.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC12 LAVATORY SERVICE OPERATIONS

PURPOSE:

Lavatory service operations involve the collection of lavatory waste fluids and sludge (i.e. blue juice) from aircraft reservoirs, re-filling of aircraft lavatory fluid reservoirs with new blue juice, and the transportation of the waste fluids to a triturator for pretreatment prior to discharge to the City of Austin publicly owned treatment works (POTW). These operations are performed using trucks and/or trailers outfitted with the necessary storage compartments, pumps, and hoses. Fluid releases to the ground surface or equipment can occur by overfills, hose connection or valve leaks, residue drippage, etc. These releases may occur due to operator errors, or due to equipment failures. Based on the nature of both the new and used blue juice, such release will cause adverse impact to storm water quality if not properly cleaned up. The ABIA Tenants that have been identified as conducting lavatory service operations are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for lavatory service operations:

- Adherence to established triturator procedures posted at the GSEM facility is required at all times.
- All employees utilizing the triturator facility must be trained on triturator operating procedures and Department of Aviation Spill Response Procedures Plan prior to utilizing the facility.
- Lavatory trucks will not be left unattended at the triturator bay.
- Discharge of lavatory wastes to the storm water system or non-permitted sanitary sewer connection is prohibited.
- Discharge of unapproved chemicals or materials into the triturator is prohibited. This includes protective gloves, paper, syringes and other non-biodegradable materials.
- Lavatory trucks must be parked on paved surfaces at all times
- Maintain an adequate supply of spill response materials at the triturator facility and on all lavatory trucks.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants from lavatory service operations to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Do not hose down spills unless the discharge enters the sanitary sewer system through a permitted connection to a triturator facility.
2. Carefully handle chemicals and chemical concentrates. Immediately collect dry chemicals or absorb liquid chemicals for proper disposal.
3. Perform all surfactant/disinfectant mixing and transfers in the triturator area. This will allow the rinsing of minor spills and splashes to enter the sanitary sewer system.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC12 LAVATORY SERVICE OPERATIONS

4. Drain the aircraft connecting hose into the storage tank after servicing an aircraft. Properly secure all hoses, valves and equipment when transporting waste to eliminate leakage and spills.
5. Utilize drip pans at hose connections and valves.
6. Practice good housekeeping techniques, such as storing and disposing of waste properly, sweeping the outdoor area and storing materials according to manufacturers recommendation in the triturator area. Immediately clean up spills of wastes and chemicals.
7. DO NOT discharge lavatory waste to sanitary sewer connections other than through the triturator facilities. Other industrial type connections may be equipped with bypass gates that if improperly maintained or defective may discharge to the storm water system.
8. Perform regular inspections of equipment and vehicles used for lavatory waste operations. Keep all equipment in good working order. Replace worn equipment before leaks develop. Notify appropriate ground service personnel if aircraft lavatory fittings require maintenance.
9. Perform regular inspections of the triturator facilities. Keep all equipment in good working order. Replace worn equipment before it malfunctions. Notify appropriate individuals if the triturator is malfunctioning. If the triturator is malfunctioning, DO NOT attempt to discharge waste into it OR the storm water system. Lavatory waste is to remain in the equipment storage tank until the triturator is functioning.
10. Provide and maintain an adequate supply of spill response equipment and materials on lavatory waste trucks, at the triturator building, and near areas where spills may be likely to occur. Implement spill response in an expeditious fashion.
11. Provide and maintain an adequate supply of personal protective equipment (PPE) and ensure properly trained employees don such equipment when cleaning a spill.
12. Utilize buckets or pans to capture drippage from aircraft lavatory access fitting and hoses. Immediately dump the drippage into bulk storage on the service cart of truck.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC13 PAVEMENT WASHDOWN

PURPOSE:

Washdown of paved surfaces occurs as part of routine housekeeping measures and may also be employed during spill cleanup. Solids and chemical residues that have accumulated on the paved surfaces are picked up by the wash waters and can be carried into the storm water drainage system. The ABIA Tenants that have been identified as conducting outdoor pavement washdown activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policy for outdoor pavement washdown operations:

- Washing of outdoor pavement where oil, and grease might accumulate such as aprons, parking lots and garages is only allowed where there is a permitted connection for wash water and rinsate to discharge to the waste water system or where wash waters are reclaimed.
- Paved surfaces where leaking aircraft, vehicles and ground support equipment are parked or where outdoor maintenance of the above occurs, must be cleaned as appropriate, and power washed on a regular basis.
- Water from routine washing of pavement where detergents or other chemicals are used or where spills or releases have occurred must be reclaimed.
- Prior to tug tunnel power washing the DOA maintenance division will deploy downgradient controls (absorbent booms, etc.) to remove any hydrocarbons that enter the storm drainage system. Detergents cannot be used during tug tunnel power washing activities.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants associated with outdoor pavement washdown operations to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Use designated and approved discharge facilities to dispose of wastes derived from apron/ramp cleaning.
2. Use "dry" sweeping techniques and dispose of sweepings in an appropriate manner.
3. Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
4. Retain a qualified pressure wash contractor to perform routine Tenant pavement and industrial area cleaning and reclamation of wash waters.
5. Use no heat, detergents or soaps when performing wash down of sidewalks or pavements where there are pollutants associated with industrial operations, such as oils, lubricants and de/anti-icing chemicals. Ensure that cold water (no additives) rinse is discharged to a down-stream vegetated filter strip that will collect solids and promote infiltration.

In addition to employing DOA policy, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC14 PAINTING

PURPOSE:

Painting operations may involve the use of water and oil-based paints, petroleum distillate and solvents, chemical stripping solutions, and sanding, grinding, and sand blasting operations. The materials used in the operations may be stored in bulk or in individual containers. The performance of painting operations can generate wastes including paint dusts and chips, chemical residues, spent solvents and stripping solutions, and discarded equipment and materials. Many of the products and wastes associated with painting operations represent a potential chemical or suspended solids pollutant source for storm water. The ABIA Tenants that have been identified as conducting painting activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for painting operations:

General Policies:

- Store containers of paint and solvents indoors.
- Empty containers with residual paint must not come in contact with precipitation.
- Paint trucks and support equipment must be stored on a paved surface with use of drip pans and absorbent materials to collect drips and leaks.
- Waste materials must be disposed according to local, state, and federal regulations.

Aircraft and GSE Painting:

- Aircraft and GSE painting must be performed at an approved permitted facility or off-site.

Vehicle Painting:

- Minor spot painting of vehicles is authorized in approved locations with the use of proper environmental controls. Controls include tarps and drop cloths or other devices to collect over spray.
- Vehicle sandblasting is authorized in approved locations provided proper environmental controls are in place. Environmental controls include utilizing tarps and plastic sheeting to capture blast media. Collected media must be disposed according to local, state and federal regulations

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants associated with painting operations to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Perform painting operations indoors with proper ventilation and emission controls.
2. Inspect parts prior to painting to ensure they are dry and prepared properly to accept paint.
3. Perform painting-related preparation activities indoors.
4. Evaluate efficiency of spray equipment to minimize waste overspray.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP# SC14 PAINTING

5. Use only non-halogenated solvents (i.e., petroleum spirits, mineral spirits).
6. Use water-based paints.
7. Recycle paint solvents.
8. Store incompatible waste streams separately.
9. Containerize paint solvents for appropriate offsite management.
10. Use a permitted onsite solvent recovery system.
11. Schedule outdoor pavement painting activities based on weather forecast. Do not paint before predicted rain events.
12. Ensure application area is dry before painting.
13. Dispose of all waste painting materials according local, state and federal regulations.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC15 AIRFIELD PAVEMENT DE-RUBBERIZING

PURPOSE:

When aircraft land on runways, tire particles become embedded in the paved surfaces. To remove these particles, "de-rubberizing" operations are performed. On the runways, the de-rubberizing operations involve spraying a de-rubberizing compound (biodegradable detergent) on the targeted pavement areas (typically within 3000 feet of each end of each runway), followed by a high-pressure wash. After the high-pressure wash, the pavement is flooded with fresh water to flush the particles off the runway and into a vegetative filter strip. The ABIA Tenants that have been identified as conducting de-rubberizing activities are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for airfield pavement de-rubberizing operations:

- Water from routine de-rubberizing activities where detergents or other chemicals are used must not enter the storm drain system.
- Field maintenance (FM) will not perform rubber removal if we received a significant precipitation event (>0.25") 24 hrs. prior to scheduled removal.
- FM will not perform rubber removal if there is >30% chance of precipitation within 24 hours of removal activities.
- FM will not perform rubber removal if precipitation is imminent even though there is a <30% chance of rain.
- FM will block the nearest downgradient storm drain inlets if they perform rubber removal activities when there is a 30% chance of rain within 24 hours of scheduled activities.
- FM will not perform rubber removal during precipitation events.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants associated with de-rubberizing operations to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Ensure that cold water wash and rinse is discharged to a vegetated filter strip, WQP, or vegetated channel that will collect solids and promote infiltration.
2. Use the least amount of surfactant possible.
3. Maintain vegetative strips along the runway systems to promote treatment.
4. Monitor the amount of material infiltrating the grass filter unit and prevent any materials from entering ABIA storm water drainage system.
5. Use drain-blocking devices to prevent material from entering ABIA storm drainage system.

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP# SC16 FIRE FIGHTING EQUIPMENT TESTING AND/OR TRAINING

PURPOSE:

Discharges that occur as a result of fire fighting are exempt from TPDES regulations. However, discharges from fire fighting readiness testing and training activities are not exempt. These activities, therefore, must be conducted in a manner that protects storm water. Airport Rescue and Fire Fighting (ARFF) conducts fire equipment readiness testing and fire-fighter training using chemical sprays, such as Aqueous Film Forming Foam (AFFF). AFFF contains water, glycols, surfactants, and proprietary chemicals.

The DOA periodically is required to test sprinkler systems in the terminal facility and the parking garage complex. The testing typically generates a discharge to the sanitary sewer system but on occasion may be discharged to the ABIA storm drainage system. Although the system is charged with potable water it was determined that the sprinkler system piping may contain contaminants including cutting oils and pipe anti-sieze compounds.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for fire fighting equipment testing and/or training:

- Fire fighting chemicals and wash waters used during testing must not enter the ABIA storm water conveyance system.
- Sprinkler system testing that generates observable contaminants including sheens or free oils that have the potential to enter the ABIA storm water drainage system will be minimized or eliminated by using hydrophobic booms/pads or by reclamation activities. Process waters recovered will be properly disposed.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for pollutants associated with fire-fighting equipment readiness and training exercises to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Conduct testing and training without the use of fire-fighting agents.
2. Conduct testing and training in areas where releases are discharged to a vegetated filter strip, WQP, or vegetated channel that will collect solids and promote infiltration.

In addition to employing applicable BMPs, Operators must always comply with applicable local, state, and federal regulations.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP#TC1 OIL/WATER SEPARATORS

PURPOSE:

There are two types of oil/water separators: the American Petroleum Institute (API) separator and the Coalescing Plate Separator (CPS). In general, oil/water separators are baffled chambers that are designed to remove petroleum compounds and greases from waters that flow through them. Oil/water separators also remove floatable debris and settled solids (sediment). Oil/water separators are typically used in areas where the concentration of petroleum hydrocarbons, floatables, or sediment may be abnormally high and source control techniques are not very effective. Design, sizing, and placement of oil/water separators are dependent on several factors including tributary area, types of activity, pollutant type and concentration, and water temperature. Given the designed function of oil/water separators, accumulated solids, hydrocarbons, and floatables represent a potential pollutant source for storm water. The ABIA Tenant locations where storm water run-off flows through an oil/water separator are listed in Table 5-1.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for oil/water separators:

- Implement a formal annual inspection program and clean out accumulated oil, grease floating debris and sediments as needed. The inspection program shall include but may not necessarily be limited to the depth of sludge, notation of the quantity and type of floating debris, and observation of walls and structural components and any valves or piping for deformation or cracks that may allow separate oils to leak from the system. Document all inspection results.
- Retain documentation regarding inspection, maintenance and disposal activities.
- Remove all sludge if volume exceeds 20% capacity.

BEST MANAGEMENT PRACTICES:

The BMPs listed below are designed to reduce the potential for accumulated pollutants associated with the use of oil/water separators to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must only implement those BMPs appropriate for use at their given facility, in consideration of their specific operations.

1. Conduct informal, routine inspections of structural integrity to ensure proper operation.
2. Inspect structure for accumulated pollutants after any spill event that could have impacted the oil/water separator.
3. Use oil absorbent pads to collect oil discharges and replace prior to each wet season, or as needed, whichever period is shorter.
4. Close all effluent valves during cleaning operations.
5. Properly characterize and dispose of all standing fluids, sludge, and other waste generated during cleaning operations.
6. Use an EPA or TNRCC approved waste transportation and disposal contractor.
7. Replace any removed water with clean water to prevent oil carryover through the outlet.

Storm Water Pollution Prevention Plan Austin-Bergstrom International Airport

BMP#TC2 WATER QUALITY PONDS

PURPOSE:

Water quality ponds (WQPs) are engineered structures that provide sedimentation and filtration pretreatment of storm water before discharge to most ABIA Outfalls. The WQPs function with associated detention basins that limit discharge rates for mitigation of the potential for downstream flooding and stream bank erosion caused by rapid runoff from improved sites. WQPs that collect runoff from the cargo and terminal aprons include concrete-lined retention basins to allow operator evaluation for runoff contaminants before appropriate discharge management. There are a total of 16 WQPs including those maintained by DOA and tenants. Depending on the specific location and purpose, WQPs may be lined or unlined and include lined or unlined conveyances, vegetated ponds, vegetated filter strips, sand and gravel filter media, perforated and non-perforated drainage piping, gates, valves, pumps and controls. To ensure the WQPs are operating properly and providing the designed pretreatment, these structures must be maintained, repaired, and cleaned periodically. For all City-owned WQPs, the DOA will have primary responsibility for operation, maintenance, and repairs.

DOA POLICIES AND PROCEDURES:

The DOA has established the following policies for Water Quality Ponds (WQPs) and Detention Basins (DBs):

- Regular maintenance must be performed on WQPs and DBs. Such maintenance shall include, but not necessarily be limited to the removal of trash and debris, repair of sluice gates and valves and mowing of grass.
- Maintenance must be performed in accordance with established City of Austin policies and procedures.

BEST MANAGEMENT PRACTICES

The BMPs listed below are designed to reduce the potential for accumulated pollutants associated with the use of WQPs and DBs to adversely impact storm water quality. The list is purposely exhaustive with the understanding that Operators must implement those BMPs appropriate for use at their given facility, in consideration of their specific operations. The ABIA Tenants facilities where storm water discharge flows to WQPs and DBs are listed in Table 3. In addition to employing applicable BMPs, Operators must always comply with applicable local, state, and federal regulations.

1. Comply with all requirements of COA Watershed Protection and Development Review Department site development permits and agreements regarding inspection and maintenance of WQPs and DBs.
2. Develop written Standard Operating Procedures (SOP) for operations, inspections, and maintenance of WQPs and DBs and all ancillary appurtenances. Inspection and maintenance activities should be documented. The SOPs should be reviewed and amended as necessary to ensure proper functioning of the WQPs. All employees involved in the operations or maintenance of the WQPs should be trained in the SOPs. ABIA has an existing SOP that is maintained by DOA Field Maintenance.
3. Dispose of all wastes generated from WQP and DB maintenance in accordance with applicable regulations.

**Storm Water Pollution Prevention Plan
Austin-Bergstrom International Airport**

BMP#TC2 WATER QUALITY PONDS

In addition to employing DOA policies, each Tenant must also employ appropriate BMPs, and comply with applicable local, state, and federal regulations.