Best Management Practices for Tenant Operations at State of Hawaii Airports

PROTECT OUR WATER
MĀLAMA I KA WAI
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION

STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, AIRPORTS DIVISION
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Disclaimer

Industrial and commercial activities conducted at the airport have the potential to discharge pollutants into the State of Hawaii, Department of Transportation, Airports Division (DOTA) Small Municipal Separate Storm Sewer System (MS4), underground injection control (UIC) wells, or receiving waters. Airport tenants are responsible to prevent or reduce the release or discharge of pollutants generated by their operations at both their leased tenant space and the common use areas of the Air Operations Area (AOA), such as the ramp. This document shall serve as a guidance document for general activities conducted by any and all tenants and their service providers at all State of Hawaii airports. The list of federal, state, and local regulations that apply to environmental compliance at the airports is provided in Attachment I. It is every tenant's responsibility to ensure that their activities comply with all current and applicable environmental laws and regulations, as well as their signed lease agreement with DOTA.

All tenants and/or their contractors operating at the airport shall adhere to the following best management practices (BMPs) in both their leased space and common use areas, airport responsibilities as described in Hawaii Administrative Rules (HAR) Title 19, and pertinent state and federal regulations. In the case of a conflict between tenants' and/or their contractors' company policies or procedures and the BMPs provided by DOTA, tenants and/or their contractors shall follow the more stringent BMPs.

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LIST OF ACRONYMS

AIR-EE	DOTA, Engineering Branch, Environmental Section
AOA	Air Operations Area
AOC	Airport Operations Control
AOM	Airport Operations Maintenance
ARFF	Aircraft Rescue and Fire Fighting
AST	Aboveground Storage Tank
BMP	Best Management Practice
CFR	Code of Federal Regulations
CWB	Department of Health, Clean Water Branch
DOH	State of Hawaii, Department of Health
DOTA	State of Hawaii, Department of Transportation, Airports Division
EC	Emergency Coordinator
EPA	U.S. Environmental Protection Agency
GSE	Ground Service Equipment
HAR	Hawaii Administrative Rules
HAZMAT	Hazardous Materials
HEER	Department of Health, Hazard Evaluation and Emergency Response
HRS	Hawaii Revised Statutes
LQG	Large Quantity Generator
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
OPA	Oil Pollution Act
OWS	Oil Water Separator
PBMP	Permanent Best Management Practice
PCB	Polychlorinated biphenyl
PPE	Personal Protective Equipment
SDS	Safety Data Sheet
SDWB	Department of Health, Safe Drinking Water Branch
SPCC	Spill Prevention, Control, and Countermeasure
SQG	Small Quantity Generator
UIC	Underground Injection Control
UST	Underground Storage Tank
VOC	Volatile Organic Compound
VSQG	Very Small Quantity Generator

Best Management Practices
Good Housekeeping Practices

Description

Various operations conducted at the common use areas of the AOA, tenant leased spaces, or in conjunction with tenant operations have the potential to impact stormwater runoff. Good housekeeping practices are intended to maintain a clean, safe, and environmentally friendly working environment. Implementing good housekeeping best management practices (BMPs) reduces the potential for pollutants to enter the State of Hawaii, Department of Transportation, Airports Division (DOTA) Small Municipal Separate Storm Sewer System (MS4), State waters, and/or underground injection control (UIC) wells to the maximum extent possible.

Limitations

There are no major limitations to the implementation of this BMP.

Practice		
☐	1	DO NOT overfill dumpsters or leave trash outside of containers. Ensure that materials put into dumpsters do not leak out of dumpsters and commingle with stormwater runoff. Use leak-proof dumpsters and keep them covered when not in use. If dumpsters are damaged, are delivered without lids, or leaks from dumpsters are observed, implement BMPs to prevent and/or contain discharges until dumpsters can be repaired or replaced.
☐	2	Remove and properly dispose of debris and trash from all areas daily. Minimize the potential for waste, garbage, and floatable debris to be discharged to the MS4 or UIC wells by keeping exposed areas free of such materials or by intercepting them before they are discharged.
☐	3	Schedule regular pickup and disposal of garbage and waste materials.
☐	4	Dry sweep or vacuum all areas to prevent tracking of materials. DO NOT hose down facility floors or outside areas with water unless a collection method and/or treatment device is implemented to contain wash water, properly dispose, and ensure there is no potential to impact stormwater. Treatment devices include oil water separators (OWSs), sumps, or other equivalent methods.
☐	5	Place spill kits in easily accessible areas and keep them stocked. If activities are conducted in areas that pose a potential threat for non-stormwater discharges to enter drain inlets, such as fueling activities, it is prudent to include drain mats or other preventative devices within spill kits to prevent discharges into drainage structures.
☐	6	Clean up spills and leaks promptly using dry methods such as rags or absorbent material to prevent discharge of pollutants into the MS4 or UIC wells, and properly dispose of spent cleaning materials. Put spent rags or other absorbent material used to contain any non-hazardous spills in durable plastic bags, double wrap (if applicable), seal with tape, and place in trash dumpsters. Disposal of hazardous spilled substances and spent cleanup materials shall be in accordance applicable rules and regulations.

Best Management Practices
Good Housekeeping Practices
(Continued)

Practice		
☐	7	Perform Permanent Best Management Practice (PBMP) inspections annually and perform maintenance as required. Document all inspections and maintenance of PBMPs and maintain records. Refer to the *PBMP Fact Sheet*.
☐	8	Identify storm drains, UIC wells, and waterways in each work area and prevent non-stormwater discharges into the storm drainage system.
☐	9	Inspect storm drain inlets regularly for sediment build-up or debris accumulation. DOTA maintains all storm drain inlets through a routine maintenance contract at HNL and OGG. If the build-up and/or accumulation is not a result of tenant activity, notify AIR-OME or AIR-EE if storm drain inlets and catch basins require cleaning. Otherwise, it is the tenant's responsibility to ensure that all storm drains are maintained.
☐	10	Inspect and maintain BMPs implemented by leasee within storm drains (i.e. witches' hat, etc.).
☐	11	Divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff to minimize discharge of pollutants.
☐	12	Perform daily facility inspections to ensure good housekeeping practices are being followed by facility personnel.
☐	13	Maintain records for all permits and plans for a minimum of five years.
☐	14	Ensure that all employees complete annual DOTA Stormwater BMP Training and have filled out the 10-question survey. At a minimum, one person from each facility must complete the annual DOTA Stormwater BMP Training and 10-question survey. This training covers BMPs listed in this manual. If only one person completed the training, they will be responsible to train all other employees as necessary and keep a roster of all personnel trained. Please click on the link to view the DOTA Stormwater BMP Training Video: http://hidot.hawaii.gov/airports/doing-business/engineering/environmental
☐	15	It is good practice to identify all chemical substances used in maintenance activities, compile Safety Data Sheets (SDSs) for hazardous chemicals, and store SDSs where chemicals are used. SDSs provide both workers and emergency responders with the proper procedures for handling a particular hazardous substance.

Best Management Practices
Aircraft, Vehicle, and Equipment Maintenance and Repair

Description
Routine maintenance on aircraft, vehicles, and equipment must be done to maintain their proper operation and prevent leaks and spills. Additionally, emergency maintenance of aircraft and equipment outside of tenant leased spaces may be required. The maintenance and repair activities conducted may include fluids removal, engine and parts cleaning, and/or tire repair and replacement. These activities represent a potentially significant source of contaminants due to the harmful materials used and the waste generated. This BMP is designed to prevent, or at minimum reduce to the maximum extent possible, the impact of contaminates from maintenance and repair on the stormwater system and/or UIC wells.

Limitations
Only emergency repair may be conducted in the AOA common use areas. All other maintenance and repair activities must be conducted in appropriate areas of the tenant facility.

Practice		
☐	1	Maintain aircraft, vehicle, and equipment used at the facility or in the common use areas of the AOA and keep in good operating condition. Inspect aircraft, vehicles, and equipment periodically for leaks, immediately implement appropriate drip protection measures if a leak is observed, and repair as soon as possible.
☐	2	Perform aircraft, vehicle, and equipment maintenance and repair activities indoors or under cover, whenever possible and ensure that all maintenance and repair activities are conducted away from the storm drain system. If emergency maintenance is conducted within the common use areas of the AOA, BMPs must be in place and perform an area check and clean up after maintenance is conducted.
☐	3	Store damaged and/or leaky aircraft, vehicles, and equipment indoors whenever possible. When a drip or leak is identified, use drip protective measures as means to prevent contact with ground (indoors or outdoors). If a drip pan is used outdoors, make sure that the drip pan is cleaned regularly to prevent overflow, especially during rain events. DO NOT leave leaking aircraft, vehicles, and equipment parked within the common use areas of the AOA overnight.
☐	4	Remove fluids and batteries from damaged and/or salvage aircraft, vehicle, or equipment before storage. Store damaged and/or salvage aircraft, vehicle, or equipment under cover, if feasible, until repair or disposal. Inspect at least monthly for signs of deterioration.
☐	5	Use drip pans, tarps, or any other drainage control measures whenever removing fluids to capture any releases and prevent stormwater pollution. Clean the drip pans when they fill up with oils or other fluids and dispose of the contents properly.
☐	6	Transfer fluids to a designated storage container as soon as possible.
☐	7	Store used, cracked, damaged, or acid batteries under cover and within secondary containment measures.

Best Management Practices
Aircraft, Vehicle, and Equipment Maintenance and Repair
(Continued)

Practice		
☐	8	When not in use, store drums 25-gallons and larger of liquid materials and waste indoors or under cover and within secondary containment. Store smaller containers of liquid materials and waste indoors or under cover.
☐	9	Properly empty and clean drip protection measures (i.e. drip pans) regularly and ensure all containers at the facility are properly closed and sealed when not in use.
☐	10	Store materials, such as impermeable berms or drain mats to protect storm drain inlets in the event of a spill.
☐	11	Designate areas for parts cleaning. Allow parts to drain over solvent tank or drip pan. DO NOT wash or rinse parts outdoors and do not allow solvent to drip or spill onto the floor. Remove any parts that are dipped in liquid slowly to avoid spills.
☐	12	Use dry cleanup methods such as dry sweep or vacuum all areas and properly dispose of clean-up materials. Washing may only occur in areas where there is a collection method and/or treatment device that contains wash water. Ensure all wash water is properly disposed and has no potential to impact stormwater.
☐	13	Prohibit pouring liquid waste into floor drains, sinks, outdoor storm drain inlets, or other storm drains or sewer connections. Dispose of the waste liquids properly.
☐	14	Maintain stocked spill kits throughout the facility, especially in maintenance areas to protect discharge to receiving waters and storm drain inlets in the event of a spill. Refer to the Spill Prevention and Response BMPs section located within this manual.
☐	15	Ensure that the BMPs installed at the tenant facility for stormwater management, such as the OWSs, storm drain inlet inserts, etc. are functioning as designed. Conduct inspections, maintenance and/or repairs as needed.
☐	16	Inspect the maintenance area regularly for proper implementation of BMPs.
☐	17	Conduct employee training annually and as required.

Best Management Practices
Aircraft, Vehicle, and Equipment Body Repair

Description

Body repair for aircraft, vehicles, and equipment is only conducted in permitted paint booths or auto repair/auto body shops. Body repair activities may include sanding, painting, welding, washing, and floor cleaning. The materials and waste generated by these activities have the potential to release pollutants such as oil and grease, organics, heavy metals, toxic chemicals, and paints to stormwater. This BMP is designed to prevent or reduce the impact of pollutants on the stormwater entering DOTA's MS4 and/or UIC wells from body repair.

Limitations

The fire code does not allow sanding and painting activities, unless conducted within an approved and permitted paint booth or by a permitted auto repair/auto body shop. Tenants conducting these activities must receive permission from Airports Rescue and Fire Fighting department to ensure this activity is allowed at their leased space.

Practice		
☐	1	Perform all body repair activities indoors or under cover and within a permitted paint booth or at an auto body shop.
☐	2	Utilize plastic barriers or tarpaulins during blasting or painting operations to contain debris.
☐	3	Sweep, vacuum, or use other dry cleanup methods routinely to pick up dust from dry sanding of primer, metal, or body filler. Keep airborne dust to a minimum by using vacuum attachments on sanding equipment whenever possible or utilize a paint booth. Make extra efforts to thoroughly sweep or vacuum dust prior to mopping.
☐	4	Clean up wet sanding drips with rags or absorbent materials and let them drip dry. Then sweep or vacuum up the dust. Finally, mop the area and dispose of the mop water properly. Put spent rags or absorbent material used to contain any non-hazardous spills in durable plastic bags, double wrap (if applicable), seal with tape, and place in trash dumpsters. Disposal of hazardous spilled material and spent cleanup materials should be in accordance with the Solid Waste Storage and Disposal BMP.
☐	5	Use solvents with low volatility and coatings with low volatile organic compound (VOC) content; use high transfer efficiency coating techniques such as brushing and rolling to reduce overspray and solvent emissions.
☐	6	Mix paints and solvents in designated areas indoors or under cover.
☐	7	Establish and implement effective inventory control to reduce paint waste, including tracking date received and expiration dates.

Best Management Practices
Aircraft, Vehicle, and Equipment Body Repair
(Continued)

Practice		
☐	8	Conduct all priming and painting activities only in permitted paint booths. Prohibit uncontained spray-painting activities. Painting outside or inside of hangars is prohibited due to fire code.
☐	9	DO NOT use water to control overspray or dust in the paint booth unless the water evaporates in the booth.
☐	10	Store waste paint, solvents, and rags in covered containers to prevent evaporation to the atmosphere.
☐	11	Wash water-based and latex paint brushes, rollers, and other equipment in utility sinks or other locations where wash water is treated or hauled.
☐	12	DO NOT clean out brushes or rinse paint containers into the dirt, street, gutter, storm drain, or waterways. "Paint out" brushes as much as possible. Prohibit washing paint equipment outside on pavement or into storm drains and/or UIC wells.
☐	13	Rinse the oil-based paint brush using paint thinners. Use a brush-and-roller spinner after the paint solids are loosened from the brush, dip the brush into a clean container of paint thinner, and spin the brush again. DO NOT dump the paint thinner when done; let the paint solids settle to the bottom of the container, then pour off the rest into a clean container. Let the paint solids dry out and then dispose properly.
☐	14	Properly segregate and label waste paints for disposal according to the Solid Waste Storage and Disposal BMP. Note: oil-based paints are considered hazardous waste.
☐	15	Conduct employee training annually and as required.

Best Management Practice
Aircraft, Vehicle, and Equipment Washing

Description
Routine washing of aircraft, vehicles, and equipment shall be conducted ONLY at designated wash racks or wash areas. Designated wash racks or wash areas are located inside a building or an impervious area where wash water can be contained and properly disposed of or directed to an OWS that drains to the sewer system, evaporation ponds, or collected and properly disposed of. Wash water may contain oils, greases, heavy metals, sediments, soaps, and other pollutants that pose a threat to the storm drain system and receiving water bodies. This BMP is intended to reduce the impact of these activities on stormwater runoff.

Limitations
As stated above.

Practice		
☐	1	Keep aircraft, vehicles, and equipment clean and in good operating condition. Aircraft, vehicle, equipment washing activities are NOT permitted in the common use areas of the AOA., unless at designated wash racks.
☐	2	Wash aircraft, vehicle, and equipment in designated wash racks or wash areas located at the tenant facility. Ensure the wash racks or wash areas are located indoors, under cover, or on an impervious area where wash water can be contained and directed to the municipal sewer system.
☐	3	Use detergents that meet U.S. Environmental Protection Agency's (EPA) Safer Choice Standard. Please refer to the following link to verify if the product you are using meets this standard: https://www.epa.gov/saferchoice/products.
☐	4	Where applicable, dry wash aircraft, vehicles, and equipment.
☐	5	See Solid Waste Storage and Disposal BMP for OWS maintenance.
☐	6	Ensure the OWSs within the tenant spaces have all applicable permits.
☐	7	Prohibit washing of personal vehicles.
☐	8	Ensure BMPs are implemented while washing at the DOTA wash racks or wash areas at the tenant facility.
☐	9	Always use the minimum amount of water and soap needed for all washing activities and avoid over spraying, showering, and splashing.
☐	10	Conduct employee training annually and as required.

Best Management Practice
Aircraft, Vehicle, and Equipment Fueling

Description
During fueling of aircraft, vehicles, and equipment on the tenant space, there is the potential for leaked or spilled fuel to contaminate stormwater. The procedures outlined in this BMP are intended to prevent fuel spills and leaks and reduce potential spills from impacting stormwater runoff.

Limitations
There are no major limitations to the implementation of this BMP.

Practice		
☐	1	Where possible, perform fueling of aircraft, vehicles, and equipment in designated areas away from storm drain inlets, drainage channels, UIC wells, or receiving waters.
☐	2	Conduct fueling operations (including the transfer of fuel to tank trucks) on an impervious or contained pad and under a roof or canopy, where possible.
☐	3	DO NOT top off or allow unattended fueling.
☐	4	Engage the interlocking brake system and/or chock the wheels of the fueling vehicle to avoid the driver from moving. Place a traffic cone or warning sign for safety.
☐	5	Ensure that containment devices or diversion measures (e.g., storm drain cover, Safe Drain, etc.) are properly implemented during filling of Aboveground Storage Tanks (ASTs) and Underground Storage Tanks (USTs). Monitor filling of ASTs and USTs. Conduct a visual check and test the stormwater collected in the Safe Drain containment measures prior to discharge.
☐	6	DO NOT hose off fueling area.
☐	7	Post proper fueling and cleanup instructions in fueling areas.
☐	8	Use only dry absorbents or other cleanup materials to contain spills. Promptly clean spills with rags or absorbent material, and properly dispose of cleaning materials. Put spent rags or absorbent material in a durable container until disposal can be facilitated. For larger spills, contact spill response personnel immediately. See Spill Prevention and Response BMPs located in this manual. Dispose of hazardous spilled material and spent cleanup materials in accordance with the Solid Waste Storage and Disposal BMP.
☐	9	Maintain an ample supply of spill cleanup materials and spill control equipment near fueling areas to protect discharge to storm drain inlets and receiving waters in the event of a spill. Equip fuel trucks and mobile tanks with spill cleanup materials. Each kit should have, at a minimum, loose absorbent material, broom, and pan or shop vac to pick up absorbent materials.

Best Management Practice
Aircraft, Vehicle, and Equipment Fueling
(Continued)

Practice		
☐	10	Develop and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan, if required. Ensure the SPCC Plan is updated at the required frequency. Conduct inspections and training per SPCC Plan requirements at the required frequency.
☐	11	Train oil and hazardous material handling personnel on proper fueling operations as well as spill response and reporting procedures annually and as required. Refer to the Spill Prevention and Response BMPs listed in this manual.
☐	12	Dispose the waste resulting from fuel tests and water collected in fuel tanks and hydrant sumps in accordance with the applicable county, state, and federal regulations.

Best Management Practice
Aircraft, Vehicle, and Equipment Fueling
(Continued)

Practice		
☐	13	The tenants and/or their fueling contractors should conduct the following checks regularly in addition to their operational procedures. If the following checks fail, replace defective parts immediately or remove from service until repaired. Fuel Storage Tanks: 1. Check the general condition of fuel storage tanks for safety defects, damage, corrosion, leaks, and appearance. 2. Check the condition of all fuel hoses and dispensing nozzles for wear. 3. Check piping systems (e.g. pipes, pumps, flanges, couplings, hoses, and valves) for failure, cracks, and leaks. 4. Check for appropriate monitoring via liquid level indicators or gauges, overfill protection with alarms, leak detection systems. 5. Check automatic shut off controls on fuel dispensing nozzles. 6. Check posts surrounding the fuel pumps and tanks to ensure they are in good condition to prevention collisions during vehicle ingress and egress. Tank Truck or Fueling Vehicle Checks: 7. Check the general condition of tank trucks or fueling vehicles for safety defects, equipment damage, fuel leaks, and appearance. 8. Check the operation of deadman controls, brakes, or the safety interlock system. 9. Check the condition of all fuel hoses, swivels, and dispensing nozzles for wear. 10. Check the general condition of grounding reels, cables, clamps, and lift platforms. 11. Verify that fire extinguishers are in proper place with unobstructed access. 12. Check the satisfactory operation of the emergency shutdown system. Hydrant System Checks: 13. Check the hydrant valve pits for fuel leaks, liquid level, and cleanliness. 14. Check the hydrant valve including components for visual deficiencies. 15. Ensure all emergency fuel shutdown stations on the ramp have clear access and check if the locator lights are working properly. 16. Verify the satisfactory operation of emergency shutdown. 17. Report abnormal pressure / flow charts because this may indicate leaks. 18. Check the isolation valve pits that control the distribution of fuel, for emergency access, lid condition, fuel leaks, and electrical components. Confirm satisfactory operation of pipeline leak detection system and/or pipeline monitoring systems, where installed.

Best Management Practices
Fertilizer and Pesticide Storage and Application

Description

Fertilizer and pesticide application are conducted by the tenant facility personnel or hired contractor to maintain landscaping or kill pests at their facility. Overuse of pesticides and fertilizers can lead to the presence of these chemicals in stormwater at significant concentrations. Pesticides are defined as chemicals used to kill pest animals or plants. They are typically used to control the growth of weeds or other undesirable vegetation. Occasionally, insecticides or rodenticides are used to control an infestation of insects or to prevent the spread of diseases (i.e., mosquito or rodent control). This BMP is designed to prevent or reduce the impact of pollutants to stormwater or UIC wells from fertilizer and pesticide storage and application.

Limitations

The only limitations are that the fertilizer, pesticide, and herbicide application should not be conducted during inclement weather or applied within six feet of a waterway or on slopes greater than a three to one ratio.

Practice		
☐	1	Store fertilizers and pesticides in accordance with the Container and Material Storage BMPs to minimize contact with stormwater runoff.
☐	2	Periodically check the condition of containers. Look for leaking or corroded containers, crystallization on covers or bases of containers, or discolored labels. Dispose unnecessary containers properly in accordance with the Solid Waste Storage and Disposal BMP.
☐	3	DO NOT over apply and ensure that all application is away from the DOTA MS4 and UIC wells.
☐	4	Use natural or organic alternatives, if possible.
☐	5	Follow all rules and laws, refer to the Hawaii Department of Agriculture, Plant Industry Division, Pesticide Branch for more information on the following: Hawaii Revised Statutes (HRS), Administrative Rules, Chapter 66; HRS, Hawaii Pesticide Law, Chapter 149A; Senate Bill 3095; and Act 45 (2018).

Best Management Practices
Container and Material Storage and Handling

Description
A variety of products and materials that may adversely affect water quality are stored at the tenant facility or common use areas of the AOA. This BMP is intended to reduce the potential for the contamination of stormwater by minimizing exposure of such products and materials to stormwater, minimizing hazardous materials used on-site, and training employees in proper handling and use of materials.

Limitations
Materials and waste cannot be stored in the common use areas of the AOA without approval from the AOC/AOM/Security.

Practice		
☐	1	Store materials (used tires, rusted metals, etc.) indoors or in covered areas wherever practical. Store materials in their original or appropriate containers as recommended by the manufacturer.
☐	2	Liquid storage in containers 25 gallons or greater and used acid batteries shall be stored indoors or under cover, and within secondary containment measures. Accumulation in secondary containment measures should be minimized, managed, and disposed of properly.
☐	3	Liquid containers in less than 25 gallons shall be stored indoors or under cover. If stored outdoors, they are within secondary containment measures and covered. Accumulation in secondary containment measures should be minimized, managed, and disposed of properly.
☐	4	Store small containers of flammable materials within flammable storage lockers.
☐	5	When storing materials (used tires, rusted metals, etc.) outdoors, place on top of dunnage to minimize contact with stormwater runoff/run-on. Cover materials with a tarp when storing them outdoors, whenever practical to prevent pollutants from leaching into stormwater or mixing with stormwater runoff.
☐	6	Ensure that all liquid containers are closed, secured to prevent movement, stored neatly and away from high traffic areas (if possible) to avoid accidental spills, and are properly labeled.
☐	7	Ensure that all empty containers are properly labeled as “empty” when stored on-site.
☐	8	Inspect storage areas regularly. Look for leaking or corroded containers, chemical discoloration, or other changes in the containers or contents that may indicate a potentially hazardous condition or chemical deterioration.
☐	9	Maintain accurate and organized inventory of stored supplies and materials used in the maintenance areas. Compile an SDS for all chemicals and maintain them in an accessible location for employees. Periodically review inventory and properly dispose of materials that are expired or no longer used.

Practice		
☐	10	Only purchase and store required quantities of hazardous materials and use less hazardous alternative materials where possible. Dispose of any unusable material, such as dried out paint.
☐	11	ASTs and MSTs shall be kept in good condition (i.e., free of damage with no signs of failure) to prevent potential spills or releases and should be properly labeled with the product it contains. If possible, a canopy or cover should be installed over ASTs used for fueling or transfer of products.
☐	12	Maintain an ample supply of spill clean-up materials near where spills may occur (e.g., liquid material storage areas, fueling areas, etc.) or where a rapid response can be made. Recommendation to include drain mats or other devices in spill kits to immediately stop and prevent spills from entering storm drain structures in high risk areas.
☐	13	Use absorbent materials to contain any spills. Promptly clean spills with rags or absorbent material, and properly dispose of cleaning materials. Put spent rags or absorbent material in durable plastic bags, double wrap (if applicable), seal with tape, and dispose in trash dumpsters. Disposal of hazardous spilled material and spent cleanup materials should be in accordance with the Solid Waste Storage and Disposal BMP. For larger spills, contact spill response personnel immediately. See Spill Prevention and Response BMP.
☐	14	Follow manufacturer's instructions regarding uses, protective equipment, ventilation, flammability, and mixing of chemicals.
☐	15	Recycle spent anti-freeze, used oil, spent solvents, windshield washer fluid, used batteries, degreasers, used paints, thinners, etc.
	16	Develop and implement a SPCC Plan, if required, based on facility oil storage and operations. Ensure the SPCC Plan is updated at the required frequency. Conduct inspections and training per SPCC Plan requirements at the required frequency.
☐	17	Conduct employee training annually and as required in spill prevention and proper material management. Train all employees who work in areas where industrial materials or activities are exposed to stormwater.

Best Management Practices
Solid Waste Storage and Disposal

Description

Some chemicals used at the airport require waste management. Improper handling of solid waste may result in contaminants entering stormwater runoff. The potential for discharge of these pollutants can be reduced by tracking solid waste storage, handling, and disposal, as well as reducing the waste generation through reuse and recycling.

The solid waste generated from tenant activities may include, but are not limited to, oil-based paints, solvents, thinners, petroleum products, used batteries, anti-freeze, light ballasts, and other chemicals. Some of this waste should be managed as hazardous waste, universal waste, and/or used oil as required by federal and state regulations (Appendix II). It is the responsibility of the hazardous waste generator to make a hazardous waste determination and dispose of the waste properly.

The procedures outlined in this BMP are intended to prevent or reduce the discharge of pollutants to stormwater through proper solid waste storage and disposal and training of employees and subcontractors.

Limitations

All hazardous waste shall be disposed of by a certified hazardous waste hauler.

Practice		
☐	1	Use the entire product before disposing of the container. Minimize use of hazardous materials on-site. Use less hazardous, alternative materials where possible.
☐	2	DO NOT remove the original product label; it contains important safety and disposal information. If a container is empty, label as such.
☐	3	Maintain good integrity of all storage containers (e.g., used oils, hydraulic fluids, spent solvents, waste aircraft fuel). Inspect containers regularly and transfer waste from damaged containers into containers that are intact and ensure new containers are properly labeled.
☐	4	Identify, list, and inventory all chemical substances present in the facility. Compile an SDS for all chemical substances. Have SDS data readily accessible for facility employees.
☐	5	Only purchase and store required quantities of hazardous materials.
☐	6	Water-based paints should be dried and disposed of in the dumpsters. Dispose of excess oil-based paints and sludge as hazardous waste.
☐	7	Designate an indoor or covered hazardous waste collection area.
☐	8	Hazardous waste should be stored in secure, covered containers, and protected from damage. Place hazardous waste containers in secondary containment.

Best Management Practices
Solid Waste Storage and Disposal
(Continued)

Practice		
☐	9	Label hazardous waste containers clearly with the words "Hazardous Waste" and the date when the hazardous waste accumulation began.
☐	10	DO NOT mix wastes; this may cause chemical reactions, make recycling impossible, and complicate disposal.
☐	11	Arrange for regular hazardous waste collection before containers reach capacity.
☐	12	Ensure that hazardous waste is collected, removed, and disposed of only at authorized disposal sites by an approved hazardous waste hauler. DO NOT discard hazardous waste into dumpsters. Maintain disposal manifests for a minimum of three years.
☐	13	Recycle any useful waste such as used oil, spent solvents, spent lead acid batteries, scrap metal, and used oil filters, etc. Filter and re-use thinners and solvents.
☐	14	Store used oil in appropriate containers, label containers clearly with the words "Used Oil," and provide secondary containment for containers 25 gallons or larger.
☐	15	Store universal waste in appropriate containers, indoors or under cover, and label containers clearly with the words "Universal Waste" followed by "lamps, batteries, etc.," in addition to marking with the accumulation start date. Dispose of universal waste within one year of the accumulation start date.
☐	16	Store used acid batteries indoors or under cover and within secondary containment.
☐	17	Store used tires and rusted metal under cover and off ground, if practicable while awaiting disposal.
☐	18	Place spill kits where they are readily accessible.
☐	19	If containers spill, clean up immediately; follow procedures in the Spill Prevention and Response BMP.
☐	20	At a minimum, OWSs must be inspected annually and cleaned to remove accumulated oil, grease, floating debris, and sediment in order to maintain solids and petroleum removal efficiency.
☐	21	Conduct employee training annually and as required. Train employees on proper waste control and disposal procedures as well as spill prevention and control.

Best Management Practices
Spill Prevention and Response

Description
Spills of materials used and stored at the tenant facility can impact stormwater runoff. The procedures outlined in this BMP are intended to prevent spills from occurring and outline procedures to be followed in the event of a spill.

Small spills of oil (less than 25 gallons) can be cleaned up using absorbent materials or other acceptable practices as long as they are cleaned up within 72 hours and do not threaten ground or surface waters. All spills five gallons or more must be reported to Airport personnel according to the *Spill Reporting Fact Sheet* for your airport. Daily inspections of the facility shall identify any small spills, which shall be addressed immediately.

In the event of a large or uncontrolled release, the owner or manager of the tenant facility shall act as the Emergency Coordinator (EC). Employees shall follow the guidelines listed below where practicable.

Limitations
There are no major limitations to the implementation of this BMP.

Practice		
☐	1	Stop work.
☐	2	Determine the source of the release and any hazards present.
☐	3	Notify the EC and Safety (ARFF) personnel as required per the Spill Reporting Fact Sheet. Notify all other Airport Personnel (Airport Duty Manager or Code 22, Ramp Control, or Dispatch) as required. Notify and alert others of the incident via: (1) voice; (2) hand-held radios; and/or (3) other effective communication.
☐	4	The EC shall evaluate the situation and decide whether to implement a "fight or flight" response by gathering the following information, if it can be done safely: • Location of the release • Type, quantity, and description of the release • Hazards of the release • Type of media affected (e.g., soil, asphalt, concrete, etc.). • Rate of the release • Migratory direction of the release • Potential for fire or explosion • Potential for human exposure • Potential for migration to surface water (e.g., ocean, storm drains, UIC wells, etc.)
☐	5	Keep non-essential employees and visitors away from the spill area.
☐	6	Prevent vehicles and equipment from driving through the spill area.

Best Management Practices
Spill Prevention and Response Practices
(Continued)

Practice		
☐	7	Locate, stop, and contain the source of the release.
☐	8	Confine the release to prevent further migration using drainage controls, including, but not limited to: • Diking and berming using sand, soil, or other inert material; • Sealing storm drains with plastic and sandbags; • Placing granular absorbent or absorbent pads and booms; • Diverting the chemicals from entering drains, manholes, streams, etc.; and • Implementing retention techniques.
☐	9	Call the facility spill response contractor for cleanup and removal of accumulated product resulting from the release. Ensure that the contactor collects and containerizes the spilled materials, affected media, used decontamination solutions. The contractor shall transport and properly dispose of the hazardous waste in accordance with applicable federal and state regulations.
☐	10	Clean any stained pavement by placing a berm for containment around the stained area, scrubbing the area using detergent or cleaning agent, and rinsing. The detergent and rinse water must be collected in the bermed area around the spill and removed.

Best Management Practices
Spill Prevention and Response Practices
(Continued)

Practice		
☐	11	The EC shall determine whether the spill is a reportable incident in accordance with the *Spill Reporting Fact Sheet* for the respective airport. If the spill is a reportable incident, the following agencies should be notified: • National Response Center – (800) 424-8802 • Local Emergency Planning Committee – see *Spill Reporting Fact Sheet* for your respective airport • State of Hawaii, Department of Health (DOH) Hazard Evaluation and Emergency Response (HEER) office – (808) 586-4249 or (808) 247-2191 (after hours) • Department of Health, Clean Water Branch (CWB) – (808) 586-4309 (only if spill reaches DOTA's MS4 or state waters) • Department of Health, Safe Drinking Water Branch (SDWB) – (808) 586-4258 or (808) 247-2191 (after hours) (only if it reaches a UIC well) • Department of Health, Waste Water Branch (WWB) – (808) 586-4249 (only for reportable sewage spills) The following information should be provided: 1. Caller name and telephone number 2. Name of hazardous substance spilled 3. Approximate quantity spilled 4. Location of the spill and Medium affected (land, water, etc) 5. Date and time of the spill 6. Description of how it happened 7. Immediate danger or threat posed by the release 8. Contact information for the responsible party 9. Measures taken or proposed to be taken to clean up the spill 10. Any known injuries resulting from exposure 11. Other country, state or federal officials that were also notified Call AIR-EE at (808) 838-8002 to report all verbal notifications. Copy AIR-EE (dot.air.environmental@hawaii.gov) on all written notifications.
☐	12	If the spilled material is a reportable incident, a written notification must also be submitted to various agencies no later than 30 days following the discovery of the release in accordance with the *Spill Reporting Fact Sheet* for the respective airport.
☐	13	If the EC decides on the "flight" option, the EC is to immediately alert and evacuate all personnel. The spill response team should don the appropriate Personal Protective Equipment (PPE).
☐	14	Labeling, transportation, and subsequent disposal of hazardous materials/waste must be in accordance with applicable government regulations.

Best Management Practices
Spill Prevention and Response Practices
(Continued)

Practice		
☐	15	All used decontamination solution, disposable PPE, and affected media must be properly packaged in U.S. Department of Transportation specified containers.
☐	16	Implement proper decontamination procedures on vehicles, affected media, PPE, and equipment. This may include placing absorbent material on oil-stained pavement; later sweeping up, removing, and disposing of affected media (soil or loose asphalt) that contains contaminant; and/or berming the spill area, scrubbing using detergents, and disposing detergent and rinse in accordance with applicable rules and regulations.

Best Management Practices
Outdoor Loading and Unloading Practices

Description

Several loading and unloading activities involving cargo, hazardous materials (HAZMAT), and aircraft servicing and waste disposal operations are conducted at the common use areas of the AOA. The loading and unloading of materials usually take place outside; therefore, materials spilled, leaked, or lost during the process may collect in the soil or on other surfaces and have the potential to be carried away by stormwater runoff. Implementation of these practices will prevent or reduce the discharge of pollutants to stormwater from the loading and unloading of materials.

Limitations

All the tenants and/or their contractors operating at the common use areas of the AOA will implement their individual or contractor's company policies or procedures, ramp responsibilities, and state and federal regulations in addition to this BMP.

Practice		
☐	1	Perform loading and unloading operations on designated areas, away from storm drain inlets, drainage channels, or receiving waters.
☐	2	Utilize PPE such as eye protection, face shield, rubber gloves, and protective apron when engaging in HAZMAT handling operations.
☐	3	Keep accurate maintenance logs to evaluate materials removed and improvements.
☐	4	Park tank trucks or ground service equipment (GSE) in designated areas that have drainage controls to contain spills or leaks of materials.
☐	5	Limit exposure of material to rainfall whenever possible, such as only loading or unloading during dry weather or conducting loading and unloading operations under cover.
☐	6	Check equipment regularly for leaks. Remove any faulty or leaking equipment from service.
☐	8	Use drip pans underneath hose and pipe connections, access fittings, and other leak-prone spots during liquid transfer operations. Drip pans may also be used for leaking delivery trucks, where appropriate.
☐	9	Conduct regular broom sweeping of the loading and unloading area.
☐	10	Maintain spill response materials on the all petroleum storage tank trucks as well as near the loading and unloading areas. In addition, place a stockpile of spill cleanup materials where it will be readily accessible to the service equipment.
☐	11	Limit exposure of material to rainfall whenever possible, such as only loading or unloading during dry weather, or conducting the loading or unloading indoors or under cover. Whenever possible, avoid placing the loading area near storm drains or cover storm drains during loading or unloading operations.

Best Management Practices
Triturator Operation Practices

Description
The sanitary sewage and associated rinse waters produced during the servicing of aircraft lavatory facilities must be discharged to the designated DOTA Triturator facility. All tenants and applicable personnel are responsible for proper disposal of waste associated with ground servicing of aircraft lavatory facilities. The following BMP outlines the steps for proper operation of the Triturator facilities to minimize the risk of a wastewater spill.

Potential sources of wastewater spills include failing private laterals, portable toilet failure, or triturator equipment. Due to the potential for exposure to unknown pathogens, all wastewater spills, no matter how small, must be reported to Duty Manager/Code 22, Ramp Control, dispatch or ARFF. In the event of a sewage spill, refer to HAR, Title 11, Department of Health, Chapter 2, Wastewater Systems.

Limitations
There are no major limitations to the implementation of this BMP.

Practice		
☐	1	Ensure the pit door is open.
☐	2	Position the vehicle so that the discharge pipe is centered over the pit.
☐	3	Some triturators may require the activation of the equipment via a start button.
☐	4	Deposit the waste. DO NOT leave the vehicle unattended while waste is discharging.
☐	5	Use the water hose to push clean water through the interior compartment of the vehicle. Note: the exterior of vehicles should not be washed at the triturator units.
☐	6	Ensure that the discharge valve is tightly closed to prevent releases and do not move the vehicle until faulty discharge valves are corrected.
☐	7	Move the vehicle and clean area surrounding the pit as necessary.
☐	8	Some triturators may require the deactivation of the equipment with a stop button.

ATTACHMENT I
LIST OF APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS APPLYING TO ENVIRONMENTAL COMPLIANCE AT AIRPORTS

LIST OF REGULATIONS

Code of Federal Regulations (CFR)

29 CFR § 1910 (Subparts G, H, I, J, and K) Occupational Health and Environmental Controls, Hazardous Materials, Personnel Protective Equipment, General Environmental Controls, and Medical and First Aid

29 CFR § 1910.1200 OSHA Hazard Communication Standard

40 CFR § 110 Discharge of Oil

40 CFR § 112 Oil Pollution Prevention (SPCC/Oil Pollution Act [OPA] Plans)

40 CFR § 117 Determination of Reportable Quantities for a Hazardous Substance

40 CFR §§ 122–124, 401 National Pollutant Discharge Elimination System (NPDES) Regulations for Stormwater Discharges

40 CFR §§ 260–263 Hazardous Waste Management System

40 CFR § 273 Universal Waste Management

40 CFR § 279 Used Oil Management

40 CFR § 280 Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)

40 CFR § 355 Emergency Planning and Notification

40 CFR § 370 Hazardous Chemical Reporting: Community Right-to-Know

40 CFR § 372 Toxic Chemical Release Reporting: Community Right-to-Know

40 CFR § 403 General Pre-Treatment Regulations for Existing and New Sources of Pollution

40 CFR § 761 Toxic Substances (Polychlorinated biphenyls [PCBs])

49 CFR § 110.3 Discharge of Oil

49 CFR §§ 171–173, 175, and 177 Hazardous Materials Regulations (DOT)

Hawaii Administrative Rules (HAR)

HAR § 11-54 Water Quality Standards

HAR § 11-55 Water Pollution Controls

HAR § 11-58.1 Solid Waste Management Control

HAR § 11-62 Wastewater Systems

HAR § 11-104.1 Management and Disposal of Infectious Waste

HAR §§ 11-260–263 Hazardous Waste Management

HAR § 11-273 Universal Waste Management

HAR § 11-279 Used Oil Management

HAR § 11-281 Underground Storage Tanks

HAR § 11-451 State Contingency Plan

HAR § 19 Department of Transportation, Airports Division

Hawaii Revised Statutes (HRS)

HRS § 128D Environmental Response Law
HRS § 128E Hawaii Emergency Planning and Community Right-to-Know Act
HRS § 174C State Water Code
HRS § 261 Transportation and Utilities
HRS § 342D Water Pollution
HRS § 342G Integrated Solid Waste Management
HRS § 342H Solid Waste Pollution
HRS § 342I Special Waste Management
HRS § 342J Hazardous Waste
HRS § 342L Underground Storage Tanks
HRS § 342N Used Oil Recycling

City and County Ordinances

City and County of Honolulu Sewer Ordinance 14
City and County of Maui Sewer Ordinance 19
City and County of Hawaii Sewer Ordinance 21
City and County of Kauai Sewer Ordinance 14

Airport Rules

Property Management Clauses

ATTACHMENT II
SUMMARY OF FEDERAL AND STATE REGULATIONS FOR SOLID WASTE MANAGEMENT

SUMMARY OF FEDERAL AND STATE REGULATIONS FOR SOLID WASTE MANAGEMENT

Solid waste is defined in 40 CFR § 261.2 and can be further classified into hazardous waste and non-hazardous waste. Hazardous waste is defined in 40 CFR § 261.3, as well as HAR § 11-261-3. Hazardous wastes are divided into listed wastes, characteristic wastes, universal wastes, and mixed wastes. It is the responsibility of hazardous waste generators to make a hazardous waste determination and dispose of hazardous waste properly. The identification and listing of hazardous waste and standards applicable to hazardous waste generators are available in the 40 CFR §§ 261 and 262 as well as HAR §11-261 and HAR §11-262. The facility can determine their hazardous waste generator status based on the following table:

Table 1 – Hazardous Waste Generator Status, Quantity, and Accumulation Time

Hazardous Waste Generator Status	Quantity of Hazardous Waste Generated Per Calendar Month	On-site Accumulation Time
Large Quantity Generators (LQGs)	• ≥ 1,000 kg or > 1 kg of acute hazardous waste • > 100 kg of acute spill residue or soil *No on-site accumulation limits*	≤ 90 days
Small Quantity Generators (SQGs)	• > 100 kg and < 1,000 kg *Never accumulate more than 6,000 kg at any one time*	≤ 180 days or ≤ 270 days (if hazardous waste is shipped 200 miles or more)
Very Small Quantity Generators (VSQGs)	• ≤ 100 kg • ≤ 1 kg of acute hazardous waste • ≤ 100 kg of acute spill residue or soil *≤ 1,000 kg or ≤ 1kg acute hazardous waste or ≤ 100 kg of acute spill residue or soil*	None

Universal waste, as defined in 40 CFR § 273 and HAR § 11-273, includes batteries, some pesticides, mercury containing equipment (mercury thermostats), and bulbs (lamps and light ballasts). The universal waste rules are not applicable to the VSQGs of hazardous waste. Universal waste handlers are classified into small-quantity universal waste handlers and large-quantity universal waste handlers. A small-quantity handler of universal waste means a universal waste handler accumulates less than 5,000 kilograms total of universal waste (i.e., batteries, pesticides, or thermostats, calculated collectively) at any time (HAR § 11-273-6). A large quantity handler of universal waste means a universal waste handler who accumulates 5,000 kilograms or more total of universal waste (i.e., batteries, pesticides, or thermostats, calculated collectively) at any time (HAR § 11-273-6). This designation as a large-quantity handler of universal waste is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated.

Universal waste must be managed in a way that prevents release of any universal waste or component of a universal waste to the environment. Universal waste must be labeled or marked to identify the type of universal waste as follows: Universal Waste – Batteries, Universal Waste – Lamps, Universal Waste – Pesticides, and Universal Waste – Mercury Containing Equipment or Universal Waste – Mercury Thermostat. Universal waste can be stored for one year starting from the date the universal waste was generated. A large quantity universal waste handler is not required to maintain their waste manifest; however, they are required to keep basic shipping records (40 CFR § 273.39). A small quantity universal waste handler is not required to maintain their waste manifest or basic shipping records (40 CFR § 273.19).

Used oil, as defined in 40 CFR § 279.1 and HAR § 11-279-1, is regulated under the 40 CFR § 279, HAR § 11-279, and HAR§ 11-261-6(a)(4). Containers and aboveground tanks used to store used oil as well as fill pipes used to transfer used oil into USTs at generator facilities must be labeled or marked clearly with the words "Used Oil." Additionally, used oil generators are subject to all applicable SPCC requirements (40 CFR § 112). Used oil generators are also subject to the state's UST standards and any applicable federal standards for used oil stored in underground tanks whether or not the used oil exhibits any characteristics of hazardous waste.