

CM 1.0 Facility-Wide Control Measures

Targeted Activities:

- General Facility Operations

Targeted Pollutants:

- Fuels/Oils/Grease
- Solvents
- Soaps/Detergents
- Battery Acid
- Paint

Key Approaches:

- Keep outside areas clean.
- Conduct regular inspections.
- Train employees.
- Document stormwater pollution prevention activities.

Minimize Exposure

- 1.1 Keep all pollutant sources indoors or under cover.

Good Housekeeping

- 1.2 Maintain exposed areas in a clean and orderly manner.
- 1.3 Restrict site access.
- 1.4 Substitute less hazardous/biodegradable materials where feasible.

Spill Prevention and Response Procedures

- 1.5 Post Spill Response Plans in areas where spills are most likely to occur.
- 1.6 Spill Kits
 1. Stock spill kits with adequate spill response equipment and materials.
 2. Locate spill kits in accessible locations and on vehicles where spills are likely to occur.
 3. Label spill kits.
 4. Spill kits should have lids.
 5. Keep spill kits free of debris.
- 1.7 Spill Containment and Reporting
 1. Stop the spill at the source, if feasible and safe to do so.
 2. Prevent the spill from entering the storm drain by using drip pans, absorbent booms, mats, or other devices.
 3. Report spills by calling: (602) 273-3311 for emergencies (602) 273-3302 for non-emergencies.
- 1.8 Spill Response
 1. When feasible and safe, use spill response equipment to clean-up spill.
 2. Dispose of used spill response materials promptly and appropriately.
 3. Use appropriate procedures for hazardous waste spill response.

Management of Runoff

- 1.9 Outdoor Water Supplies
 1. Limit availability of outdoor water supplies.
 2. Post signs at outdoor water sources identifying appropriate or inappropriate uses.

Employee/Contractor Training

- 1.10 Attend annual SWPPP training (tenant PPT members).
- 1.11 Provide equivalent SWPPP training to employees who work in areas where industrial materials or activities are exposed to stormwater or have responsibilities under the SWPPP.
- 1.12 Contractor/Subcontractor Education
 1. Provide construction and operational contractors and haulers with copies of relevant CMs.
 2. Require contractors to comply with all relevant CM requirements.

CM 1.0 Facility-Wide Control Measures

Routine Facility Inspections

1.13 Perform inspections at regular intervals to identify and eliminate non-stormwater discharges.

Recordkeeping and Reporting

1.14 Tenant generated documentation to be kept with the SWPPP:

1. Employee stormwater training.
2. Inspection findings.

1.15 Retain copies of the following documents:

- Stormwater Pollution Prevention Plan (SWPPP)
- Annual Reports
- Visual Assessment Reports
- Inspection Forms
- Notice of Intent, Authorization to Discharge or No Exposure Certificate, and
- Corrective Action Reports, if applicable.

CM 2.0 Aircraft, Vehicle and Equipment Maintenance

Targeted Activities:

- Aircraft, Vehicle, and Equipment (AVE) Maintenance

Targeted Pollutants:

- Fuels/Oils/Grease
- Battery Acid
- Paint
- Solvents
- Soaps/Detergents

Key Approaches:

- Conduct maintenance indoors or under cover.
- Collect and properly dispose of fluids.
- Conduct preventative maintenance.

Minimize Exposure

- 2.1 When possible, perform maintenance indoors or under cover.
- 2.2 Recommend replacing batteries in GSE with sealed and/or gel batteries when batteries are spent and need replacement.

Good Housekeeping

- 2.3 Use solvents and other cleaning products indoors to the maximum extent practicable.
- 2.4 Dispose of waste and hazardous waste properly per federal, state, county, and city regulatory requirements. See CM 8.0 waste handling key approaches.

Spill Prevention and Response Procedures

- 2.5 Minimize Pollutant Exposure when Performing Maintenance Activities
 1. Relocate maintenance materials and waste indoors.
 2. Perform maintenance away from storm drains.
 3. Provide controls in maintenance areas (such as storm drain inlet protection, oil/water separators, berms, and sumps).
- 2.6 Maintain spill kits on maintenance vehicles.
- 2.7 Maintain the appropriate (battery acid) spill kits by battery charging stations and single point water stations.
- 2.8 Perform preventative AVE maintenance.
- 2.9 Immediately contain, clean and report leaks/spills that occur during maintenance activities.

Routine Facility Inspections

- 2.10 Inspect maintenance areas for compliance with CMs.
- 2.11 Routinely inspect electric AVE, charging stations and single point watering stations.

Recordkeeping and Reporting

- 2.12 Maintain inspection records.

CM 3.0 Aircraft, Vehicle and Equipment Cleaning

Targeted Activities:

- Aircraft, Vehicle, and Equipment (AVE) Washing
- Equipment Degreasing

Targeted Pollutants:

- Fuels/Oils/Grease
- Solvents
- Vehicle Fluids
- Soaps/Detergents

Key Approaches:

- Use designated wash areas.
- Use dry washing techniques.
- Recycle wash water or discharge appropriately.
- Cover catch basins.

Minimize Exposure

- 3.1 Use dry washing methods when possible.
- 3.2 When practical, use off-site commercial facilities for vehicles and equipment washing.
- 3.3 Use designated areas for washing and steam cleaning.

Good Housekeeping

- 3.4 Soaps, Detergents, and Cleaning Agents
 1. Use water-based cleaning agents or non-chlorinated solvents.
 2. Use biodegradable, phosphate-free detergents.
 3. Use non-emulsifying cleaning agents in areas equipped with an oil/water separator (OWS).
- 3.5 Wash Service Providers must prepare and follow approved wash plans.
- 3.6 Wash Water and Material Disposal
 1. Collect wash water for proper disposal.
 2. Discharge wash water to the sanitary sewer through an OWS.
 3. Remove material (i.e. drippings and residue) using vacuum or sweeping and dispose of properly.
 4. Recycle wash water when practical.
- 3.7 Cover, berm, or otherwise block nearby catch basins during washing.

Maintenance

- 3.8 Repair any cracks or breaches in berms or surfaces.

Routine Facility Inspections

- 3.9 Inspect wash areas for cracks or breaches in berms or surfaces.

Recordkeeping and Reporting

- 3.10 Document inspections and maintain records.

CM 4.0 Aircraft, Vehicle and Equipment Storage

Targeted Activities:

- Aircraft, Vehicle, and Equipment (AVE) Storage

Targeted Pollutants:

- Fuels/Oils/Grease
- Solvents
- Hydraulic Fluid

Key Approaches:

- Use designated storage areas away from storm drain inlets.
- Store materials indoors or under cover.
- Provide berming or secondary containment in storage areas.
- Drain fluids before AVE storage.
- Perform and document periodic inspections.

Minimize Exposure

- 4.1 Store AVE indoors or under cover and in paved areas designed to contain leaks.
- 4.2 Store AVE away from storm drains.
- 4.3 Provide berming or secondary containment in storage areas.
- 4.4 Store tires off the ground and provide cover.

Good Housekeeping

- 4.5 Long Term Storage of AVE (>30 days)
 1. Drain all fluids and salvage batteries.
 2. Wipe down exterior surfaces to remove grease/oil prior to storage.

Spill Prevention and Response Procedures

- 4.6 Temporary storage of vehicles awaiting repair/removal
 1. Use drip pans or absorbent pads to contain releases.
 2. Expedite repair.
 3. Check drip pans on a regular basis.
 4. Maintain clean drip pans.
 5. Dispose of used absorbent materials.
 6. Provide cover for vehicles and equipment when possible.

Routine Facility Inspections

- 4.7 Perform periodic inspections of AVE storage areas.

Recordkeeping and Reporting

- 4.8 Document inspections and maintain records.

CM 5.0 Material Storage Areas

Targeted Activities:

- Cargo handling
- Chemical and fuel storage
- Equipment storage
- Painting and stripping

Targeted Pollutants:

- Fuels/Oils/Grease
- Misc. cargo
- Solvents
- Soaps/Detergents
- Deicing chemicals
- Battery Acid
- Paint
- Pesticides

Key Approaches:

- Conduct loading, unloading, and material transfer under cover, in paved areas, and away from storm drains.
- Store materials indoors or under cover, store empty drums/containers in secondary containment.
- Contain and absorb leaks/spills that occur during material transfer.
- Provide berming.
- Clean exterior surfaces by removing excessive oil and grease build-up.
- Perform and document periodic inspections.

Minimize Exposure

5.1 Clean Exterior Container Surfaces

1. Clean exterior surfaces by removing excessive oil and grease build-up.
2. Use drum-top absorbent pads to contain small spills and leaks.

5.2 Material and Waste Storage

1. Store material and waste in bermed areas, away from storm drain inlets and in a secure area.
2. Designate enclosed central storage locations for material and waste.
3. Reduce the amount of outdoor storage.
4. Provide cover for material and waste storage areas.
5. Protect materials from rainfall, run-on, run-off, and wind dispersal.

5.3 Transfer materials in covered areas.

5.4 Limit inventory of materials stored onsite.

CM 5.0 Material Storage Areas

Good Housekeeping

- 5.5 Transfer, use, and store liquid materials only in paved areas.
- 5.6 Keep Safety Data Sheets (SDSs) for chemicals with potential stormwater exposure immediately accessible either in hard copy or on mobile electronic devices.
- 5.7 Dispensing Liquids
 - 1. Dispense liquids from upright drums equipped with hand pumps, when possible.
 - 2. Avoid dispensing from drums positioned horizontally or use self-closing spigots with secondary containment.
- 5.8 Secondary Containment for Stored Materials
 - 1. Materials stored outdoors, no matter how temporary, should be placed on secondary containment.
 - 2. Secondary containment should be free of liquid and debris.
 - 3. Secondary containment should be sized to contain the single largest item in/on the containment and sufficient freeboard.
 - 4. Secondary containment shall be in good condition, free of cracks, holes, etc.
- 5.9 Signage for Storage Locations
 - 1. Post visible signs at storage locations noting the materials stored.
 - 2. Post spill response plan near storage locations.
- 5.10 Store materials in their original containers or in approved containers.
- 5.11 Container Labeling
 - 1. Clearly label containers with its contents.
 - 2. Identify and properly dispose of unlabeled and unknown materials.
- 5.12 Eliminate waste collection piles or "bone yards."

Spill Prevention and Response Procedures

- 5.13 Conduct material transfers in areas where spills can be contained and cleaned.
- 5.14 Locate spill response materials in material transfer areas.

Employee/Contractor Training

- 5.15 Required facilities should develop and implement a Spill Prevention Control and Countermeasures (SPCC) Plan and provide appropriate training.

Routine Facility Inspections

- 5.16 Periodically inspect loading and transfer areas for damage/cracks.
- 5.17 Periodically inspect material and waste storage areas (containers and tanks) for evidence of corrosion and structural failure; spills, leaks and overfills; and piping system damage/deterioration.

Recordkeeping and Reporting

- 5.18 Document inspections and maintain records.
- 5.19 Facilities with an SPCC Plan, should provide annual certification to COPAD confirming the SPCC Plan is up to date.

CM 6.0 Airport Fuel Systems and Fueling Areas

Targeted Activities:

- Aircraft, Vehicle, and Equipment (AVE) fueling
- Fuel storage

Targeted Pollutants:

- Fuel

Key Approaches:

- Post 'No Topping Off' signs, provide cover and berming/secondary containment for fueling areas.
- Install proper equipment for fuel dispensing and tank monitoring.
- Perform and document periodic inspections.

Minimize Exposure

- 6.1 Designate paved and contained areas to park mobile refueling equipment and vehicles, if possible.

Maintenance

- 6.2 Maintain automatic shut-off mechanisms on fuel tankers.

Spill Prevention and Response Procedures

- 6.3 Install Fuel Tank Monitoring and Release Prevention Systems
1. Provide appropriate monitoring equipment for fuel tanks.
 2. Equip fuel dispensing equipment with "breakaway" hose connections.
- 6.4 Post "Do Not Top Off" signs at vehicle fuel pumps.
- 6.5 Prevent Pollutant Exposure When Fueling or Defueling
1. Cover or block nearby storm drains and outlets to surface drains.
 2. Fuel equipment in designated areas.
 3. Permanently cover fueling areas, if possible.
 4. Immediately contain and clean spills that occur during fueling or defueling.
- 6.6 Maintain spill kits on fueling tankers.
- 6.7 Collection of Aircraft Fuel Samples
1. Use GATS jars to take fuel samples.
 2. Dispose of samples at designated collection sites.

Employee/Contractor Training

- 6.8 Train employees performing fueling activities on the appropriate response procedures for fuel spills.

Routine Facility Inspections

- 6.9 Regularly inspect fueling areas, fueling vehicles and equipment, and storage tanks (underground fuel storage tanks should be tested as required by federal, state, and county law).

Recordkeeping and Reporting

- 6.10 Document inspections and maintain records.

CM 7.0 Building and Grounds Maintenance

Targeted Activities:

- Building and grounds maintenance

Targeted Pollutants:

- Sediment
- Landscape Waste
- Fuel/Oil/Grease
- Pesticides, Herbicides, and Fertilizer

Key Approaches:

- Keep paved surfaces clean using dry methods.
- Use native/low maintenance landscaping.
- Clean catch basins regularly.
- Manage the use of pesticides, herbicides, and fertilizers.

Minimize Exposure

- 7.1 Use seals or door skirts to prevent material exposure to rainfall.
- 7.2 Minimize Pesticide, Herbicide, and Fertilizer Use
 1. Minimize use of pesticides, herbicides, and fertilizers.
 2. Apply according to directions.
 3. Apply in accordance with Arizona Office of Pest Management.
 4. Use integrated pest management.
- 7.3 Landscape areas to prevent erosion.

Good Housekeeping

- 7.4 Cleaning Interior Floors and Exterior Ground Surfaces
 1. Maintain clean, dry floors using dry methods (using brooms, vacuums, etc.).
 2. Do not hose down or use cleaning products on outside work areas unless nearby storm drain inlets are blocked and wash water is collected and properly disposed.
- 7.5 Fire-Fighting Foam Deluge System Testing Procedures
 1. Perform testing operations only in designated areas.
 2. Collect and properly dispose or recycle foam discharge.

Maintenance

- 7.6 Regularly maintain stormwater control devices and outfalls.
- 7.7 Maintain Catch Basins
 1. Regularly maintain on-site catch basins that receive site runoff.
 2. Install and maintain catch basin filter fabric inserts.
- 7.8 Label Storm Drain Inlets .

Litter, Garbage and Floatable Debris

- 7.9 Properly dispose of landscape waste, wash water, sweepings, and sediment.

Dust Generation and Tracking

- 7.10 Consider paving or landscaping non-landscaped areas.
- 7.11 Regularly clean outdoor paved areas.

Routine Facility Inspections

- 7.12 Inspect sumps and catch basins.
- 7.13 Inspect fire-fighting foam system and collection sumps.

Recordkeeping and Reporting

- 7.14 Document inspections and maintain records.

CM 8.0 Recycling, Waste Handling and Disposal

Targeted Activities:

- Garbage
- Debris
- Recyclable handling and disposal

Targeted Pollutants:

- Fuels/Oils/Grease
- Garbage
- Floatable Debris
- Battery Acid
- Paint
- Solvents

Key Approaches:

- Keep outside areas clean and free of litter, garbage, and floatable debris.
- Dispose of materials in a timely fashion.
- Keep dumpster and trash can lids closed.
- Provide an adequate number of trash receptacles throughout the facility.
- Comply with all federal, state and local regulatory requirements pertaining to the handling, storage, and disposal of hazardous waste.

Minimize Exposure

8.1 Reduce, Reuse, and Recycle

1. When possible, recycle, reclaim, and/or reuse materials.
2. Potential recyclable materials include:
 - Used petroleum products (including used oil)
 - Grease and hydraulic fluid (including brake and transmission fluid)
 - Antifreeze and deicing fluid
 - Automotive and aircraft batteries
 - Wash water
 - Tires
 - Oil filters with steel casings
 - Used fuel
3. Recycle materials in a timely fashion.

8.2 Used Battery Management

1. Recycle used batteries within 30 days of removal.
2. Store used batteries on secondary containment and indoors or under cover.
3. Label containers of used batteries as "Used Batteries".

8.3 Used Oil Containers and Filters

1. Drain and crush oil filters and containers before recycling or disposing.
2. Store used containers and filters on secondary containment and indoors or under cover.

8.4 Clean dumpsters in designated wash locations that are connected to oil/water separators.

Good Housekeeping

8.5 Provide an adequate number of trash receptacles throughout the facility.

8.6 Waste Generation

1. Characterize and maintain accurate information on waste streams.
2. Properly dispose of hazardous materials and liquids according to all federal, state, county, and city regulatory requirements.

Spill Prevention and Response Procedures

8.7 Collection and Disposal of Spilled Fluids

1. Collect fluids using dry methods (i.e. vacuum or sweep).
2. Properly dispose of collected fluids according to all federal, state, county, and city regulatory requirements.
3. Never discharge materials to a catch basin, storm drain, or dry well.

CM 8.0 Recycling, Waste Handling and Disposal

Litter, Garbage and Floatable Debris

8.8 Waste and Unusable Material Disposal

1. Properly dispose of garbage, debris, and recyclable materials.
2. Schedule waste pickup as frequently as needed.

8.9 Garbage Collection Areas

1. Provide cover, if possible.
2. Use covered dumpsters or keep dumpster lids closed.
3. Install dumpster plugs in drain holes.
4. Do not dispose of liquids or hazardous materials in dumpsters.
5. Keep the garbage collection areas clean and free of litter, garbage, and floatable debris.
6. Provide lids for trash receptacles.

Employee/Contractor Training

8.10 Waste Management Training

1. Train employees on the proper disposal procedures for operations-derived wastes.

Routine Facility Inspections

8.11 Inspect waste storage areas for compliance with waste handling and disposal CMs.

Recordkeeping and Reporting

8.12 Document inspections and maintain records

CM 9.0 Oil Water Separators and Lavatory and Potable Water Service

Targeted Activities:

- Oil/water separators
- Lavatory operations & maintenance
- Potable water system maintenance

Targeted Pollutants

- Lavatory Waste
- Sediment
- Fuels/Oils/Grease

Key Approaches:

- Install and properly maintain oil/water separators (OWS).
- Collect and properly dispose of lavatory waste.

Minimize Exposure

- 9.1 Conduct lavatory and potable water activities away from stormwater inlets.
- 9.2 Keep OWS drainage area free of spills, debris, sediment and other pollutants.
- 9.3 Perform detergent/disinfectant mixing and transfers under cover if possible.

Good Housekeeping

- 9.4 Install OWS , where needed
 1. Install OWS in fuels, oils, grease, and sediment storage areas, where other CMs are not practical.
 2. Have OWS designed by qualified professionals.
- 9.5 Procedures for Servicing Aircraft Lavatories
 1. Use only approved detergent and disinfectants.
 2. Properly secure hoses, valves and equipment when transporting transferring waste.
 3. Use buckets and/or drip pans to capture leaks from aircraft lavatory access fittings.
 4. Drain the aircraft connecting hose as completely as possible into the storage tank after servicing an aircraft.
 5. Immediately transfer the fluids into the bulk storage tank on the service cart or truck.
 6. Discharge lavatory and lavatory truck clean/back-flush waste to approved location only.
 7. Cap discharge connection when not in use.
- 9.6 Procedures for Servicing Aircraft Potable Water Systems
 1. Perform water truck flushing operations only in designated areas.
 2. Do not perform flushing near or discharge to storm drains.
 3. Collect potable water discharges, de-chlorinate, and discharge to a sanitary sewer connection with an OWS or recycle.

Maintenance

- 9.7 Maintain Sumps and OWSs
 1. Clean and maintain sumps and OWS regularly.
 2. Keep effluent shutoff valve closed during cleaning operations.
 3. Maintain OWS in accordance with manufacturer requirements or as necessary for operations.
 4. Properly dispose of cleaning waste.
 5. Comply with all federal, state, county, and city regulatory requirements and obtain all required permits, especially the AZPDES Construction General Permit.
- 9.8 Maintain Lavatory Service Equipment
 1. Keep the equipment in good working order. Replace worn equipment before leaks develop.
 2. Notify appropriate ground service personnel when aircraft lavatory fittings require maintenance.

Spill Prevention and Response Procedures

- 9.9 Maintain spill kits on lavatory service vehicles.
- 9.10 Address spills promptly with proper materials. Do not hose down spills.

CM 9.0 Oil Water Separators and Lavatory and Potable Water Service

Routine Facility Inspections

9.11 OWS Inspection

1. Regularly inspect OWS for needed maintenance.
2. Inspect for oil, trash, debris, and oil accumulation at least monthly.

9.12 Lavatory Service Equipment Inspections

1. Inspect hoses and fittings used for transferring lavatory fluids.

Recordkeeping and Reporting

9.13 Maintain records of lavatory service equipment inspections.

9.14 Maintain records of all OWS maintenance and cleaning at the facility for three years.

CM 10.0 Facility Structural Improvements

Targeted Activities:

- Facility improvements
- New construction
- Significant renovation

Targeted Pollutants:

- Fuels/Oils/Grease
- Floatable debris
- Soaps/Detergents
- Paint
- Solvents
- Sediment

Key Approaches:

- Obtain project approval from Tenant Improvement (TI) program.
- Comply with all federal, state and local regulatory requirements, especially the AZPDES Construction General Permit.

Minimize Exposure

- 10.1 Conduct all facility improvements through the TI Program
- 10.2 Design to Minimize Stormwater Exposure
 1. Move planned industrial activity areas indoors or under cover.
 2. Provide outdoor industrial activity areas with impervious surfaces.
 3. Design outdoor industrial activity areas to prevent run-on and run-off.
 4. Incorporate structural control measures such as oil/water separators or detention basins as needed.
 5. Include clear signage indicating outdoor industrial activity areas.
- 10.3 Landscape to Prevent Stormwater Pollution
 1. Incorporate pervious landscaped areas into design.
 2. Use native or low maintenance vegetation.
- 10.4 Fire Deluge Systems
 1. Locate away from storm drain inlets, rivers and washes.
 2. Provide impervious surfaces.
 3. Design to prevent run-on and run-off.
- 10.5 Comply with all federal, state, county, and city regulatory requirements and obtain all required permits, especially the AZPDES Construction General Permit.

Maintenance

- 10.6 Review plans at each design and construction milestone for illicit or cross connections.

Dust Generation and Tracking of Industrial Materials

- 10.7 Comply with Maricopa County dust control regulations and ADEQ Construction General Permit.

Employee/Contractor Training

- 10.8 Provide contractors and subcontractors with relevant CMs during specification and bidding phases.

Routine Facility Inspections

- 10.9 Confirm facility improvements were conducted under TI program.

Recordkeeping and Reporting

- 10.10 Maintain record copies for projects as required by City of Phoenix Aviation Department.

CM 11.0 Aircraft Deicing

Targeted Activities:

- Aircraft Deicing and Anti-icing
- Defrosting

Targeted Pollutants:

- Deicing chemicals
- Glycols

Key Approaches:

- Perform in designated areas
- Apply minimum required amount of chemicals,
- Clean ramp afterwards,
- Inspect monthly.

Minimize Exposure

- 11.1 Consider using hot water as an alternative to chemicals.
- 11.2 Use minimum amount of chemicals necessary.

Good Housekeeping

- 11.3 Conduct deicing in designated areas only.
- 11.4 Clean ramp after each deicing operation.
1. Call street sweeper before deicing operation begins.
 2. Begin deicing operation after street sweeper has arrived during rain events.
- 11.5 Dispose or recycle collected fluids in accordance with federal, state, county, and city regulations.

Spill Prevention and Response Procedures

- 11.6 Prevent pollution exposure when performing maintenance on deicing equipment.
1. Cover or block nearby storm drains, catch basins, and dry wells.
- 11.7 Maintain appropriate spill response materials for glycol spills.
- 11.8 Place glycol capturing spill booms around the deicing operations area during rain events.

Routine Facility Inspections

- 11.9 Monthly Inspections – November through March
1. Report each deicing event to the Stormwater Pollution Prevention Deicing Hotline at 602-8-GLYCOL (602-845-9265) and provide:
 - Name
 - Company/Airline
 - Location of deicing/anti-icing event (Terminal and Gate)
 - Time of deicing/anti-icing event
 - Phone number

Recordkeeping and Reporting

- 11.10 Report deicing fluid quantities to the City of Phoenix Aviation Department monthly.

