

***EG 1-1: Fueling - Aircraft, Vehicles and Auxiliary Equipment***

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**I. Activity Description:**

The delivery of fuel to aircraft is dispensed using the hydrant fueling system, a fueling truck or self-service fuel island dispensers. Vehicles and equipment are fueled from stationary fueling systems or from mobile sources, including fueling from fuel trucks and portable fuel cans. Auxiliary power generation equipment is fueled from mobile sources. In addition, fuel is sometimes removed from vehicles or aircraft (“defueling”) for transport purposes

**II. Potential Environmental Risks**

A. The Clark County Department of Aviation (CCDOA) - Environmental, Health &, Safety (EHS) office has identified the following environmental concerns associated with these activities:

1. Fuel spills
2. Fire and health hazards
3. Air pollution and odors
4. Disposal of contaminated spill response media
5. Contamination of soils
6. Contamination of groundwater
7. Contamination of storm/surface water
8. Contamination of storm water runoff

B. Potential consequences from performing the activity incorrectly:

1. Property damage
2. Personal injury
3. Damage to the environment
4. Potentially expensive site remediation
5. Citations, Notices of Violation and related (financial & non-financial) penalties

**III. Critical Operating Requirements**

A. Prohibited Activities

1. Operating fueling systems without applicable regulatory permits, plans and required training
2. Operating fueling systems without pre-inspections for leaks/tears

3. Operating fueling systems without verifying that the proper connections have been made
4. Use of disconnected or faulty deadman switches or other spill controls, or the use of countermeasure equipment for convenience
5. Fuel spills of any kind or size shall not be washed into any sewer system, storm drain system, drive waterway or onto any soils
6. Filling portable containers in or on a vehicle
7. Dispensing fuel into vehicles or equipment while engine is running
8. Pre-flight fuel test (sumped fuel) must be disposed of properly

B. Required Activities

1. Appropriate preventative measures must be implemented to minimize and contain incidental spills
2. All fueling vehicles must be equipped with spill response kits adequate for a 100-gallon spill
3. Follow fueling procedures focused on prevention of fire, overfills and spills, including the use of all spill prevention and containment equipment, during fueling activities, including fueling from the hydrant system
4. Compliance with spill reporting requirements. Environmental Guideline EG 6-1, Spill Response
5. Immediately respond to all spills in accordance with Environmental Guideline EG 6-1, Spill Response
6. Proper storage of fuel containers (in good condition, properly labeled, lid closed and set on spill pallets)
7. All fueling vehicles must have a current Fire Department inspection sticker displayed
8. All free-standing liquids in fuel pits and containments must be removed and disposed of properly
9. Contaminated spill response material must be disposed of in accordance with Environmental Guideline EG 7-5, Management of Special Wastes (i.e., diesel or jet fuel spills). Spill response materials from gasoline spills are considered hazardous due to benzene being a component of gasoline; therefore, must be disposed of in accordance with Environmental Guideline EG 7-3, Management of Hazardous Wastes

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C. General Considerations

1. Each operator/tenant is responsible for understanding applicable regulations and managing their activities accordingly. This Environmental Guideline is meant as guidance and does not supersede any regulations. Any deviations must have prior approval from the Department of Aviation
2. Fueling and defueling operations are typically associated with a petroleum storage system; therefore, refer to Environmental Guideline EG 5-2, Management of Petroleum Storage Tanks and Containers
3. Good housekeeping practices and operational controls must be implemented to the maximum practical extent
4. Applicable emissions control equipment will be installed, inspected and maintained
5. Follow proper operational procedures, including company policies, for:
  - a. Fueling aircraft
  - b. Filling fuel trucks from fuel storage
  - c. Transporting and dispensing fuel to vehicles and equipment
  - d. Fueling vehicles at fueling stations
  - e. Transferring fuels between any container system(s) and
  - f. Spill prevention
6. Periodically inspect hoses for leaks and tears, and report any damage immediately
7. Stay with the vehicle or equipment while fuel is being dispensed or the equipment is being defueled; never leave a dispensing pump unattended
8. Know the location of all automatic shut-off devices or controls, fire extinguishers, and spill response materials in the vicinity of the fuel dispensing/defueling area

C. Training Requirements

1. Each operator/tenant is responsible for ensuring that all operators of fueling equipment are adequately trained in proper fueling procedures and all applicable rules and regulations
2. Training on Spill Prevention, Control and Countermeasure (SPCC) Plan requirements will be provided to all fuel and oil handling personnel if they conduct SPCC-related operations
3. Each operator/tenant is responsible for informing their personnel of CCDOA's spill reporting requirements. Refer to Environmental Guideline EG 6-1, Spill Response

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4. At least one fueling supervisor with each fueling agent must have completed an aviation fuel-training course in fire safety
5. Employee training programs shall inform personnel at all levels of responsibility who are involved in industrial activities that may impact storm water runoff. Storm Water Pollution Prevention (SWPP) training shall address topics such as, spill response, good housekeeping and material management practices
6. Contractor or temporary personnel shall be informed of facility operations and design features in order to prevent discharges or spills from occurring

D. Storage and Materials Management Requirements

1. All containers and tanks shall be in good condition with no evidence of leaks or corrosion
2. Labels, markings and other required signage must be legible and in good condition
3. The tenant's/operator's (owner's) name, must be present on all containers and tanks
4. Ensure that secondary containment and equipment are adequate and in good operating condition. This includes storage units, receiving units, dispensing units and ancillary monitoring and safety equipment
5. Ensure that mobile and stationary storage tanks are operated and stored in compliance with the applicable SPCC Plan
6. Ensure that spill response equipment is adequately stocked and maintained

**IV. Planning Requirements**

- A. As applicable, prepare, implement and maintain an EPA-compliant SPCC Plan
  1. See Environmental Guideline EG 5-2, Management of Petroleum Storage Tanks and Containers
  2. Submit a SPCC Plan to CCDOA, EHS for review
- B. Review air permit requirements associated with fueling, storage tanks and mobile sources. For more information, contact the Clark County Department of Air Quality
  1. Permits must be obtained prior to conducting any fueling activities or installing any associated tanks and/or dispensing equipment
- C. Review equipment for spill prevention control and countermeasures (i.e., deadman switches, valves, overfill alarms, etc.)

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- D. Review the facility Storm Water Pollution Prevention Plan
  - 1. These documents are available through the CCDOA, EHS office
  - 2. If applicable, the operator will need to decide whether to utilize the existing CCDOA generated SWPPP, or complete their own plan for approval by CCDOA EHS
- E. Prepare and maintain a training program and a preventative maintenance plan for all fueling and related equipment including tanks, support facilities, buried piping, and mobile fueling equipment
  - 1. All personnel should be trained in appropriate spill prevention and response procedures in accordance with workplace safety and emergency response plans, whether or not an SPCC Plan is required
  - 2. Operating procedures should be written, communicated and available for review
  - 3. Maintain adequate supplies of spill response equipment and materials in locations where spills are likely to occur
  - 4. Maintain a spill response equipment and materials inventory

#### **V. Critical Tasks**

- A. Conduct training for all staff involved with fueling activities prior to staff conducting fueling activities, according to the plans and procedures for spill prevention and response requirements
- B. Demonstrate compliance with the on-site SPCC Plan prior to conducting any fueling activities
- C. Demonstrate compliance with applicable air permitting requirements
- D. Demonstrate compliance with the SWPPP prior to conducting any fueling activities. Maintain a copy of the SWPPP on site
- E. Visually inspect fueling hoses, valves and piping for leaks and tears. Notify appropriate operations personnel immediately of leaks, broken/damaged equipment or any other hazardous condition

#### **VI. Emergency Response**

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- A. If a spill occurs, immediately stop the source of the spill if possible. Refer to Environmental Guideline EG 6-1, Spill Response.
- B. Call the Airport Control Center (702) 261-5125 or the appropriate Customer Service Desk for the area (see phone numbers in Section IX below), immediately, for all spills
- C. Use absorbent materials to manage spills. Contain used materials and dispose offsite at a permitted disposal facility
- D. Prevent contamination from entering any sewer, storm drain, drainage waterway or soil area using whatever means available (i.e., barriers, blocking devices, etc.). In the event that spills enter any sewer or storm drain system, the drainage line must be accessed and contamination collected utilizing absorbent materials. If the fuel release reaches a pretreatment device or open outfall, operators/tenants must have a licensed contractor pump out free-floating product or sheen, as necessary, in accordance with Environmental Guideline EG 2-3, Maintenance of Pretreatment Devices and/or Environmental Guideline 6-1, Spill Response.
- E. Control spills to eliminate risk to human health and the environment and to minimize property damage
- F. Complete the CCDOA Spill Reporting Form and return the completed form to the CCDOA EHS office within 24-hours of the release

## **VII. Inspection and Maintenance Requirements**

- A. Monitor and maintain all spill and release control systems, including vapor collection systems, leak detection systems, overfill and release prevention systems and secondary containment systems
- B. Document all maintenance activities, especially on spill and release control and containment systems
- C. During every use, visually inspect fueling hoses, valves, and piping for leaks and tears. Notify appropriate operations personnel immediately of spills, leaks, broken/damaged equipment or any other hazardous condition

- D. Document and maintain records of all inspections conducted of vehicles, equipment, tanks and SPCC-regulated containers (as required by the applicable SPCC Plan)

## **VIII. Expected Records and Outputs**

- A. Plans and procedures for fueling operations, spill prevention and control, and training
  - 1. In accordance with operator requirements
- B. Fueling operations, spill prevention and control, and SWPPP training documentation
  - 1. Must be submitted to CCDOA Operations Coordinators' office annually
- C. Spill and release records for any spills
  - 1. Spill/release must immediately be reported to Airport Control Center (refer to Guideline 9, Phone Numbers), or appropriate Customer Service Desk
  - 2. Responsible party for the spill completes and submits a Spill Report Form to CCDOA, EHS office within 24 hours. Spill Report Forms are available from Airport Operation Coordinators or the CCDOA, EHS office
  - 3. If any spill is 25 gallons or more, the tenant is responsible for contacting the Nevada Division of Environmental Protection (NDEP) at 1-888-331-6337 within the next business day following the spill. The NDEP Spill Report Number should be noted on the CCDOA Spill Report Form
- D. Operator records of fuel farm and aircraft fueling operations relating to equipment operation, preventative maintenance and repairs
  - 1. Operator must maintain these records at their facility
- E. Evidence of training on Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasure Plan, and operator's Standard Operating Procedures (SOPs)
  - 1. Formal certifications are not always necessary; however, proof of training such as sign-in sheets, signed by the attendees, and/or handouts are expected to be available and should be maintained on file by the operator/tenant
- F. SPCC Plan, if required, and compliance records, as applicable (i.e., monthly inspections, fueling and defueling operations, witnessing, etc.)
  - 1. Operator must maintain SPCC Plan-related inspection and compliance records at their facility

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2. A copy of the SPCC Plan must be submitted to the CCDOA, EHS office
- G. Waste Management Records (profiles, manifests, sample results, etc.)
1. Based on disposal profile, manifests and related forms may be required
  2. Manifests and profile forms can be obtained from the disposal facility for off-site disposal activities (manifests are required for hazardous wastes)
  3. Operator must maintain waste management records at their facility for a minimum of three (3) years
- H. Air permits notifications, compliance data, reports and certifications
1. Notification forms can be obtained from the Clark County Department of Air Quality
  2. The operator must maintain these records at their facility

## IX. References

- A. Phone Numbers
1. CCDOA (Airport) Control Center (spill and release reporting).....(702) 261-5125
  2. Henderson Executive Airport Customer Service Desk.....(702) 261-4800
  3. North Las Vegas Airport Customer Service Desk.....(702) 261-3806
  4. CCDOA Environmental, Health & Safety (EHS).....(702) 261-5692
  5. NDEP Spill Reporting Hotline(for spills 25 gallons or greater)..... 1(888) 331-6337
- B. Guidance Materials (list is not limited to the following)
1. DOT Labeling and Placarding Guidance
  2. Product Safety Data Sheets (SDS)
  3. CCDOA Storm Water Pollution Prevention Plan (SWPPP)
  4. Spill Prevention Control and Countermeasure Plan (SPCC)
  5. NDEP Storm Water Discharge Permit (NPDES)
  6. Leak Detection System Design and Operation Information
  7. CCDOA Tenant Bulletins
  8. Ramp drainage design and storm water plans (as-builts)
- C. Training Materials (list is not limited to the following)
1. NFPA regulations and requirements
  2. Operational procedures training (on-the-job)
  3. Operator's Standard Operating Procedures (SOPs) for fueling activities (if available)



- D. Related Environmental Documents (list is not limited to the following)
1. Environmental Guideline EG 1-1, Fueling
  2. Environmental Guideline EG 1-5, Maintenance of Aircraft, Vehicles and Equipment
  3. Environmental Guideline EG 1-7, Storage of Vehicles and Equipment Containing Chemicals
  4. Environmental Guideline EG 2-3, Maintenance of Pretreatment Devices
  5. Environmental Guideline EG 3-3, Power Generation
  6. Environmental Guideline EG 4-3, Procurement
  7. Environmental Guideline EG 4-4, Tenant Operating Guidance
  8. Environmental Guideline EG 4-5, Tenant Relocation or Closeout
  9. Environmental Guideline EG 5-2, Management of Petroleum Products
  10. Environmental Guideline EG 5-3, Storage, Handling and Management of Hazardous Materials
  11. Environmental Guideline EG 6-1, Spill Response
  12. Environmental Guideline EG 6-2, Abandoned Material Response
  13. Environmental Guideline EG 7-1, General Waste Management
  14. Environmental Guideline EG 7-2, Management of Recyclable and Reusable Materials
  15. Environmental Guideline EG 7-3, Management of Hazardous Wastes
  16. Environmental Guideline EG 7-5, Management of Special Wastes
  17. Environmental Guideline EG 7-6, Management of Materials
- E. Applicable Regulations (list is not limited to the following)
1. NAC 444/NRS 444 Sanitation
  2. NAC 445A Water Controls
  3. NAC 445B Air Controls
  4. NAC 459/NRS 459 Hazardous Materials
  5. NAC 590 Motor Vehicle Fuel, Petroleum Products and Antifreeze
  6. 14 CFR Aeronautics and Space
  7. 29 CFR 1910 Protection and Environment
  8. 40 CFR Protection of the Environment
  9. 49 CFR Transportation
  10. Uniform Fire Code/NFPA
  11. Clark County Department of Air Quality, Air Quality Regulations
- F. Other Documents (list is not limited to the following)

1. Air Permit Applications
2. Permits & Licenses
3. UST registration/upgrade/closure form - EPA 7530-I
4. Land Disposal Restrictions (LDRs) for waste materials
5. Waste Shipment Manifests/Disposal Documentation
6. Incident Reports
7. CCDOA Spill Reports
8. NFPA requirements
9. Operator SOPs for equipment operations, aircraft servicing and spill prevention, control and countermeasure activities
10. The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

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