



PETROLEUM - FUELING AIRCRAFT & VEHICLES

ENVIRONMENTAL GUIDELINES



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PURPOSE

The purpose of the guideline is to provide guidance on what DEN's expectations are for fueling of aircraft, vehicles, power generators, and other mobile and immobile equipment. This guideline is associated with the Storage Tank and Spill Compliance Obligation Registry compliance obligation document. Each airport tenant, contractor, and operator conducting fueling activities is responsible for understanding the applicable regulations and managing their activities accordingly. This Environmental Guideline is meant as guidance and does not supersede any regulations.

ACTIVITY DEFINITION

The Department of Aviation and tenants on DEN property dispense fuel to aircraft, vehicles, and auxiliary equipment using a variety of methods. Specialized tenants use the hydrant fueling system or a fueling truck to fuel aircraft, and tenants and the Department of Aviation owned 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. On an as needed basis, fuel is sometimes removed from aircraft, vehicles, or equipment ("defueling") for transport or maintenance purposes.

EXPECTATIONS

Best Practices:

- Fueling and defueling must occur in designated areas. The "areas" are specific for each type of fueling; remote vehicles, permanent vehicle locations, aircraft at gates and/or hangars, auxiliary generators, etc.
- Follow fueling procedures focused on prevention of fire, overfills, and spills, and use appropriate spill prevention and containment equipment during fueling activities, including fueling from the hydrant system.
- Stay with the vehicle or equipment while fuel is being dispensed or the equipment is being defueled; never leave a dispensing pump unattended.
- 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.
- Contaminated spill response material must be disposed of in accordance with Environmental Guideline Management of Special Wastes (e.g., for diesel or Jet A spills). Spill response materials from gasoline spills are considered hazardous because gasoline contains benzene, and must,



therefore, be disposed of in accordance with Environmental Guideline Management of Hazardous Wastes.

- Conduct training for all staff involved in fueling activities prior to conducting fueling activities, in accordance with plans and procedures for spill prevention and response requirements. All operators of aircraft fueling equipment must be adequately trained in proper fueling procedures (DEN Rules and Regulations Part 150 – Aircraft Fueling and Defueling Regulations).
 - Training on Spill Prevention, Control, and Countermeasure (SPCC) Plan requirements must be provided to all oil-handling personnel if they conduct operations with SPCC-regulated containers and activities.
 - Employee training programs shall inform personnel at all levels of responsibility who are involved in industrial activities that may impact stormwater runoff. Stormwater pollution prevention (SWPP) training shall address topics such as spill response, good housekeeping, and material management practices.
 - Contractor or temporary personnel shall be informed of facility operation and design features in order to prevent discharges or spills from occurring.
 - Employee training shall include spill response procedures.
- To prevent spills, visually inspect fueling hoses, valves, and piping for leaks and tears. Notify facility operations personnel immediately of spills, leaks, broken/damaged equipment, or any other hazardous condition.
 - Call DEN Communications Center immediately at 303-342-4200 for all spills.
 - Use absorbent materials to manage spills. Contain used materials in an appropriate container and dispose off site at an approved and permitted facility.
 - Use barriers or blocking devices to prevent petroleum contamination from entering any sewer, drainage, waterway, or soils.
 - Control spills to eliminate risk to human health and the environment and to minimize property damage.
- Best practices for the storage and materials management of fuel and fueling systems include:
 - Maintain legible labels and markings on, and required signage around, all containers and tanks as well as at fuel dispensing system locations.
 - Ensure that secondary containment and other fuel-related equipment are adequate and in good operating condition. This includes storage units, receiving units, dispensing units, and ancillary monitoring and safety equipment.
 - Refer to the appropriate SPCC Plan for guidance on specific requirements.
 - Ensure that mobile storage tanks (such as fueling trucks) are operated and stored in compliance with the applicable SPCC Plan.
 - Ensure that spill response equipment is adequately stocked and maintained.
- As applicable, prepare an SPCC Plan.



- Review air permit requirements associated with fueling, HAPs, and APENs – Contact CDPHE APCD for permitting information. File any required Air Pollutant Emission Notices (APENs) or other required permits prior to conducting any fueling activities.
- Review equipment and devices for spill control and countermeasures (e.g., deadman switches, valves, overfill alarms).
- Complete the Stormwater Management Plan (SWMP) survey/matrix to assist in determining the Environmental Guideline(s) applicable to the activity.
 - This document is available in Appendix B of the DEN SWMP and also from DEN Environmental Services.
 - If applicable, the operator will need to decide whether to operate under the DEN SWMP or generate their own SWMP for review by DEN ES.
- Prepare and maintain a preventative maintenance and inspection plan for all fueling and related equipment, including tanks, support facilities, buried piping, and mobile fueling equipment.
 - 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.
 - Operating procedures should be written, communicated, and available.
 - Maintain adequate supplies of spill response equipment and materials in locations where spills are likely to occur.
 - Maintain a spill response equipment inventory.
 - 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.
 - Document all maintenance and inspection activities, especially on spill and release control and containment systems.
 - During every use, visually inspect fueling hoses, valves, and piping for leaks and tears. Notify facility operations personnel immediately of spills, leaks, broken/damaged equipment, or any other hazardous condition.
 - Conduct documented inspections on SPCC-regulated containers (as required by the applicable SPCC Plan).

Shall Not:

- Operate fueling systems without applicable regulatory permits, plans, and required training.
- Disconnection or faulting of deadman switches or other spill control or countermeasure equipment for convenience.
- Spills of any kind shall not be washed into any sewer system or waterway, or onto any soils.
- Fueling of aircraft, vehicles, or equipment outside of designated fueling areas.
- Filling portable containers in or on a vehicle.



- Dispensing fuel into vehicles or equipment whose engine is running.

REFERENCES

Contacts

- DEN Communications Center (for spill reporting) 303-342-4200
- DEN Environmental Services (Main Line): 303-342-2730; DENEnvironmental@flydenver.com

Additional Resources

- DOT Labeling and Placarding Guidance
- Metro Wastewater Contribution Permit
- CDPS Industrial Stormwater Permit / Stormwater Management Plan
- Leak Detection System Design and Operation Information
- DEN Cathodic Protection Specification – Section 16642 (Buried Piping)
- Ramp drainage design (as-builts)
- Colorado Water Quality Control Division “Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits”
- 40 CFR 50 – 95 Clean Air Act Regulations
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC/FR Plans)
- 40 CFR 240 – 299 RCRA hazardous waste regulations
- 49 CFR 100 – 185 DOT Regulations
- 6 CCR 1007 Colorado hazardous waste regulations
- 7 CCR 1101 – 14 Colorado storage tank regulations
- NFPA 415 Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways. Chapter 5 has specific requirements for ramp slope and drain design, including the existence of a trench drain in areas of aircraft fueling and defueling.
- Denver Fire Department Codes
- DEN Rules and Regulations Part 150
- DEN Rules and Regulations Part 180