



Title	ES-301-4.04 Management of Fire Control Agents
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Revision Date:	March 28, 2019

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## 1) Activity Description:

The activity of properly storing, handling, transporting, dispensing, and disposing of fire control agents such as Aqueous Film Forming Foam (AFFF) and dry chemicals. Includes fire truck testing and training activities.

## 2) Potential Environmental Risks

- A. The following environmental concerns are associated with these activities:
  - i) Contamination of soil
  - ii) Contamination of groundwater
  - iii) Contamination of surface water
  - iv) Contamination of sanitary sewer
  - v) Improper or inappropriate disposal of fire control agents
- B. Potential consequences from performing the activity incorrectly:
  - i) Property damage, personal injury or damage to the environment
  - ii) Noncompliance, Notices of Violation from Regulators, and related [financial & non-financial] penalties

## 3) Critical Operating Requirements

- A. Prohibited Activities
  - i) Except with events associated with an emergency firefighting event, discharge of fire control agents into State Waters (i.e. stormwater system or waterway) is prohibited.
  - ii) DEN DFD will perform Best Management Practices (BMPs) during any testing and training exercises utilizing AFFF to minimize the potential for impacts to soil, groundwater, surface water and the sanitary sewer.
- B. General Considerations
  - i) Each operator and tenant conducting activities with fire control agents is responsible for understanding the applicable regulations and managing their activities accordingly; this Environmental Guideline is meant as guidance only and does not supersede any regulations.
- C. Training Requirements
  - i) All applicable employees should be trained in appropriate procedures for use of fire control agents.
- D. Storage and Materials Management Requirements
  - i) Store chemicals and other cleaning products in appropriate containers in good condition (i.e. original containers that are labeled and don't pose risk to leakage) and utilize secondary containment when appropriate.
    - o For proper storage techniques of petroleum products, refer to ES-301-1.07 Storage of Vehicles and Equipment Containing Chemicals

## 4) Planning Requirements

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- A. Train all responsible personnel in the use, calibration, testing, and disposal of fire control agents.

## 5) Critical Tasks

- A. When AFFF is used for training or calibration of equipment, it must be managed properly. Training for the use of AFFF must be conducted in accordance with the following:
  - i) DEN DFD will conduct training exercises in an area on DEN property that is not in close proximity or directly connected to DEN's receiving waters and/or tributaries.
  - ii) It is DEN's intention to collect and dispose of all non-emergency discharges where ever possible. Non-emergency discharges should be coordinated through ES personnel for proper locations and procedures.
  - iii) Care will be taken to ensure that the quantities of AFFF utilized and the manner in which they are sprayed minimize the threat of AFFF entering DEN's receiving waters or tributaries.
  - iv) Care will be taken to ensure that the AFFF does not enter any storm drains, inlets, or culverts.
  - v) Material usage will be monitored.
  - vi) Disposal of AFFF into one of the lined retention ponds is allowed subject to Metro Wastewater Reclamation District (Metro) approval. At any time, Metro has the right to require DEN to cease discharge if they believe there is a potential for the discharge to disrupt treatment processes. Any introduction of AFFF into the lined retention ponds **must** be coordinated with DEN Environmental Services.

## 6) Emergency Response

- A. If a spill occurs, refer to Environmental Guideline ES-301-5.02 Spill Response.
  - i) Call DEN Communications Center immediately at 303-342-4200 for all spills.
- B. Disposal of Spill cleanup materials generated from cleanup of spills of AFFF or Purple K (dry chemical) must be handled in accordance with ES-301-6.01. Small amounts (less than 5 gallons) can be placed in a municipal solid waste dumpster or commercial compactor. Larger volumes of spill cleanup material must be handled as Special Waste (see ES-301-6.06)

## 7) Inspection and Maintenance Requirements

- A. Inspect the local area for impacts after AFFF use; notify DEN Environmental Services if significant erosion is noted or fire control agents have been released to a storm sewer or a waterway.

## 8) Expected Records and Outputs

- A. Waste management records (profiles, manifests, sample results, etc.)
  - i) Based on the disposal profile, manifests and related forms may be required. Manifests & profile forms can be obtained from the disposal facility for off-site disposal activities (manifests **are required** for hazardous, special and universal waste).

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- ii) Operator must maintain waste management records at the facility for a minimum of 3 years.

**9) References**

A. Phone Numbers

- i) DEN Communications Center (for spill reporting) (303) 342-4200
- ii) Craig Schillinger (DEN Environmental Services) (303) 342-2834

B. Guidance Materials (list is not limited to the following)

- i) DEN Stormwater Management Plan
- ii) MSDSs

C. Training Materials (list is not limited to the following)

- i) DEN DFD Standard Operational Procedures (SOPs)

D. Related Environmental Documents (list is not limited to the following)

- i) ES-301-5.02 Spill Response
- ii) ES-301-6.01 General Waste Management

E. Applicable Regulations (list is not limited to the following)

- i) 40 CFR 260-262 Federal RCRA Regulations
- ii) 40 CFR 401 Effluent Limitation Guidelines
- iii) 6 CCR 1007-3, Parts 260-262 State RCRA Regulations
- iv) CDPHE WQCC Regulation No. 61: Colorado Discharge Permit System Regulations
- v) Metro Wastewater Reclamation District Rules and Regulations
- vi) DEN Rules and Regulations

F. Other Documents (list is not limited to the following)

- i) N/A