



Title	ES-301-6.04 Management of Hazardous Wastes
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1) Activity Description:

The activity of properly identifying, storing, handling and offering for transportation, and disposing of hazardous waste.

2) Potential Environmental Risks

- A. The following environmental concerns are associated with these activities:
 - i) Legal management of hazardous waste
 - ii) Improper handling and disposal of hazardous waste, both listed and characteristic
 - iii) Improper identification, handling and disposal of unknown potential hazardous wastes
 - iv) Protection of Airport property
- B. Potential consequences from performing the activity incorrectly:
 - i) Property damage, personal injury or damage to the environment
 - ii) Noncompliance, Notices of Violations from Regulators, and related financial penalties

**NOTE: The following guidance applies only to Hazardous Waste.
Use ES-301-6.01 (General Waste Management) to facilitate waste classification.**

3) Critical Operating Requirements

- A. **Prohibited Activities**
 - i) Individuals are not allowed to handle or manage hazardous waste unless they have appropriate training and personal protective equipment.
 - ii) Hazardous waste cannot be left unidentified, unclassified, and inadequately managed due to lack of knowledge of regulatory requirements.
- B. **General Considerations**
 - i) Hazardous waste must be properly managed according to all legal requirements.
 - ii) In general, wastes generated from the cleanup of spills at DEN are considered non-hazardous (diesel, jet fuel, deicers, lavatory wastes). However, cleanup materials from spills of gasoline or aviation gas must be handled as hazardous waste until such time as they are determined to be non-hazardous (e.g., sampled for toxicity and/or exempt from regulation as a hazardous waste due to regulated UST release source).
 - iii) The generator must be aware of their generator status, i.e. "large", "small" or "very small".
 - iv) The generator must know the hazardous waste codes and amounts of all generated hazardous wastes.
 - v) Each generator of waste is specifically responsible for understanding waste management regulations and managing their waste accordingly; this Environmental Guideline is meant as guidance only and does not supersede any regulations.
 - vi) All generators shall properly identify and characterize hazardous wastes using generator process knowledge or analytical testing, and available regulatory guidance.
 - vii) Segregate, handle, store, and track inventory of hazardous wastes as per regulatory guidance.

- viii) Containerize, label, and transport hazardous waste according to DOT, RCRA, and State regulations.
- ix) Generate and maintain a profile with the disposal facility for all hazardous wastes.

4) Critical Operating Requirements

A. Registration Requirements

- i) Managers of facilities who manage hazardous wastes shall submit the Colorado Department of Public Health and the Environment equivalent to the EPA Identification Number using form USEPA 8700-12 (i.e., the Colorado Notification of Regulatory Waste Activity Form) and pay stipulated management fees to the same (6 CCR 1007-3), if required by regulation.
- ii) The USEPA has delegated responsibility for implementing RCRA regulations to the State of Colorado, Department of Public Health and Environmental Hazardous Materials and Waste Management Division.
- iii) Note that in 2007, F waste code waste generation triggered more rigorous notification requirements for CDPHE (6CCR 1007-3). Refer to the CDPHE website for access to a Fact Sheet summarizing the requirements.

B. Training Requirements

- i) HAZWOPER OSHA training for companies/employees subject to OSHA regulations.
- ii) Personal who handle or manage hazardous wastes are required to receive site-specific training in accordance with all applicable State and Federal requirements. This includes the following.
 - Discussion of waste characteristics and safe handling practices
 - Describing methods of containment, and
 - Generation and storage requirements and their safety and spill response

C. Storage & Materials Management Requirements

- i) Store the hazardous waste according to all RCRA and CDPHE HMWMD requirements.
- ii) Maintain legible labels and markings on all containers and tanks; labels on all containers must have the name of the owner of the container and an associated contact telephone number, and must clearly indicate the contents.
- iii) Per OSHA, DOT, RCRA, Local, and State and Federal requirements:
 - Inspect and maintain hazardous waste generation (suggested), satellite accumulation, and waste storage areas;
 - Provide appropriate secondary containment and spill control;
 - Label hazardous waste appropriately. The labeling shall conform to CDPHE HMWMD requirements including the owner, the owner USEPA ID Code, RCRA description of waste and applicable codes, facility address, and for storage in a satellite accumulation area, the start date for when the container is first used for accumulation.
 - Place appropriate signage in generation and satellite accumulation areas; and
 - Record amounts of materials along with dates and locations.

5) Planning Requirements (Responsible: Generator)

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- i) Maintain adequate resources to assure correct management, storage, and disposal of hazardous wastes, including physical resources, and management and training resources. This includes but is not limited to containers, transfers equipment, personal protective equipment, and emergency response equipment.
- ii) When appropriate, implement hazardous waste source control programs that divert applicable materials to recycle or universal waste streams while demonstrating full compliance with hazardous waste regulations.
- iii) Comply with all emergency response requirements of applicable hazardous waste requirements including maintaining a communication and response plan to protect human health and the environment during emergencies.
- iv) Consider the preparation of a Waste Management Plan – this document is not required but highly recommended for fully understanding the generation, control, and storage implications for hazardous wastes generated in the operator’s activities. Use the plan to avoid commingling wastes and to develop generator knowledge for waste determinations.

6) Critical Tasks (Responsible: Generator)

- i) Records must be kept on waste identification and determinations. This includes analytical results. Material Safety Data Sheets (MSDSs), and any other records used in waste characterization. Any process knowledge determinations to include or exclude a waste as hazardous should be kept as long as the waste is being generated or managed.
- ii) Hazardous waste generators are required to maintain all records related to hazardous waste storage area inspections and waste shipping and disposal for a minimum of three years. This requirement can be extended if the records are under investigation.
- iii) Storage locations require rigorous supervision for compliance with general housekeeping, access, emergency response, inspection and recordkeeping, secondary containment, and spill control, as well as time limitation for storage.
- iv) Generators of hazardous waste must label all hazardous wastes appropriately (per DOT guidance) before shipping. Waste must be offered for shipping and disposal in compliance with RCRA and state regulations. Special care should be taken in preparation of manifests, Land Disposal Regulations (LDRs), and disposal site notification of receipt.

7) Emergency Response (Responsible: Generator)

- i) If a spill occurs, refer to Environmental Guidance ES-301-5.02 Spill Response.
 - Call DEN Communications Center immediately at 303-342-4200 for all spills.
- ii) Control spills to minimize property damage and eliminate imminent risk to human health and the environment.
- iii) Spills of any kind shall not be washed into any sewer or waterway, or onto any soils.

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- iv) Containerize all collected spillage and cross contaminated wastes and evaluate for proper labeling, storage, and disposal.

8) Inspection and Maintenance Requirements (Responsible: Generator)

- i) Hazardous waste satellite and storage areas must be inspected every week for RCRA-complaint containment, emergency response items, labeling, and waste hold times.
- ii) Maintain good housekeeping practices in waste collection areas.

9) Expected Records and Outputs

A. Waste Management Plan (including generation locations and waste determinations)

- i) While this plan is not required, it is highly recommended to fully understand the generation, control, and storage of hazardous wastes.

B. Waste Analysis and Profiles- MSDSs and Generator Knowledge

- i) All hazardous wastes must be profiled by the landfill for disposal. This frequently requires chemical analyses be performed by an EPA-certified analytical laboratory, or equivalent.
- ii) MSDSs should be made available to all employees and maintained on file by the Generator at the facility. Manufacturers will supply these documents on demand. Generator knowledge documentation must be kept on site.

C. Colorado Notification of Regulated Waste Activity Form

- i) All hazardous waste generators must complete and submit this form to the Colorado Department of Public Health and Environment prior to operation.
- ii) In 2007, CDPHE required additional notification requirements for specific F code waste generation. This information must be provided on the Hazardous Waste Notification Form.
- iii) At this point, the impact of managing hazardous wastes as universal wastes or recycle options should be considered.

D. Disposal manifest(s), LDR & shipping forms

- i) Originating shipping and disposal forms must be developed and kept on site.
- ii) Manifests and LDR forms must be obtained from the disposal facility in a timely fashion or notifications to USEPA must be made.
- iii) All manifests must be maintained on file by the generator for at least three years.

iv) MSDSs should be made available to all employees and maintained on file by the Generator at the facility. Manufacturers will supply these documents on demand. Generator knowledge documentation must be kept on site.

E. Inspection records

i) Waste storage area inspection records must be maintained on site by the operator for a minimum of 3 years.

F. Evidence of training

i) Employees involved in the handling of hazardous wastes must receive site-specific training per RCRA guidance.

ii) Site-specific hazardous waste training records for employees must be maintained on site by the generator for a minimum of three years.

10) References

A. Phone Numbers

- | | |
|---|----------------|
| i) DEN Communications Center (for spill reporting) | (303) 342-4200 |
| ii) DEN Environmental Services (Main Line) | (303) 342-2730 |
| iii) Craig Schillinger (DEN Environmental Services) | (303) 342-2834 |

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

- i) MSDSs/Safety Data Sheets (for raw material)
- ii) Waste Management Plan (if prepared)
- iii) CDPHE Compliance Bulletins

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

- i) DEN hazardous waste management training materials
- ii) Site-specific hazardous waste generation, management, and shipping information.
- iii) OSHA HAZWOPER training materials, if subject to OSHA.

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
- iii) ES-301-6.05 Universal Waste Management

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

- i) 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- ii) 40 CFR 261-279 Federal RCRA Regulations
- iii) 40 CFR 100-185 DOT Regulations
- iv) 6 CCR 1007-3, Part 261-279 State RCRA Regulations
- v) DEN rules and regulations
- vi) Denver Wastewater Management Division Rules and Regulations
- vii) Metro Wastewater Reclamation District Rules and Regulations

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