

EG 5-3: Storage, Handling and Management of Hazardous Materials

Date:	January 1, 2024
Document Owner:	CCDOA Environmental Specialist

I. Activity Description:

A hazardous material is any gas, liquid, or solid the exposure to which may cause harm to people, other living organisms, property or the environment. Hazardous materials may be flammable, explosive, toxic, reactive, corrosive, radioactive, bio hazardous, asphyxiating (causes suffocation), pathogenic, allergic or may have other characteristics that render them hazardous in specific circumstances

The handling and storage of hazardous chemicals/materials used on a regular basis must be done in a way that prevents the release and discharge of pollutants from indoor or outdoor storage areas to storm water or other media. Examples of activities that are covered by this guideline include: cargo handling, fueling, chemical storage and handling of painting or cleaning supplies, storage of materials, equipment, vehicles, and the storage and use of pesticide/herbicide

In addition, inventories of hazardous chemicals must be kept by each facility and may need to be reported to the Nevada State Fire Marshal, depending on the quantities and hazardous nature of the materials being stored. See Occupational Safety and Health Organization (OSHA), Hazard Communication Standard (HCS), and the Emergency Planning and Community Right-to-Know Act (EPCRA) Threshold Planning Quantities

This Environmental Guideline addresses procedures related to usable hazardous chemicals and materials. Use reference, Environmental Guideline EG 7-1, General Waste Management, for proper waste handling procedures for materials that can no longer be used for their intended purpose

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 or chemical spills reaching the storm water system
 2. Air Pollution and odors both indoors and outdoors
 3. Improper or inappropriate disposal of hazardous materials or their derived wastes
 4. Improper disposal of contaminated spill response media
 5. Contamination of soils
 6. Contamination of surface water
 7. Contamination of ground water

- B. Potential consequences from performing the activity incorrectly:
 - 1. Property damage
 - 2. Personal injury
 - 3. Long term damage to the environment
 - 4. Citations, Notices of Violation and related (financial & non-financial) penalties

III. Critical Operating Requirements

- A. Prohibited Activities
 - 1. Spills of any kind shall not be washed into any sewer system or waterway, or onto any soils
 - 2. Discharge of the following materials down any drain is prohibited:
 - a. Any fuels, oils, grease or other maintenance/cleaning fluids
 - b. Pesticides, Insecticides or herbicides
 - c. Solvents
 - d. Paints
 - e. Battery Acids
 - f. Deicing/Anti-icing fluids
 - g. Maintenance/cleaning fluids
 - h. Fire-fighting chemicals (except during fire-fighting activities)
 - 3. Use and dispose of aerosol cans may require certain management procedures specific to universal waste. These items should not be disposed of in the trash. See Environmental Guideline EG 7-1, General Waste Management
 - 4. Disposal of any hazardous materials that are expired or that have been spilled, leaked, or otherwise handled improperly, must be done in accordance with the appropriate "Waste" guideline(s). See Environmental Guideline EG 7-1, General Waste Management for further guidance
 - 5. Do not block or otherwise restrict the flow of air through any ventilation equipment within storage or work areas
- B. Required Activities
 - 1. Any hazardous materials that have been spilled, leaked or otherwise handled improperly, must be properly disposed of
 - 2. All hazardous materials must be properly labeled including the name of the owner of the material
 - 3. All hazardous materials must be properly stored off of the floor
 - 4. All containers are to remain closed when not in use
 - 5. Secondary containment units must be free of liquids
 - 6. The Uniform Fire Code requires that all aerosol cans and all flammables be stored in fireproof cabinets
 - 7. Each operator and tenant conducting hazardous material handling/storage activities 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

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8. It is recommended that each facility that handles and stores hazardous materials, in any quantity, develop a management plan that identifies each hazardous material, its storage location and its proper handling during use. The plan should identify procedures to respond to any spill, leak or proper handling during use. The plan should identify procedures to respond to any spill, leak or other release that could reach any drains, harm employees or contaminate any environmental media such as water, soil or air
 9. In accordance with the Hazard Communication Standard (HCS), ensure that product Safety Data Sheets (SDSs) are readily available to all employees for all chemicals and products used during work activities
 10. All employers with hazardous chemicals in their workplaces must have labels and safety data sheets for their exposed workers, and train them to handle the chemicals appropriately
 11. Labels must conform with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
 12. SDSs for materials no longer in use should be routinely removed and placed in an archive
 13. Properly characterize and dispose of all wastes generated during handling or storage. See Environmental Guideline EG 7-1, General Waste Management for additional guidance
 14. Store unopened drums or containers on pallets to keep the containers out of contact with the ground and aid with detecting leakage
 15. Store open drums or containers on secondary containment, such as spill pallets
- C. General Considerations
1. Store all materials in their original containers or utilize containers approved for that material
 2. A Clark County Fire Department hazardous materials permit may be required on the type of material stored
- D. Training Requirements
1. Each employee who is involved with the handling, storage or use of hazardous materials should receive site-specific training in accordance with all applicable regulations. This includes:
 - a. Discussion of the materials that are considered hazardous in each work area
 - b. Discussion of methods of containment and safe storage
 - c. Storage and handling requirements
 - d. Response actions for spills or leaks
 - e. Discussion of prohibited activities
 - f. Discussion of appropriate or required personal protective equipment (PPE)
 2. Employees 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 Plan (SWPPP) training shall address topics

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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

3. Appropriate OSHA training is required for personnel who handle hazardous chemicals in the course of their jobs

E. **Storage and Materials Management Requirements**

1. Impacted soils and used absorbent materials must be properly labeled, stored and properly disposed
2. Store hazardous material drums and containers on spill pallets, within berms or other secondary containment systems to prevent leaks and spills from entering store water runoff and to enable easier inspection and detection of leaks
3. Store drums/containers of other chemicals on pallets or off of the ground in some way, to protect containers and aid in inspection and detection of leaks
4. Store materials indoors, whenever possible. Protect materials stored outside from exposure that may compromise containers or allow contact with storm water. Make use of overhead cover, storage cabinets, etc., whenever possible
5. Transfer liquids in paved areas when feasible. Areas paved in concrete should be utilized if the material is asphalt reactive
6. Avoid entirely or minimize transferring materials in areas with storm drain inlets. Use temporary covers on storm drains when handling materials outside to prevent spills from reaching the storm water system

IV. **Planning Requirements**

- A. Ensure that all storage and handling areas are stocked with appropriate spill response materials at all times. As applicable, obtain hazardous materials storage permits from the Nevada State Fire Marshal
- B. Purchase of new hazardous chemical inventory, or new products containing hazardous chemicals, must be approved by CCDOA, EHS
- C. An inventory of all hazardous chemicals/materials, or products containing hazardous chemicals, must be kept by the facility in accordance with the Emergency Planning and Community Right-to-Know Act (EPCRA). This inventory must be kept in such a way that notification can be made to CCDOA, EHS and the Clark County Local Emergency Planning Committee (LEPC) within 30 days of exceeding threshold planning quantities (TPQs) established in the EPA's List of Lists
- 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

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- E. Facilities that store chemicals in certain quantities are to provide specific information about the chemicals on site to the Nevada State Fire Marshal, Clark County LEPC, and local FD in the form of what is referred to as a Tier II report. This report is due annually by March 1, covering the preceding calendar year. The report should contain information on every chemical for which an EPCRA Section 302 TPQ is exceeded or for any hazardous substance present on site in excess of 10,000 pounds at one time.

Note: This requirement is applicable to facilities that must comply with OSHA's Hazard Communication Standard to have SDSs available on site

V. Critical Tasks

- A. Ensure materials are stored and handled on containment pallets, paving or other impervious surface in areas away from storm water inlets, trench drains or any other drains that route to the storm water system
- B. Properly secure all hoses, valves and equipment when transporting materials to eliminate leakage or spills

VI. Emergency Response

- 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, drainage waterway or soil area using whatever means available (i.e., barriers, blocking devices, etc.)
- 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. Perform and document all inspections of storage areas or materials handling events

- B. Inspections of hazardous materials' storage areas are recommended weekly for correct materials management containment, security, cleanliness, access, correct labeling, storage duration, spills and leaks

VIII. Expected Records and Outputs

- A. Current SWPPP documents
 - 1. Obtain a copy of this document from CCDOA EHS
 - 2. Complete internal SWPPP inspections and report any non-compliant conditions to CCDOA EHS for evaluation
 - 3. Maintain all SWPPP inspections and audits on file for a minimum of 3 years
- B. EPCRA and Hazardous Materials Inventory records/reports
 - 1. Records of quantities of hazardous materials and copies of Reports to Clark County's LEPC, the State Emergency Response Commission and the Nevada State Fire Marshal, shall be maintained
- C. Hazardous materials storage and handling records (weekly inspections of storage areas and containers, etc.)
 - 1. Operator must maintain management records at the facility for a minimum of (3) three years
- D. Waste management records (profiles, manifests, sample results, etc.)
 - 1. Based on disposal profile, manifests and related forms may be required. Manifests and profile forms must be provided by the disposal facility for off-site disposal activities (manifests are required for hazardous wastes)
- E. Evidence of Training
 - 1. While formal certifications are not always necessary, some form of "proof of training" such as sign-in sheets, signed by the attendees and/or handouts are expected and should be maintained on file by the operator

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. Facility Storm Water Pollution Prevention Plan (SWPPP)
 - 2. Product Safety Data Sheets (SDSs) for materials being stored
 - 3. DOT Labeling and Placarding Guidance

4. The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

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

1. Operating procedures training (on-the-job)
2. Operating site-specific training materials for handling Hazardous Materials
3. Annual Industrial Storm Water Pollution Prevention training

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

1. All Environmental Guidelines apply to airport tenants and others who may be conducting the activities described in each Guideline

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

1. NAC 444/NRS 444 Sanitation
2. NAC 445A Water Controls 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. NRS 618.775 Asbestos
7. NRS 459.748-459.773 Responding to Spills, Accidents and Incidents
8. 14 CFR 139.321 Handling and Storing of Hazardous Substances and Materials
9. 29 CFR 1910 Occupational Safety and Health Standards
10. 29 CFR 1926 Safety and Health Regulations for Construction
11. 40 CFR Protection of the Environment
12. Uniform Fire Code/NFPA
13. 49 CFR Transportation
14. RCRA Subtitle D Storage Requirements
15. Nevada State Fire Marshal Requirements
16. Clark County Fire Department Hazardous Materials Requirements
17. CCDOA Rules and Regulations

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

1. None

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