

EG 4-1: Construction

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Document Owner:

CCDOA Environmental Specialist

I. Activity Description

This guideline addresses environmental concerns associated with construction activities taking place on Clark County Department of Aviation (CCDOA) property. Planning and design requirements for construction projects are located in Environmental Guideline EG 4-2, Planning and Design

Each tenant, contractor or operator conducting construction 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.

II. Potential Environmental Risks

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

1. Fuel spills
2. Impacts to air quality
3. Improper or inappropriate disposal of wastes
4. Impacts to storm water
5. Contamination of groundwater
6. Collection of wash water
7. Disposal of contaminated spill response media
8. Soil erosion
9. Contamination of soil
10. Adverse impacts to wildlife
11. Impacts to asbestos containing materials
12. Damage to sanitary sewer system

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
5. Legal action from outside parties
6. Negative public image
7. Delays to project schedule
8. Increases to project cost
9. Inability to obtain federal funding
10. Increases to lifetime maintenance and operating costs

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III. Critical Operating Requirements

A. Prohibited Activities

1. Project Managers should not allow construction to begin without ensuring that all proper environmental permits and Federal Aviation Administration (FAA) approvals have been issued to and signed by the permittee, and all inspection requirements have been satisfied in accordance with state and local permitting requirements
2. Abandonment or disposal of construction debris spoils, and/or waste on CCDOA property is strictly prohibited without prior approval from the CCDOA EHS office. Placement of concrete spoils and asphalt spoils is permitted at designated areas ONLY with the prior approval of the CCDOA Project Manager (PM)
3. Concrete washout activities are prohibited anywhere on CCDOA property unless:
 - a. the activity and location are specifically authorized by the CCDOA for the project, and/or
 - b. the wash water is collected and hauled off-site for disposal at an appropriately permitted facility
4. Spills of any kind shall not be washed into any sewer system, storm drain system, drainage waterway or onto any soils

B. Required Activities

1. Soil stockpiles shall be managed in accordance with Environmental Guideline EG 7-6, Management of Materials. Best management practices (BMPs) shall be employed to protect stockpiles from wind and water erosion, and to manage storm water-induced sedimentation
2. Concrete asphalt spoils shall be managed in accordance with Environmental Guideline EG 7-6, Management of Materials
3. Dust control measures are required to be implemented
4. All "Haul-Off" dumpsters must be covered with a tarp when not in use
5. Inspect construction areas completely and regularly to control Foreign Object Debris (FOD) within airport operations areas

C. General Considerations

1. Obtain all applicable federal, state and local permits for construction project
 - a. State of Nevada Division of Environmental Protection (NDEP) Construction Storm Water Permit applies to construction sites meeting one or more of the following criteria:
 - 1) Disturbing one acre or more, or less than one acre, but part of a larger common plan for development that will ultimately disturb one or more acres
 - 2) A project less than one acre in size that will impact receiving waters or its tributaries within a 1/4-mile radius of the project, as determined by the NDEP

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- b. A National Pollution Discharge Elimination System (NPDES) dewatering permit may be required if construction activities require the removal and discharge of groundwater offsite
 - c. A U.S. Army Corps of Engineers (USACE), Section 404 Permit, may be needed if the work will be conducted in or impact waters of the United States, including wetlands, washes, drainages, ditches, creeks, streams and rivers
 - d. Air permits and fire permits for the removal of asbestos-containing material (ACM) may be required for construction project(s) requiring the abatement of ACM prior to construction
2. In most cases, the contractor is responsible for applying, and obtaining all environmental permits that are required. Actual permit needs are identified through the planning and design process
3. Environmental permitting requirements are identified in the planning and design phases of a project so that permits can be secured in a timely and cost-effective manner. Some environmental permits and approvals can be secured in a matter of days, while others may take months to obtain
4. All construction work must comply with the CCDOA Tenant Improvement Guidelines
5. Asbestos containing building materials may be present. Check with the CCDOA EHS office prior to work starting to ensure that a survey has been conducted
6. Applicable sediment and erosion controls shall be installed to prevent illegal discharges to the storm system or waterways, such as inlet protection, silt fence, sediment traps, erosion control logs, check dams and vehicle track-out control. Sediment and erosion controls will be installed and maintained in accordance with approved design criteria and/or industry standards
7. Where practicable, non-structural controls will be used, such as phased construction, dust control, good housekeeping practices (daily sweeping & prompt cleanup), and spill prevention and response procedures
8. Protect storm drain inlets and drains with curb socks, rock berms, inlet protection, or drain covers/mats prior to any activity

D. Training Requirements

1. Employee training programs shall inform personnel at all levels of responsibility who are involved in construction 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
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 DOA spill reporting requirements. Refer to Environmental Guideline EG 6-1, Spill Response

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4. Contractor or temporary personnel shall be informed of facility operations, design features and details of this Environmental Guideline, in order to prevent discharges or spills from occurring

E. **Storage and Materials Management Requirements**

1. Refer to other environmental guidelines (see below) for guidance on management of petroleum storage tanks, hazardous materials (e.g., chemicals & gasoline cans), construction-derived waste, and asphalt and concrete spoils. Store chemicals per Resource Conservation Recovery Act (RCRA)-approved methods
2. Flammable/combustible liquid cans and containers must be labeled, put in a NFPA-approved cabinet and locked. Labels must have the name of the contractor responsible for the product
3. Waste containers (e.g., roll-off dumpsters) must be covered and emptied routinely
4. All drums should be labeled. Empty drums should be labeled "EMPTY". All drums should be placed on secondary containment devices. Damaged drums should be replaced
5. Soil stockpiles are allowed with prior approval by the CCDOA PM. Soil stockpiles must contain only "clean" soils, i.e., stockpile cannot contain mixed materials such as concrete, trash, rebar, or other construction debris. Soil stockpiles are considered a potential pollutant source and must be managed in accordance with the Construction Storm Water Permit requirements
6. Cover and routinely empty waste containers (e.g., roll-off dumpsters)
7. Ensure adequate secondary containment for all bulk storage containers, and that all containers and equipment are in good operating condition
8. Whenever possible, recycle concrete and asphalt materials; otherwise, dispose of it as solid waste

IV. **Planning Requirements**

- A. Review the CCDOA Tenant Improvement Manual and Technical Specifications prior to conducting any construction activities
- B. Verify with CCDOA EHS that no asbestos containing building materials are present prior to conducting any construction activities

V. **Critical Tasks**

- A. Perform all work in accordance with contract documents
- B. Verify with CCDOA EHS that no asbestos containing building materials are present prior to conducting any construction activities

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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, 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 CCDOA recommends flushing water through the system, operators/tenants must have a licensed contractor pump out free-floating product or sheen from the pretreatment device, as necessary, in accordance with Environmental Guideline EG 2-3, Maintenance of Pretreatment Devices.
- 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. The contractor should perform inspections pursuant to the permits obtained, such as Storm Water Permit BMP inspections. Contractor must maintain copies of inspection reports on-site
- B. Schedule a Final Inspection with the NDEP and NPDES Inspector when final site stabilization has been achieved. After site stabilization has been inspected and accepted by the regulator inspectors, all applicable environmental permits should be terminated

VIII. Expected Records and Outputs

- A. Evidence of training on Storm Water Pollution Prevention Plan, Spill Prevention Control and Countermeasure Plan, and operator's SOPs
 - 1. Formal certifications are not always necessary; however, "proof of training" such as sign-in sheets are expected and should be made available and signed by the attendees, and maintained on file by the operator/tenant

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- B. SPCC Plan, if required, and compliance records, as applicable (i.e., monthly inspections, fueling and defueling operations, witnessing)
 - 1. Operator must maintain SPCC Plan and related inspection and compliance records at the facility
 - 2. A copy of the SPCC Plan must be submitted to the CCDOA EHS office
- C. Spill and release records for any spill
 - 1. Spill/release reported immediately
 - 2. The Responsible Party (for the spill) must complete and submit a Spill Report Form to CCDOA EHS office. Spill Report Forms are available from CCDOA Airport Operations Coordinators or the CCDOA Environmental, Safety & Risk Management 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. Documentation of all inspections in accordance with applicable permit requirements. A copy of these inspections should be submitted to the CCDOA PM assigned to the project. All inspection documentation shall be readily available for state, local and CCDOA inspectors
- E. Contractors must submit all permit inactivation and/or termination documentation to the CCDOA PM

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. CCDOA Storm Water Pollution Prevention Plan
 - 2. Project Storm Water Pollution Prevention Plan
 - 3. NDEP Storm Water Discharge Permit (NPDES)
 - 4. Facility drainage design and storm water plans (as-built plans)
 - 5. SPCC Plan
 - 6. DOT Labeling and Placard Guide
 - 7. The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
 - 8. Materials of Selection Safety Data Sheet (SDS) documents and other manufacturer specification information
 - 9. Airport Construction Standard Specifications

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10. CCDOA Tenant Improvement Manual
 11. International Building Code (IBC)
 12. NFPA requirements
- C. Training Materials (list is not limited to the following)
1. OSHA 10-hour Construction Training Course
 2. Storm Water Pollution Prevention Plan Training
 3. Manufacturer's SDS Information and Equipment Specifications
- D. Related Environmental Documents (list is not limited to the following)
1. Environmental Guideline EG 2-1, Painting and Paint Removal
 2. Environmental Guideline EG 2-2, Cleaning Washing - Indoor Industrial Surfaces
 3. Environmental Guideline EG 2-3, Maintenance of Pretreatment Devices
 4. Environmental Guideline EG 2-4, Janitorial Activities
 5. Environmental Guideline EG 2-5, Cleaning Washing - Outdoor Areas and Structures
 6. Environmental Guideline EG 3-2, Heating, Ventilation, and Air Conditioning (HVAC) Operations
 7. Environmental Guideline EG 3-4, Metal Finishing, Coating, Machining, and Cooling
 8. Environmental Guideline EG 4-1, Construction
 9. Environmental Guideline EG 4-2, Planning and Design
 10. Environmental Guideline EG 4-3, Procurement
 11. Environmental Guideline EG 4-4, Tenant Operating Guidance
 12. Environmental Guideline EG 4-5, Tenant Relocation or Closeout
 13. Environmental Guideline EG 5-2, Management of Petroleum Products (SPCC Plan)
 14. Environmental Guideline EG 5-3, Storage, Handling and Management of Hazardous Materials
 15. Environmental Guideline EG 6-1, Spill Response
 16. Environmental Guideline EG 6-2, Abandoned Material Response
 17. Environmental Guideline EG 7-1, General Waste Management
 18. Environmental Guideline EG 7-2, Management of Recyclable and Reusable Materials
 19. Environmental Guideline EG 7-3, Management of Hazardous Wastes
 20. Environmental Guideline EG 7-4, Management of Universal Wastes
 21. Environmental Guideline EG 7-5, Management of Special Wastes
 22. Environmental Guideline EG 7-6, Management of Materials

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- E. Applicable Regulations (list is not limited to the following)
1. NAC 444/NRS 444 Sanitation
 2. NAC 444A.005-444A.470/NRS 444A.010-444A.110 Recycling
 3. NAC 445A Water Controls
 4. NAC 445B Air Controls
 5. NAC 459/NRS 459 Hazardous Materials
 6. NAC 590 Motor Vehicle Fuel, Petroleum Products and Antifreeze
 7. 29 CFR 1910 Occupational Safety and Health Standards
 8. 29 CFR 1926 Safety and Health Regulations for Construction
 9. 40 CFR Protection of the Environment
 10. 49 CFR Transportation
 11. Clark County Department of Air Quality Regulations
 12. CCDOA Rules and Regulations
 13. Uniform Fire Code/NFPA
 14. Uniform Fire Code/NFPA Chapter 16 Construction, Alteration and Demolition Operations
 15. Clark County Department of Air Quality (CCDAQ) Regulations
- F. Other Documents (list is not limited to the following)
1. Construction-related inspection records
 2. Project permits and plans
 3. Air Permit Applications

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