



DEVELOPMENT & REDEVELOPMENT – CONSTRUCTION CONTROLS & PERMITTING

ENVIRONMENTAL GUIDELINE



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PURPOSE

The purpose of this guideline is to provide guidance on DEN's expectations for Construction Activities that occur on DEN property. This document is one of several specifically identified procedures for our activities or facilities that are required by the Pollution Prevention/Good Housekeeping section of the City and County of Denver's MS4 permit. It addresses environmental concerns associated with construction activities taking place on DENs property.

Each airport 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.

ACTIVITY DESCRIPTION

The activities covered under this EG are as follows:

- Training Requirements-training practices to be used, and proper storage handling
- Construction Activities Critical Tasks
- Emergency Response
- Inspection & Maintenance Requirements
- Expected Records & Outputs
- Potential Environmental Risks
- Sediment & erosion

EXPECTATIONS

Best Practices:

- For all construction sites requiring a city construction permit, prior to any earth disturbance operations, conduct an Initial Inspection when the first level of temporary erosion and sediment control measures (CM) have been installed. The contractor shall schedule the Initial Inspection with the assigned City and County of Denver Department of Transportation and Infrastructure (DOTI) National Pollutant Discharge Elimination System (NPDES) Inspector once initial CMs have been installed. The DEN PM or designated representative should be present during the Initial Inspection
- Obtain all applicable federal, state, and local permits for construction projects
- Both the Colorado Stormwater Construction General permit and the Denver Construction Activities Stormwater Discharge Permit apply to construction sites meet one or more of the following criteria:
 - Disturbing one acre or more, or less than one acre but part of a larger common plan of development,



- Are part of a larger common plan of development is defined as a contiguous area where multiple separate and distinct construction activities may be taking place at various times on different schedules under one plan,
- The site has been identified as having a significant potential for erosion, based on site characteristics including steep topography,
- The site is not known to contain contaminated soils or pre-existing environmental impairment, and
- The site is not directly adjacent to receiving waters (i.e., creek, stream, river, pond, lake, etc.).
- A dewatering permit may be required if construction activities require the removal and discharge of groundwater offsite.
- A U.S. Army Corp 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.
- In most cases, the contractor is responsible for applying for and obtaining all environmental permits at the direction of the DEN PM. Actual permit needs are identified through the planning and design process (see Environmental Guideline Planning and Design). When applying for a permit the owner (DEN) will be a co-permittee on each permit, holding both DEN and the Contractor legally responsible for each project; however, it will be the contractor who is responsible for following their Stormwater Permits and complying.
- Environmental permitting requirements are identified in a project's planning and design phases 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 can take months to obtain.
- All contractor waste must be sent to the Denver Arapahoe Disposal Site (DADS) per Mayor's Executive Order 115.
- Applicable sediment and erosion control measures shall be installed to prevent illegal discharges to the storm sewer or waterways, such as inlet protection, silt fence, sediment traps, erosion control logs, check dams, and vehicle tracking control. Sediment and erosion controls will be installed and maintained in accordance with approved design criteria and/or industry standards.
- Where practicable, non-structural controls will be used, such as phased construction, dust control, good housekeeping practices (daily sweeping), and spill prevention and response procedures.
- Protect storm drain inlets and drains with curb socks, rock berms, inlet protection, or drain covers/mats prior to any activity.
- Where feasible, schedule maintenance activities during dry weather.
- Obtain any required waste profile acceptance for each waste stream at proper disposal sites prior to initiating work.
- Leaking material containers should be properly discarded and replaced.
- Store materials in containers under cover when not in use and away from any storm drain inlet.
- Monitor equipment for leaks and use drip pans, as necessary.
- Develop training programs to inform personnel, at all levels of responsibility, who are involved in construction activities that may impact stormwater runoff. Training should include topics such as permit requirements, inspection procedures, spill response, good housekeeping, and material management practices. Records of this training should be maintained and should be available upon request.



- DEN Field Maintenance Staff receive annual waste management training from DEN Environmental Services (ES). DEN Construction Engineering is responsible for ensuring that Contractors comply with Project Technical Specifications.
- If a spill occurs, call DEN Communications Center immediately at 303-342-4200.
- Soil stockpiles are allowed with prior approval by the DEN PM. Soil stockpiles must contain only “clean” soils, i.e., stockpiles 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 State and City permit requirements.
- Store materials per RCRA-approved methods.
- Maintain legible labels and markings on all containers and tanks.
- Label all cans and containers with product information, 24/7/365 contact information (name and number), put in a fire department-approved cabinet, and locked.
- Label all drums; label empty drums with the words “EMPTY.” Place all drums under cover. Replace damaged drums. Use containers that are compatible with the material stored in them.
- Cover and routinely empty waste containers (e.g., roll-off dumpsters).
- Ensure adequate secondary containment for all bulk storage containers, and that all containers and containment are in good operating condition.
- Whenever possible, recycle concrete and asphalt rubble; otherwise, dispose of it as solid waste
- A Recycle Materials Manifest is required for each load of concrete or asphalt placed in the north and south recycling yards. Submit completed manifests weekly to the responsible DEN PM (see Project Specifications for details). A copy of the Recycled Materials Manifest form is available from the DEN PM. A copy of all manifests must be handed in weekly to the Director of Construction.
- For construction projects conducted by DEN Field Maintenance, the Director of Field Maintenance shall assign an acting Project Manager. This individual is responsible for compliance with all applicable permit and program requirements. Responsibilities include all duties assigned to the “contractor” and the DEN PM as stated herein.
- Perform work in accordance with contract documents and permits obtained for the project.
- Stabilize all areas of disturbance including but not limited to, staging areas, laydown area, and contractor yards in accordance with State and local permit requirements, airport rules and regulations, and/or restore the site to the condition that the City initially provided the site.
- In accordance with Technical Specification 01500, a final inspection of all temporary contractor facilities shall be conducted by the DEN PM or their representative. These areas include, but are not limited to, staging areas, laydown areas, borrow areas, and contractor yards and offices. The DEN PM will ensure these areas have been properly stabilized in accordance with DEN contract agreements and restored to the condition in which the City initially provided them to the contractor. A DEN representative should be present during the final walk through.
- In accordance with Airport Rule and Regulation 180, restore any area on DEN property contaminated by contractor operations. Restoration shall be in accordance with federal and state regulations, applicable standards or to such other levels as the Manager of Aviation may require, at the Manager’s sole discretion.
- If questionable materials are encountered during construction activities, immediately notify the DEN Communications Center at (303) 342-4200 and DEN PM.
- Submit final as-built drawings to the DEN PM and DOTI, if required.



- Document all inspections in accordance with applicable permit requirements. A copy of these inspections should be submitted to the PM assigned to the project. All inspection documentation shall be readily available for State, City, and DEN ES inspectors.
- Contractors must submit all permit inactivation and/or termination documentation to the DEN PM.
- Facility Development/Redevelopment Environmental Checklist should be on file with DEN ES and DEN PM for the project design and construction.
- The Environmental SME puts the final Environmental and Sustainability Checklist and final major permits, licenses, and certifications in the Environmental Records Library maintained by the Sustainability Division. While the project is active the Environmental SME retains additional convenience copies of project related materials in a folder in the Project files in the Environmental Planning folder in the Collaboration Library maintained by the Sustainability Division. The DEN Project Manager retains files in their own project files

Shall Not

- Construction activities shall not commence on any project until all FAA approvals have been received, applicable permits have been issued to and signed by the permittee, and all inspection requirements have been satisfied in accordance with State and local permitting requirements. **This includes NEPA approval if applicable.**
- Abandonment or disposal of construction debris, spoils, and/or waste on municipal airport property is strictly prohibited by state and local law. Placement of concrete spoils and asphalt spoils is permitted at designated areas ONLY with the prior approval of the DEN Project Manager (PM).
- Concrete washout activities are prohibited anywhere on DEN property unless: a) the activity is specifically authorized under a CDPS permit and included in the SWMP, or b) the wash water is collected and hauled off site for disposal at an appropriately permitted facility.
- Concrete washout activities, authorized by permit, are only allowed at a designated concrete washout area as indicated in the approved Construction Activities Stormwater Management Plan (CASMP) and include the washing of the chute and tools ONLY. Concrete washout spoils are eligible for recycling once the washout has been segregated and allowed to dry and harden in accordance with permitted methods.
- No spiders shall be washed into any sewer system, waterway, or onto any soils.
- No idling of heavy equipment; it contributes to air pollution through emissions of harmful pollutants that particulate matter, nitrogen oxides, and carbon dioxide.

REFERENCES

Contacts

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

Additional Resources

- Environmental Checklist for Facility Development/Redevelopment
- City and County of Denver Construction Sites Program
- City and County of Denver Construction Activities Stormwater Management Plans Information Guide



- Urban Storm Drainage Criteria Manual Vol. 3
- SDSs
- SPCC Plan
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 6 CCR 1007-3, Part 261 State RCRA Regulations
- Federal hazardous waste regulations (40 CFR Parts 260-279)
- State hazardous waste regulations (6 CCR 1007-3, Parts 260-279)
- For DEN projects on Denver land, Denver illegal dumping ordinances (D.R.M.C. Title II, Chapter 48, Articles IV and VI)
- For DEN projects on Aurora land, Aurora illegal dumping ordinances (Aurora Code of Ordinances, Chapter 114, Article II)
- Mayor's Executive Order 115 Required Use of Denver Arapahoe Disposal Site (Landfill)
- Municipal separate storm sewer system (MS4) permit for the City and County of Denver (Permit No. COS-000001)
- Project Stormwater Management Plan
- DEN Technical Specifications
- DEN Technical Specifications
- City and County of Denver Ordinances
- DEN Rules and Regulation 180
- City and County of Denver Mayor's Executive Orders