



# PLANNING AND DESIGN

**ENVIRONMENTAL GUIDELINES**

**EMS ELEMENT: OPERATION**



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## **ACTIVITY DESCRIPTION**

New development, redevelopment, and expansion projects at DEN can include Capital Improvement Program (CIP), tenant, and maintenance projects. For each of these, environmental issues need to be considered during the planning and design phases to identify and mitigate potential environmental impacts, minimize potential regulatory liabilities, obtain federal funding, prevent increases to project cost, and prevent delays to project schedule.

The first step in the process is for the DEN Project Manager to complete and submit a DEN Environmental Project Review form to Environmental Services (ES). This form provides ES with basic information that helps determine whether the project is a federal action subject to compliance obligations under the National Environmental Policy Act (NEPA). Typical federal actions are any project that is a conditional, unconditional, or mixed approval of Federal funding for airport planning and development projects, use of Passenger Facility Charges (PFC), or involves a change to the airport layout plan (ALP). Other Federal actions are defined in Federal Aviation Administration (FAA) Order 5050.4B.

ES will then conduct an environmental review using the Environmental/Sustainability Checklist for Facility Development and Redevelopment. This review considers all environmental compliance obligations relating to air quality; water quality including stormwater, groundwater, and process wastewater, drainage, flood control, wetlands, and spill control; wildlife impacts, threatened and endangered species; historical properties; storage containers for fuels and chemicals; waste management; and corrosion prevention of tank and pipeline systems.

ES will also review the project scope to determine if the project is subject to Section 163 of the 2018 FAA Reauthorization Act (October 5, 2018). Section 163(a) of the act narrows the scope of the FAA's authority over airport land uses by generally prohibiting the FAA from directly or indirectly regulating airport land. In addition, Section 163 reduced the FAA's ALP approval authority. Previously, FAA had the ability to approve or deny any change to the ALP. For DEN, Section 163 typically applies to "Landside" projects or those outside the airport operations area (AOA) not purchased using Federal funds. ES will coordinate with the FAA Airport District Office to determine 163 applicability. Projects eligible under Section 163 do not require NEPA review.

Upon completion of the environmental review, the Environmental Checklist is sent back to the project manager (PM). For NEPA projects, the appropriate NEPA review is determined: Categorical Exclusion (CATEX), Environmental Assessment (EA), or Environmental Impact Statement (EIS). CATEX projects can take on average 90 days for FAA approval, EA projects 4-12 months, and EIS projects 3 years or more. The DEN Project Manager is responsible for ensuring that the airport tenant, contractor, or operator obtains all environmental permits and approvals prior to work commencement. Pursuant to Technical Specification 015719, these permits, and approvals should be incorporated into contracts as required submittals.

## **POTENTIAL ENVIRONMENTAL RISKS**



The following environmental concerns are associated with these activities:

- Non-compliance with NEPA and other environmental compliance obligations.
- Increased operation and/or maintenance costs.

Potential consequences from not performing the activity or performing incorrectly:

- Damage to airport property, persons, and/or the environment.
- Legal action from environmental regulators, including Notices of Violation, Cease and Desist Orders, and/or fines.
- Legal action from outside parties.
- Negative press for the airport.
- Delays to project schedule.
- Increases to project cost.
- Inability or delay for obtaining federal funding.
- Increases to lifetime maintenance costs.

## **RECOMMENDED OPERATING CONTROLS**

### Prohibited Activities

- Work commencement without securing proper approvals and permits.
- Separation of projects or NEPA "Connected Actions" (the division of a larger project into tasks, phases, or "enabling-projects") should be avoided with regards to environmental planning. This practice is not lawful for federally funded projects and is not recommended for other projects. Separation of connected actions can lead to delays and errors in the environmental approval process, and lead to schedule delays and cost increases.

### General Considerations

- Environmental compliance obligations should be identified early in the planning and design phases of a project. Because some approvals and/or permits require long lead times, early identification of these issues by the PM and ES can help secure approvals and/or permits in a timely manner.
- Each airport tenant, contractor, or operator conducting planning and design 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.
- All airport tenants must comply with the airport's Tenant Guidelines.

### NEPA Considerations

NEPA documentation required for projects subject to federal actions as defined in FAA Order 5050.4B entitled National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions.

- Air quality.
- Biological Resources (including fish, wildlife and plants).
- Coastal Resources.
- Department of Transportation Act, Section 4(f).



- Farmlands.
- Hazardous Materials, Solid Waste, and Pollution Prevention.
- Historical, Architectural, Archeological and Cultural Resources.
- Land Use.
- Natural Resources and Energy Supply.
- Noise and Noise-Compatible Land Use.
- Socioeconomics, Environmental Justice, and Children's Health and Safety Risks.
- Visual Effects – light emissions, visual resources/visual character.
- Water Resources (including wetlands, floodplains, surface waters, groundwater, and Wild and Scenic Rivers).

## Other Environmental Considerations

Air Permitting for new or modified existing regulated sources. Examples include emergency back-up generators, tanks, boilers, dust control, etc.

### Stormwater and Drainage

- The City and County of Denver Department of Transportation and Infrastructure (DOTI) requires a Construction Activities Stormwater Discharge Permit (CASDP) for each development or redevelopment that disturbs greater than 1.0 acre.
- CDPHE requires a stormwater discharge permit (CDPS) associated with construction activities for each development or redevelopment greater than 1.0 acre.
- DOTI also requires a drainage review for each development or redevelopment greater than 0.5 acres.

### Sewer Use and Drainage

- DOTI requires a sewer use and drainage permit (SUDP) for each new building. SUDPs cover new hookups to the sanitary sewer system and storm sewer, water quality pretreatment devices (e.g. sand traps, grit chambers, sand/oil interceptors, oil/water separators, and grease traps), sewer abandonment, and individual sewage disposal systems (e.g. privy vaults or septic systems).

### Dewatering

- CDPHE requires a dewatering permit for construction activities where groundwater has seeped up into an excavation and the project team proposes to put the groundwater in a surface water drainage (e.g., dewater the groundwater and place it in a stormwater drain, swale, or pond) they must have prior approval from the MS4 permit manager.

### Tanks

- The Denver Fire Department – Fire Prevention Bureau requires a permit for the installation of new petroleum storage tanks and a separate permit for the removal of petroleum storage tanks.
- The State Division of Oil and Public Safety (OPS) requires an application and registration for the installation of new petroleum underground storage tanks (UST) above 110 gallons and above ground storage tanks (AST) with capacities between 660 and 39,999 gallons. OPS require application and registration for the installation of new LPG tanks above 2000 gallons water capacity.



### Cathodic Protection

- Cathodic protection for buried tanks, piping, and above ground storage tanks and other structures in contact with corrosive soils.

### Training Requirements

All DEN Project Managers should be familiar with this process.

## **CRITICAL PLANNING REQUIREMENTS**

Identify projects or activities that require environmental review. Examples include but are not limited to the following:

- Roadway improvements, widening, expansion, etc.
- Parking lot construction.
- Concourse expansions.
- Runway construction.
- New/temporary building construction, expansion.
- Lighting projects.
- Solar projects.
- Projects impacting wetlands.

Project Managers gather project information and submit to ES using the DEN environmental Project Review form. Required information includes:

- Project purpose and need.
- Project description/scope of work.
- Project location.
- Project schedule.
- Project sponsor.
- Area of disturbance.
- Basic project drawings or sketches (30% design if available).

Environmental Services will:

- Review the project using the Facility Development/Redevelopment Environmental Sustainability Checklist.
- Return a copy of the Facility Development/Redevelopment Environmental Sustainability Checklist to the DEN Project Manager.
- Determine level of NEPA review required for the project.
- Review the current list of significant environmental aspects at DEN, determine if the project will introduce any new significant aspects, and revise the aspects list as necessary.
- Attend pre-construction and on-going meetings to discuss issues identified during the environmental review with the PM and project team.

## **EXPECTED RECORDS AND OUTPUTS**



PM provides project information (purpose and need, description/scope of work, drawings, Business Case, etc.) using the Environmental Project Review Form:

- DEN PM files in own project file; DEN ES files in the Environmental Planning folder in the Collaboration Library.

ES Completes the Environmental/Sustainability Checklist for Facility Development and Redevelopment:

- DEN PM files in own project file; DEN ES files in the Environmental Planning folder in the Collaboration Library.

Required submittals (such as copies of applications and permits) as discussed in the Environmental/Sustainability Checklist for Facility Development and Redevelopment

- DEN PM will send copies of all submittals (including correspondence) to DEN ES.
- DEN PM files for current projects are in the Collaboration library, past projects in the Records library.

## REFERENCES

### Contacts

- DEN Communications Center (for spill reporting): 303-342-4200
- DEN Environmental Services (Main Line): 303-342-2730; [DIA.Environmental@flydenver.com](mailto:DIA.Environmental@flydenver.com)
- Khurram Qadri, DEN Environmental Services: 303-342-2636; [Khurram.Qadri@flydenver.com](mailto:Khurram.Qadri@flydenver.com)

### Guidance Materials

- FAA Orders 1050.1E and 5050.4B
- FAA Advisory Circulars if applicable
- City and County of Denver Department of Public Works MS4 Permit Program documents

### Related Environmental Documents:

- Environmental Guideline: Construction
- Environmental Guideline: General Waste Management
- Environmental Guideline: Cathodic Protection Corrosion Prevention on Buried Tanks and Piping

### Applicable Regulations

- Federal environmental planning regulations (40 CFR 1500 – 1508)
- FAA Order 1050.1F
- FAA Order 5050.4B (“Airport Environmental Handbook”)
- FAA October 27, 2020 Memorandum “Instructions to Airports District Offices and Regional Office of Airport Employees Regarding Airport Layout Plan Reviews and Projects Potentially Affected by Section 163 of the FAA Reauthorization Act of 2018”
- CDPS MS4 Permit (Permit No. COS-000001, Part I.B.1.a.2)
- City and County of Denver Sanitary Sewer Design Technical Manual
- City and County of Denver Storm Drainage Design & Technical Criteria
- UDFCD Urban Storm Drainage Criteria Manual – Volume 3



- DEN Technical Specifications – Sections 015719, 017419, 017420
- DEN Tenant Development Guidelines
- DEN Design Standards Manuals

## Other Documents

- FAA ARP SOP No. 5.1 Categorical Exclusion Form (Effective Date June 2, 2017)