

Operations and Maintenance (New Chapter) Compiled Comments / Draft Outline

Chapter Organization and Framework

I. Introduction

Airport operations and maintenance are the activities related to the performance of routine, preventive, predictive, scheduled, and unscheduled actions aimed at preventing equipment failure or decline with the goal of increasing efficiency, reliability, and safety at the airport and airport-related facilities. Sustainable maintenance practices can generate substantial energy savings and should be considered a resource. Moreover, improvements to facility maintenance programs can often be accomplished immediately and at a relatively low cost. Sustainable operations and maintenance can be a cost-effective method for ensuring reliability, safety, energy efficiency through the implementation of sound engineering and ecological practices.

II. Sustainable Operations and Maintenance Project Phases

a. Project Development Phase

- Let O&M suggestions and concerns be known (i.e how can systems, equipment, processes, etc be done more efficiently, cost effective, using less energy).
- Assist in making sure that O&M needs are known and understood.

b. Project Design Phase

- Confirm that suggestions and concerns were investigated and implemented, provide review, comment of the design with respect to O&M issues, training needs, spare parts and tools, etc.

c. Project Construction Phase

- Invest in participation of O&M staff for systems training, operations, troubleshooting, maintenance requirements, documentation of systems and components.

d. Post-Construction Phase

- Formulate reviews to identify systems issues that need to be addressed prior to warranty expiration, refresh O&M training, identify O&M issues and concerns, and provide feedback as to what in the O&M Commissioning Process worked and what did not work.

III. Sustainable Strategies

- a. Identify and implement sustainable components and materials used in O&M (paper products, recycled filtering materials)
- b. Identify and implement energy efficient processes for O&M
- c. Building surveys and studies to identify equipment and systems that present repetitive O&M issues, energy inefficient, contain non-green components.
- d. Develop projects to address these systems using a sustainable design approach.
- e. Recycle pavements replaced as part of O&M
- f. Disposal of O&M materials – use of trash compactors, make sure “hazardous” materials are disposed of properly
- g. Implement water saving technologies in bathroom facilities, landscaping
- h. Use of sunshades to minimize heat gain in existing buildings
- i. Use of smart building technologies (lighting control and operation, HVAC system control and operations)
- j. Converting to LED technology wherever possible
- k. Address PM issues on systems immediately so they do not cause detriment to the system’s O&M and efficiency
- l. Maximize the systems/buildings operating temperatures and air flow requirements to minimize energy use (ie demand control ventilation, building humidity)

IV. Key Focus Areas

- a. Training, Metrics/Monitoring and Reporting
- b. Identifying the need for integration with Planning and other chapters/committees
- c. Identification of funding sources

SDM: Guidelines for Operations & Maintenance				
DRAFT CHAPTER OUTLINE				
Sustainable Sites				
Sample BMPs: Storm Water Management, Exterior Airside and Landside Maintenance				
Water Efficiency				
Sample BMPs: Water Conservation Measures				
Energy & Atmosphere				
Sample BMPs: Energy Efficiency, Emission Reduction Goals				
Materials & Resources				
Sample BMPs: Sustainable Procurement/Purchasing, Waste Reduction Plan				
Indoor Environmental Quality				
Sample BMPs: Green Cleaning Policy, IAQ BMPs, Noise & Exhaust Control				
Innovation in Operations				
Sample BMPs: LEED-AP, Tracking Sustainable Building Costs				
Sustainable O&M Training				
To address above topics				
Sustainability Monitoring (Measuring & Tracking)				
To address above topics				
Sustainability Reporting				
To address above topics				