Presentation Overview

- Massport Environmental Vision
- EMS Overview
- Massport’s EMS

Massport Overview

- An independent State Authority
- Airports
  - BOS-Logan International
    - 25.5 million passengers (2009)
  - BED - Hanscom Field
    - ISO 14001 certified (1st US Airport)
  - ORH - Worcester Regional Airport
  - Winner of 2008 ACI Environmental Achievement Award – Logan Airport Emissions Reduction Program
- Maritime
  - Boston Cruiseport
  - Conley Container Terminal
    - ISO 14001 certified
  - Parks
  - Development Parcels
    - Winner 2009 American Association of Port Authorities “Comprehensive Environmental Management” Award

Massport Environmental Vision

**Sustainability**
Approaching business in a way that allows the organization to evaluate, design and plan all its activities to continuously avoid and minimize environmental impacts related to all current and future operations and services.

Massport’s Environmental Management Policy

**Continuous Improvement**
- Ensure the environmental management policy is available to staff, tenants, customers and the general public.
- Identify and mitigate negative environmental impacts and opportunities for improvement.
- Enhance performance of operations, processes, and programs in order to achieve continual improvement.
- Involve and communicate with stakeholders.
- Set performance targets and Objectives which are consistent with the requirements of the policy.
- Establish measurable indicators to monitor performance.
- Maintain an annual environmental performance report to be made available to staff, tenants, customers and the general public.

What is an Environmental Management System?

- **Organization**
- **Process**
- **Technology**
- **Tools**

An EMS fosters the integration of business elements in developing, implementing, reviewing and achieving an organization’s Environmental Policy.
ISO 14001

- Global voluntary standard for Environmental Management Systems (EMS)
- Developed by the International Organization for Standardization in 1996 - updated in 2004
- Structured framework for achieving continuous improvement beyond regulatory compliance
- Based on the Plan-Do-Check-Act (PDCA) methodology

Key Changes With An EMS

BEFORE
- Reactionary
- Compliance focus
- Separation of environmental and other processes
- Informal or undocumented procedures

AFTER
- Proactive, continuous improvement
- Consideration of all environmental impacts
- Integration of environmental and other processes
- Explicit, documented procedures

Key Benefits of Implementing an EMS at Logan International Airport

<table>
<thead>
<tr>
<th>EMS Component</th>
<th>Benefit</th>
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<tbody>
<tr>
<td>Policy</td>
<td>Provides basis for employees and public to understand commitment to environment</td>
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<tr>
<td>Planning</td>
<td>Allows for conscious decision making regarding environmental issues of importance</td>
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<tr>
<td>Implementation and operation</td>
<td>Well-defined procedures and responsibilities increase efficiency and improve performance</td>
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<tr>
<td>Checking and corrective action</td>
<td>Monitoring and measurement provide the basis for continuous improvement</td>
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<tr>
<td>Management review</td>
<td>Ensures that senior management is actively involved in environmental management</td>
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Massport’s EMS Program Status

- Hanscom Field - First full airport in US to receive ISO 14001 certification (May 2001)
- Conley Terminal - Massport operated container terminal, received ISO 14001 certification (December 2003)
- Tobin Bridge – ISO 14001 Certified (February 2006)
- Logan Field Maintenance Facilities – ISO 14001 Certified (December 2006)
- Airport-wide Logan EMS in development - to incorporate broader sustainability elements (2010/2011)
Initial EMS Facility Selection

- Select a facility where an EMS is relatively easy to implement
- Identify opportunities which are transferable to other airport operations
- Choose a location that is highly visible

An EMS Can Help Simplify Complex Environmental Issues

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Benefit</th>
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</thead>
<tbody>
<tr>
<td>• Many types of operations</td>
<td>• Aspects/impacts analysis helps sort out issues and establish priorities</td>
</tr>
<tr>
<td>• Several environmental issues with each facility</td>
<td>• Increased understanding of nature of environmental issues</td>
</tr>
<tr>
<td>• Shared responsibilities for operations</td>
<td>• Conscious decisions about how issues will be addressed</td>
</tr>
<tr>
<td>• Complex regulatory environment</td>
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Role of Airport Senior Management

- Senior management commitment is most important factor in determining success
- Ensure sufficient resources to establish and maintain the EMS
- Participate in management review process
- Recognize EMS successes
- Promote the concept of continual improvement

Logan Tenant and Contractor EMS Involvement

<table>
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<th>Challenges</th>
<th>Benefit</th>
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<tr>
<td>Environmental impacts resulting from tenant and contractor operations</td>
<td>Control tenant and contractor liability</td>
</tr>
<tr>
<td>Level of control over tenants and contractors</td>
<td>Improve communication with tenants and contractors</td>
</tr>
<tr>
<td>Too many tenant and contractor requirements</td>
<td>Improve communication with tenants and contractors</td>
</tr>
</tbody>
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EMS Checking and Corrective Action

- Monitoring and measurement
- Corrective and preventive action
- Record keeping
- EMS audit

EMS Management Review

- Review by senior management
- Address need for changes
- Opportunity for management to see how the EMS is performing
- Closes continuous improvement loop
Conclusion

It is precisely because airports must address complex environmental, organizational, community and regulatory issues that an EMS can provide significant benefits to the airports that implement them.

Thank You