

Paul W. Conley Container Terminal Environmental Management System Development and Implementation



Presentation Overview

- EMS Overview
- Massport's System
- Conley Terminal EMS

Environmental Management System

An Environmental Management System (EMS) is a systematic approach to dealing with the environmental aspects of an organization. It is a “tool” that enables an organization to control impacts of its activities and services on the natural environment in a manner consistent with its policies, goals, and objectives.

Key Changes

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

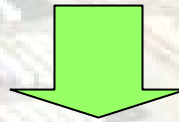
EMS Component	Benefit
Policy	Provides basis for employees and public to understand commitment to environment
Planning	Allows for conscious decision making regarding environmental issues of importance
Implementation and operation	Well-defined procedures and responsibilities increase efficiency and improve performance
Checking and corrective action	Monitoring and measurement provide the basis for continuous improvement
Management review	Ensures that senior management is actively involved in environmental management

Massport System

MASSPORT VISION - SUSTAINABILITY



ENVIRONMENTAL MANAGEMENT POLICY



ENVIRONMENTAL MANAGEMENT SYSTEM

Massport 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 EMS Program

Status to Date

- Hanscom Air Field - Becomes first full airport in US to receive ISO 14001 certification in May 2001
- Conley Terminal - Massport operated container terminal, received ISO 14001 certification in December 2003
- Massachusetts State Sustainability Executive Order - requires agencies to have EMS by October 2004
- Tobin Bridge – ISO 14001 Certified in February 2006
- Logan Field Maintenance – ISO 14001 Certified in December 2006

Role of 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

Conley Terminal EMS

Implementation Process

1

**Establish
EMS
Boundary**

2

**Identify
Activity
Activities**

3

**List
Aspects
Impacts
of Activities**

4

**Determine
Significance**

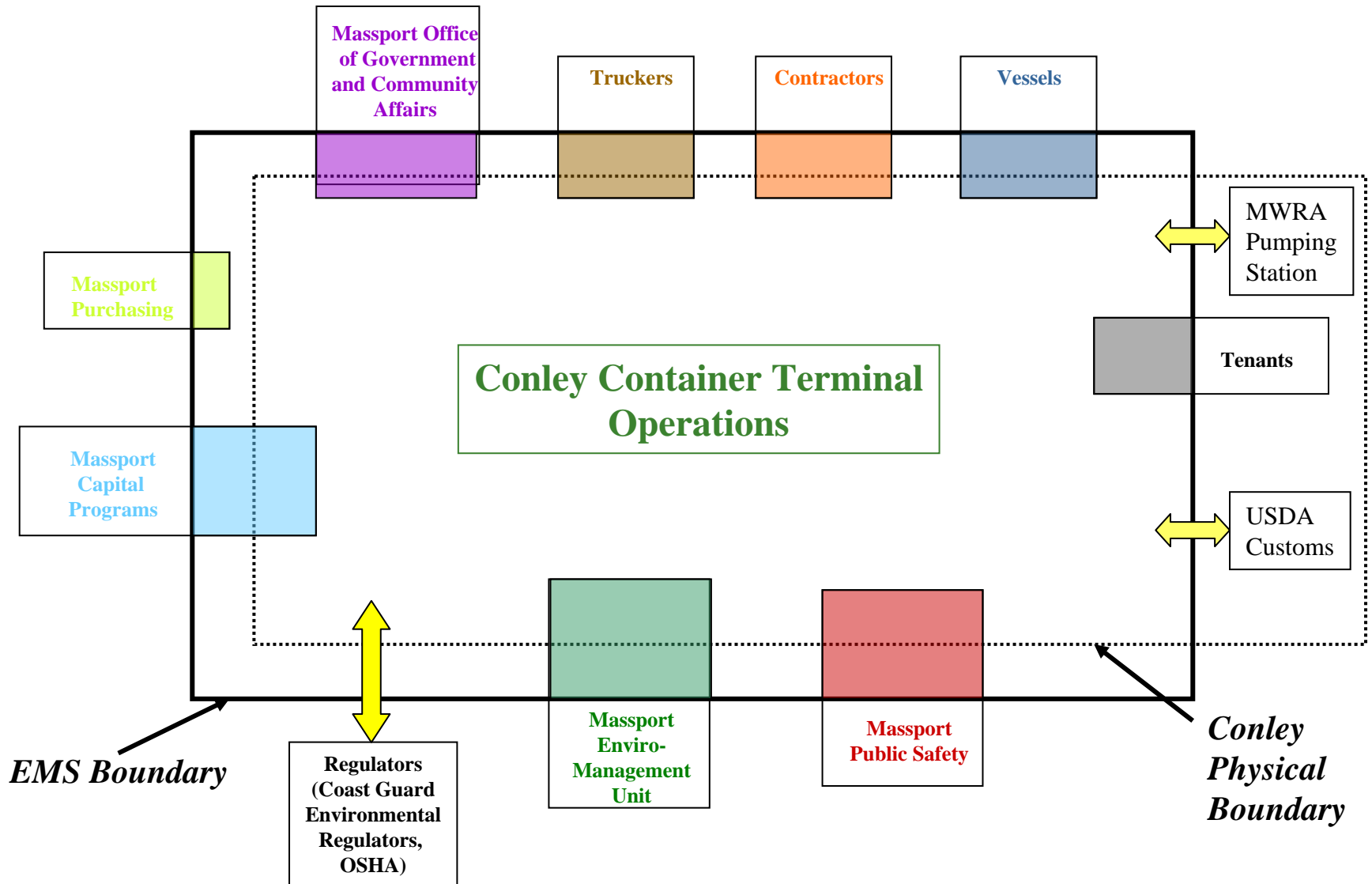
5

**Create
Programs**

6

**Establish
Objectives
And
Targets**

Conley Terminal EMS Boundary



Conley Terminal EMS

Summary

- Identified 19 Activity Areas within boundary
- 190 Aspects and Impacts
 - 81 Significant Aspects
- Established 8 Programs
 - Created at least one objective for each program
 - Some programs have multiple targets
- Procedures created to achieve targets

Conley Terminal EMS

Process Example

- **Activity** – Yard-Side Cargo Handling
- **Aspect** – Diesel
- **Impact** – Diesel emissions to air
- **Program** – Air Emissions
- **Objective** – Manage and minimize the impact of air emissions on the environment to the extent practicable.
- **Target** – Evaluate the placement of particulate filters on cargo handling equipment

Conley Terminal EMS

Specific Benefits to Date

- Diesel Emissions (Air Quality)
- Evaluated possible actions to reduce total emissions
 - Change to better fuel (lower sulfur content)
 - Change to alternate fuel
 - Engineering (filtering systems)
 - Change in equipment operations (usage times / duration)

Specific Benefits of an EMS

- Greater buy-in and commitment to environment
- Continuity of environmental programs
- Rapid conversion of environmental “ideas” into programs (e.g. recycling, particulate filters)
- Clearer designation of environmental responsibilities
- Increased focus on routine tracking to ensure continuity of programs