Environmental Management Systems

Marine Terminal Management Training Program

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Who I Am

Noeleen Tillman

- Principal, TEC Inc
- Coordinates and advocates sustainable development practices within the maritime sector for company
- Member of AAPA’s Sustainability Task Force
- Designed and Manages AAPA/GETF EMS Pilot Project
- 20 years as an environmental consultant
- BS Environmental Engineering
Goals of this Presentation

- Provide an overview of an Environmental Management System (EMS)
- Present several different case studies on implementing an EMS in the Maritime Sector
- Look at possibilities for terminal operator participation in future pilots
- Demonstrate that progress toward more sustainable practices can be made – even when you’re already really busy running a terminal
AAPA – GETF EMS Pilot Project

- AAPA – GETF – EPA partnership established in 2003 (Association, Not-for-Profit and Regulatory Agency)
- Pilot Started in 2004
- 20 Ports participated to date
- 3rd Pilot on-going – completion 2010
- Variety of “fencelines”: maintenance operations, terminal operations, storm water management, air quality management, green procurement
Port Operations Impact the Environment
Port Challenges: large multi-modals of 24-hour activity, new government requirements, community relations, pollution controls, heavily regulated, increased trade and construction, terrorist threats, worker safety and health, asset management, etc…

Theme for Path Forward: Integrated management system – focused management of key priorities and activities.
What Distinguishes LEADING Organizations?

- **Ahead of the Curve**
  - Coping with the changing regulatory environment
  - Technology Innovation
  - Enterprise Risk Management

- **Operational Excellence**
  - Goals—Targets—Metrics: “The Dashboard”
  - Efficient, effective, and prioritized operational controls

- **Open/Good Neighbors**
  - Regular Communications with Regulators
  - Transparency with communities
Respond to a crisis

Ease in, starting with low-hanging fruit

Implement a well-thought-out program
Environmental Management System:

“is a framework that helps an organization achieve its environmental and business goals through consistent control of its operations; i.e. manage risk. The EMS does not dictate a level of environmental performance that must be achieved; each organization's EMS is tailored to its own business and goals.”
The EMS Framework

Continual improvement

- plan
- do
- act
- check
What Does an EMS Provide?

- Order and consistency in methodologies
- A well thought-out allocation of resources
- Assignment of responsibilities
- Evaluation of the effects of practices, procedures, and processes
- Process for continual improvement
EMS provided the structural framework:
- To harness an organization’s internal capabilities
- Organize them, and
- Then direct these capabilities in a unified manner to address the organization’s top priority objectives

An EMS ensures that:
Top goals are continually considered as permanent in all activities, at all levels of the operation, top to bottom
- Ideas are followed up on, until they are implemented
- Accomplishments are recognized
Proven and documented value

Environmental management becomes “business as usual”

An EMS is about systematically managing “hot spots”

The “E” focuses on environmental risks, but “hot spots” could be security, terrorism, safety and health, public relations

The Vision: Integrate multiple systems that naturally synergize
Port performance measures

- Reduce facility energy and water use
- Reduce diesel emissions
- Reduce use of hazardous materials
- Improve handling of hazardous materials/cargo
- Improve storm water management
Conversion of cranes and yard equipment from diesel to electric or alternative fuel

Electronic gate and tracking systems

Shifting from truck to rail/on-dock rail

Inventorying of air emissions

Use of green purchasing & building practices
Our Panelists

- Matt Arms, Port of Long Beach
- Chris Foley, Port of LA
- Kelly Makley, Port of San Diego
- Robert Wolters, California United Terminals
- Marla Harrison, Port of Portland