

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

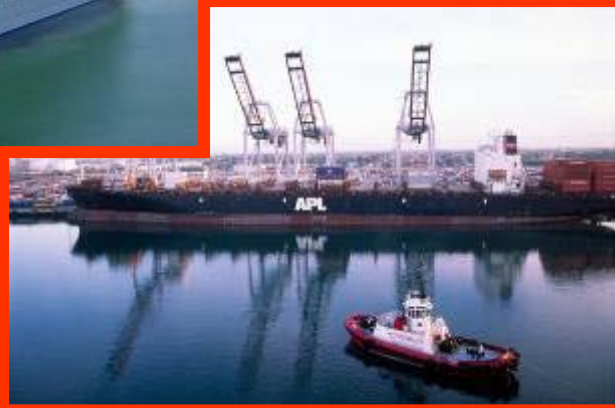
AAPA – GETF EMS Pilot Project

- ❖ 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

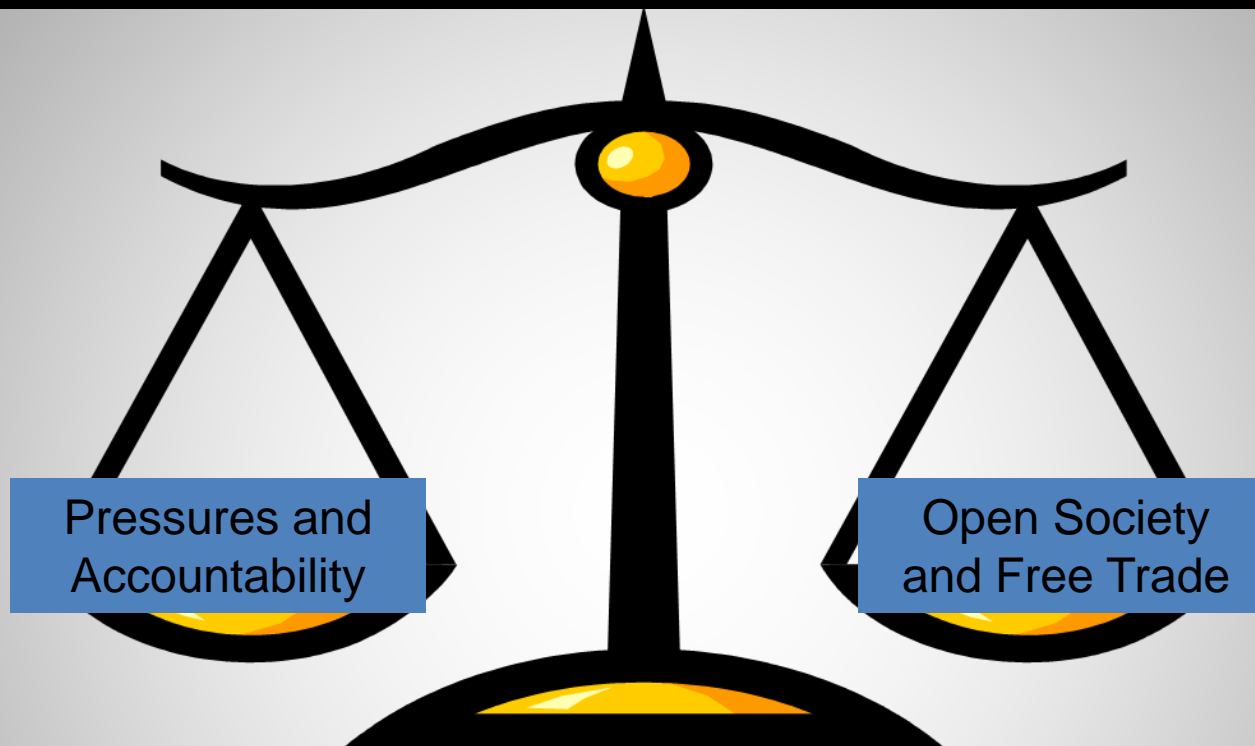
Port Operations Impact the Environment



Sources and Challenges



The Balancing Act



- ❖ **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

Typical Approach

more
common



less
common

Respond to a crisis

Ease in, starting with low-hanging fruit

Implement a well-thought-out program

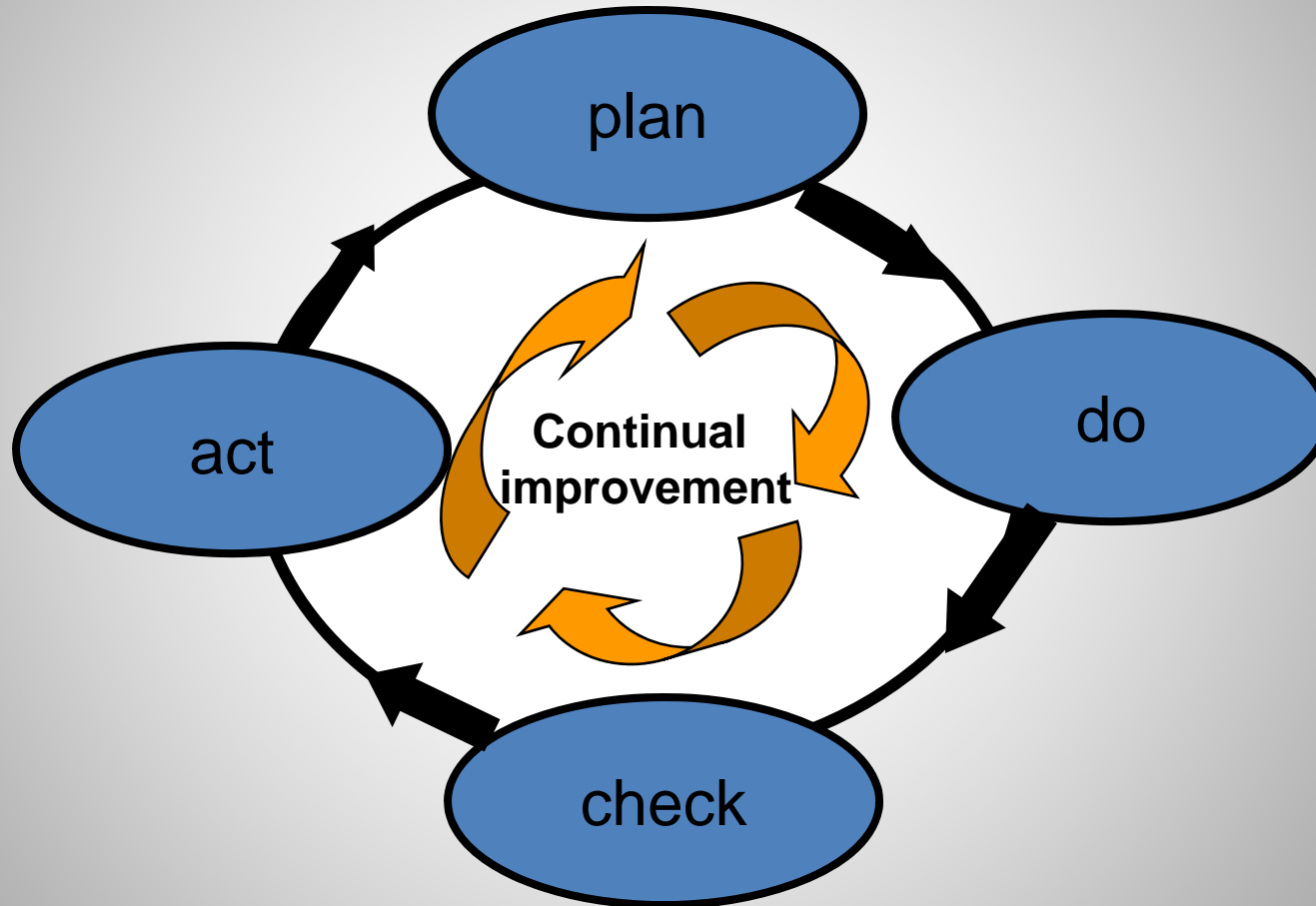
What is an EMS?

❖ 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



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

Benefits of an EMS

- ❖ 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

EMS Management - A Proven Approach

- ❖ 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

Other indicators of progress

- ❖ 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