



# Environmental Management Systems and Public Seaports

## 1<sup>st</sup> Port EMS/SMS Assistance Project (2003-2005)

### Why EMS and Public Seaports?




Public seaports today are challenged to provide a healthy environment for their citizens and to be good stewards of public funds in meeting public needs for economic development. An Environmental Management System (EMS) is a tool that can help ports to meet both of these goals. As an integrated process management system, an EMS enables port authorities to identify today's realities and risks and to implement realistic solutions in an effective manner. The EMS framework can also support continual improvement in other port-identified focus areas such as health & safety, security, operational efficiency and community relations. The Port of Houston Authority successfully tested this through implementation of a Security Management System (SMS) during this initiative, having previously implemented an ISO 14001 certified EMS.

### What is the 1<sup>st</sup> Port EMS/SMS Assistance Project?

The Global Environment & Technology Foundation (GETF), in partnership with the American Association of Port Authorities (AAPA) and the U.S. Environmental Protection Agency (U.S. EPA), recently completed a two year initiative in which 11 port authorities received EMS training, mentoring and technical assistance following a group implementation approach. Modeled on U.S. EPA's successful EMS Initiative for Local Government Entities program, participating ports were able to test the use of EMS within a single sector allowing for effective peer-to-peer exchange. Participants in this groundbreaking initiative included the following seaports:

Port of Houston Authority – Houston, TX (SMS)	Port of Los Angeles – Los Angeles, CA
Virginia Port Authority – Norfolk, VA	Port of New Orleans – New Orleans, LA
The Port Authority of New York & New Jersey – NY, NY	Port Everglades – Fort Lauderdale, FL
Port of Portland – Portland, OR	MARAD – Fort Eustis, VA
Portland District Corps of Engineers – Portland, OR	Port of Vancouver – Vancouver, WA
Port of Corpus Christi Authority – Corpus Christi, TX	

### What EMS Benefits Have Seaports Experienced?

	 THE PORT AUTHORITY OF NY & NJ	 Port of Corpus Christi	 PORT OF PORTLAND Possibility. In every direction.™
BENEFIT	<ul style="list-style-type: none"> <li>Repaired water leaks</li> <li>Engine replacement and retrofit program</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced public image</li> <li>Improved operational efficiency</li> </ul>	<ul style="list-style-type: none"> <li>Developed Quick Pay automated system</li> <li>Tested green products and equipment</li> </ul>
SAVINGS	<ul style="list-style-type: none"> <li>640,000 gallons of water/daily</li> <li>\$655,000 in costs</li> <li>Potential NOx reduction of 400 tons/year</li> </ul>	<ul style="list-style-type: none"> <li>2005 Coastal Bend Bays Foundation Award</li> <li>\$27,257 from recycling program</li> </ul>	<ul style="list-style-type: none"> <li>Reduced idling by 79%; estimated 2.26 tons CO/yr</li> <li>360,160 gallons of water savings per year</li> </ul>

## How Much Does an EMS Cost?

Resource commitments will vary depending on the size of the organization, the extent of operational activities, risks and impacts, and the gaps between how the organization currently manages its environmental issues and how it wants to manage them in the future. Based on data collected since 1997, the resources that public agencies commit to EMSs are primarily direct labor costs, which have averaged about 8-10 hours per employee per year to integrate EMS activities into daily operations.

*“Developing a comprehensive EMS was the key to changing the way we think about and conduct our business. Already, our EMS has demonstrated substantial cost savings and reduced delays in working with regulatory agencies.”*

Bill Wyatt, Executive Director  
Port of Portland (OR)

Based upon quarterly data tracked by individual participants over the course of this project, average resource commitments to EMS implementation are highlighted below. In addition, the development and facilitation of the 1<sup>st</sup> Ports EMS/SMS Assistance Project was cost-shared equally by all participants.

**Average Direct Labor Costs = \$103,405**  
(Over 2 years)

**Average Direct Labor Hours = 1,955 hours**  
(Over 2 years)

## Where Can I Find Additional Information?

For those considering implementation of an EMS, you will be rewarded by a wealth of available information, guidance materials, and mentors available. A great place to start is the National Public Entity EMS Resource (PEER) Center at [www.peercenter.net](http://www.peercenter.net). The PEER Center is a one-stop shop for free EMS resources, including a section devoted to port-specific information. In addition, a number of rich EMS case studies can be downloaded at [www.peercenter.net/case/studies/](http://www.peercenter.net/case/studies/).

## Who Supported the 1<sup>st</sup> Port EMS/SMS Assistance Project?



AAPA, the alliance of leading ports in the Western Hemisphere, protects and advances the common interests of its diverse membership of public port authorities from throughout the Western Hemisphere as they connect their communities with the global transportation system. Contact: Meredith Martino, 703-684-5700, [mmartino@aapa-ports.org](mailto:mmartino@aapa-ports.org).



EPA's Office of Policy, Economics, and Innovation is partnering with the port industry through its Sector Strategies Program (SSP) to promote EMS. In addition, the SSP is providing a sector point-of-contact within EPA to assist in resolving regulatory or other barriers to performance improvement, and to facilitate the measurement and reporting of environmental performance information. Contact: Kathleen Bailey, 202-566-2953, [bailey.kathleen@epa.gov](mailto:bailey.kathleen@epa.gov).



GETF is a 501(c)(3) not-for-profit that provides EMS training and support to public entities. Visit GETF online at <http://www.getf.org>. GETF manages the National Public Entity EMS Resource (PEER) Center, which is a central clearinghouse of key resources such as service providers, sample documentation, state EMS programs, mentors, training materials and case studies. The PEER Center is made possible through a cooperative agreement with the U.S. EPA EMS Programs (<http://www.epa.gov/ems>). Visit the PEER Center at <http://www.peercenter.net>. Contact: Nick Martin, 703-379-2713, [nmartin@getf.org](mailto:nmartin@getf.org).