Initiative to bring ports environmental success

EMS program shows shared commitment

Enhanced environmental performance and related benefits are beginning to be realized by U.S. ports and those they serve through a newly developed initiative involving the American Association of Port Authorities (AAPA), the U.S. Environmental Protection Agency (EPA) and the Global Environment & Technology Foundation (GETF).

The Port Environmental Management System (EMS) Assistance Project entails a set of management processes and procedures that allow an organization to analyze, control and improve the environmental consequences of its activities.

"Another way to describe this is preventive medicine for ports," said Kathleen Bailey, EPA's port sector liaison, who noted that ports may expect to save money while improving relationships with their communities.

"I like to think of it as developing world-class ports, ports that are not just environmentally sustainable but that are economically viable and socially responsible," Bailey added.

She commended AAPA and its Harbors, Navigation and Environment Committee for assuming leadership of a program that initially is involving 11 participants, including nine port entities, in a two-year implementation of EMS training and technical assistance.

Kicking off with a workshop hosted by the Port of Los Angeles from Jan. 27-29, 2004 – the first of four training sessions planned over a two-year period – the initiative got its seed money through a $50,000 EPA grant, supplemented by an additional $500,000 from the initial participants, with each putting up about $45,000.

photo courtesy Port of Long Beach

Participants named

The initial nine port participants, chosen through a competitive application process, are: Port of Houston Authority, Virginia Port Authority, Port Authority of New York & New Jersey, Port of Portland (Ore.), Port of Corpus Christi Authority, Port of Los Angeles, Port of New Orleans,

Port Everglades and Port of Vancouver (Wash.). Joining them are the U.S. Maritime Administration (MARAD), based in Fort Eustis, Va., and the Portland (Ore.) District of the U.S. Army Corps of Engineers.

Deborah L. Chenoweth, chief of operations for the Corps' Portland District, commented, "EMS is a tool that will both complement the U.S. Army Corps of Engineers' environmental operating principles and enhance the effectiveness of the Corps in applying them to all phases of its work. The pilot program, which will be conducted at the Corps' U.S. Government Moorings facility, will focus on incorporating new and innovative chemical management practices at its plant maintenance facilities and among the Corps' dredge fleet."

The Port EMS applies the four-phase management philosophy of "plan, do, check and act," patterned after three earlier successful EPA-supported EMS initiatives for local governments. It was developed as part of the ongoing Sector Strategies Program partnership between EPA's Office of Policy, Economics and Innovation and AAPA and its members.

"Organizations have seen positive changes in their community relationships as a result of implementing an EMS – from increased confidence knowing that there are processes in place to handle environmental issues, to joint collaboration with surrounding communities on a variety of activities," said Noeleen A. Tillman, vice president of GETF, which is a Virginia-based not-for-profit organization dedicated to building infrastructure for sustainable development.

"AAPA has shown great leadership as the first association to support, endorse and encourage its members to 'step out of the box' and use an Environmental Management System as a process that not only will help them with their environmental issues, but will also provide them with the structure to promote better communication, improve operation efficiency and save money!" she continued.

"As a leader in the application of EMSs to the public sector, GETF has worked with a huge array of organizations," Tillman added. "The Port EMS initiative stands out as a true opportunity to manage some of the 'headline' concerns of today, such as security, in an inclusive, systematic and efficient way."

Houston leads way

Of course, ports are no strangers to EMS implementation. In August 2002, the Port of Houston Authority's innovative EMS for the Barbours Cut Container Terminal and Central Maintenance Facility achieved compliance with ISO 14001 standards, becoming the first port in the United States to meet the rigorous standards. The authority also was recognized by AAPA with its Calvin Hurst Award for Outstanding Achievement.

"The Port of Houston Authority has worked diligently to implement an EMS that meets the rigorous standards of ISO 14001," said H. Thomas Kornegay, the authority's executive director. "We are proud to be the first port in the United States that has succeeded in creating and implementing such a program, and we look forward to surpassing this benchmark in the future."

Following its selection by EPA in March 2000 as one of 14 public entities to participate in a pilot program to develop an EMS, the Port of Houston Authority developed and implemented a program that concentrates on increasing recycling and reducing air emissions. To reduce emissions and improve air quality, the port began testing PuriNOX, a Lubrizol diesel emulsion product, on five yard tractors and two rubber tire gantry cranes. Emission testing results showed a 25 percent reduction in nitrogen oxide levels and a 30 percent reduction in particulate matter. In addition, the port collaborated with the Texas Natural Resource Conservation Commission to reduce its use of absorbents by 50 percent to meet the EMS objective. The goal was attained by using a cement mixer to distribute oil evenly throughout all used absorbent material. The material can then be reused to absorb six or seven additional spills.

photo courtesy Port of Long Beach

Tom Chase, AAPA's director of environmental affairs and the association staff liaison to the Harbors, Navigation and Environment Committee, said EMS appears to be becoming a necessity.

"The challenges in the industry are changing so fast, and I think there is a recognition that a management system needs to be in place," Chase said. "It's become essential to have this type of system in place."

Benefits experienced by similar organizations have included improved overall environmental performance (including in areas not currently regulated), expanded pollution prevention opportunities, improved compliance and enhanced operational control and efficiency. The Port EMS project advances the common commitment of AAPA, EPA and GETF to actively promote world-class performance in the public port sector through the adoption of continuously improved management processes. S