

# Applications solicited for leading ports: Managing today's complex realities through Environmental and Security Management Systems

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All over the world, ports manage large and small operations that directly impact the environment, human health and safety of millions of citizens in the communities which they operate. Economic pressures of a competitive marketplace, increasing federal regulations and potential vulnerability to security breaches combine to create additional, multifaceted challenges for port operators and managers. But even as ports across the nation grapple with these hurdles, they remain conscious of lessening their environmental impacts and protecting their local communities. Due to their complex, multi-modal structure, ports are well-positioned as test beds of innovation, seeking a systematic way to manage potential vulnerabilities, instill confidence in the citizens they serve, protect human health and the environment, and ensure uninterrupted operations which are vital to the economic health of the nation.

## 1<sup>st</sup> Ports EMS/SMS Assistance Project (2004-2005)

Embracing this culture of innovation, the Global Environment & Technology Foundation (GETF), American Association of Port Authorities (AAPA), and the U.S. Environmental Protection Agency (U.S. EPA) partnered on a groundbreaking initiative called the *Ports EMS/SMS Assistance Project*. In January 2004, eleven Seaports from throughout the nation kicked off a two-year Environmental/Security Management System (EMS and SMS) implementation effort based upon the ISO 14001 International Standard. Through participation in this project, each port has received training, technical assistance, and mentoring aimed at effectively and efficiently implementing a management system within a port-defined area of operations (e.g., Central Maintenance Facility). The partnership is currently soliciting applications through October 31, 2005 for a *2nd Ports EMS/SMS Assistance Project* (see details below) to begin in early 2006.

An EMS provides a systematic way to review and improve operations for better organisational performance. The beauty of this tool is that although it is based upon a standard set of elements, organisations can implement EMSs in many different ways, depending on the organisation's activities, needs, available resources and capabilities. The ultimate goal is to incorporate sound environmental management into daily business. By incorporating environmental considerations into a port's decision-making structure, an EMS introduces employees and tenants to more efficient business processes. As a "best practices" tool, an EMS enables ports to establish achievable goals with respect to managing environmental impacts and create action plans with milestones, resource requirements, and operational procedures needed to achieve those goals. An EMS follows Shewart and Deming's well-known Quality Management approach of "*plan, do, check, and act*" which is a systems methodology rather than the traditional command and control approach of compliance systems,

## PORT EMS/SMS ASSISTANCE PROJECT PARTICIPANTS 2004-2005

Maritime Administration (MARAD)  
Port of New Orleans  
Port Authority of New York/New Jersey  
Port of Portland  
Port Everglades  
Port of Vancouver, USA  
Port of Corpus Christi Authority  
Portland District Corps of Engineers  
Port of Houston Authority  
Virginia Port Authority  
Port of Los Angeles

allowing organisations adopting this approach to more readily find, fix, and prevent recurrence of potential issues. The result is return on investment in the form of money saved, reduced liability, greater regulatory flexibility, as well as improved confidence on the management of environmental issues.

## Moving beyond the traditional EMS

Taking the EMS approach one step further, the Port of Houston Authority decided to grow their Plan, Do, Check, Act approach, having previously developed an ISO 14001 registered EMS, to encompass management of security vulnerabilities in addition to established environmental controls. What many organisations have discovered is that a management system approach, institutionalising continuous improvement throughout the multiple layers of an organisation, can be employed cross-functionally to effectively manage daily operations under a single umbrella. This holds true for environment, security, safety and health, or risk management – all of which are critical issues to port operations. Leading organisations are realising that these elements are no longer mutually exclusive; rather they must be managed in orchestra. The Port of Houston Authority had the foresight to understand that an umbrella management system provided the ability to address, prioritise, and efficiently manage the complex risks and realities that confront them while also serving as role models for their communities and peers.

"We developed a Security Management System based on the ISO 14001 standard. This plan-do-check-act model has already helped assure that we are in compliance with security requirements through the establishment of policies and overall commitment for security concerns, provided us with organisational structure and responsibility for more efficient use of resources, supplied an ongoing process to monitor and measure key security parameters, and guided us to reallocate resources to highest security priorities."

**Russell Whitmarsh, Chief of Police, Port of Houston Authority**



An EMS follows Shewart and Deming's Quality Management approach.

Management system approaches provide preparedness, clearly defined employee roles and responsibilities, and strong operational procedures and controls which are vital to preventing, deterring, and/or responding to potential public health, worker safety, and environmental impacts. In addition, the enhanced communication that is commonly achieved through this approach empowers all employees, top-down and bottom-up, to leverage their working knowledge of operations and collaborate on new approaches. With positive verification forthcoming from the 1st Ports EMS/SMS Assistance Project, GETF in partnership with AAPA and U.S. EPA, look forward to further positioning ports as centres of innovation.

## 2<sup>nd</sup> Port EMS/SMS Assistance Project (2006-2007)

Ports wishing to apply for the *2nd Port EMS/SMS Assistance Project* should submit a letter of application no later than October 31, 2005. This letter should be signed by the port director and contain the following information:

- A brief description of the port authority, its management structure and activities;
- The name of the Project Manager within the port who will have the responsibility and authority to lead the EMS project

"Building on the success of our participation in the EMS programme, the Port of Vancouver, USA would like to participate in the SMS programme. How do we enroll?"

**Mike Schiller, Operations Manager, Port of Vancouver, USA**

described above, as well as a description of how the Project Manager intends to work with the relevant port departments in developing and implementing the EMS. The Project Manager should be available to travel to and participate in all Project Workshops;

- A preliminary indication of the Port fenceline or operational area of initial focus (e.g., geo) for the EMS. A final determination of the fenceline can take place during the first phase of the Project;
- A description of the reasons the port wishes to participate in the Project and some of the benefits it hopes to realise from adopting an EMS;
- A clear assurance that top management will provide the necessary visibility, staff time, and other resources necessary to successfully develop and implement the EMS. Ongoing top management support is the most critical factor for ensuring a successful and sustainable EMS; and,
- A willingness to track data and information and contribute to case studies and other outreach materials that describe the benefits, barriers, and keys to success of the EMS development and implementation process as well as a willingness to communicate and share this information with local stakeholders, regulatory agencies, and the National EMS Clearinghouse for Public Entities.

*Project sponsors encourage inquiries and applications, after the identified submission date, for consideration in expansion of the upcoming project or subsequent port initiatives.*

### ABOUT THE AUTHOR AND ABOUT PORT EMS ASSISTANCE PROJECT PARTNERS

**Nick Martin** is a Program Manager with GETF's Environmental Management Division, providing technical assistance, client relations, and general project management support. Prior to joining GETF, Mr. Martin focused on international environmental issues as both an environmental and labour rights analyst with the Overseas Private Investment Corporation and as a U.S. Peace Corps Volunteer in Kazakhstan. He received his Bachelor's in Biology from Southwest Missouri State University and a Masters' in Environmental Engineering Management from The George Washington University. He is certified in the ISO 14001 EMS Lead Auditor coursework and training and has provided EMS implementation and auditing services.



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.



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.



GETF is a 501(c)(3) not-for-profit that provides management system training and support to public and private sector organisations. 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.

### ENQUIRIES

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