ENVIRONMENTAL MANAGEMENT SYSTEMS

INTRODUCTION

An Environmental Management System (EMS) is a formal framework for integrating the management of environmental issues into the overall management structure at DoD Installations and ranges. When properly implemented, EMSs identify the environmental aspects of the mission, highlight and prioritize areas of risk, promote pollution prevention, and track progress toward environmental goals. An EMS is designed to improve operational efficiency while reducing environmental risk and associated costs.

Executive Order (E.O.) 13148, "Greening the Government through Leadership in Environmental Management," requires each Federal agency, including DoD, to integrate environmental accountability across all missions, activities, and functions and into day-to-day decision-making, long-term planning, and processes. At a minimum, E.O. 13148 requires that each DoD Component implement a documented EMS at all appropriate facilities by December 31, 2005.

The Under Secretary of Defense (Acquisition, Technology, and Logistics) issued the Department of Defense Environmental Management System policy memorandum, recognizing the different missions among DoD Components and providing support for each component's efforts to implement an EMS that best fits its mission needs.

COMPLIANCE WITH EXECUTIVE ORDER 13148

In 2003, each DoD Component established a baseline list of appropriate facilities. Apendix J provides a consolidated list of appropriate facilities required to implement an EMS. This is the first year the Department will track facility-level progress using the following EMS implementation metrics:

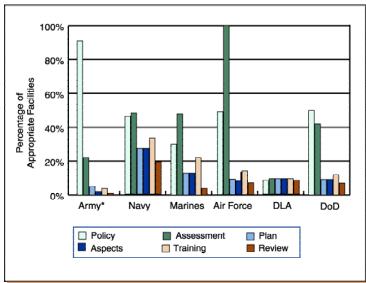
- **Policy** Appropriate facilities issue an EMS policy statement
- **Self Assessment** Gap analysis against an accepted EMS framework.
- Plan EMS implementation plan, including dates, resources and responsibilities
- Aspects DoD Components identify, document, and prioritize their environmental aspects
- **Training** Facilities conduct awareness-level EMS training

■ **Review** – At least one management review in accordance with the installation's documented procedure for recurring EMS management review

EMS IMPLEMENTATION PROGRESS BY DOD COMPONENT

The DoD Components are developing and issuing EMS guidance to assist appropriate facilities in implementing EMSs that will efficiently meet their needs and mission requirements. Figure 6 charts the progress DoD components have made implementing EMSs at appropriate facilities.

Figure 6
FY2003 DoD EMS Implementation Progress



The Army Environmental Management System Action Memorandum adopted the internationally recognized International Organization for Standardization (ISO) 14001 EMS Standard. Army appropriate facilities use a mission-focused approach to the ISO 14001 Standard to meet the EMS requirements of Executive Order 13148. The Army centrally funds development and dissemination of awareness, implementation, and auditor training programs across the Army. The Army is also expanding its

Environmental Performance Assessment System, which has traditionally focused on compliance assessments, to now cover comprehensive ISO 14001 auditing. The Garrison Commander, EMS Management Representative, and the Cross Functional Team are the main stakeholders involved in the Army-wide implementation of EMS. Although each is a key player in EMS implementation at the installation level, the Garrison Commander serves as the EMS champion on the installation.

The Chief Of Naval Operations issued the Navy EMS Policy as memo 5090 Ser N451G/1U595831 dated December 6, 2001 and distributed it to the Major Claimants across the Navy responsible for installation management. The U.S. Navy EMS Implementation Guide is intended to support Navy installation Commanding Officers and Regional Commanders in the successful implementation and documentation of an environmental management system at their installations or regional complexes. The guide is designed primarily to help assess how the organization's existing EMS compares to the Navy EMS framework. This Navy EMS Policy and Implementation Guide and other information on EMS is available at the Joint Service Pollution Prevention Technical Library website at

http://p2library.nfesc.navy.mil/ems/index.html. This website contains sample forms, EMS documents, and reference materials that are useful during EMS preplanning, planning, implementation, and maintenance. Many of the figures and tools presented are actual materials developed and used by Navy installations that have already implemented their EMSs. Tools, templates, and lessons-learned through EMS implementation efforts at DoD military installations are made available at this website.

The Headquarters Marine Corps (HQMC) Installations and Logistics Department issued Letter 5090 L/S-040101 on March 3, 2004. Letter 5090 L/S-040101 describes Marine Corps EMS applicability, implementation criteria, and reporting requirements. The Marine Corps will publish additional EMS guidance in mid-2004. HQMC and Marine Corps installation personnel meet semi-annually to discuss evolving EMS pursuits and progress. HQMC facilitates EMS implementation by providing tools and templates that installations can tailor to meet specific mission needs.

The Air Force issued the *Planning Element* and the *Implementation and Operations Element* guidance documents to detail the steps involved in completing the initial phases of EMS implementation. Each guide provides instructions, checklists, templates and examples to assist installations with the tasks involved in each of these phases. The Air Force is developing a third guidance document to address "Corrective Actions And Management Review Elements." The estimated completion date for the third guidance document is summer 2004.

The Defense Logistics Agency's (DLA's) EMS initiative includes a comprehensive action plan providing DLA-specific guidance to appropriate facilities. In the interim, appropriate facilities received sample guidance documents developed by NASA, EPA's Office of Water, and the Army. Eleven DLA activities (8 percent) have signed EMS policies. In addition, the Defense Energy Supply Center (DESC) published a DESC-wide EMS policy that will be cascaded down to individual activities. Several other Field Activities and Centers are developing EMS policies. Field Activity EMS Implementation Team representatives in collaboration with DLA Support Services Office of Environment and Safety (DSS-E), identified 137 DLA activities as appropriate facilities. DLA Vice Director, Major General Saunders, made EMS implementation a formal objective in the agency-level Defense Logistics Agency Strategic Plan. Nine DLA activities have DSS-E validated EMSs that conform to ISO 14001 standards.

INSTALLATIONS WITH AN EMS IN PLACE

The following installations have EMSs in place as of October 1, 2003.

- Fort Lewis
- Scranton Army Ammunition Plant, Scranton
- Pine Bluff Chemical Agent Disposal Facility
- US Army Tank Automotive Research and Development Center (TARDEC)
- Naval Air Engineering Station Lakehurst
- Naval Air Depot North Island
- Naval Undersea Warfare Center, Newport
- Naval Undersea Warfare Center, Keyport
- Supervisor of Shipbuilding, Groton
- Naval Air Depot Cherry Point
- Naval District Washington
- Naval Air Station Patuxent River
- Naval Air Station Whidbey Island
- Naval Support Activity La Maddalena
- Joint Maritime Facility ST MAWGAN, UK
- Thule Air Base, Greenland

- 177FW, Atlantic City Air National Guard Base (ANGB)
- 173 FW, Klamath Falls ANGB
- Eglin Air Force Base
- Robins Air Force Base
- Des Moines Air National Guard Base (ANGB)
- Ft. Wayne ANGB
- Great Falls ANGB
- Defense National Stockpile Center (DNSC) Headquarters
- DNSC New Haven Depot
- DNSC Point Pleasant Depot
- DNSC Binghamton Depot
- DNSC Curtis Bay Depot
- DNSC Hammond Depot
- DNSC Scotia Depot
- DNSC Somerville Depot
- DNSC Warren Depot

EMS FUNDING

Each DoD Component has identified resources for EMS implementation consistent with EMS policy requirements. DoD's general approach to EMS implementation involves programming funding for training and EMS implementation for Fiscal Year (FY) 2004 and beyond. EMS training and implementation resources have been programmed as part of the DoD Components' overall training and management budgets. Each Component has identified an EMS program manager at the headquarters or secretarial level. These individuals are in the DoD Components' environmental organizations. With this structure, the Department plans to have EMSs in place at all appropriate facilities by December 31, 2005.

EMS Guidance

The Department of Defense provided EMS implementation guidance to the DoD Components in the DoD EMS policy memo dated April 5, 2002. The DoD Policy requires compliance with EO 13148 as well as specific minimum elements:

- Shall comply with E.O. 13148
- Shall adopt an EMS that best suits its needs and integrate it in all core business areas
- May adopt ISO 14001
- Pursue third party registration only when it provides a clear and documented benefit
- DoD Components are encouraged to implement a complementary management system for safety and occupational health

Providing additional EMS implementation guidance beyond these minimum requirements is explicitly the responsibility of the DoD Components, as indicated in the following statement from the DoD policy, "Recognizing the diversity of our missions, each DoD Component shall implement an environmental management system that best suits its mission needs." In January 2003, DoD also issued EMS implementation metrics to track progress on EMS implementation across the Department. The office of the Deputy Under Secretary of Defense for Installations and Environment and DoD Components have adopted these metrics.

EMS TRAINING

Leadership within the Office of the Secretary of Defense consistently and actively communicates and reinforces key elements of EMS policy and its impact on DoD's mission. This active communication effectively spreads the message of the strong correlation between EMS, sound environmental stewardship, and mission performance. DoD teamed with EPA to provide EMS implementation courses for audiences including Federal interagency groups, DoD groups, and the U.S. Department of Agriculture. DoD, through the Inter-Service Environmental Education Review Board (ISEERB), initiated a review of common EMS training requirements, available training courses, and materials. Each DoD Component will make training materials available in various formats that suit the target audience, including Senior leadership. Examples of training materials include fact sheets, computer training modules, and videos.

The Headquarters Department of the Army (HQDA) completed the *Army Commander's Guide to Environmental Management Systems*. This guide focuses specifically on actions that should be taken by the Garrison Commander to successfully implement and sustain an effective EMS. The Army also developed and field-tested the *Environmental Management Systems Aspect and Impact*

Methodology for Army Training Ranges. This guide decribes how to identify, evaluate, and prioritize environmental risks (aspects and impacts) associated with range operations as part of the U.S. Army Sustainable Range Program. The Assistant Chief of Staff for Installation Management (ACSIM) signed both the Implementers Guide for Army Environmental Management Systems and Army Commanders Guide to Environmental Management Systems and distributed them to all appropriate facilities in July 2003. HQDA is coordinating the final revisions of The Environmental Management Systems Aspect and Impact Methodology for Army Training Ranges with the ACSIM and Army Director of Training before its release to installation personnel in April 2004. These guidance documents form the foundation for standardized EMS training across the Army.

The Navy developed an executive-level EMS awareness training module entitled *Environmental Management Systems CO/XO Brief.* This 15-minute video/videocast consists of an endorsement of EMS by Commander of Navy Installations Command, RADM Christopher Weaver an overview of EMS, and testimonials by four Commanding Officers with effective EMSs in place. The Navy intends this training for Regional and installation level leadership, including Regional Commanders, Commanding Officers, and Executive Officers, Program Managers, Department Heads, and other senior level managers.

The Navy developed a 30 minute web-based Interactive Multimedia Instruction/Distance Learning (IMI/DL) General EMS Awareness Module for regions and installations. This training includes a leadership message from RADM Weaver and an overview of the basics for an ISO 14001-based EMS. Installations are able to insert site-specific EMS information. Various Navy environmental training courses, such as the *Advanced Environmental Management Course* and *Conducting EMS Reviews*, also cover EMS requirement and policy. The Navy briefs all prospective Commanding Officers of shore installations on the environmental programs, including EMS, during their required orientation training before they take command.

The Air Force considers Group Commanders, Wing Commanders, and all voting members of the Environmental Protection Committee (or equivalent positions) to be senior leadership and requires them to receive EMS training. The Air Force plans to deliver EMS leadership training for senior-level managers in several ways. The existing Air University commander courses includes a discussion on the Air Force approach to EMS and senior leadership responsibilities. The Air Force also offers managers a short Computer Based Training class that describes the basic principles of EMS and senior leadership responsibilities. The Air Force is developing a commander's EMS training template that EMS coordinators can modify at the installation, major command, and Head Quarters levels and provide in a tabletop or briefing format. The last two training aids will be available to major commands and installations in early summer 2004.

The Marine Corps developed EMS training materials that installations can adapt for the purposes of seeking command support of EMS, training personnel who will implement EMS, and developing general awareness of EMS. HQMC developed a Senior Management Module to be tailored and used by installation EMS personnel to educate installation senior leadership. HQMC and two installations are working jointly to develop computer-based EMS awareness training programs to provide EMS training at multiple organizational levels. Although the Marine Corps does not provide Corps wide EMS training, installations are able to procure outside EMS training resources when necessary.

DLA provided agency-wide EMS awareness training during a November 2003 EMS workshop, by Major General Saunders, DLA Vice Director, and Mr. Ed Pinero, Office of the Federal Environmental Executive (OFEE), with assistance from the Office of the Deputy Under Secretary of Defense (Installations and Environment) and the EPA. EMS Implementation Team members at DLA field activities and appropriate activities and facilities attended EMS implementation training at four regionally-based sessions. In addition, DLA developed an EMS Awareness Training video with video clips from seven DLA senior leaders, technical material, and video interviews shot at Defense National Stockpile Center Depots and Defense Supply Center Richmond. All DLA staff will receive the EMS Awareness Training video with a companion web-based training brochure and individual CDs.

DOD-STATE PARTNERSHIPS

DoD recognizes the importance of sustaining solid partnerships with the states to maintain public confidence in military environmental stewardship and streamline day-to-day operations. The Department considers EMS implementation to be a unique opportunity to establish and improve these partnerships.

In FY 2003, DoD continued its partnership with the Multi-State Working Group (MSWG) and the Environmental Council of States (ECOS) under and OFEE-led Federal-State initiative to advocate EMS as a tool for improving environmental performance. For example, the DoD Region 4 Pollution Prevention Partnership, with funding from DoD, established a DoD EMS/ISO 14001 Alliance for Federal Facilities in Region 4. This effort represents a collaboration of the Region 4 states, universities, and military installations. The installations received structured EMS coaching provided by experienced EMS personnel and tailored to Service-specific DoD policies. In another example, Defense Supply Center Richmond teamed with the city of Richmond, Chesterfield county, and Virginia DEQ in an EMS implementation process designed to serve the mission needs of each participant while enhancing regional environmental quality.

FUTURE DIRECTIONS

DoD will continue to use EMSs as a framework for organizing the elements of its environmental quality program to better support the mission and integrate environmental management into core mission activities. DoD can use EMSs to protect and preserve the resources the Department manages, sustain public support, and reduce program costs over the long term.