# INTRODUCTION

An environmental management system (EMS) provides a framework for integrating the many facets of an environmental quality program into the overall management structure. An EMS helps identify the environmental aspects of the mission, highlight 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.

The Department of Defense (DoD) recently issued guidance on complying with Executive Order (E.O.) 13148, "Greening the Government through Leadership in Environmental Management." The primary goal of E.O. 13148 is to ensure that each Federal agency, including DoD, integrates environmental accountability across its missions, activities, and functions and into day-to-day decision-making, long-term planning and processes. The E.O. also requires Federal agencies to—

- Assess their existing environmental management programs by October 31, 2001
- Implement a pilot EMS by April 21, 2002
- Implement EMSs at all appropriate facilities by December 31, 2005.

DoD completed a pilot study of EMS implementation in February 2000. Each of the DoD Components conducted, completed, or updated assessments of their environmental management programs during 2001.

In April 2002, the Under Secretary of Defense (Acquisition, Technology, and Logistics) issued the Department of Defense Environmental Management System policy memorandum. This policy memorandum recognizes the difference in missions among the DoD Components and supports efforts for each Component to implement an EMS that best fits its mission needs. At a minimum, each DoD Component must adopt a documented EMS that meets requirements of E.O. 13148.

# Elements of an EMS

An EMS is a formal management framework intended to help an organization achieve internal environmental goals by improving environmental performance, increasing the efficiency of operations, and enhancing regulatory compliance. The elements of a successful EMS are—

 Public commitment by senior leaders to environmental compliance, pollution prevention, and continual improvement of the EMS

- Integrated planning, including goals and targets for reducing environmental impacts and supporting mission priorities
- Operations and training to ensure attainment of those goals and targets
- Procedures for self-evaluation and corrective action
- Periodic review of the management system by senior leadership, with recommendations for improvement as necessary.

### EMS AND DOD'S MISSION

"Balancing our training and operational needs with the demands of sound environmental stewardship is an increasingly complex challenge, one in which we must succeed to accomplish our mission. Environmental management systems are a proven tool for defining and achieving this balance."

> Deputy Under Secretary of Defense (Installations and Environment) Raymond DuBois

DoD intends to use EMSs to enhance mission performance by systematically identifying, prioritizing, and reducing risks to mission and the environment. Effective EMSs can reduce the costs of compliance, streamline the environmental footprint of operations, improve internal and external communication to support mission critical goals, and reduce the likelihood of encroachment and subsequent mission impacts. DoD will use EMSs to align defense mission and environmental goals.

By using an EMS, DoD installations can—

- Systematically align environmental management activities with mission priorities
- Reduce mission-driven risks and costs associated with environmental compliance
- Provide a consistent, cost-effective environmental management framework
- Provide a basis for self-correcting and mitigating fines and penalties if noncompliance occurs
- Improve communication with stakeholders to maintain confidence in military environmental stewardship.

DoD views EMS not as a new requirement, but as a change in management practices. DoD's approach is to adapt existing management processes to systematically identify and reduce the environmental risks inherent in mission activities. This approach is intended to make compliance with environmental laws more streamlined, less costly, and a routine part of mission planning and execution. DoD believes this will enhance mission performance, while reducing environmental costs and liabilities.

DoD has played an active role in advancing EMS implementation across the Federal government through its activities in support of the E.O. 13148 Federal Interagency Environmental Leadership Work Group. DoD chaired Federal interagency sub-groups for E.O. 13148 Metrics, EMS Self-Declaration Protocol, and EMS Budgeting.

DoD recognizes the importance of addressing environmental changes and challenges, and continues to move beyond compliance to integrate stewardship and environmental protection into every aspect of its operations. Well-established EMS' will help ensure full integration of these elements into all of DoD's policies and practices.

## Identifying Facilities for EMS Implementation

Each of the DoD Components is developing a process to determine appropriate facilities and provide a baseline list of such facilities for the first round of management review of DoD's EMS implementation metrics. The Department will track progress using the EMS implementation metrics beginning in 2003.

The following installations have EMSs in place as of October 1, 2002—

- Atlantic City Air National Guard Base, New Jersey
- Columbus Air Force Base, Mississippi
- Eglin Air Force Base, Florida
- Fort Lewis, Department of Public Works, Washington
- Klamath Falls Air National Guard Base, Oregon
- Naval Air Depot North Island, Coronado, California
- Naval Air Engineering Station Lakehurst, New Jersey
- Naval Undersea Warfare Center Newport, Rhode Island
- Naval Undersea Warfare Center, Division Keyport, Keyport, Washington
- Pine Bluff Chemical Agent Disposal Facility, Arkansas

- Robbins Air Force Base, Georgia
- Scranton Army Ammunition Plant, Pennsylvania
- Thule Air Base, Greenland
- Tobyhanna Army Depot, Pennsylvania
- U.S. Air Force Academy, Colorado

#### Guidance for Implementing an EMS

The DoD Components are developing and issuing EMS guidance to assist installations in implementing EMSs that will efficiently meet their needs and mission requirements.

The Army Environmental Management System Action Memorandum adopted the internationally recognized International Organization for Standardization (ISO) 14001 EMS Standard. Army installations will use a mission-focused approach to the ISO 14001 Standard to meet the EMS requirements of Executive Order 13148 by December 31, 2005. The Army will continue implementing the standard and assure that a mission-focused, fence-to-fence EMS that fully conforms to ISO 14001 is in place by Fiscal Year (FY) 2009.

The Navy issued its EMS policy statement in late 2001. The Navy EMS framework is based on the ISO 14001 specifications and incorporates the basic elements that are common throughout a number of different EMS models. The Navy EMS policy and implementation strategy have been communicated to field representatives through various forums and conferences attended by Navy field representatives, including Navy pollution prevention conferences.

The Marine Corps conducted east and west coast regional EMS workshops in the Fall of 2002. Marine Corps installations and Headquarters collaborated on EMS policy and approaches to facilitate Marine Corps-wide EMS implementation. Based on feedback from those workshops, in early 2003 the Marine Corps solicited proposals from Marine Corps installations interested in serving as EMS implementation "prototypes." These prototypes will demonstrate a variety of approaches and methodologies and develop products and implement tools that can be exported to other installations to assist in EMS implementation. In addition, the prototypes provide an opportunity to apply and test draft Marine Corps EMS implementation guidance. The Marine Corps will revise the guidance, as appropriate, to incorporate lessons learned from the prototype installations' endeavors. Seven installations expect to serve as protype installations.

The Air Force has set a goal of implementing an Environmental, Safety, and Occupational Health Management System (ESOHMS). This ESOHMS will follow a pattern similar to ISO 14001. The Air Force plans to finalize and issue its ESOHMS implementation guidance in early 2003. During the past year, the Air Force policy has been communicated to field representatives through various forums, including the Air Force Pollution Prevention Conference, the Environmental Training Symposium, commander conferences, and installation-level workshops. An Air Force EMS Implementation Plan is also being drafted.

The Defense Logistics Agency (DLA) will not require that installations adhere to specific EMS standards, but will instead conform to the generic elements that are common throughout the different EMS models. DLA plans on paralleling ISO 14001 to the extent possible under mission requirements.

#### Identifying Resources for EMSs

Each of the DoD Components 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 FY 2004 and beyond. EMS training and implementation resources will be programmed as part of the Components' overall training and management budgets. With this funding structure, the Department plans to have EMSs in place at all appropriate facilities by December 31, 2005.

The Army has identified funding for EMS implementation in the FY 2004 through FY 2006 budgets. To significantly reduce total implementation timelines and cost, the Army has also invested substantial staff and budget resources in the centralized development of EMS policy, guidance, tools, and training materials during FY 2002 and 2003.

In FY 2003, Navy will invest in the development of EMS implementation guidance, tools, and training materials. Each Navy installation and regional complex will use in-house resources to accomplish EMS implementation. Naval Facilities Engineering Command expertise will be available through the Naval Environmental Protection Support Service.

Marine Corps Headquarters is providing technical support and appropriate resources for EMS implementation at seven prototype installations during 2003, including documentation, training materials, and tools to be developed and distributed to all Marine Corps installations.

The Air Force has determined that the cost of developing and implementing EMS can be accomplished with existing funds. Each Air Force installation will use existing manpower, funding, and programming rules to implement EMS. Air Force Headquarters is funding the development of policy, guidance, and training materials.

### **EMS** Training

Leadership within the Office of the Secretary of Defense has consistently and actively communicated and reinforced key elements of EMS policy and its impact on DoD's mission. This active communication has effectively spread the message of the strong correlation between EMS, sound environmental stewardship, and mission performance. DoD is also teaming with the U.S. Environmental Protection Agency (EPA) and the Federal community to identify and develop training materials and outreach techniques. DoD teamed with EPA to develop EMS implementation courses for audiences including Federal interagency groups, DoD groups, the U.S. Department of Agriculture, and the National Recycling Coalition. DoD, through the Inter-Service Environmental Education Review Board (ISEERB), initiated a review of common EMS training requirements and available training courses and materials. The Assistant Deputy Under Secretary of Defense (Environment) initiated the ISEERB review in October 2002, with a tasking to the Air Force, the ISEERB Chair. In June 2003, the ISEERB plans to complete the initial report.

Each DoD Component will make training materials available in various formats so that training can be provided in a way that best suits the audience. Examples of training materials include fact sheets, computer training modules, and videos.

Raising EMS awareness across the Army is one of four goals set by the Army Environmental Management System Steering Committee. Communicating EMS policy is a central part of raising awareness and has been included in all EMS training and briefings. Since the policy was signed, Army staff have conducted 21 internal EMS briefings and training sessions, held two Army-wide EMS implementation conferences, and distributed over 4,000 copies of the Army EMS brochure.

The Navy requires prospective Commanding Officers of shore installations to be briefed on environmental programs, including EMS, during their orientation training. The Navy is also planning a number of regional workshops on implementing the Navy EMS for Spring and Summer 2003.

The Air Force is currently working on identifying EMS training needs, materials, and the appropriate training vehicle for senior-level managers.

The Marine Corps has 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. The materials were presented at two regional workshops in 2002.

# **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. DoD views EMS as a basis for simultaneously improving environmental stewardship and enhancing mission performance.

In FY 2002, DoD joined the Multi-State Working Group (MSWG) in its efforts to advocate EMS as a tool for improving environmental performance. The MSWG is a broad, multi-stakeholder body that regularly assembles government, business, and academic professionals to explore innovative approaches to environmental protection, enhancement, and restoration. The organization facilitates dialogue, research, workshops, international partnerships, exchanges, and education.

In recent months, DoD's partnership with the MSWG has expanded, in close coordination with the Office of the Federal Environmental Executive, to include collaboration with the Environmental Council of States to consider a broad-based Federal-state partnership on EMS.

# FUTURE DIRECTIONS

DoD will continue to use environmental management systems as a framework for organizing the many facets of its environmental quality program, and integrating environmental management into core mission activities. Each DoD Component will adopt a documented EMS that meets requirements of E.O. 13148. DoD can use EMS to protect and preserve the resources the Department manages, sustain public support, and reduce program costs over the long term. A comprehensive EMS program will help DoD meet the environmental management challenges of the 21st century while sustaining operational readiness by reducing the environmental impacts of operations, improving DoD stewardship of natural resources, and sustaining the national defense training landscape.