

## Appendix B: Environmental Management Systems

The Department of Defense (DoD) continues to integrate environmental accountability across all missions, activities, and functions into day-to-day decision-making, long-term planning, and processes. An environmental management system (EMS) is DoD's formal framework for integrating the consideration of environmental issues into its overall management structure. Through active participation from all functions and organizations, the Department is integrating EMS into missions, activities, functions, contracts, and installation support agreements as a business practice for improving overall compliance.

EMS is a dynamic, proactive, and adaptable management system that provides a logical, step-by-step process to integrate environmental issues into the overall operating structure of DoD. When properly implemented, EMS identifies the environmental aspects of the mission; highlights and prioritizes areas of risk; promotes pollution prevention; and tracks progress toward environmental goals.

### Applicable Requirements

Executive Order (E.O.) 13423, issued January 24, 2007, entitled Strengthening Federal Environmental, Energy, and Transportation Management, requires that each federal agency implement an EMS at all appropriate organizational levels. E.O. 13423 further states that each agency utilize EMS as the primary management approach for addressing the environmental aspects of internal agency operations and activities, including environmental aspects of energy and transportation functions. Each agency is additionally required to establish objectives and targets to ensure the implementation of EMS and collect, analyze, and report information to measure performance in the implementation of E.O. 13423. As such, DoD outlined EMS goals, objectives, and targets for appropriate facilities and organizations under the 2007 Defense Installations Strategic Plan (DISP), Objective 5.3. The Council on Environmental Quality's Instructions for Implementing E.O. 13423 state that each agency have a fully implemented EMS by December 31, 2008. DoD requested and received an extension from the Office of Federal Environmental Executive (OFEE) to December 31, 2009.

In Fiscal Year (FY) 2008, DoD developed a DoD Instruction (DoDI), which implements policy, assigns responsibilities, and prescribes procedures for cross-functional integration of EMS pursuant to E.O. 13423. This instruction integrates EMS into missions, activities, functions, contracts, and installation support agreements as a business practice for improving overall performance. The DoDI also mandates that EMS shall enhance the

operational mission and will manage the environmental aspects of DoD operations, the impacts of environmental conditions, and constraints on the mission. This instruction is expected to be published in FY2009.

### Current Management Practices

DoD recognizes the importance of sustaining solid partnerships with states to maintain public confidence in military environmental stewardship and streamline daily operations. The Department considers EMS implementation to be a unique opportunity to establish and improve these partnerships. During FY2006, DoD continued its involvement in the OFEE-led federal-state initiative, which advocates EMS as a tool to improve environmental performance. The DoD EMS Working Group consists of representatives from each Component and is responsible for ensuring the implementation of all internal and external programs and policies within DoD.

Leadership within DoD consistently and actively communicates and reinforces key elements of EMS policy and its impact on the mission. This active communication effectively spreads the message of the strong correlation between EMS, sound environmental stewardship, and mission performance. In FY2003, DoD teamed with the U.S. Environmental Protection Agency (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, initiated a review of common EMS training requirements, available training courses, and materials. Each Component makes training materials available in various formats for the target audience, including senior leadership. Examples of training materials include fact sheets, Web-based training modules, and videos.

DoD provided EMS implementation guidance to the Components in the DoD EMS policy memorandum, dated April 5, 2002. The policy requires Components to comply with E.O. 13148 (now E.O. 13423), as well as specific minimum elements. Under the guidance, Components:

- ▶ Shall adopt an EMS that best suits its needs and integrate the EMS into all core business areas
- ▶ May adopt International Organization for Standardization (ISO) 14001 Environmental Management Standards
- ▶ Should pursue third-party registration only when it provides a clear and documented benefit
- ▶ Are encouraged to implement a complementary management system for safety and occupational health.

Providing additional EMS implementation guidance to facilities or organizations is the responsibility of the 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.” DoD continues to meet the EMS requirements of E.O. 13423 and has developed a DoDI to reflect these requirements. The new DoDI will revoke the 2002 policy memorandum.

### Performance Evaluation Criteria

In FY2008, each Component continued to track EMS implementation. Figures B-1 and B-2 display the number of U.S. and overseas appropriate facilities by Component and progress made toward full implementation. For a facility’s EMS to be classified as “In Conformance,” the EMS must meet the Component’s specific EMS criteria. For a facility’s EMS to be classified as “Fully Implemented,” the EMS must meet the requirements of E.O. 13423, which include conducting an external (second party) audit, recognition of audit findings by senior management, and a declaration of conformance. Under these definitions, a facility or organization can be declared in conformance with Component-specific requirements but not fully meet the requirements of E.O. 13423. However, all facilities or organizations declared fully implemented according to E.O. 13423 are also in conformance with Component-specific requirements. The Department also continued to track

facility-level progress using the following DoD EMS scorecard metrics:

- ▶ Environmental Aspects
- ▶ Goals, Objectives, and Targets
- ▶ Operational Controls
- ▶ Environmental Training
- ▶ Contracts
- ▶ EMS Audit/Evaluation Procedures
- ▶ Management Review.

On September 14, 2008, DoD deployed new EMS metrics: “EMS Metrics for FY2009 and beyond” for appropriate facilities and organizations within DoD. The metrics are based on the draft federal EMS metrics, and include annual and semi-annual reporting requirements. The new EMS metrics also incorporate several sustainability aspects. Through its evolving and improving metrics, DoD continues to drive implementation and assist in assessing the progress, performance, and success of EMSs already in place.

## DoD

In FY2008, DoD continued to demonstrate progress in meeting the December 2009 deadline for full implementation at all appropriate facilities or organizations. Of the total 452 appropriate facilities or organizations, DoD currently has 138 appropriate facilities or organizations with an EMS in conformance and 125 with a fully implemented EMS. In January 2007, DoD deployed its Compliance Management Plan (CMP) in accordance with the President's Management Agenda. The DoD CMP highlights steps taken by DoD to ensure environmental compliance. In July 2008, DoD continued to update the CMP to reflect organizational sustainability changes within the environment, energy, and transportation management program areas. DoD also is taking measures to evaluate the effectiveness of a Department-wide EMS in addition to publishing DoDI 4715.vv to further assist with successful implementation.

Although the Office of the Secretary of Defense (OSD) provides oversight and guidance for the Defense Environmental Programs, the Components are responsible for implementing EMSs to manage, and execute environmental activities to meet the program goals established by OSD. Since the Components and their individual defense missions vary, managing their programs through an EMS at the Component-level with DoD oversight affords consistency of program guidance and overall goals while providing each Component with the ability to address its environmental requirements according to Component-specific needs.

**Figure B-1** Domestic EMS Appropriate Facilities Summary

Component	Number of Appropriate Facilities		Number of Facilities with EMS In Conformance <sup>†</sup>		Number of Facilities with EMS Fully Implemented <sup>‡</sup>	
	FY2007	FY2008	FY2007	FY2008	FY2007	FY2008
Army	139	128	40	18	13	17
Navy	82	74	5	7	5	7
Marine Corps	18	18	9	18	6	18
Air Force	153	152	69	71	49	60
DLA	18	14	3	3	3	3
Other*	2	2	0	0	0	0
<b>Total</b>	<b>411</b>	<b>388</b>	<b>126</b>	<b>117</b>	<b>76</b>	<b>105</b>

\* Other Components include Defense Commissary Agency and Missile Defense Agency.

† In Conformance: EMS is in conformance with Component requirements.

‡ Fully Implemented: Meet requirements for Executive Order 13423:

1. External Audit
2. Audit Findings recognized by senior management
3. Declaration of Conformance signed

**Figure B-2** Overseas EMS Appropriate Facilities Summary

Component	Number of Appropriate Facilities		Number of Facilities with EMS In Conformance*		Number of Facilities with EMS Fully Implemented <sup>†</sup>	
	FY2007	FY2008	FY2007	FY2008	FY2007	FY2008
Army	22	21	10	4	1	4
Navy	21	20	0	0	0	0
Marine Corps	2	2	1	2	1	2
Air Force	19	19	7	15	2	14
DLA	3	2	0	0	0	0
<b>Total</b>	<b>67</b>	<b>64</b>	<b>18</b>	<b>21</b>	<b>4</b>	<b>20</b>

\* In Conformance: EMS is in conformance with Component requirements.

† Fully Implemented: Meet requirements for Executive Order 13423:

1. External Audit
2. Audit Findings recognized by senior management
3. Declaration of Conformance signed

## Army

The Army continues to make progress toward meeting federal and DoD EMS goals and requirements. In FY2007, OFEE established new standards for “fully implemented” EMSs, including a requirement for external EMS audits. Twenty-one Army appropriate facilities met the new federal EMS requirements as of FY2008. The Army has conducted external EMS audits at 91 of its appropriate facilities (61 percent), and 138 of its appropriate facilities (93 percent) are projected to meet the new EMS requirements by the December 31, 2009 deadline. The Army also has established a process that integrates the remaining external EMS audits into a 3-year cycle of external environmental compliance audits.

In FY2008, the Army reduced its list of appropriate facilities for EMS implementation from 161 to 149 as a result of Base Realignment and Closure (BRAC) actions, global transformation, and organizational restructuring. Eleven Army Reserve Regional Readiness Commands, which are under reorganization, were removed from the Army’s appropriate facilities list pending deployment of their new organizational structure. The U.S. Army Garrison Hessen, Germany, which closed under the Army’s global transformation plan, also was removed from the list.

Army leadership is committed to implementing effective EMSs at appropriate facilities. The Army maintains leadership focus and awareness of EMS implementation through the installation-level Environmental Quality Control Committee and at the Region and Headquarters levels through periodic implementation progress reporting. In FY2008, the Army increased its progress reporting frequency to provide improved oversight of its EMS implementation status. To further facilitate EMS implementation, the Army’s Installation Management Command will hold an EMS in-progress review in January 2009. Additionally, the Army National Guard will focus on EMS, E.O. 13423, and sustainability during its National Environmental Workshop in March 2009. Both forums will share installation EMS successes and identify and address implementation challenges.

## Navy

The Navy’s EMS is based on the ISO 14001 model, which employs a cycle of policy, planning, implementation and operation, evaluation and corrective actions, and management review. The Navy’s EMS goal is to continually improve environmental performance. A fully implemented EMS will provide for continual improvement in environmental management as well as enhance the Navy’s overall mission performance.

The Navy is committed to ensuring all appropriate facilities implement EMSs in compliance with E.O. 13423 and to ensure the best use of EMS as a business practice to improve uniformity, efficiency, and shore facility management. Regional Commanders and Installation Commanding Officers utilize EMSs to address activities critical to mission execution and to manage related environmental aspects to sustain operational readiness. The Navy provides installations and regions with tools, templates, and training to assist with EMS implementation efforts. The Navy’s EMS Web site, located in the Joint Service Pollution Prevention and Sustainability Technical Library at <http://205.153.241.230>, is designed as a clearinghouse for EMS resources. The Web site provides the most comprehensive, current, and pertinent EMS information available to Navy and other federal personnel, contributing to the successful implementation and maintenance of a facility’s EMS.

In FY2008, the Navy had 94 appropriate facilities, seven of which had fully implemented EMSs that have been verified by external EMS audits. During FY2009, the remaining 87 appropriate facilities will receive an external EMS audit to validate conformance with ISO 14001. The Navy plans to meet its September 30, 2009 deadline established in Navy policy, and the December 31, 2009 deadline for all DoD appropriate facilities or organizations.

## Marine Corps

The Marine Corps has met the EMS “full implementation” requirements of E.O. 13423, with 100 percent of installations achieving full implementation by October 2008. Headquarters, Marine Corps (HQMC) validated and recognized all of the installations’ conformance declarations via internal EMS audits in FY2007, and external EMS audits in FY2008. In accordance with policy and guidance issued in December 2004 and March 2007, HQMC has incorporated EMS audits into its triennial Environmental Compliance Evaluations (ECEs), which provided the leverage needed to achieve Component-wide full implementation. In the future, triennial ECEs will help to ensure that Marine Corps installations continue to maintain their full EMS implementation and meet Marine Corps full conformance criteria.

Marine Corps installations also are required to continue to perform annual self-audits to review their EMSs, and are required to provide self-audit results to HQMC by September 30 of each year. HQMC reviews the results of installation self-audits to ensure continual improvement in EMS performance and to evaluate the impact of EMS on missions. In support of the requirement to conduct annual EMS self-audits, HQMC has developed and provides EMS Lead Auditor Training annually for installation personnel responsible for conducting self-audits. Additionally, HQMC Environmental Managers Workshops are provided to facilitate the exchange of ideas and EMS best practices among HQMC and the installations.

## Air Force

In FY2008, the Air Force staffed and coordinated a draft EMS instruction to all technical points of contact, outlining its commitment to implement EMS according to the ISO 14001 standard. The Air Force continues to complete required EMS awareness training for all personnel and continues to make progress in meeting EMS criteria.

The Air Force achieved EMS conformance at 86 appropriate facilities and full EMS implementation at 74 facilities, as of

FY2008. In the reporting year alone, the Air Force achieved full implementation at 23 appropriate facilities. The Air Force Civil Engineer commissioned an initiative to integrate EMS and Natural Infrastructure Management (NIM) into the overarching Asset Management System, greatly enhancing resource and planning decisions. As a result, the Air Force established various work groups, including a group to establish an organizational EMS construct, and another to further define performance measures.

The Air Force anticipates having all EMSs fully implemented by December 31, 2009. In addition, the Air Force is moving toward combining the aspects of its EMS with a management system for safety and occupational health to create an integrated Environment, Safety, and Occupational Health Management System.

#### **DLA**

Building upon its success in having validated its mission-focused EMSs at 100 percent of qualifying Defense Logistics Agency (DLA) activities by December 2005, DLA began conducting external audits of those EMSs in FY2006. Through FY2008, the Defense Reutilization Marketing Service, the Defense Supply Center Columbus, and the Defense Supply Center Richmond had fully implemented organizational EMSs. Of the remaining 13 DLA facility EMSs, external audits have been completed on all but one system. DLA expects conformance declarations on 10 of the 13 EMSs in early 2009 and the remaining three by December 31, 2009.