

# memorandum

DATE: April 14, 2004

REPLY TO  
ATTN OF: Office of Pollution Prevention and Resource Management: Woodbury: 6-4371

SUBJECT: Status of Implementing Environmental Management Systems

TO: Distribution

The progress of the Department's sites in implementing Environmental Management Systems (EMSs) is summarized in the attached report. Almost a quarter of the Department's sites currently have EMSs in place. Many sites report additional milestones achieved since the status report last December. Two notable examples include the Pacific Northwest National Laboratory and the National Renewable Energy Laboratory recently who had their EMSs recognized by their acceptance into the National Environmental Performance Track program sponsored by the Environmental Protection Agency.

One of my responsibilities as the Department's Agency Environmental Executive is to report the Department's progress toward implementing EMSs by December 2005. This date was established by Executive Order 13148, *Greening the Government through Leadership in Environmental Management*, and was incorporated in DOE Order 450.1, *Environmental Protection Program* (issued January 15, 2003). The progress information which I report to the Environmental Protection Agency is used by the Office of the Federal Environmental Executive to generate an annual scorecard for Federal agencies. I appreciate the assistance and support provided by the Points of Contact whom you have designated within your respective program offices. The progress report reflects the information which they have provided for your program.

DOE Order 450.1 assigns to Program Secretarial Offices, along with the Administrator of the National Nuclear Security Administration and Administrators of Power Administrations, the responsibility to ensure that sites under your purview implement environmental management systems by December 31, 2005. My Office stands ready to assist you and your sites in this endeavor. We have issued implementation guidance for DOE O 450.1 and are conducting a series of videoconference EMS training sessions with DOE sites across the country. We would welcome other opportunities to assist you in supporting your sites as they implement EMSs.

The Department is committed to meeting the December 2005 deadline established in the Executive Order. The Secretary wants the Department to continue to be a leader in EMS

implementation, and I request that you emphasize the importance of this effort to those site managers under your purview.

A handwritten signature in black ink that reads "Beverly A. Cook". The signature is written in a cursive style with a large, prominent 'C' at the end.

Beverly A. Cook  
Assistant Secretary  
Environment, Safety and Health

Attachment

DISTRIBUTION:

Program Secretarial Officers:

Margaret Chu, Director, Office of Civilian Radioactive Waste Management  
David Garman, Assistant Secretary for Energy Efficiency and Renewable Energy  
Jessie Roberson, Assistant Secretary for Environmental Management  
Michael Smith, Assistant Secretary for Fossil Energy  
William Magwood, Director, Office of Nuclear Energy, Science and Technology  
Raymond Orbach, Director, Office of Science  
Michael Owen, Director, Office of Legacy Management

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Stephen J. Wright, Administrator, Bonneville Power Administration  
Charles A. Borchardt, Administrator, Southeastern Power Administration  
Michael A. Diehl, Administrator, Southwestern Power Administration  
Michael S. HacsKaylo, Administrator, Western Area Power Administration

National Nuclear Security Administration

Everett Beckner, Deputy Administrator, National Nuclear Security Administration

cc: HQ EMS Points of Contact

Attachment

# **Environmental Management System Implementation Status**

## **Quarterly Report**



**U.S. Department of Energy**

**March 2004**

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**March 2004**

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# INTRODUCTION

This Quarterly Status Report identifies the Department of Energy's progress toward achieving the Department's goal of implementing environmental management systems (EMSs) at all DOE major sites by December 2005. The report highlights changes since the previous report in December 2003.

The December 2005 goal was established for Federal facilities by Executive Order (EO) 13148, *Greening the Government Through Leadership in Environmental Management*. It was made a DOE requirement in DOE Order 450.1, *Environmental Protection Program* (issued January 15, 2003). Order 450.1 implements the Federal requirement by requiring the integration of Environmental Management Systems (EMSs) into the Department's existing Integrated Safety Management Systems (ISMSs).

EMS implementation reflects accepted management principles based on the "Plan, Do, Check, Act" model using a standard process to identify environmental goals, implement them, determine progress, and make adjustments to ensure continual improvement. Properly implemented, an EMS not only improves regulatory compliance and environmental performance, but also increases overall efficiency and accountability, reduces operational costs and potential liability, and enhances community relations.

Establishment of EMSs by December 2005 is an important goal for DOE and for all Federal agencies. The Secretary of Energy – and the Department – are graded by the Administration on progress toward meeting this goal. The Office of the Federal Environmental Executive (OFEE) is tracking all agencies' progress implementing EMSs through use of an annual scorecard. Each agency's "score" is then reported to the President.

The Assistant Secretary for Environment, Safety and Health (EH-1), as the Department's Agency Environmental Executive, is responsible for reporting DOE's progress annually to the Environmental Protection Agency. In early September 2003, EH-1 sent a memorandum to each Program Office requesting that line management designate points of contact to work with EH to provide the information needed to comply with the EMS progress reporting requirements. Each office has designated a point of contact for this purpose. The data in this Quarterly Status Report are provided by these points of contact.

The metrics, or milestones, in the Quarterly Status Report measure site-level progress in implementing environmental management systems. They reflect the site-level metrics established by the OFEE for the agency scorecards for 2003, 2004 and 2005. (Adjustments to the chart may be necessary if and when the OFEE refines the scorecards metrics as the 2005 goal draws closer. For example, this report includes a newly proposed milestone for 2004.) Additional information on the site-level EMS implementation metrics can be found at the end of this report.

If you have questions or comments about the Quarterly EMS Implementation Status Report, please contact Steven Woodbury, Performance Analysis and Compliance Reporting Unit, EH-43 (202-586-4371; [steven.woodbury@eh.doe.gov](mailto:steven.woodbury@eh.doe.gov)).

**OFFICE OF CIVILIAN RADIOACTIVE WASTE MANGEMENT  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track
<b>Yucca Mountain Geologic Repository Project</b>	2 <sup>nd</sup> Quarter CY04							

\* Proposed Federal (Site-Level) EMS Metrics

- Previously Documented
- *Newly Documented this Quarter*

Updated March 2004

Point of Contact: [dong.kim@rw.doe.gov](mailto:dong.kim@rw.doe.gov), RW-20E  
 Alternate: [scott\\_wade@notes.ymp.gov](mailto:scott_wade@notes.ymp.gov), YMP

**OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
National Renewable Energy Laboratory	●	●	●	●	●	●	●	●

\* Proposed Federal (Site-Level) EMS Metrics

● Previously Documented

● Newly Documented this Quarter

Updated March 2004

Point of Contact: [roselle.drahushak-crow@go.doe.gov](mailto:roselle.drahushak-crow@go.doe.gov), Golden Field Office

Alternate: [teri.harris@go.doe.gov](mailto:teri.harris@go.doe.gov), Golden Field Office

**OFFICE OF ENVIRONMENTAL MANAGEMENT  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
East Tennessee Technology Park	●	●	●	●				
Fernald Environmental Management Project								Site closing in 2006
Mound Site/ Miamisburg Closure Project								Site closing in 2006
Office of River Protection	●							
Paducah Site								
Portsmouth Gaseous Diffusion Plant								
Richland -- Fluor Daniels Hanford	●	●	●	●	○	●	●	
Richland -- Bechtel Hanford	●	●	●	●	○	●	●	
Rocky Flats Environmental Technology Site Closure Project	●	●	●	●	○	●	●	Site closing in 2006
Savannah River Site	●	●	●	●	○	●	●	●
Waste Isolation Pilot Plant	●	●	●	●	○	●	●	●
West Valley Demonstration Project	●	●	●	●	○	●	●	●

\* Proposed Federal (Site-Level) EMS Metrics

- Previously Documented
- Newly Documented this Quarter

Note: Portsmouth and Paducah currently have DOE Order 5400.1 in place; New contracts scheduled for award in 4<sup>th</sup> quarter FY04 will include DOE Order 450.1.

Updated March 2004. Point of Contact: [lawrence.bailey@hq.doe.gov](mailto:lawrence.bailey@hq.doe.gov), EM-3

**OFFICE OF FOSSIL ENERGY  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
Albany Research Center	●		●	●		●	○	
National Energy Technology Laboratory (MGN/PGH/NPTO)	●	●	●	●	○	●	●	●
Naval Petroleum and Oil Shale Reserves CO/UT/WY								
Strategic Petroleum Reserve	●	●	●	●	○	●	●	●

\* Proposed Federal (Site-Level) EMS Metrics

- Previously Documented
- Newly Documented this Quarter

Updated March 2004

Point of Contact: [craig.zamuda@hq.doe.gov](mailto:craig.zamuda@hq.doe.gov) , FE-7  
 Alternate: [connie.lorenz@hq.doe.gov](mailto:connie.lorenz@hq.doe.gov) , FE-7

**OFFICE OF LEGACY MANAGEMENT  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
<b>Grand Junction Office</b>								

\* Proposed Federal (Site-Level) EMS Metrics

● Previously Documented

● *Newly Documented this Quarter*

March 2004

Point of Contact: Rich.Bush@gjo.doe.gov, LM-50

**NATIONAL NUCLEAR SECURITY ADMINISTRATION  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
Bettis Atomic Power Laboratory	●	●	●					
Kansas City Plant	●	●	●	●	○	●	●	●
Knolls Atomic Power Laboratory (NY)	●	●	●					
Lawrence Livermore National Laboratory								
Los Alamos National Laboratory	○	○	90% complete					
Nevada Test Site	○	○	○	○	○			
Pantex Plant	●	○	○					
Sandia National Laboratories (CA)	○	○	○					
Sandia National Laboratories (NM)	○	○	○					
Savannah River Tritium Facility	○	○	○	○	○	○	○	○
Y-12 National Security Complex	○	○	○	In draft	In draft	○		

\* Proposed Federal (Site-Level) EMS Metrics

● Previously Documented

○ Newly Documented this Quarter

Updated March 2004

Points of Contact: [samuel.johnson@nnsa.doe.gov](mailto:samuel.johnson@nnsa.doe.gov), NA-124; [robert.peterson@nnsa.doe.gov](mailto:robert.peterson@nnsa.doe.gov), NA-117; [DenkoAR@NAVSEA.NAVY.MIL](mailto:DenkoAR@NAVSEA.NAVY.MIL), NA-30

**OFFICE OF NUCLEAR ENERGY, SCIENCE AND TECHNOLOGY  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
<b>Argonne National Laboratory (West)</b>	●	●	2 <sup>nd</sup> Quarter CY04	2 <sup>nd</sup> Quarter CY04				
<b>Idaho National Engineering and Environmental Laboratory</b>	●	●	●	●	●	●	●	●
<b>Idaho Advanced Mixed Waste Treatment Facility</b>								

\* Proposed Federal (Site-Level) EMS Metrics

● Previously Documented

● Newly Documented this Quarter

Updated March 2004

Point of Contact: [rajendra.sharma@hq.doe.gov](mailto:rajendra.sharma@hq.doe.gov), NE-70

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**POWER MARKETING ADMINSTRATIONS  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
Bonneville Power Administration	●	●	●	●				
Southwestern Power Administration	●	○	●	●	○	○		
Western Area Power Administration	●	●	●	○	○			

\* Proposed Federal (Site-Level) EMS Metrics

● Previously Documented

○ Newly Documented this Quarter

Bonneville Power Administration, updated March 2004

Point of contact: Steve Sander [srsander@bpa.gov](mailto:srsander@bpa.gov); Alternate: James Meyer [jrmeyer@bpa.gov](mailto:jrmeyer@bpa.gov)

Southwestern Power Administration, updated March 2004

Point of contact: [darlene.low@swpa.gov](mailto:darlene.low@swpa.gov)

Western Area Power Administration, updated March 2004

Point of contact: Jim Hartman [hartman@wapa.gov](mailto:hartman@wapa.gov) act

**OFFICE OF SCIENCE  
EMS IMPLEMENTATION STATUS**

	FY03 Federal Scorecard			FY04 Federal Scorecard*			FY05 Federal Scorecard*	
	Site EMS Policy Statement Issued (need not be a stand-alone document)	EMS Implementation Training Provided (to personnel establishing system)	Significant Environmental Aspects Identified	Measurable Environmental Objectives and Targets Established	Environmental Programs Established to Achieve EMS Objectives and Targets	EMS Awareness Training Program Established	All EMS Procedures Established (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review)	EMS In-Place; Self Declaration Protocol Completed or Third Party Certification/Recognition Obtained (i.e., ISO 14001 or National Environmental Performance Track)
Ames National Laboratory	●	●	●	○	scheduled 9/30/04	○		
Argonne National Laboratory (East)	●	●	●	scheduled 9/30/04	scheduled 9/30/04	○		
Brookhaven National Laboratory	●	●	●	●	○	●	●	●
Fermi National Accelerator	●	●	●	●				
Lawrence Berkeley National Laboratory	●	●	scheduled 6/30/04	scheduled 9/30/04	scheduled 12/30/04			
Oak Ridge National Laboratory	●	●	●	●	○	○	○	
Oak Ridge Institute for Science Education	●	●	●	●				
Pacific Northwest National Laboratory	●	●	●	●	○	●	●	●
Princeton Plasma Physics Laboratory	●	●	●	●	scheduled 9/30/04			
Stanford Linear Accelerator Center	●	●	●	●				
Thomas Jefferson National Accelerator Laboratory	○	●	scheduled 9/30/04	scheduled 9/30/04	scheduled 12/30/04			

\* Proposed Federal (Site-Level) EMS Metrics

● Previously Documented

○ Newly Documented this Quarter

Updated March 2004. Point of Contact: [sat.goel@science.doe.gov](mailto:sat.goel@science.doe.gov), SC-83

# EMS IMPLEMENTATION STATUS REPORTING

## I. Overview

The requirement for DOE sites to implement Environmental Management Systems (EMSs) as part of their Integrated Safety Management Systems (ISMS) was established in February 2001 (DOE Notice 450.4, later superseded by DOE Order 450.1). Several DOE sites have implemented EMSs, and many others have made significant progress toward this goal.

The process of implementing an environmental management system, or – in the case of DOE sites – ensuring that the elements of an EMS are fully integrated into the site ISM, involves many steps.

- Specific EMS elements required by DOE O 450.1 are identified in Attachment 3 of DOE Guide 450.1-1, issued on February 18, 2004  
<http://www.directives.doe.gov/pdfs/doe/doetext/neword/450/g4501-1.pdf>.
- DOE issued Implementation Guidance on February 12, 2004 (for use and comment) for integrating EMS into ISM  
<http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/g4501-2.pdf>
- A generic set of key EMS elements is identified in EPA guidance at <http://www.epa.gov/ems/info/sme4.htm>, and in Chapter 2 “Getting Started” of the *EMS Primer for Federal Facilities*, issued by DOE and EPA at <http://tis.eh.doe.gov/oepa/guidance/ems/emsprimer.pdf>.

### **A few key metrics have been identified for the Federal Government EMS Scorecard**

Executive Order 13148 (implemented within DOE by DOE O 450.1) establishes a date of December 31, 2005, for all appropriate federal sites to implement an EMS. It also requires agencies to submit an annual report on progress in implementing the requirements of the Executive Order. The Office of the Federal Environmental Executive (OFEE) (within the Council on Environmental Quality) prepares a Federal Agency Scorecard each year to measure agency progress toward this goal. The OFEE has identified a several key metrics for Federal agencies to report. The metrics for 2004 and 2005 are “proposed” and may be modified before they are finalized for inclusion in upcoming annual reports.

To support DOE’s reporting requirements under E.O. 13148 and DOE O 450.1, DOE has adopted these metrics. This information will also assist DOE leadership in assessing the Department’s progress in implementing its responsibility to implement EMS, and how program offices are meeting their responsibility to ensure that sites under their purview have implemented EMS by December 31, 2005.

## II. Description of EMS Metrics and Available Guidance

The following discussion addresses the site-specific criteria (metrics) identified by the OFEE, and references some of the available guidance.

### **CY03 Metric: Site has issued an EMS Policy Statement.**

For DOE, this criterion means: If a site has an ISMS, has it signed and issued a site EMS policy statement? This need not be a “stand-alone” document; for example, it may be part of an

integrated policy statement for the site environment, safety and health management system. However, a generic ISMS policy statement is not likely to meet this criterion. For purposes of the Department's annual E.O. 13148 Report and the OFEE's Federal Agency Scorecard, the policy statement needs to specifically address EMS. The EMS Policy Statement is discussed further in Section 6.1 of DOE G 450.1-1

<http://www.directives.doe.gov/pdfs/doe/doetext/neword/450/g4501-1.pdf>. A general discussion of EMS policy statements is also provided in Chapter 4 of EPA's EMS Guide at <http://www.epa.gov/owm/iso14001/ems2001final.pdf>.

**CY03 Metric: Site has provided EMS implementation training to the personnel establishing the EMS.**

For DOE, this criterion means: If a site has an ISMS, has it conducted EMS training for the staff who will ensure the integration of EMS elements into the ISMS? For an EMS to be successful, top management needs to endorse the process and identify the staff responsible for integrating EMS elements into the ISMS. These initial steps are described in Section 7 of DOE G 450.1-1 <http://www.directives.doe.gov/pdfs/doe/doetext/neword/450/g4501-1.pdf>. They are also described in Section 3 of the EPA EMS Guide at <http://www.epa.gov/owm/iso14001/ems2001final.pdf>, as well as Chapter 2 of the DOE/EPA Primer at <http://tis.eh.doe.gov/oepa/guidance/ems/emsprimer.pdf>.

Sites need to identify for themselves what training is necessary for the staff responsible for integrating EMS elements into ISMS to succeed at that task. It would likely include instruction about EMS elements and documenting implementation of EMS elements.

Training has been offered by Regional EPA offices, as well as by private vendors and consultants. EMS implementation training materials have also been made available by EPA.

**CY03 Metric: Site has identified its significant environmental aspects.**

For DOE, this criterion means: If a site has an ISMS, has the site conducted a process to identify the environmental aspects of its activities and identified which of these aspects are significant? This process results in a documented list of significant environmental aspects, which is used to establish environmental objectives and targets, and to establish appropriate hazard controls for any activities which could result in environmental impacts of concern. The process of identifying significant environmental aspects is described in Section 2 of DOE G 450.1-2 at <http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/g4501-2.pdf>, as well as Section 4 of the EPA Guide at <http://www.epa.gov/owm/iso14001/ems2001final.pdf>.

**CY04 Metric: Site has documented measurable environmental objectives and targets.**

Once the significant environmental aspects of the site's activities are identified, the site is to establish (and document) measurable environmental objectives and targets. Objectives and targets are to be reflected in the annual goals and performance measures established as part of the ISMS annual review. Guidance on establishing environmental objectives and targets is included in Section 3 of DOE G 450.1-2 at <http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/g4501-2.pdf>. Establishing objectives and targets is also discussed in Section 4 of the EPA guide at <http://www.epa.gov/owm/iso14001/ems2001final.pdf>.

**CY04 Metric: Site has established environmental management programs specifically to achieve each of its environmental objectives and targets.**

For a DOE site, this means that specific programs of action have been established and implemented designed to achieve each of the established environmental objective and targets. Metrics have been established, and data are collected and reported to track progress toward achieving the environmental objectives and targets. [Note that this CY04 metric has been added by the Interagency Environmental Leadership Workgroup since the December Status Report.] Guidance for establishing environmental management programs is provided in DOE G 450.1-2 at <http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/q4501-2.pdf>.

**CY04 Metric: Site has developed a program for EMS awareness training.**

When ISMS was implemented at sites, training was provided to all workers about the management system, and how it affects them. Once the ISMS (procedures, and system description document) is modified to include EMS elements, such awareness training is again appropriate. The purpose of the awareness training is to inform all employees of the revised management system, and how it affects them. Guidance is provided in Section 7.4 of DOE G 450.1-2 at <http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/q4501-2.pdf>. Training is also discussed in Section 4 of the EPA Guide at <http://www.epa.gov/owm/iso14001/ems2001final.pdf>.

**CY05 Metric: Site has established all EMS procedures (e.g., objectives and targets, aspects and impacts, corrective action, self-assessment, management review).**

For DOE sites, this means that

- existing ISMS documents and procedures have been systematically reviewed and revised to ensure that they fully and explicitly incorporate EMS elements pursuant to DOE O 450.1;
- any new procedures (such as identification and documentation of significant environmental aspects, and establishing environmental objectives and targets) are complete; and
- these changes are reflected in a revised ISM system description document (per DOE O 450.1).

Guidance on establishing procedures is provided in Section 7 of DOE G 450.1-2 at <http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/q4501-2.pdf>.

**CY05 Metric: Site has EMS in place and has completed the Self Declaration Protocol in accordance with agency policy or have obtained third-party certification.**

For DOE sites, this means that they have

- obtained third-party registration of their EMS (several DOE sites are registered as conforming to the ISO 14001 Standard), OR
- been recognized by the EPA National Environmental Performance Track (NEPT) as having implemented an effective EMS, OR
- they have undergone a review, demonstrating to the satisfaction of the DOE Contracting Official/Program Official, that the EMS elements required by DOE O 450.1 are in place, and that they are effectively implemented as part of the ISMS (where applicable).

Guidance on self-declaration is provided in Section 9 of DOE G 450.1-1 at <http://www.directives.doe.gov/pdfs/doe/doetext/neword/450/q4501-1.pdf>.

Guidance on conducting periodic top management reviews of the EMS/ISMS is provided in Section 9 of DOE G 450.1-2 at <http://www.directives.doe.gov/pdfs/doe/doetext/draftord/450/q4501-2.pdf>.

### **III. Summary**

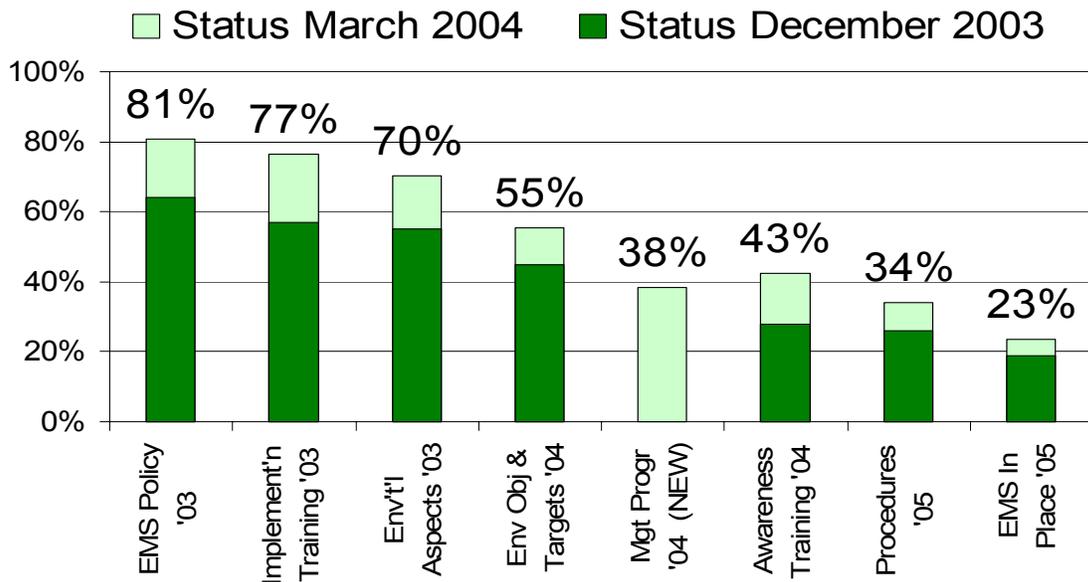
Available guidance, as noted above, outlines EMS elements and implementation steps, which need to be adapted to the needs of a specific site. The metrics identified by the OFEE reflect a few key activities which were seen as essential and representative steps along the way. Sites which have developed, or are in the process of developing a systematic process for implementing the requirements of DOE O 450.1, consistent with existing guidance, should have little difficulty knowing when these metrics are achieved.

A summary of DOE's progress in meeting these metrics, both Department-wide and by Program Office, is presented in Figure 1.

Figure 1

# Summary of Environmental Management System Implementation Status March 2004

Percentage of DOE Sites Meeting EMS Milestones



Percentage of Sites Meeting EMS Milestones -- by PSO

