



Implementing E.O. 13423 at the Department of Energy

Andy Lawrence

Director

Office of Nuclear Safety, Quality Assurance,
and Environment

June 20, 2008



Overview



- Integration of new requirements into existing EMS
- Additional EMS Requirements
- Integration of energy, transportation, and other sustainable practices into EMS
- Coordinating Implementation Within DOE
- Integration of EMS within ISMS



New Requirements to Integrate into EMS



- EMS must “reflect the EMS elements and framework found in ISO 14001:2004” [*§ 4.b.(1)*]
- EMS must have
“a formal audit by a qualified party outside the control or scope of the EMS”
 - before declaring initial implementation of the EMS [*§ 4.d.(1)-(2)*]
 - every three years [*§ 4.d.(3)*]



Additional EMS Requirements



EO 13423 establishes additional requirements for the Department. These include:

- Environmental Management Systems (EMSs) are to serve as the primary management approach for addressing the environmental aspects of internal agency operations and activities, including the environmental aspects of energy and transportation functions. [§4.c.]



Additional EMS Requirements (con't)



- EMSs shall include specified compliance management elements, including an environmental compliance audit program that identifies compliance needs and possible root causes of non-compliance [§4.b.(4)]
- A separate Compliance Management Plan *is not* required.



Notices of Violation and Fines



During the 12-month period ending May 2008, DOE sites received:

- Received Notices of Violation for
 - Hazardous Waste (16)
 - Water (11)
 - Air (2)
 - Other (6)
- Were Assessed Fines of \$3,030,537.00



“Significant Non-Compliers” (SNC)



- WIPP Isolation Pilot Plant, RCRA
- Y-12 Plant, CWA/ RCRA
- East Tennessee Technology Park, CWA/RCRA
- Idaho National Laboratory, RCRA
- Los Alamos National Laboratory, RCRA
- Hanford Site, RCRA
- Oak Ridge National Lab, CWA
- Paducah Gaseous Diffusion Plant, CWA

Data compiled June 3, 2008



Integrating New Sustainable Practices into EMS



EO 13423 requires the Department to implement Sustainable Practices for:

- energy efficiency, greenhouse gas emissions avoidance or reduction, and petroleum products use reduction
- renewable energy, including bio-energy
- water conservation
- acquisition (environmentally preferable purchasing)



Sustainable Practices (cont.)



- pollution and waste prevention, and recycling
- reduction or elimination of acquisition and use of toxic or hazardous chemicals
- high performance construction, lease, operation, and maintenance of buildings
- vehicle fleet management
- electronic equipment management

These should be reflected in the EMS.



Coordinating Implementation Within DOE



Requirements from E.O. 13423 are addressed in both
DOE O 450.1A, and DOE O 430.2B

DOE O 450.1A *Environmental Protection Program*

- establishes EMS requirements
- establishes goals and addresses specific sustainable environmental practices, including
 - environmentally preferable purchasing
 - pollution prevention and waste reduction
 - post-consumer material recycling
 - toxic or hazardous chemicals and materials use and release reduction
 - life-cycle environmental management of electronic assets



Coordinating Implementation Within DOE (cont.)



DOE O 430.2B *Departmental Energy, Renewable Energy and Transportation Management*
(revision issued February 2008)

- addresses key elements of the Department's TEAM Initiative, and
- establishes goals and requirements for
 - energy
 - fleet
 - water conservation
 - sustainable design/high performance buildings

DOE O 430.2B states that these programs are to implemented through the site EMS [§4.1.]



New Dates and Deadlines



- DOE managers are to declare DOE site EMSs in conformance with the new requirements by **June 30, 2009**.

This declaration must reflect a formal EMS audit conducted within the previous three years “by a qualified party outside the scope of the EMS.”

[§ 4.d.(2); 5.c.(1); 5.d.(1)]

- Where DOE determines that a new EMS is needed for a (new or reorganized) facility/organization, DOE will establish the date for implementation in consultation with the Federal Environmental Executive. *[§5.d.(6)]*



Integration of EMS with ISM Systems



Insofar as possible EMS requirements are linked to existing requirements in DOE M 450.4 *ISMS Manual*.

Existing req'ts in DOE M 450.4

- DOE field offices and DOE program offices are to implement ISM Systems
- DOE offices are to set annual performance expectations and performance objectives
- DOE offices are to conduct annual ISMS effectiveness reviews

Related req'ts in DOE O 450.1A

- DOE field offices and DOE program offices are to incorporate specified EMS elements in their ISM Systems
- DOE offices are to identify significant aspects; establish goals and measurable targets [*§ 4.e.*]
- DOE offices are to address implementation of DOE O 450.1A requirements in the annual reviews [*§5.c.(2); §5.d.(2)*]



Integration of EMS with ISM Systems (cont.)



- DOE field and program offices are required to incorporate specified EMS elements into their existing Integrated Safety Management (ISM) Systems. [§5.d.(2),(8) §5.c.(2),(4),(5)]

These offices *are not* required to implement EMSs.

- DOE field and program offices are required to incorporate in their ISM systems appropriate performance objectives, measures and commitments to support compliance with applicable environmental protection requirements. [§5.c.(1); §5.d.(1)]



HS-20 Support



- EMS Guidance: update, revise, consolidate
- Support to the Field
 - EMS Assistance Network
 - Environmental Sustainability Network
- Assistance to the Field
 - EMS development
 - Environmental sustainable practices
 - Interface with EERE and other TEAM elements



Summary



- Build on existing EMSs
- Build on and extend existing sustainable practices
- Integrate sustainable practices into EMS
- Continue to integrate EMS into ISM systems
- Our office will support and assist you