

**ISMS Training Document**  
**Track 2, Activity 16 – September 2011**  
**Environmental Management System (EMS)**

**Activity**

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Describe the features of the Oak Ridge Office (ORO) contractors' Environmental Management Systems (EMS) that encompass such environmental management areas as environmental protection and compliance, waste minimization and pollution prevention, cultural resource management, sustainable design, green purchasing, and the National Environmental Policy Act (NEPA). Describe how EMS complements Integrated Safety Management Systems (ISMS).

At the completion of this activity, fill out the Self-Certification Form certifying that you have read this activity sheet.

**Note:** When regulations, Department of Energy (DOE) directives, or other industry standards are referenced in this ISMS activity, please use the most recent version. In addition, please note that DOE Guides provide preferred, non-mandatory, supplemental information about acceptable methods for implementing requirements, including lessons learned, suggested practices, instructions, and suggested performance measures. Guides do not impose requirements but may quote requirements if the sources are adequately cited. Alternate methods may be used if it can be demonstrated that they provide an equivalent or better level of performance.

**Key Documents**

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- [DOE O 436.1, \*Departmental Sustainability\*](#)
  - [DOE O 451.1, \*National Environmental Policy Act Compliance Program\*](#)
  - [DOE/EH-0573, \*Environmental Management Systems Primer for Federal Facilities\*](#)
  - [Executive Order \(EO\) 13423, \*Strengthening Federal Environmental, Energy, and Transportation Management\*](#)
  - [Executive Order \(EO\) 13514, \*Federal Leadership in Environmental, Energy, and Economic Performance\*](#)
  - [ORO Directives Management Group, \*Key Management Documents\*](#) (Internal Link)
  - [ORO Management System Description/Quality Assurance Program – Part A \(MSD\)](#) (Internal Link)
  - [ORO Management System Description/Quality Assurance Program – Part B \(QAP\)](#) (Internal Link)
  - ORO Office of Science Federal employees should also refer to the Office of Science Management System (SCMS): Environment, Safety, and Health, Subject Areas: *Environmental Authorization and Implementing the National Environmental Policy Act (NEPA) Within the Office of Science (SC)*, <http://scms.sc.doe.gov/>

**What's In It For Me**

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An effective EMS provides Federal managers with a predictable structure for managing, assessing, and continuously improving the effectiveness and efficiency of the management of their environmental activities. An EMS approach builds in periodic review by top management and emphasizes continuous improvement instead of crisis management.

The systematic nature of the EMS allows ORO to focus on management

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implementation and take a more inclusive and proactive view of environmental protection. By demonstrating improved environmental performance, an EMS can open the door to improved relations with regulators, stakeholders, and the public. By itself, an EMS does not guarantee performance or compliance. Regulators, communities, and environmental groups must see credible evidence that an EMS is being used to ensure compliance and advance environmental and mission goals.

The completion of this activity will help you gain an understanding of how the ORO sites' EMSs are implemented.

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**Definition**

Environmental management systems are “that part of the overall management system which includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.” (ISO 14001, Environmental Management System Standard)

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**Requirements**

DOE O 436.1 requires DOE sites to implement an Environmental Management System that is consistent with ISO 14001:2004. The EMS must ensure that the site complies with all environmental requirements, including applicable Executive Orders, laws (including the National Environmental Policy Act and the National Historic Preservation Act), regulations, and other requirements. In addition, the EMS must incorporate a Site Sustainability Plan that describes how the site will contribute to the environmental, energy, and transportation goals established in Executive Orders 13423 and 13415.

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**EMS Elements**

The basic elements common to Environmental Management Systems are:

1. *Policy*: A policy statement endorsed by top management.
2. *Planning*: Identifying how operations impact the environment, setting goals and targets for reducing impacts, tracking legal and other requirements, and developing systems for environmental management.
3. *Implementation and Operation*: Assigning roles and responsibilities, training, communication, documentation, and emergency preparedness.
4. *Checking and Corrective Action*: Establishing ways to monitor, identify and correct environmental problems.
5. *Management Review*: Management periodically stepping back and evaluating the performance of the EMS as a whole.

These basic elements of an EMS should already be familiar to most Federal managers. This familiarity allows agencies to use and adapt existing environmental management activities. Adopting an EMS approach rarely requires beginning from scratch. Many facilities will find they have most or all the elements of an EMS already in place. Complex sites, such as those with numerous program elements or host-tenant relationships, may be faced with multiple, inconsistent, or unrelated elements of environmental programs. A formal EMS can help draw together such elements, producing a clearly defined environmental policy statement and an integrated framework for environmental

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activities.

The ORO contractors at all major facilities were required to have an EMS in place and implemented by June 30, 2009.

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**To Learn More**

Click on these documents for more information about the ORO Environmental Management System.

- [DOE O 451.1, National Environmental Policy Act Compliance Program](#)
  - [Executive Order \(EO\) 13423, Strengthening Federal Environmental, Energy, and Transportation Management](#)
  - [ORO Directives Management Group, Key Management Documents](#)  
(Internal Link)
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  - <http://www.fedcenter.gov/programs/ems/>
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