The Office of Environment, Safety and Health is committed to promoting environmental excellence through sound stewardship practices at the Department of Energy (DOE). Through the implementation of Environmental Management Systems (EMS), DOE will protect the environment in a cost-effective manner while achieving mission goals.

ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

An EMS is a continuous cycle of planning, implementing, evaluating, and improving processes and actions undertaken to achieve compliance, pollution prevention and continuous environmental improvement goals. EMSs offer a systematic way to consider natural resource protection and conservation in all aspects of DOE planning and decision making.

Executive Order (E.O.) 13148*, Greening the Government Through Leadership in Environmental Management*, requires Federal Agencies to implement EMSs at all appropriate facilities by **December 31, 2005.**

In furtherance of the goals of this E.O., DOE issued DOE O 450.1, *Environmental Protection Program* in January 2003. This Order requires DOE elements to integrate an EMS into sites' Integrated Safety Management System (ISMS), hereinafter referred to as ISMS/EMS.

ISMS/EMS INTEGRATION

The integration of an EMS into ISMS provides a unified site-wide approach for the management of resources, the control of risks and the achievement of environment, safety and health goals. The ISMS/EMS provides a framework for linking those elements into an effective management system that directly supports the site's major missions.

As part of integrating EMSs into site ISMSs, DOE elements should consider specific environmental interactions and the impact these interactions will have to achieving a compliant environmental program. A site's ISMS and information from existing environmental programs provide a good starting point to crosswalk those EMS requirements in Order 450.1 with the site's ISMS. For example, existing site information contained in Annual Site Environmental Reports, National Environmental Policy Act (NEPA) documents, permit applications and monitoring reports can provide a solid foundation for meeting ISMS/EMS data needs.

THE BENEFITS OF IMPLEMENTING ISMS/EMS

Implementing an ISMS/EMS can result in both business and environmental benefits for DOE elements. An ISMS/EMS can be a powerful tool for:

- Achieving mission goals, improving business practices, and environmental performance;
- Enhancing environmental compliance by preventing pollution, conserving resources and reducing and mitigating risks;
- Addressing stewardship and legacy management issues systematically;
- Improving creditability with regulators and the local community;
- Increasing efficiency and reducing cost;
- Improving employee awareness of environmental issues and responsibilities.

DOE elements that have implemented ISMS/EMS report that:

"Our efforts have paid off and environmental compliance has shown a substantial improvement."

"We've improved the accuracy of our reports and permit applications to regulatory agencies."

"Our Pollution Prevention projects are expected to save over $150,000 annually."

SOURCES OF ASSISTANCE

DOE G 450.1-1, *Implementation Guide for Use with DOE O 450.1, Environmental Protection Program*, and DOE G 450.1-2, *Implementation Guide for Integrating Environmental Management Systems into Integrated Safety Management Systems*, have been prepared to provide information on acceptable methods for meeting the requirements of Order 450.1, and detailed guidance relating to integration of EMSs into a site's ISMS.

DOE G 450.1-3, *Environmental Guidelines for Development of Cultural Resource Management Plans (Update)* and DOE G 450.1-6, *Ground Water Surveillance Monitoring Implementation Guide for Use with DOE O 450.1 Environmental Protection Program* have been issued to assist sites in meeting additional requirements of Order 450.1. Additional guidance on implementing the Pollution Prevention requirements of Order 450.1 will be issued in the near future.

In addition to the guidance documents mentioned above, the Office of Environment, Safety and Health has a website which provides the most up-to-date information to assist sites in implementing EMSs and it can be found at *http://www.eh.doe.gov/oepa*.

Information exchange and lessons learned tele-video conferences are also available to assist sites in meeting the implementation deadline. For more information, please contact Lee Banicki (EH-41) at Leroy.Banicki@eh.doe.gov

EMS POINTS OF CONTACT

For specific information, please contact:

Office of Environment, Safety and Health, Larry Stirling, EH-41
John.Stirling@eh.doe.gov

Office of Environmental Management
Lawrence Bailey, EM-3
Lawrence.Bailey@em.doe.gov

Office of Civilian Radioactive Waste Management,
Dong Kim, RW-20E
Dong.Kim@rw.doe.gov

Office of Nuclear Energy, Science and Technology,
Rajendra Sharma, NE-70
Rajendra.Sharma@hq.doe.gov

Office of Science, Sat Goel, SC-83
Sat.Goel@science.doe.gov

Office of Fossil Energy, Craig Zamuda, FE-7
Craig.Zamuda@hq.doe.gov

Office of Legacy Management, Richard Bush, LM-50
Richard.Bush@netl.doe.gov

Office of Energy Efficiency and Renewable Energy,
Golden Field Office, Roselle Drahushak-Crow
Roselle.drahushak-crow@go.doe.gov

National Nuclear Security Administration, Bob Peterson,
NA-117
Robert.Peterson@nnsa.doe.gov

Bonneville Power Administration, Steve Sander
Srsander@bpa.gov

Southwestern Power Administration, Darlene Low
Darlene.Low@swpa.gov

Western Area Power Administration, Jim Hartman
Hartman@wapa.gov

IMPLEMENTING ENVIRONMENTAL MANAGEMENT SYSTEMS AT THE DEPARTMENT OF ENERGY

OFFICE OF ENVIRONMENT, SAFETY AND HEALTH

APRIL 2004