

Environmental Management System (EMS)

Center Directors' Retreat
Charleston, SC
04/18/2006



What is an Environmental Management System (EMS)?

- A formal set of management processes and practices that enables an organization to manage and reduce its environmental impacts and operate with greater efficiency and control
 - Manage the environmental affairs and issues on an ongoing basis where it interacts with or affects the environment, including all the applicable legal requirements (sustained by the **PLAN, DO, CHECK, ACT** EMS model)
 - The NCCOS self-declaration 3rd party audit reported only minor findings that have been/and currently are being corrected as follows;



Finding #	EMS Element	Finding	Location	Corrective Action Planned	Corrective Action Status	Date Completed
1	Roles and Responsibilities	The EMS at NCCOS is still dependent on just a few EMS team members at each facility. As the system matures, emphasis should be placed on system continuity regardless of people.	NCCOS	The EMS Team should be broadened to include other functions such as HR, Budget, Training, Procurement, IT, research and facility level teams should be formalized. Training should be provided (if necessary), procedures written and roles and responsibilities clearly defined.	Completed NCCOS EMS Team – Broadened to include budget, communications, procurement and IT Facility EMS teams formalized for SSMC, Beaufort, Oxford, and Charleston	03/03/06
2	Training	Compliance and other competency training (such as regulatory required training) are given on a recurring basis; this forms the knowledge to perform work in an environmentally sound manner. Tracking of competency training at CCFHR needs improvement.	CCFHR	Continue to robust the existing system for tracking Competency Training at CCFHR.	Completed Training matrix was changed to include the date that training is next due in addition to tracking the dates training was last completed by staff.	11/15/05
3	Operational Controls	Numerous work instructions are available at the EMS website, both generic and facility specific, but they are not yet integrated into day-to-day activities. Further emphasis on improving work instructions is required.	NCCOS	Plan and schedule training sessions on Work Instructions. Update or modify work instructions to better meet facility specific requirements.	Training on the work instructions completed by each of the facilities. The NCCOS Activities with Significant Impacts were reviewed and combined into 10 activities. Completed 3/10/06 Work instructions will now be reviewed and updated based on those changes and facility specific requirements: Scheduled for 06/10/06	12/1/05

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4	Procurement	Local procedures for communicating significant environmental aspects to contractors and suppliers were not available at Charleston or Beaufort.	CCFHR CCEHBR	<p>Develop procedure for communicating with suppliers and vendors.</p> <p>Train procurement professionals in their responsibilities, ensure appropriate steps are taken and monitor performance.</p>	<p>The NCCOS EMS Teams have been made aware that NCCOS uses the NOAA SECO standard for communicating significant environmental aspects to contractors and suppliers.</p> <p>Scheduled for 06/10/06</p>	
5	Procurement	NOAA contracts managed from Kansas City are not integrated into the site-specific EMS. Contractors and suppliers are not aware of site-specific environmental issues.	NCCOS	Communicate, to facility managers, the importance of discussing environmental requirements of construction or renovation with contracting officials. Include a local EHS representative in the pre-construction planning process.	Scheduled for 06/10/06	

Important EMS Web Sites

- SECO EMS Website

http://www.seco.noaa.gov/ENV/EMS/EMS_index.html

- NCCOS EMS Website

<http://www.seco.noaa.gov/EMS/NCCOS/index.htm>

- NCCOS Web EMS Awareness Training

<http://www8.nos.noaa.gov/nccos/ems/html/starttutorial.aspx>



The EMS ties together an organization's environmental programs into a single integrated system that can be leveraged to drive improvement



Increase Efficiency

- Reduce Costs
- Free up personnel
- Compress Schedules
- Increase Capacity

Increase Control Over Risks

- Avoid breaks in operational continuity
- Accurately pinpoint weaknesses & future failures
- Efficiently focus resources on weaknesses

Improve Performance

- Reduce environmental impacts
- Avoid environmental costs
- Improve stakeholder perceptions

Environmental Management System (EMS)

- ***Executive Order 13148, Greening the Government Through Leadership in Environmental Management***, required that all Federal agencies implement an Environmental Management System (EMS) at appropriate facilities by December 31, 2005.
- Based upon an external second-party audit which confirmed that NCCOS' EMS conforms to the requirements of Section 401 of E.O. 13148, ***NCCOS self-declared their EMS on December 29, 2005.***
- The self-declaration audit reported only minor findings which are being corrected at the present time.



Summary of an EMS

Step 1: Implement the System

Step 2: Start Using the System

Design the Process for -

- Identifying Risks
- Managing/Controlling Risks
- Assessing Performance
- Integrating Improvements

Develop Procedures for -

- Communication
- Training
- Contracting
- Procurement
- Recordkeeping
- Assessing, etc

Plan

- Identify risks requiring management
- Establish objectives for risk management

Implement (Do)

- Implement programs to manage risks
- Place controls on high risk activities

Improve (Act)

- Identify performance trends
- Identify improvement priorities

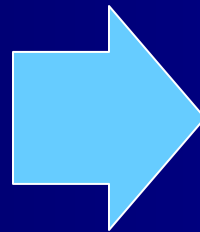
Review (Check)

- Monitor programs and controls
- Conduct system assessment



Significant Environmental Aspects

**The Ways NCCOS
Activities and
Operations Interact
with the Environment**



1. Air Emissions
2. Cultural Resources
3. Hazardous Materials
4. Hazardous Waste
5. Land
6. Medical Waste
7. Natural Resources
8. Noise
9. Special Waste
10. Toxic Substances
11. Waste Water
12. Water Quality
13. Solid Waste



First Steps in Implementing an EMS

- *Securing Time and Resource Commitment by Management.* This is absolutely critical!
- Draft and sign an *Environmental Policy*
- Designate an EMS Management Representative and an internal EMS Team using FTEs and contractors (a key component for success).
- Follow the recommended strategy that DOC/NOAA has developed for building an EMS (*DOC EMS memo* dated 04/22/03).
- Take advantage of available help including NOAA's Safety and Environmental Compliance Office and offices with established EMS's.



EMS Awareness Training

- NCCOS developed a web based EMS Awareness Training for its employees that is being *adopted and utilized by state agencies and other federal government facilities.*
- A copy of the source code for the NCCOS EMS Awareness Training is available through our website.

<http://www8.nos.noaa.gov/nccos/ems/html/starttutorial.aspx?src=visitor>



Anticipated Benefits to NCCOS

- Compliance with E.O. 13148 and NOAA directives
- Standardization of Processes across NCCOS
- Decreased environmental liability
- Some cost savings in energy, waste disposal
- Improved recycling opportunities
- Enhanced cross-functional integration with employees and collaborators
- Increased community stewardship and public perception



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What Does it Really Mean?

- Resources available to facilitate EMS implementation (e.g. NOAA EMS Development Website, possible contractor support through SECO).
- Considerable up front time and commitment from managers and employees to implement (levels off).
- Allows us to continually improve the management of NCCOS's environmental matters.
- An effective EMS will create a better working environment for our employees and collaborators (safety culture).



Questions ?

- EMS works through YOU! Its an employee-driven system with regular management reviews.
- If you have questions/suggestions regarding EMS or anything about this presentation contact the NOS EMS Representative, Jean Durosoko at 301-713-3050; or the NCCOS EMS Representative, Rick Meitzler at 843-762-8842.



