

Environmental Management in a Decentralized Organization

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MEDICAL SCHOOL
3 HOSPITALS
120 HEALTH CENTERS



38,000 STUDENTS



433,000 ALUMNI

EMS
Challenge



\$650,000,000
RESEARCH



19 SCHOOLS & COLLEGES



PLANT OPERATIONS



BUSINESS AND FINANCE



ATHLETICS

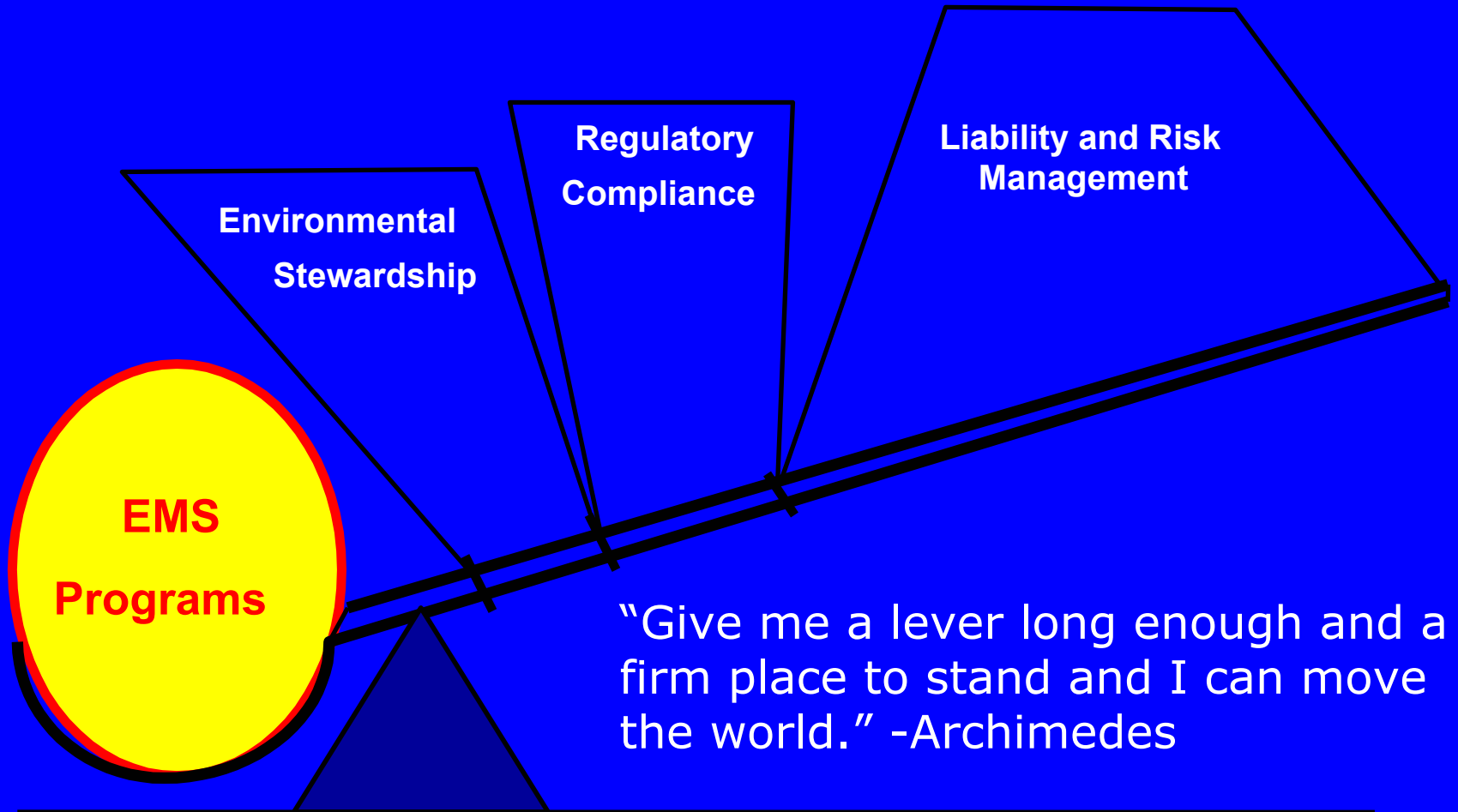
Questions, questions, questions!!!

- Can we get buy in from the top down? (*very difficult*)
- Can one system fit all needs? (*not in 1995*)
- What system is appropriate? (*unknown at the time*)
- Should system incorporate all aspects of EHS? (*yes!*)
- Can existing U-M programs fit into the system? (*a driving factor*)

Selling the Program

- What are the major objectives of the EHS programs:
 - Compliance
 - Financial Responsibility
 - Social Responsibility
 - Sustainability
- What is the driver for the program to go beyond compliance needs?

Finding the Drivers



Finding the System

- In 1995 started looking for a model to follow
- ISO 14001 was close, but did not fit the organization and no need for ISO certification
- No system fit all needs so used the UM M-Quality system to build our own based loosely on an ISO model and existing operations - minimal impact

ISO Model

- Policy
- Aspects
- Legal requirements
- Objectives/targets
- EM program
- Structure/responsibility
- Training
- Communication
- Documentation
- Document control
- Operational control
- Emergency preparedness
- Monitoring system
- Corrective action plans
- Audit
- Management review

Policy Statement in Standard Practice Guide

The U-M will provide and maintain a safe and healthy environment for faculty, staff, students, and visitors to the various campus facilities and properties owned by the University. This policy applies to and will be accomplished by all U-M faculty, staff, and students, working toward proactive regulatory compliance, environmental stewardship, and risk management.

EHS Aspects - Step 1: Program Areas

- Hazardous material management & remediation
- Biological & lab safety
- Industrial hygiene
- Community health
- Environmental compliance management
- Environmental stewardship & pollution prevention
- Radiation safety
- Diving Safety

Step 2: Aspects of Program Area

- Each manager:
 - Identifies key EHS aspects for the area
 - Establishes annual goals & objectives to address the aspects
 - Monitors for new or changing requirements
 - Prepares Guidelines for educating and communicating
 - Prepares annual summary (audit) of accomplishments for the year

Example of IH Program

- Representative Aspects of program area:
 - Asbestos Management Program
 - Blood borne Pathogen Exposure Control Plan for Non-medical/non-lab Staff
 - Emergency Evacuation Plan
 - Glove Guide
 - Hazard Communication and Material Safety Data Sheet Program
 - Indoor Air Quality Assessments
 - Noise and Heat Stress Monitoring
 - Occupational Exposure to Lead and Asbestos
 - Personal Protective Equipment Program

Documentation, Tracking, Audit

Department	Group	Goal	Target Date	Status	Completed?
A - Construction Management	construction safety program	hire const. Safety specialist (CSS rep)	Oct-00	completed 11-00	Y
		develop contractor prequalification process	Dec-00	final draft pending approval by Marina as of 2/01	
		develop & implement CM training	Jun-01	transfer this responsibility to new CSS rep	Y
		conduct PPE assessment training	Dec-00	new CSS rep completed PPE trg for FPD 11/00; Pending CM training as of 12/00	Y
A - Crane safety	as applicable	retain crane inspection co to perform initial inspections and training	Oct-00	completed 12/00	Y
		establish annual inspection program	Dec-00	completed inspections scheduled 1/22 - 2/30/01 and will be repeated annually	
		develop OSEH guideline	Mar-01		
A - SSEL phase II	EECS	oversee phase II upgrade	Sep-00	ongoing	
A - SSEL ER plan	EECS	develop written ER compliance plan - work with Tim Brock	Jun-01	initial draft to Tim 9/00; second more detailed draft to Tim 1/01	
		develop and coordinate ER protocols for OSEH, DPS, SSEL, FMO	Sep-00		Y
		train AAFD on protocols	Oct-00		Y
		train OSEH staff on protocols	Nov-00	Y - Lisa Stowe completed this portion	Y
B - Lead Compliance plan	Housing	develop comprehensive lead compl. Plan	Jun-01	initial draft to Housing 6/00	
		revise UM Guideline based on Housing plan & new EPA std.	Dec-00	completed, reflect changes in comprehensive plan	Y
PPE Guidelines (added 12-00)		revise PPE guidelines to streamline purchase of shoes and glasses	Dec-00		Y

Guidelines

- Use “Guidelines” instead of “Policies”
 - Policies require approval at Regent level!
 - Guidelines are fast to prepare, flexible for changes
 - Guidelines readily accepted in academic side of the house
- Lay out why, who does what, how it is done, references

Sample List of Guidelines on Website

- Anesthetic Gas Use (Research)
- Asbestos Management Program
- Biohazardous (Medical) Waste Disposal
- Biological Safety Cabinets
- Building Emergency Action Plan
- CDC Select Agents
- Confined Space Entry
- Departmental "Safety Coordinators"
- Environment, Health, Safety and Waste Minimization Programs

Program Documentation and Communication

- No formal “Program Plan” where everything is in one neat package
- Use the Website as our Program Plan to document and communicate
[www.umich.edu/~oseh]
- Flexible for changes, accessible to all

Management Review

- Requirement was already in place to provide annual report of activity
- Objectives spreadsheets facilitate the document preparation
- Level of activity shown on spreadsheets help:
 - Justify programs to management
 - Employee performance evaluations

Does the System Work?

- Controls Unit operations
- Guides new construction activity
- Helps Purchasing know what to look for
- EPA multi-media audit in 2000 - they downloaded our website for documentation
 - Three NOVs from the audit
 - No penalties because were implemented before they could issue the reports
- Ease of integrating new security programs

Conclusion

- System not as formal as an ISO type system
- Easy and flexible, using existing normal management practice
- Guidelines allow flexibility for independent operations on campus - can tailor to the need
- Not a command & control operation - builds on guidance and partnership with the units to achieve