

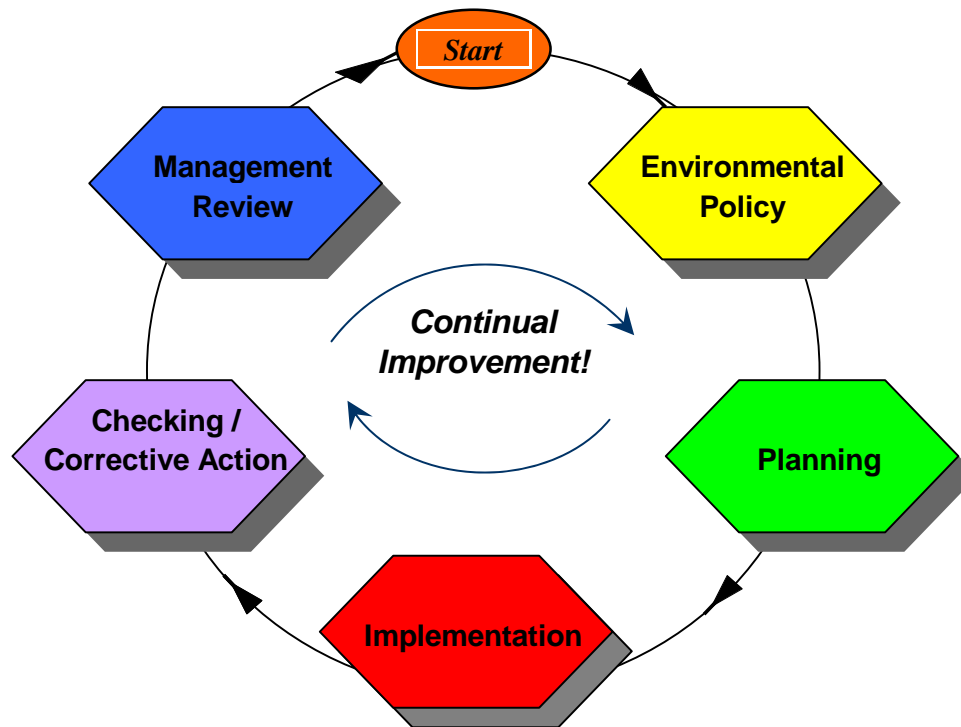


EMS: The State in the Art
Using EMS to Succeed in Environmental Regulation

ISO 14001... What is it?

- ISO 14001 is a voluntary international standard that sets requirements for the establishment of an environmental management system (EMS).
- ISO 14001 includes a voluntary registration similar to the ISO 9000 quality management system standard and to OSHA's VPP that "validates" the system is working.

ISO 14001 in Simple Terms



What ISO14001 Contains...

- Environmental Policy
- Environmental Aspects
- Legal and Other Requirements
- Objectives & Targets
- Environmental Management Programs
- Structure & Responsibility
- Training, Awareness, and Competence
- Records
- Management Review
- Communications
- Environmental Management System Documentation
- Document Control
- Operational Control
- Emergency Preparedness and Response
- Monitoring and Measurement
- Non-conformance and Corrective and Preventative Action
- Environmental Management System Audits

EMS defined in plain terms....

- How you do things with regards to the environment as you conduct everyday business OR
- How you manage your environmental compliance, risk, and impacts in the way you conduct business

Why are states adopting EMS in their agencies?

- More efficient way of managing the environment with limited resources (people, \$\$\$'s, time)
- Save money and reduce their environmental impact
- Integrate environmental concerns into “how they do business” instead of “after the fact”
- Gain state and federal regulatory incentives and funding
- Improve credibility with the public - Poor environmental performance taints reputations
- Set the example so their contractors and subcontractors will follow
- Respond to industry pressure or legislative pressure

Advantages ADEQ had in implementing its EMS Program

- EPA funding to help get it done
 - EPA P² Incentive grant
 - \$105,000; 50% state match
 - 2-year grant period
- Not mandated to do it
- Flexible timeline for implementation
- Good models from other state agencies (Texas, Virginia, California)
- Supported by industry in Arkansas



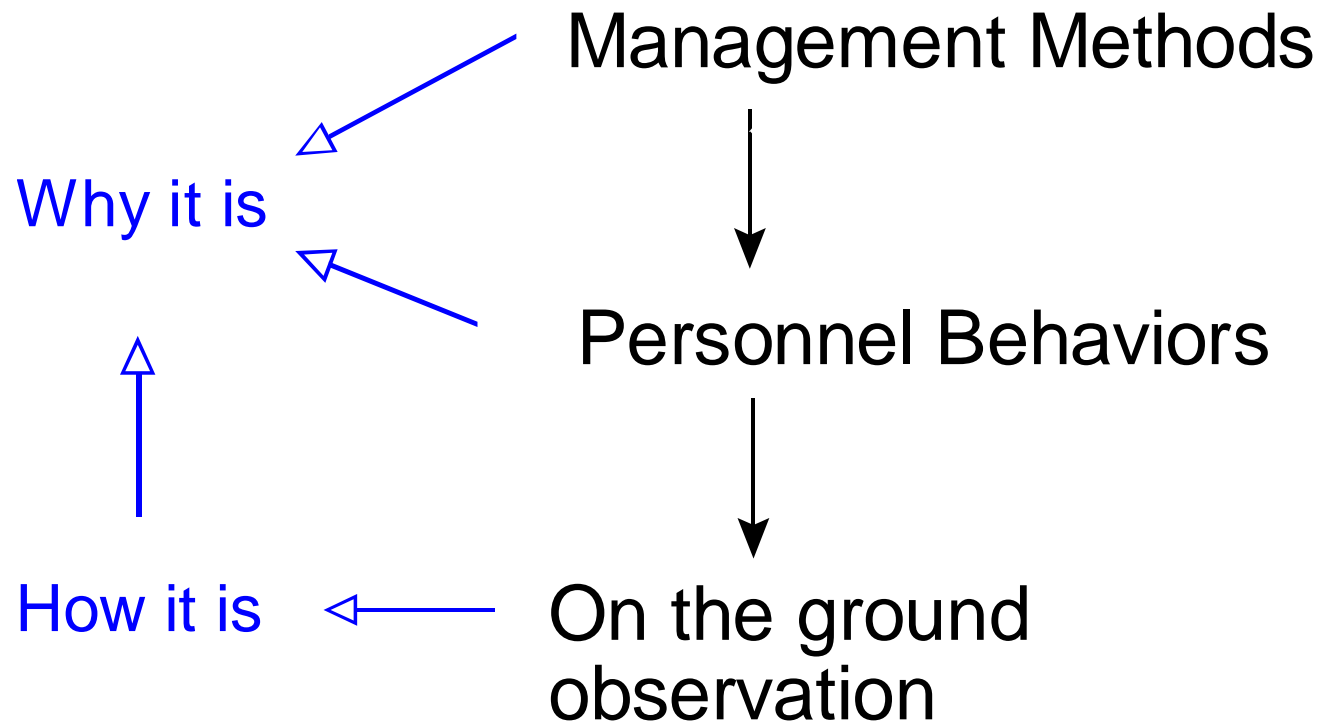
Why can EMS fail to deliver?

- Traditional auditing approach in a regulatory framework
 - First, adopt regulations that must be complied with
 - Develop documented system of procedures (manual) to conform to the regulations.
 - Inspectors verify that records indicate that the practices onsite conform to what is in the documented procedures.
- Approach causes organizations to exist in an “ISO” life and a “Real” life. Two separate existences.
 - After the audit, organizations go back to how they did business until they have to prepare for the next audit.

An alternate approach to Auditing People & Environment (EMS)

- How do managers manage? What are some techniques you use to manage?
- How do operators know how to do their jobs?
- Why is (or isn't) the environment handled as it should be at your agency in these terms?
 - Risk control vs. incidents
 - Compliance vs. non-compliance
 - Eco-efficiency vs. unnecessary waste
- EMS programs and auditing should be structured to evaluate from this approach not “do you conform to a standard”. This will drive performance improvement - the basic precept of a management system.

Basic EMS Auditing



Linkage between ISO14001 and the Performance-based EMS programs


Procedure
Focus



Environmental
Performance
Focus

Steps to help build your EMS...

Keeping it simple,
effective, and fitting
the way your agency
operates!



Steps to Implementing Value, Performance, & Behavior-based EMS

1. Determine what affects your agency's success in terms of the environment now and in the future to define your goals
2. Look at the outcomes your agency is currently producing to understand where your weaknesses are for ensuring compliance, controlling risk, and conserving resources over time
3. Build senior management support for the EMS implementation process
4. Determine where you want to be and how you will demonstrate progress

Steps to Implementing Value, Performance & Behavior-based EMS

5. Create your plan of attack (implementation plan)
6. Build a supportive implementation team
7. Analyze areas where you are successful in non-environmental matters and use those same tools to implement the EMS
8. Use internal auditing to drive performance & change behavior
9. ***Build an EMS culture internally and externally to your organization - Build awareness, understanding, and commitment to the “process”***

Step 9 is a cross-cutting step!

Cross-cutting issues when building your EMS

- Don't get wrapped up in the process. Some steps cross others and some steps may postpone...
 - You may have little management commitment until you produce a result that “catches” their attention
- Multiple groups should be used to build parts of your EMS... not “one size fits all”... teams will change dependent on the task
- Allies/Champions need to be identified and used throughout organizational levels and functions to get it done... ***One person does not build an EMS!***

Step 1: What is critical?

- Determine what is critical to your organization success in terms of the environment
 - Ongoing impacts to people & environment including “actual” and “perceived”
 - Non-compliance (wasted management time)
 - Accidents and incidents
 - Costs to organization - resource consumption, waste disposal, production disruption, impacts of customers using products
- Define your “fence line” (Scope of the EMS)

Step 2: Organizational Analysis

“How it is” and “Why it is” ...

- Are you currently producing the right outcomes with regards to compliance, risk, and resources?
 - Is it happenstance, i.e. doesn't predictably occur? If not, why not?
 - Is it reliable, i.e. things happen as you expect. What is working to deliver the right outcomes?

Step 3: Build Management Support

- Speak to them in terms they understand
 - Show pictures of how it is
 - Detail risks to the agency and possible consequences
 - Identify unnecessary waste and cost savings
 - True compliance of the agency with its own and with other applicable programs
 - The real root causes of the problems and the role these should play in supporting change

Step 4: Where do you want to be and how do you get there?

- Look at the weaknesses that you have.
- Decide how it should work.
- Decide what has to change to produce the outcomes desired
 - Training, Communication Methods, Supervisory and Operator Roles/Responsibilities, Accountability, Goals and Targets, and other EMS goals
- Implement change only to get the right behaviors and outcomes. Otherwise, don't change it!
- Figure out steps to get there and in what order (since all change is a step-wise process)

Step 5: Make your Plan of Attack

- Implementation plan must involve all aspects of operations. One person alone cannot make an EMS work.
- Plan must build off of existing programs that are working before creating additional bureaucracy and new programs.

Step 6: Build a Supportive Team

- A single person cannot drive an EMS. Must have champions throughout the organization
- Team should be committed, great communicators, know the value of the approach, know how to motivate, hold the respect of their peers, and be able to “get things done”.

Step 7: Determine where you are successful in your organization.

- Look at the areas that you consider a success
- Why are these areas successful?
- Are these same areas, key parts of environmental success?
- Capitalize and use the same tools and motivational approaches on the environment
 - Reduction of paper usage via electronic recordkeeping
 - Efficient fleet usage
 - Energy conservation

Step 8: Use internal auditing practices that drive performance

- Determine why you aren't where you need to be at this point in time
- Collect data/evidence during your audit
 - Use photographs to show impacts and consequences
 - Look for non-compliance, incidents, accidents, ongoing problems, poor practice/behaviors by all personnel, what's wrong with your infrastructure
- Use weaknesses to identify opportunities to focus the EMS on delivering value in key areas of the organization

Step 8: Auditing to Drive Performance (con't)

- Data and evidence should evaluate the agency, processes, people and practices -- not simply check documentation
- Use root cause analysis to determine why the finding is happening
- Audits should establish what is really happening, why it's not okay, and make management feel accountable for fixing it

Step 9: Build the EMS Culture Internally and Externally

- Show the value in what you are doing to all stakeholders (management, operators, regulators, community, customers)
- Make sure EMS remains about the environment – not creating more paperwork
- Use management and available resources to build the culture and keep it going
- Determine exactly what people need to know by understanding what they do (job, impacts, normal/abnormal, etc.)

Your EMS – An opportunity to enhance performance!

- Management commitment is absolute when certification is the goal!
- Implementation can be resource intensive but then becomes “second nature”
- Be careful to not focus on demonstrating conformance to the standard instead of meeting the goals you set for implementing a management system – creating the “ISO” life vs. real life
- Don't forget - What is the role of documentation?
 - To make sure if someone drops dead tomorrow, the system would go on...
- Remember how managers manage...

Management's Role in the Process

- EMS typically won't work if management does not support it...
 - “What interests my boss fascinates me...”
- Without active interest and support, change will not occur.
- Recognize where prejudices lie and be open to doing it differently
- Be willing to see where management may have to change in order for the EMS to work
- Focus the EMS efforts toward real value if you think the EMS team is getting off track

ADEQ Results

- Began process in August, 2004
- Trained core planning team
- Narrow initial fence line (waste management, energy usage, fleet operations & management)
- Analyzed aspects and impacts of Agency operations & identified issues to be addressed
- Sought & gained management support to implement policies
- Draft EMS plan/handbook by end of August 2004 for senior management approval
- Fully implement EMS by March 2007

Advice #1

Don't re-invent
the wheel...



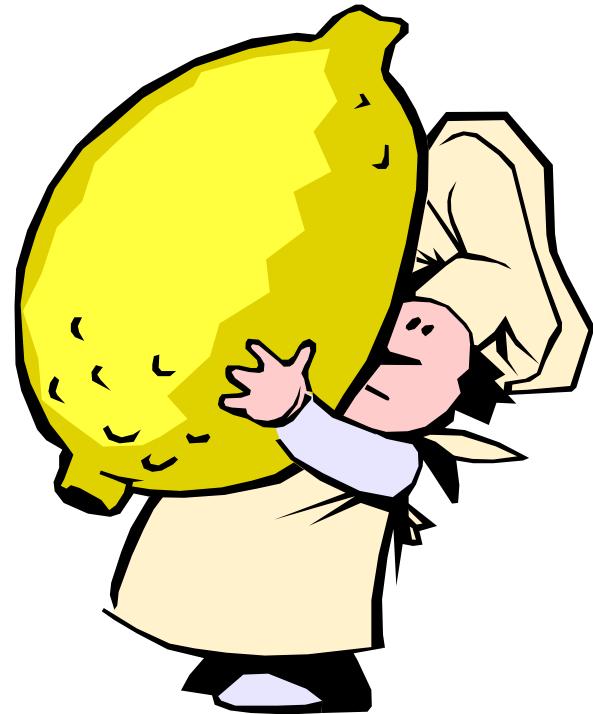
Advice #2

Don't get too wrapped up in The Process...



Advice #3

Don't settle for
only the low-
hanging fruit...



Questions?

