



Environmental Management Systems

Understanding, Using, and Reviewing
EMSs



Region 4: Southeast

June 2005



Course Structure

- Purpose of the Course – to learn
 - What is an Environmental Management System (EMS)?
 - Why develop an EMS?
 - Regulatory agencies
 - Regulated community
 - What are the keys to a quality EMS?
 - How to build an EMS?
 - How have EMSs helped?



Structure (cont'd)

- Purpose of the Course – why here and now?
 - EPA HQ policy and commitment
 - Resource Conservation
 - Demand for regulatory flexibility
 - Enforcement tool
 - *Drive environmental stewardship in and to all levels of regulated community*



Structure (cont'd)

- Our target audience
 - EPA staff
 - State regulatory agency staff
 - Eventually, companies and agencies that would implement an EMS



Structure (cont'd)

- How will the course proceed?
 - Presentations
 - Questions welcome
 - Facilitated workshops – to apply what's been presented/learned
- Referenced materials/documents will be available electronically



Course Agenda/Outline

- Understanding EMSs
 - Begin to answer what is an EMS
 - Definitions
 - Misconceptions
 - Key characteristics



Agenda/Outline (cont'd)

- What drives an EMS
 - Overview
 - EPA/State Agency perspective
 - Encouragement
 - Position Statements
 - Directives
 - Enforcement guidance



Agenda/Outline (cont'd)

- EMS Drivers (cont'd)
 - EPA perspective (cont'd)
 - Basis in regulation/orders
 - Performance Track
 - RCRA
 - CWA
 - CAA
 - EPCRA
 - EO 13148



Agenda/Outline (cont'd)

○ EMS Drivers (cont'd)

Regulated community perspective

- Forced to (decree, agreement)
- Intend to (compliance)
- Want to (continual improvement)
- Competitive requirements or edge (driven by customer demands)



Agenda/Outline (cont'd)

- Keys to a Quality EMS

- What to look for -

- Management commitment/involvement
 - Implementation/action focus
 - Self-checking
 - Continual improvement
 - Inclusion of all levels



Agenda/Outline (cont'd)

- Keys (cont'd)

- What doesn't help -
 - Lack of managerial commitment
 - Focus is on paper only
 - Once in plan, no review
 - Driven by one person or a very small group
- How to spot the keys



Agenda/Outline (cont'd)

- How to build an EMS
 - Approaches
 - Plan Do Check Act (PDCA)
 - ISO 14001:2004
 - Performance Track
 - Others (e.g., TCEQ)
 - Pluses and minuses of the approaches



Agenda/Outline (cont'd)

- How to build (cont'd)
 - Common Elements in EMSs
 - The foundation – what they all must build upon
 - The skeleton – those elements that are crucial to everything else
 - Policy
 - Impact Analysis
 - Documentation and Control
 - Checking and Review



Agenda/Outline (cont'd)

- How have EMSs helped
 - EMS successes (examples including approaches)
 - Dollars
 - Environmental performance
 - Compliance



Agenda/Outline (cont'd)

○ Workshops

- How would you develop an EMS
 - Focus
 - Approach
- How would you review an EMS
 - Qualities
 - Shortcomings
 - Meeting EPA needs
 - Meeting organization's/company's needs



Agenda/Outline (cont'd)

- Workshops (cont'd)
 - How to:
 - Encourage EMS use and development
 - Write EMS requirements
- Closing
 - Report on workshop results
 - Final questions and comments
 - Finding information



Understanding EMSs

- Before why and how, what!
- Basic definitions
 - MANAGEMENT is “judicious use of means to accomplish an end”
 - SYSTEMS include “an organized or established procedure” and “an organized set of doctrines, ideas, or principles”
 - Note the word “organized”



Understanding (cont'd)

- Basic definitions (cont'd)
 - MANAGEMENT SYSTEM may include
 - Organizational structure
 - Defined responsibilities
 - Procedures
 - Management systems are found in all organizations (both public and private) – the key is to integrate “environment” into these systems.



Understanding (cont'd)

- Dispel common misconceptions –
 - EMS doesn't require ISO 14001 structure or registration
 - However, ISO 14001 provides a useful model
 - The decision to register is separate from and should not detract from EMS consideration
 - An environmental information system (EMIS) isn't necessarily an EMS
 - However, an EMIS can be a useful tool.



Understanding (cont'd)

- Dispel misconceptions (cont'd)
 - To be successful an EMS can't reside solely in an environmental unit.
 - Remember Rome wasn't built in a day – neither is an effective EMS (tackle segments or impacts as opposed to trying to fix everything at one time).
 - An EMS isn't just a paper effort.
 - An EMS is more than a compliance tool.



Understanding (cont'd)

- Some key characteristics –
 - Management commitment
 - Employee involvement
 - Principles of continual improvement
 - Repeatable
 - Consistent
 - Capture lessons learned (what worked and what didn't)
 - **LAST BUT NOT LEAST** – build on what is already in place

EMS Drivers

- The view from 30,000 feet
 - considerations apply to regulators as well as the regulated

