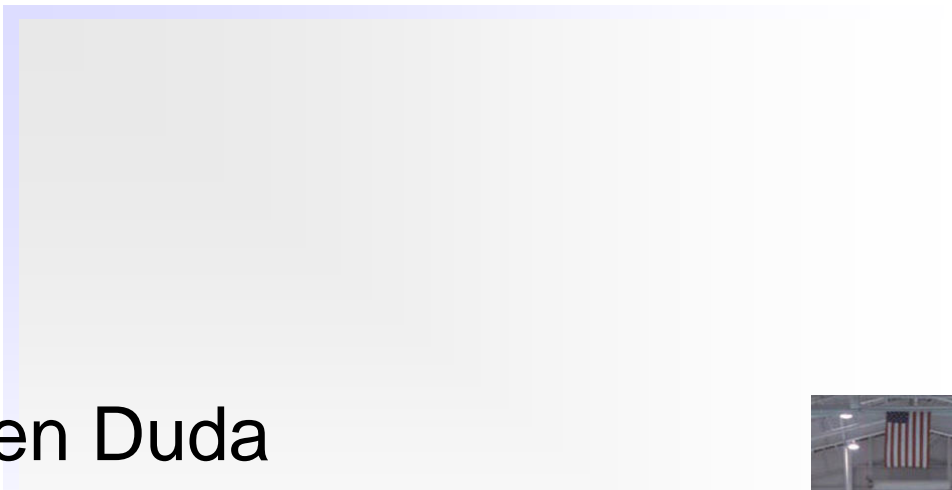




Introduction to Environmental Management Systems



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CH2M HILL
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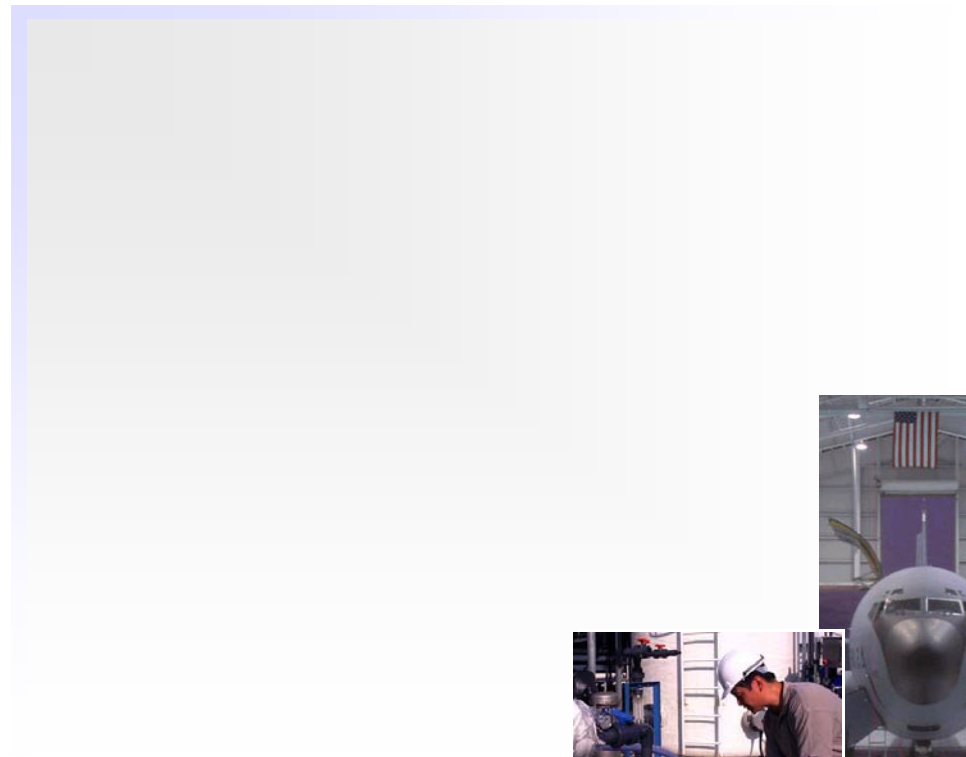
Introduction to Environmental Management Systems (EMS)

- Topics of Discussion:
 - What is an EMS and specific standards
 - Why businesses are adopting EMSs
 - Overview of typical EMS elements





What is an EMS?





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What is an EMS?

An EMS is a system that:

Incorporates **people, procedures, and work practices** in a formal structure to ensure that the important environmental impacts of the organization are identified and addressed,

Promotes **continual improvement** by periodically evaluating environmental performance,

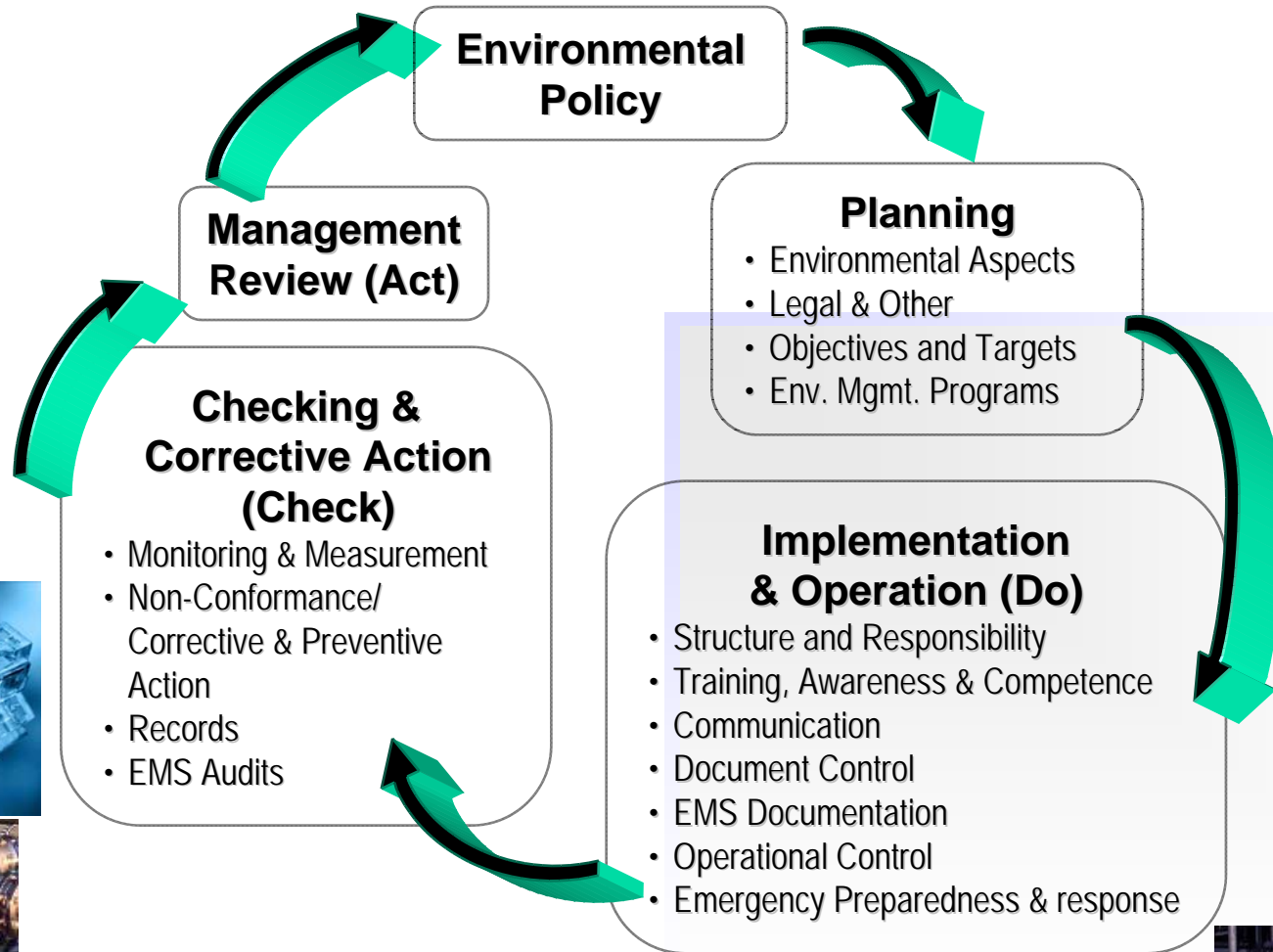
Involves **all members** of the organization as appropriate, and

Actively involves **Senior Management** in support of the environmental management program.





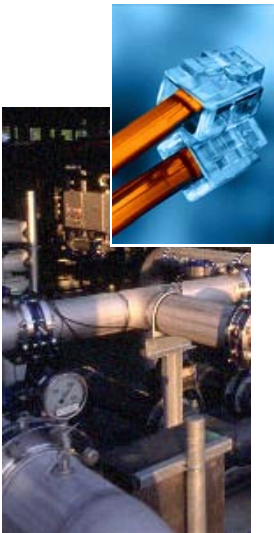
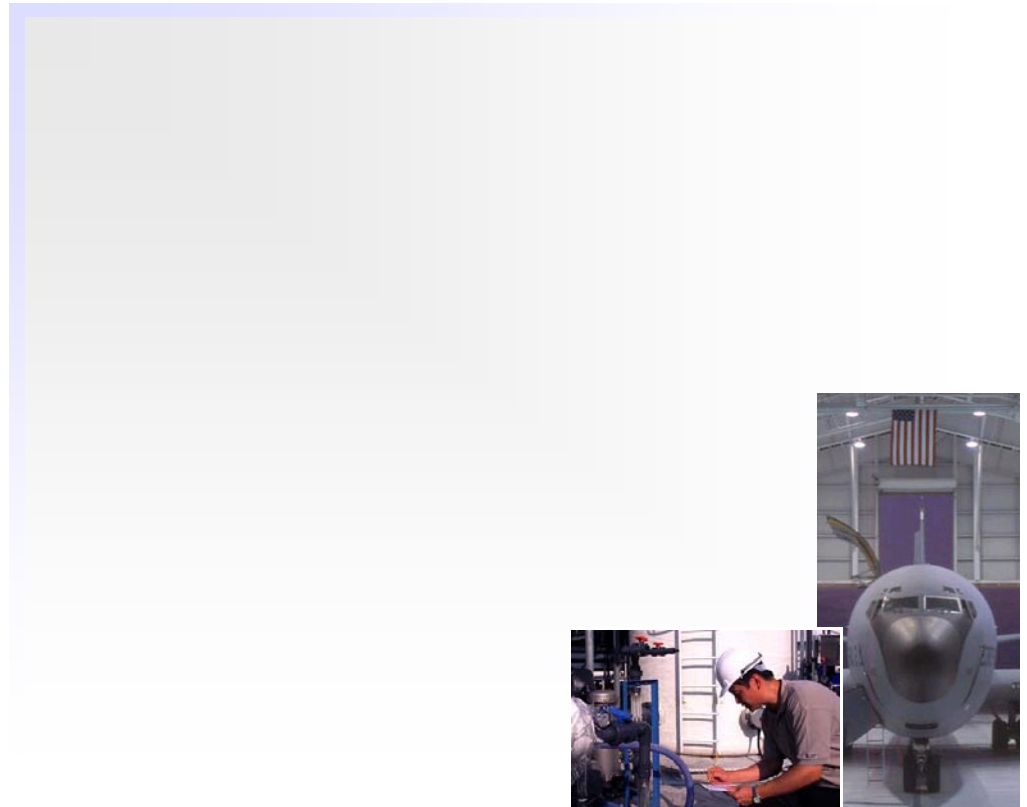
What is an EMS?





What is ISO14001?

- ISO14001 is the core EMS standard—
the only one to which a firm can register
 - Accreditation
 - Certification
 - Registration





What are other standards?

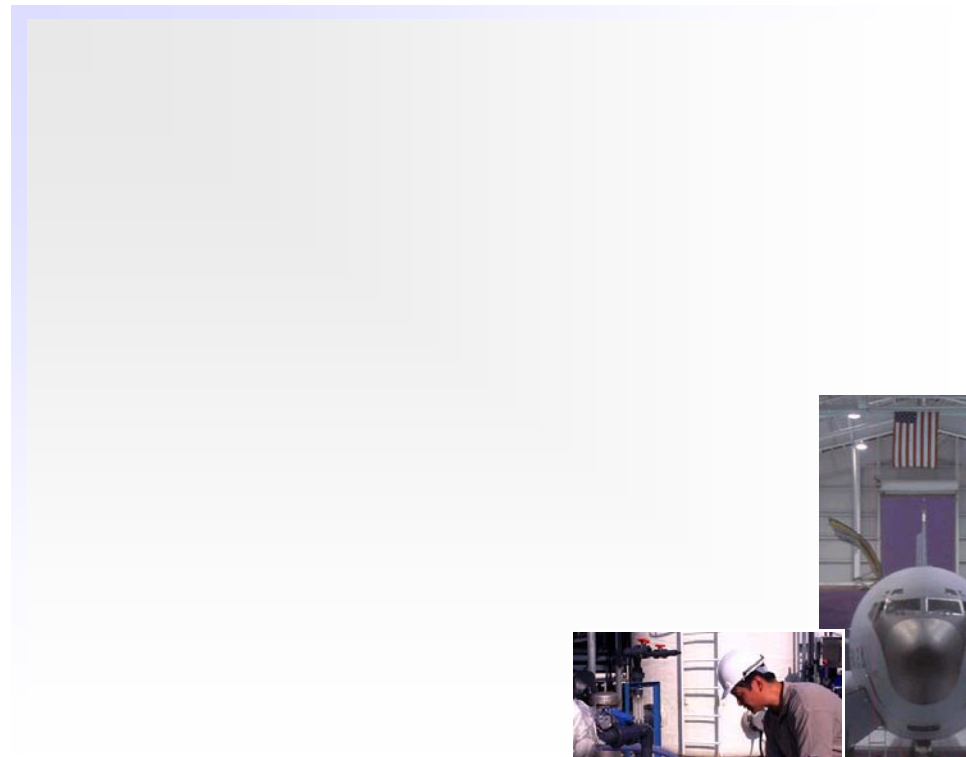
- EPA's Compliance-Focused EMS (EPA-330-9-97-002R)
- EPA's Performance Track (no longer available)
- OHSAS 18001 – H&S Management System
- ANSI Z-10 – H&S Management System
- EO13423 – Strengthening Federal Environmental, Energy, and Transportation Management
- Corporate/Company standards





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Example





AAA Vehicle Maintenance

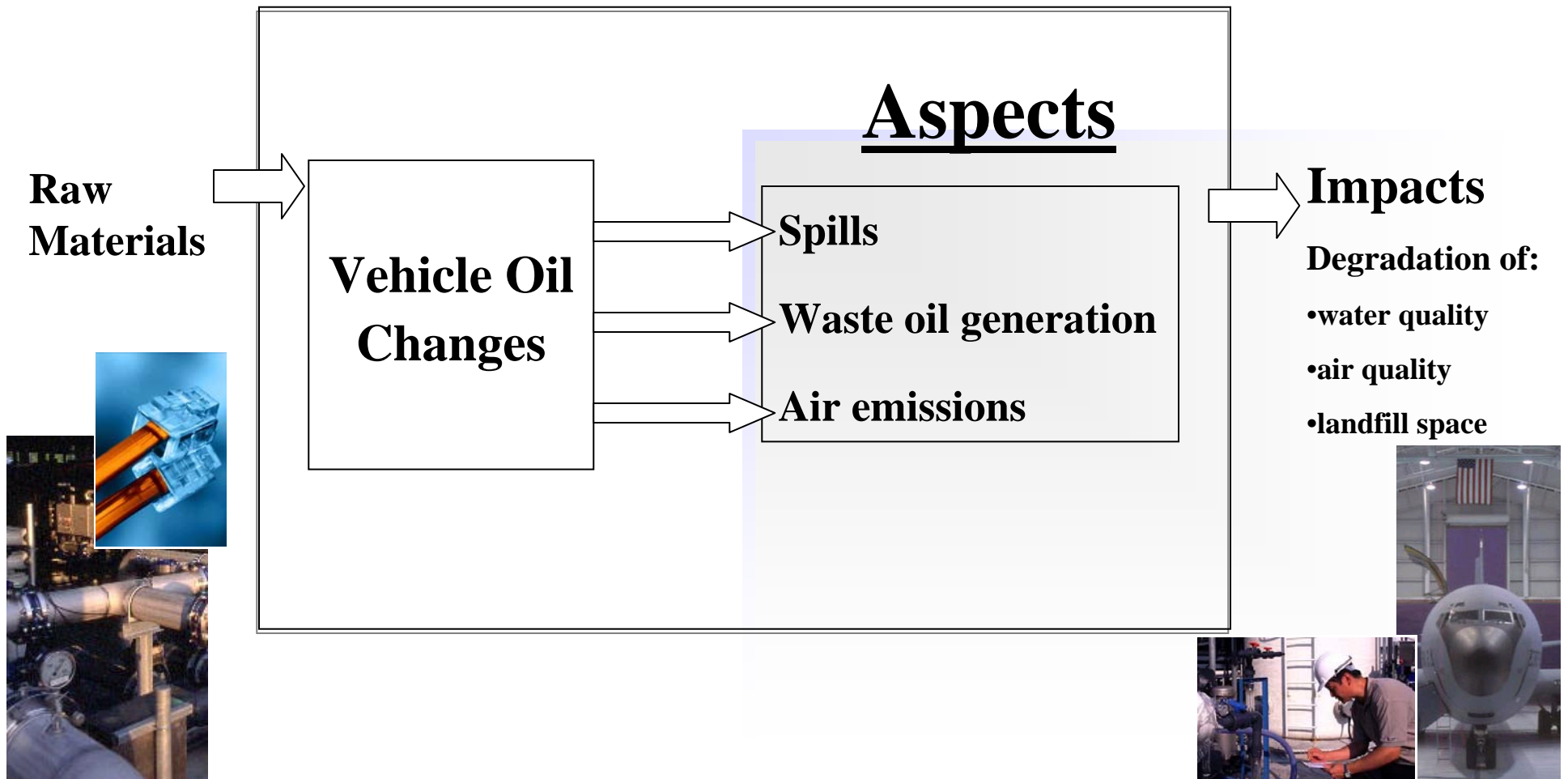
- Inventoried all of the operations at their facility that has the potential to impact the environment
 - Ranked those based on what could result in the biggest environmental impact
 - Largest impact: vehicle oil changes
 - Frequent spills
 - Potential for noncompliance





AAA Vehicle Maintenance

Activity: Vehicle Oil Changes





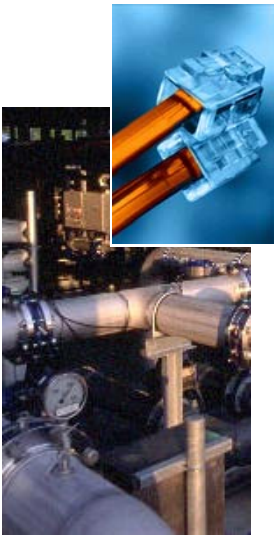
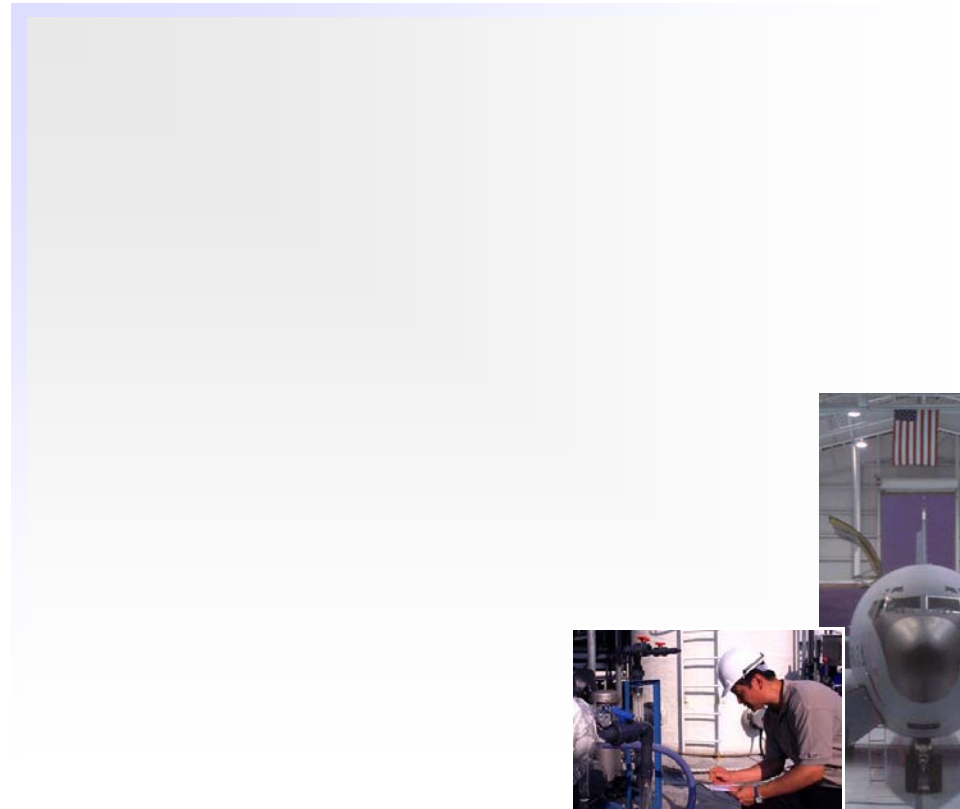
How would AAA manage this impact?

- EMS Team meets regularly to create objectives and targets for minimizing the impact.
 - Objective: Reduce spills.
 - Target: Reduce spills by 50% by CY 2015, using CY 2008 data as baseline.
- Identify actions to achieve objectives and targets.
 - Prepare standard operating procedures and work instructions
 - Provide additional training
 - Conduct regular inspections on SOPs and work instructions
 - Implement corrective and preventive actions from inspection findings and as spills occur
- Regularly report to senior management on progress.





Drivers and Benefits of EMS Implementation





Benefits with EMS

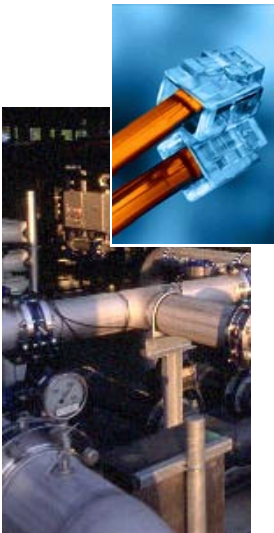
- Supports corporate/mission sustainability
- Improved environmental performance
- Reduced operational costs
- Improved compliance
- Improved process efficiency
- Fewer overlaps and gaps between programs
- Maximize use of existing capabilities
- Proactive versus reactive
- Improved community image





Trends Driving ISO14001 and EMSs

- Market forces—consumer/customer demand
- International market access
- Improve competitive advantage
- Legal or contractual requirements
- Meeting vendor certification requirements
- Government mandates—DOE and DoD
- Public pressure/public image
- Condition of business transaction





Questions?

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