

ISO 14001 – Implementations and Lessons Learned

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What were you doing in 1996?

- **IT bubble was expanding**
- **Original version of the standard was finalized**
- **Created an instant ecosystem of consultants, auditors, registrars**
- **Personal disappointment**
- **Slow build in the United States**

What is a
management
system?

“set of interrelated or interacting **elements** of an **organization** to establish **policies** and **objectives** and **process** to achieve those objectives”

What is the purpose of ISO 14001?

"This international standard helps an organization achieve the intended outcomes of its environmental management system, which provide value for the environment, the organization itself and interested parties. Consistent with the organization's environmental policy, the intended outcomes of an environmental management system include:

- *Enhancement of environmental performance*
- *Fulfillment of compliance obligations*
- *Achievement of environmental objectives"*

How does ISO 14001 achieve the purpose?

- **Context**
- **Leadership**
- **Planning**
- **Support**
- **Operation**
- **Performance Evaluation**
- **Improvement**

What is “context”

Issues that are relevant to the organizations purpose and affect its ability to achieve the intended outcomes of the environmental management system.

Needs and expectations of **relevant interested parties**

Related **compliance obligations**

Scope = boundaries and applicability of EMS



Who is “Leadership”?

- “Top Management” = “person or group of people who directs and control an organization at the highest level”
- Lots of emphasis on accountability of top management.
- Environmental Policy
- Roles and responsibilities

Its all in the “Planning”

- Consider risks and opportunities
- Analyze environmental aspects
- Identify compliance obligations
- Setting objectives and planning to achieve them

You must
provide
“support”

- **Resources** needed for implementation of the EMS
- Make sure people are **competent** to do their part
- Make sure people are **aware** of the policy, significant aspects, their contributions, implications of not conforming
- Manage relevant internal and external **communications**
- Maintain relevant **documented information**

“Operation”-
perhaps not
what you’re
thinking

- You must create processes to meet your EMS requirements
- Prepare to respond to emergencies



“Performance Evaluation”

- What do you need to monitor, measure and analyze to evaluate your environmental performance?
- Evaluate compliance with compliance obligations
- Perform periodic internal EMS audits
- Top management shall periodically review suitability, adequacy and effectiveness of EMS

What do you
mean
“improvement”

- What do you do with non-conformances and how do you take corrective action?
- How do you improve the suitability, adequacy and effectiveness of the EMS to enhance environmental performance?

Observations from 20+ years of ISO 14001 Implementation

Motivation is Key

There is a decision to be made regarding registration

Top Management is important but motivated doers make the difference

It's a cross-functional challenge

Implication for boiler owners / operators

Its not just about the powerhouse

A boon for maintenance and operational upgrades related to efficiency?

Relationship to ISO 50001



Discussion / Questions

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