ISO 14001 GENERAL REQUIREMENTS

Lesson Learning Goals

At the end of this lesson you should be able to:

➔ Describe the overall structure and cycle of ISO 14001 Environmental Management Systems (EMS)

➔ List three requirements for effective EMS

➔ Name at least three components of an Initial Environmental Review

➔ Quote three core themes of ISO 14001

What is an Environmental Management System (EMS)?

The part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing, and maintaining the environmental policy

ISO 14001 Dissected

➔ ISO 14001 contains 17 clauses (called 'elements')

➔ Each element interacts with and is interdependent with the other 16

➔ All elements have equal importance (though some may be more equal than others)

ISO 14001 Elements

4.2 ENVIRONMENTAL POLICY

4.3 PLANNING
4.3.1 Environmental Aspects
4.3.2 Legal and Other Requirements
4.3.3 Objectives and Targets
4.3.4 Environmental Programs

ISO 14001 Elements (Cont'd)

PLANNING

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4.4 IMPLEMENTATION AND OPERATION

4.4.1 Structure and Responsibility

4.4.2 Training, Awareness, and Competence

4.4.3 Communication

4.4.4 EMS Documentation

4.4.5 Document Control

4.4.6 Operational Control

4.4.7 Emergency Preparedness and Response

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ISO 14001 Elements (Cont'd)

IMPLEMENTATION AND OPERATION

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CHECKING AND CORRECTIVE ACTION
4.5.1 Monitoring and Measurement
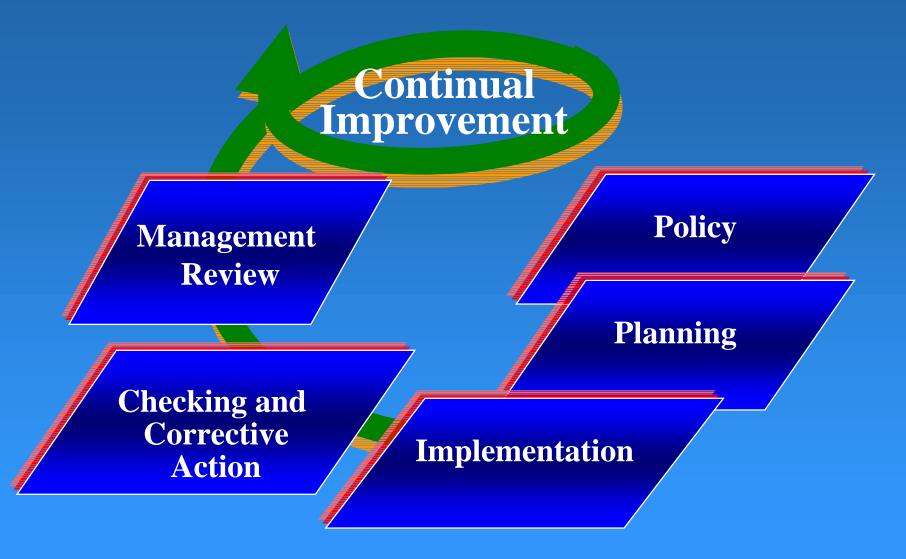4.5.2 Non-conformance,
Corrective & Preventive Action
4.5.3 Records
4.5.4 EMS Audit

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MANAGEMENT REVIEW ⬅

ISO 14001 EMS Framework

Continual Improvement

Management Review

Policy

Planning

Checking and Corrective Action

Implementation

ISO 14001 General Requirements

➜ EMS is intended to provide a framework and structured process for continual improvement of environmental performance

➜ Requires periodic review and evaluation of the EMS to identify opportunities for improvement

➜ Rate of improvement is self-paced

➜ The EMS may apply to an entire corporation, or an operating unit

➜ Integration of the EMS with other management systems is beneficial

Establishing or Improving an EMS

Key requirements:

➔ Understanding by the organization's top management of the resources needed for an effective EMS

➔ Commitment and support from top management

➔ Provision of resources (e.g., people, time, money, equipment) by management

➔ Honest assessment of environmental and business goals, and willingness to follow through on commitments

The First Steps

Initial Environmental Review tasks:

➔ Identify legal and regulatory requirements related to environmental performance

➔ Compare actual performance with external standards, regulations, codes of practice and guidelines

➔ Identify activities, products, services that can cause impacts on the environment and/or pose potential legal risks

More First Steps

Initial Environmental Review tasks:

➔ Review existing environmental management procedures

➔ Compare actual operations with internal policies and procedures

➔ Identify policies and procedures dealing with external contracts for services and supplies

➔ Review investigations of previous environmental incidents and 'near misses'

Yet More First Steps

Initial Environmental Review tasks:

➔ Gather the views of internal and external interested parties

➔ Assess if/how other internal systems can help or interfere with environmental performance

➔ Do a 'gap analysis' comparing what is in place with what ISO 14001 requires

Yet More First Steps (Cont'd)

Initial Environmental Review tasks:

➔ Consider 'benchmarking' with other organizations' EMS

➔ Prepare a plan to fill the gaps and implement ISO 14001

Core Themes of ISO 14001

➔ Think prevention before cure or correction

➔ Environmental performance is everyone's responsibility

➔ Improving awareness and understanding helps to improve performance

➔ Top management must lead by example

➔ Environmental management is risk management

➔ Continual improvement never ends

More Core Themes of ISO 14001

➔ In a system, everything depends on everything else; all components must work well for the system to work

➔ ISO 14001 is not a once-and-for-all event; it is a continuing cycle of improving the system and environmental performance

Recommended Initial Goals

➔ Focus on complying with existing laws and regulations

➔ Reduce environmental risks and legal liabilities

➔ Improve efficiency of raw material use

Concluding Thoughts

Important points to remember are:

➔ The goal of ISO 14001 is continual improvement of environmental management using a system consisting of:
  » Environmental Policy
  » Planning
  » Implementation
  » Checking and Corrective Action
  » Management Review

➔ ISO 14001 involves a cycle of Plan➔Implement ➔Check ➔Review

Concluding Thoughts (Cont'd)

Additional points to remember are:

➔ ISO 14001 core themes include:

» Prevention of pollution

» Shared responsibility for environmental management

» Leadership by top management

» Interdependence of all elements of the EMS

» Well-managed systems and procedures in support of quality performance

➔ To get started, conduct an Initial Environmental Review of the current status - compare with ISO 14001 requirements