

ISO 14001 Environmental Management System Conformance vs. Environmental Compliance

Are they equivalent?

(Does having an ISO 14001 Registration Certificate from a third-party auditor ensure you are in compliance?)

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Outline for Today's Presentation

- ▶ Objectives of Environmental Regulations/Laws.
- ▶ Objectives of ISO 14001 Standard.
- ▶ Summary of ISO 14001 Standard.
 - The Environmental Management System (EMS).
 - ISO 14001 Elements.
 - EMS Objectives and Targets.
- ▶ "Conformance" vs. "Compliance."
 - Are they equal?
 - Does having an ISO 14001 Registration Certificate from a third-party auditor ensure you are in compliance?

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Objectives of Environmental Regulations/Laws

- ▶ Laws are written by government authorities: Senate, Congress.
- ▶ Regulations written by government-appointed agency: EPA.
- ▶ Each environmental law has a specific objective to minimize impacts to human health and/or the environment.
 - Air, Water, Hazardous Materials, Wastes.



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Summary of Environmental Regulations/Laws

- ▶ Regulations have specific requirements to "comply" with:
 - Air permitting – impacts to air.
 - Storm water permitting – impacts to surface waters.
 - Tier II Reporting – notifying community of hazards.
 - Drum labeling – tracking cradle to grave.
- ▶ Agencies audit.
- ▶ Notice of Violation if one does not "comply."
 - Fines, Increased Agency Oversight, Jail Time.



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Objectives of ISO 14001 Standard

- ▶ Implement a systems approach to environmental management.
- ▶ Assumes one has a regulatory compliance baseline.
 - Compliance is a component of ISO 14001 Standard.
- ▶ Go above and beyond regulatory compliance (overall impacts to environment – i.e., shipping and diesel emissions).
 - Good neighbor principle. Mom, pie, and USA.
- ▶ Key Objective is Continual improvement.



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Summary of ISO 14001 Standard

- ▶ ISO = International Organization for Standardization based in Geneva, Switzerland.
- ▶ ISO 14001 standard.
 - Standard is 6 pages long.
 - Write EMS to meet 44 "shall" statements.
 - Identify Significant Impacts & Set Targets to Reduce.
- ▶ Third-party registration body audits and provides ISO 14001 EMS certification.



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Summary of ISO 14001 Standard

- ▶ The ISO 14001 elements are not stand-alone principles.
 - A facility must implement and integrate them all to receive registration/certification from third party.
- ▶ EMS Documentation. – Facility is audited against what it writes in its EMS.



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ISO 14001 Standard Introduction

- ▶ Continual Improvement is the Backbone of ISO 14001

- ▶ PDCA
 - Plan
 - Do
 - Check
 - Act



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ISO 14001 Considers Views Of “Interested Parties”

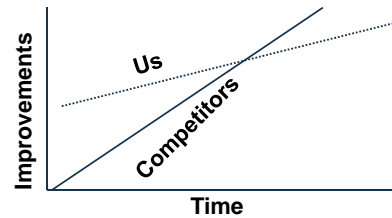
- ▶ Customers
- ▶ Shareholders
- ▶ Community
- ▶ Neighbors
- ▶ Governments
- ▶ Employees
- ▶ NGOs
- ▶ Environment itself



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Improvement

The most decisive factor in the race for business leadership is the **rate** of business improvement.



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Practical Definition for EMS



A management tool that enables an organization to achieve and systematically control the level of environmental performance that it sets itself.

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ISO 14001 Elements


The ISO 14001 EMS standard is only 6 pages long.

- ▶ 4.1 General Requirements
- ▶ 4.2 Environmental Policy
- ▶ 4.3 Planning
- ▶ 4.4 Implementation and Operation
- ▶ 4.5 Checking
- ▶ 4.6 Management Review



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PDCA




- ▶ Plan – Plan the EMS using the Policy and Planning requirements in Sections 4.1 – 4.3.
- ▶ Do – Implement the EMS using the requirements of Section 4.4.
- ▶ Check – Check the EMS performance using Section 4.5 requirements.
- ▶ Act – Improve the EMS using the requirements of Section 4.6.

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4.1 General Requirements


- ▶ Establish, document, implement, maintain and continually improve an environmental management system in accordance with the requirements of the Standard.
- ▶ Determine how the organization will fulfill these requirements.
- ▶ Define and document the scope of the organization's environmental management system.



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4.2 Environmental Policy

Top management shall define the organization's environmental policy and ensure it contains the minimum requirements listed in the ISO 14001 EMS standard and is within the defined scope of its EMS.



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4.3 Planning




- ▶ 4.3.1 Environmental Aspects
- ▶ 4.3.2 Legal and Other Requirements
- ▶ 4.3.3 Objectives, Targets and Program(s)

Note: Identifying Environmental Aspects and Impacts and developing the objectives and targets are the heart of the EMS.

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4.3.1 Environmental Aspects

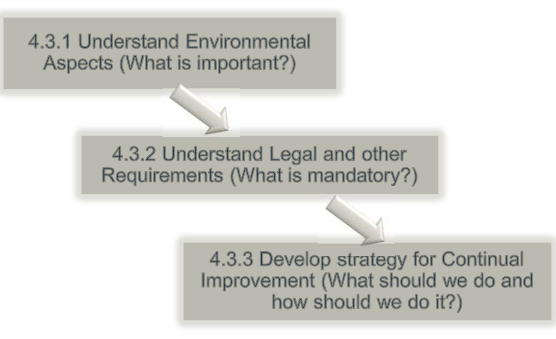


- ▶ Aspects – elements of an organization's activities or products or services that can interact with the environment.
- ▶ Impacts – any change to the environment whether adverse or beneficial wholly or partially resulting from an organization's aspects.

Aspect -----> Impact
Cause -----> Effect
Oil spill -----> Death of Wildlife
Air emissions -----> Cancer risks

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4.3 Planning



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4.3.1 Environmental Aspects (cont'd)

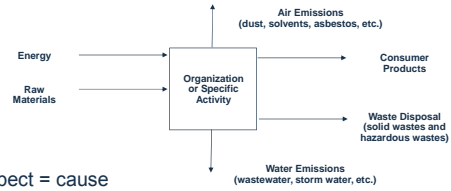
- ▶ Aspects procedure should consider:
 - Emissions to air
 - Releases to water
 - Waste management
 - Contamination of land
 - Use of raw materials
 - Other environmental issues
- ▶ Need to define the scope/boundary of what we are evaluating before starting!



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Risk Assessment Method – Aspects

- ▶ Create a block or mass flow diagram to better understand in vs. out.

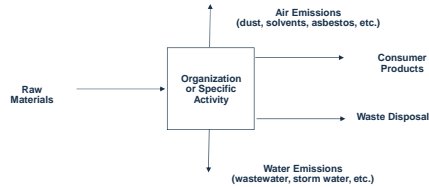


- ▶ Aspect = cause
- ▶ The process that generates the air emissions, water discharges, and wastes are examples of aspects we need to identify.

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Risk Assessment Method – Impacts

- ▶ Look at the possible impacts of an aspect.
- ▶ Impacts = the effect of the aspect.



- ▶ Disposing of wastes in landfills – fills landfills and reduces use of that land for other purposes.

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4.3.2 Legal and Other Requirements

- ▶ Evaluate the following with respect to environmental aspects:
 - Establish procedures for determining which legal and other requirements apply to the facility operations.
 - **Environmental compliance laws and regulations.***
 - Company policies.
 - Ensure that these requirements are considered when developing EMS objectives and targets.

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4.3.3 Objectives, Targets, Program

- ▶ **Environmental objective** - Overall environmental goal, consistent with the **environmental policy**, that an **organization** sets itself to achieve.
- ▶ **Environmental target** - Detailed performance requirement, applicable to the **organization** or parts thereof, that arises from the **environmental objectives** and that needs to be set and met in order to achieve those objectives.



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4.3.3 Objectives, Targets, Program

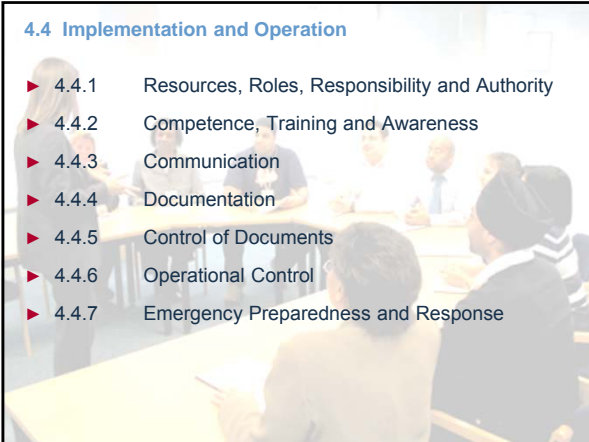
- ▶ Key points to remember
 - Must document environmental objectives and targets.
 - Objective – what will be accomplished?
 - Target – how much or to what extent?
 - Program – who, how and when will it get done?



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4.4 Implementation and Operation

- ▶ 4.4.1 Resources, Roles, Responsibility and Authority
- ▶ 4.4.2 Competence, Training and Awareness
- ▶ 4.4.3 Communication
- ▶ 4.4.4 Documentation
- ▶ 4.4.5 Control of Documents
- ▶ 4.4.6 Operational Control
- ▶ 4.4.7 Emergency Preparedness and Response



4.5 Checking

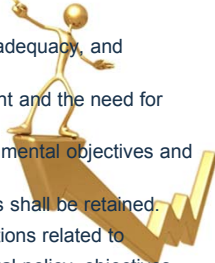
- ▶ 4.5.1 Monitoring and Measurement
- ▶ 4.5.2 Evaluation of Compliance*
- ▶ 4.5.3 Nonconformity, Corrective Action and Preventive Action
- ▶ 4.5.4 Control of Records
- ▶ 4.5.5 Internal Audit



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4.6 Management Review

- ▶ Top management needs to be involved.
- ▶ Review the EMS at planned interval
 - Ensure its continuing suitability, adequacy, and effectiveness.
- ▶ Assess opportunities for improvement and the need for changes to the EMS, including the
 - environmental policy and environmental objectives and targets.
- ▶ Records of the management reviews shall be retained.
- ▶ Outputs to include decisions and actions related to
 - possible changes to environmental policy, objectives, targets and other elements of the EMS, consistent with the commitment to continual improvement.



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4.6 Management Review (cont)

- ▶ Input to management reviews include:
 - a) Results of internal audits and evaluations of compliance with legal requirements and with other requirements to which the organization subscribes.
 - b) Communication(s) from external interested parties, including complaints.
 - c) The environmental performance of the organization.
 - d) The extent of which objectives and targets have been met.
 - e) Status of corrective and preventive actions.
 - f) Follow-up actions from previous management reviews.
 - g) Changing circumstances, including developments in legal and other requirements related to its environmental aspects.
 - h) Recommendations for improvement.

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ISO 14001 Conformance vs. Environmental Compliance

ISO 14001	Environmental Compliance
EMS assumes regulatory compliance is a baseline, but does NOT require the ISO 14001 lead auditor to confirm.	Environmental compliance is to be confirmed by the facility staff during its internal audits and implementation of the EMS.
EMS requires going above minimum regulatory compliance requirements.	No extra credit given for going above regulatory compliance requirements. Audit is usually a Pass/Fail evaluation.
ISO 14001 lead auditor looks for conformance with the written EMS and the 44 shall statements; auditor is NOT required to confirm compliance with environmental regulations.	Compliance is mentioned as a component of the legal portion of the planning section of ISO 14001.
The training and certification program for ISO 14001 lead auditors does NOT require regulatory compliance auditing experience.	The ISO 14001 lead auditor may have no environmental compliance auditing experience and could miss an obvious issue.

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ISO Conformance vs. Environmental Compliance

- ▶ Conformance with the ISO 14001 Standard does not assure that a facility is in compliance with the environmental regulations.
- ▶ Having an ISO 14001 third-party certified registration is an accomplishment to put in front of stakeholders, the community, clients, etc.
 - However, do not assume that everything is ok under the hood because of the shiny bow on the outside.



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Questions??

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If you would like more information, or
have any questions, contact me.



THANK YOU!