

Environmental Compliance and ISO 14000: The Missing Link

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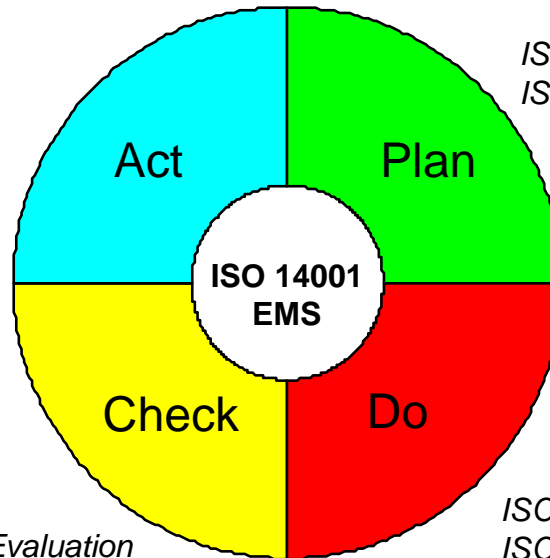
or Plan, Do, Check, Act, What?

Agenda

- ISO 14000 Model
- ISO 14001:2004 Requirements
- ISO 14001 and Compliance
- Compliance Scenarios
- Clarifying Requirements
- Creating Requirements

ISO 14000 Model

Continual Improvement



ISO 14040 – Life Cycle Assessments
ISO 14062 – Design For Environment

ISO 19011 – EMS Auditing
ISO 14030 – Environment Performance Evaluation

ISO 14020 – Environmental Labels and Declarations
ISO 14063 – Environmental Communications

ISO 14001:2004 Scope

- Demonstrate Conformity by:
 - Self-declaration
 - Customer Review
 - Third Party
- Application of Requirements Limited to Extent of Organization's
 - Environmental Policy
 - Nature of Activities
 - Products and Services
 - Location of Activities

ISO 14001:2004 General Requirements (Section 4.1)

An Organization shall

- Establish
- Document
- Implement
- Maintain
- And Continuously Improve an EMS

ISO 14001 EMS Requirements

- Environmental Policy (Section 4.2)
- Planning (Section 4.3)
- Implementation and Operations (Section 4.4)
- Checking (Section 4.5)
- Management Review (Section 4.6)

ISO 14001 Legal Requirements

- Section 4.3.2 Legal and Other Requirements

An organization shall

- a) Identify applicable legal requirements related to its environmental aspects.
- b) *Determine how these requirements apply to its environmental aspects.*

An organization shall take these legal requirements into account in establishing, implementing, and maintaining its EMS

Let's Review

- ISO 14001 is a generic framework
 - Independent of location, industrial sector, and organization goals
 - Requires compliance with local laws and regulations

Guess who can be ISO 14001 certified?

- A car parts manufacturer in Canada that recycles its waste water and has zero carbon emissions?
- A refinery in Angola dumping hazardous waste in the ocean?

Answer: BOTH!

ISO 14001 and Compliance

You can be ISO 14001 Compliant and NOT be Environmentally Responsible

ISO 14001 Compliant *WITHOUT* a Compliance Program means **NOTHING**

What ISO 14001 Does NOT do..

- Does not provide policy objectives
- Does not set standards or thresholds
- Does not identify trend directions
- Does not establish measurement criteria
- Does not offer audit protocols

ISO 14001 is not a substitute for a Compliance Program

Compliance Program Checklist

If you can't answer:

1. Are we in compliance?

2. What are we in compliance with?

Then you don't have a Compliance Program

Compliance Scenarios

		REQUIREMENTS	
		Clear	Ambiguous
ENFORCEMENT	Strong	Comply	Clarify
	Weak	Comply	Clarify
	None	Create	N/A

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Typical GCC
Environmental
Requirements

1. Comply
2. Clarify
3. Create

Current Status – Local/Regional Governance

- Vague and Ambiguous Laws
 - Ambient standards vs. Point Sources
 - No or limited promulgation to specific sectors
- Lack of Baselines and Processes
 - Poor data collection and management programs
 - No established procedures
- New or Weak Enforcement Agencies
 - Infrastructure not in place
 - Personnel not trained or insufficient resources
- Internal and International Pressure

Regional companies cannot rely on local governance for compliance guidance

Problem Statement

- Regional Companies **want** robust compliance programs
- ISO 14001 works **BEST** with robust compliance programs
- Local governments are **not ready** to meet those requirements

Ambiguity

How do you comply with this?

*All facilities **shall** provide suitable healthy atmosphere to their workers, while performing their duties and protect them **against any** emission or leakage of air pollutants.*

KEPA Decision 210/2001 Article 7

Clarification Process

- **Applicability Review**
 - What regulations apply to the organization and what level of application?
- **Conversion Analysis**
 - Effort required to define regulations and protocols from existing object language
- **Risk Analysis**
 - What are the results (impact and cost) of not complying with a particular regulation?

Compliance Analysis Tool (CAT)

- Applicability Analysis
 - Applicability
 - Responsible Party
 - Receptor
- Risk Analysis
 - Risk of Non-Compliance
 - Cost of Non-Compliance
- Conversion Analysis
 - Enforcement
 - Permits
 - Audits
 - Exemptions
 - Measurability
- Deficiencies Analysis
 - US Environmental Laws

CAT Screenshot

KEPA Conversion Analysis Tool (KCAT) - [KCAT Applicable Article Conversion Analysis Form]

File Edit View Insert Format Records Tools Window Help Adobe PDF Type a question for help

Chapter ID: Goto Article:

Article Radiation Reference

Media Sub-Media Process Stage

Article Text

Paragraph A- Levels of Exposure to Ultraviolet Ray

(1) Ultra-violet ray intensity within a spectrum field of (320-400 Nanometer) dropping on naked eye should not exceed (1 mm/cm2) for more than 16 minutes, and shall not exceed (1 joule/cm2) if exposure time is less than 16 minutes)

Applicability Enforcement Audit Measureability Permits Exemptions Non-Compliance Risk Cost Ratio Receptor Responsible US Laws IES Comments Clients Comments Arabic Text

Not Applicable

<input checked="" type="checkbox"/> All Subsidiaries	<input type="checkbox"/> KGOC	Value	Level of Confidence
<input type="checkbox"/> KPC	<input type="checkbox"/> PIC	Individual	<input type="text" value="5"/> <input type="text" value="0"/>
<input type="checkbox"/> KOC	<input type="checkbox"/> KOTC	Point Source	<input type="text" value="1"/> <input type="text" value="1"/>
<input type="checkbox"/> KNPC	<input type="checkbox"/> ODC	Facility	<input type="text" value="1"/> <input type="text" value="1"/>
		Corporate	<input type="text" value="1"/> <input type="text" value="1"/>

Comments

Scoring

- **Applicability Score**
= Average (Applicability + Receptor + Responsible Party)
- **Conversion Score**
= Average (Enforcement + Measurability + Permit + Audit)
- **Risk Score**
= Risk of Non-Compliance x Risk of Cost of Non-Compliance
- **Total Ranking Score (TRS)**
= Applicability x Conversion x Risk
TRS values > 100 are considered Very Difficult to Comply with
TRS values 100 - 50 considered Difficult to Comply with

Creation Process

- Deficiencies Analysis
 - What specific requirements are missing?
 - How do they compare to a baseline (US laws)?

US Law	Statute References
Clean Air Act	40 CFR 50-52, 60, 61, 68, 70-72
Clean Water Act	40 CFR 110-140
National Environmental Policy Act	40 CFR 102
Resource Conservation and Recovery Act	40 CFR 255-258, 260-279, & 280-282
Occupational Safety and Health Act	29 CFR 1910
Comprehensive Environmental Response Compensation and Liability Act	40 CFR 300 & 302
Emergency Planning and Community Right to Know Act	40 CFR 355, 370, & 372
Federal Insecticide, Fungicide, and Rodenticide Act	40 CFR 152-158, 160-164, 166-173, 175, 177-180, 185, & 186
Hazardous Materials Transport Act	49 CFR 171-180
Safe Drinking Water Act	40 CFR 141
Toxic Substances Control Act	40 CFR 761

Example Missing Criteria

1. No list of exemptions or projects that do not require Environmental Impact Assessments.
2. No requirement for public review or comment period.
3. Exposure by individuals to chemicals not established.
4. Sets own requirements for Hazardous Material documentation instead of using international formats for Material Safety Data Sheets.
5. No standard marking system defined for transportation or storage.
6. No permit program for water or storm drains.
7. No permit program for point sources.
8. No criteria for point source hazardous air pollutants.
9. Does not set groundwater standards.
10. Does not set pollution/contamination standards in soil.

Legitimizing Compliance

If local regulators are not able to meet your requirements:

Establish your own requirements

But get:

- Local Buy-in/Approval
- Partnering Agreements

This provides legitimacy for your EMS

Summary

- ISO 14001 works great when you have strong local compliance with clear requirements
- If you don't have strong and clear local compliance:
 - *Certification devalued: You can be ISO 14001 certified but still be irresponsible*
 - *Clarify or Create: You may have to create your own compliance program or framework of regulations*
 - *Partner/Approval for effort to legitimize program*

Questions...?



BACK-UP SLIDES