

Role of Management System Standards and Certification Bodies in the Enforcement of Environmental Legislations to Protect the Environment and Reduce Climate Change.

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Lloyd's Register Quality Assurance (LRQA)

- LRQA is the Management Systems Certification division of Lloyd's Register group (1760).
- LRQA established in 1985
- UKAS accreditation no. (1) + 30 other accreditations.
- More than 50,000 approvals in more than 116 countries.
- Provision of certification & training services to all management Systems (QMS, EMS, OHSAS, Food Safety, HACCP & Security)

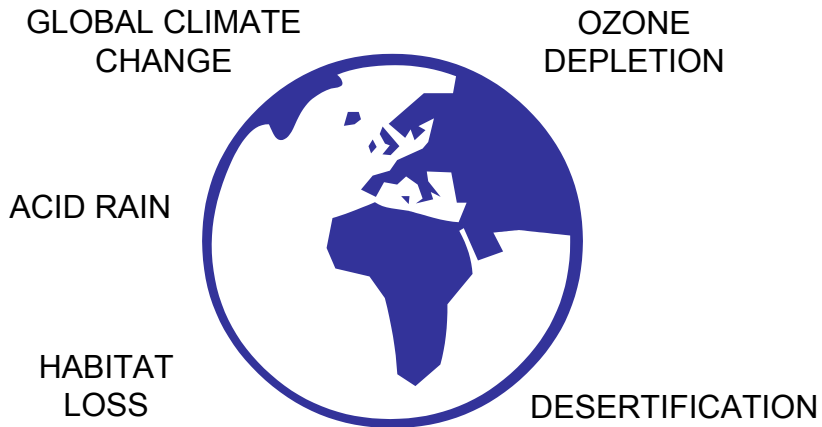


Contents:

- Overview of global environmental problems.
- Role of legal regulations in environmental protection and mitigating climate change.
- ISO 14001 Standard overview and link to the legal regulations.
- Overview on the ISO 14001 pro-active approach with regard to the environmental protection and continual improvement.
- Role of the certification bodies in the enforcement of compliance with the legal regulations.
- Overview on other environmental standards and specifications related to the protection of environment.

Overview of Global Environmental Issues

Environmental Issues



Environmental Problems

- Global warming & Climate Change
- Stratospheric ozone depletion
- Acid rain
- Water quality
- Persistent organics
- Air quality
- Noise/vibration
- Visual impact/amenity
- Waste management
- Contaminated land
- Major spills and incidents
- Release of genetically modified organisms
- Depletion of natural resources

Role of Legal Regulations in Environmental Protection and Mitigating Climate Change.

Role of Environmental Regulations & Legislations?

Setting the threshold (limits) of the:

HUMANS-RELATED ACTIVITIES' POLLUTION

in order not to harm the Environment in away to be difficult for the NATURE (environment) to Re-generate it self again.

Topics of Global Legislations

- Climate Change
- Hazardous waste incinerators
- Integrated pollution control
- Air Quality
- Water Quality
- Eco-auditing
- Waste movements
- Vehicle Emissions
- Protecting Ozone Layer
- Packaging Waste
- Landfill sites
- Hazardous Installations
- Environmental Impact Assessments
- Access to information and reporting

Key Specifications within Legislations

- Air Quality
 - CO
 - CO₂
 - SO_x
 - NO_x
 - TSP
- Water Quality
 - COD
 - BOD
 - PH
 - TDS
 - TSS
 - Heavy Metals

Key Specifications within Legislations

- Global Warming
 - Measured in GWP
 - CO₂ = 1 (as Reference)
- Ozone Depletion
 - Measured in ODP
 - CFC 11 or (R-11) = 1 (as Reference)
- Noise
 - Measured in DBL
 - Depends on the Location

Examples of Environmental Legislations

- EU Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
- US EPA – Waste Federal Facility Compliance Act.
- Egypt - Law 4/94 for the Protection of the Environment
- Jordan – Environmental Law no. 52
- Jordan – JS 202 Industrial Waste Water
- UAE - Environmental Standards And Allowable Limits Of Pollutants On Land, Water, And Air Environment.

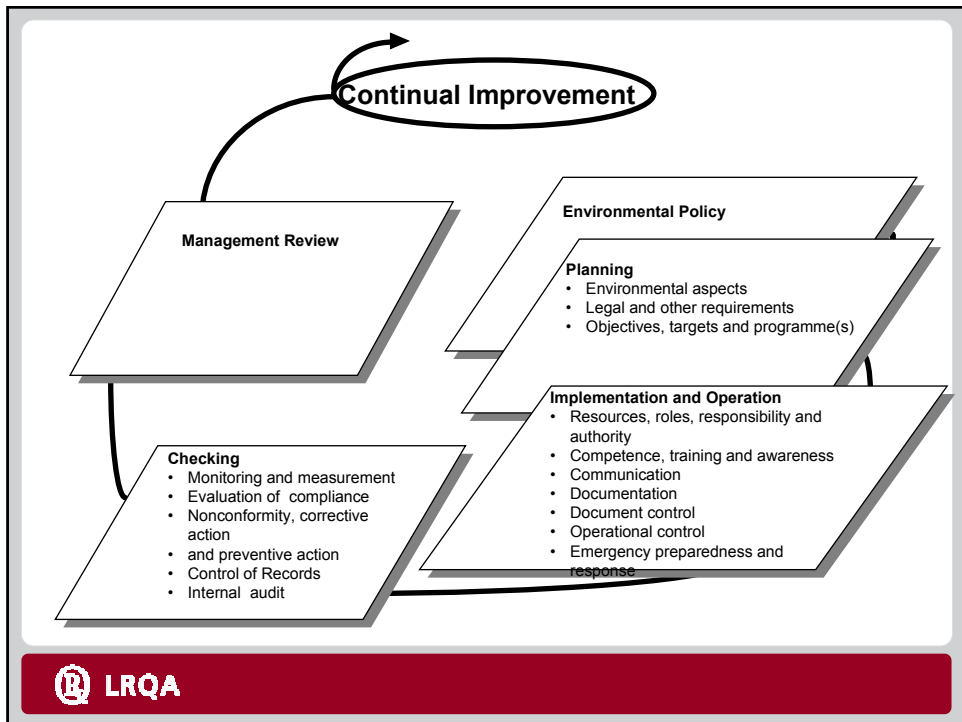
**ISO 14001 Standard Overview and Link to the
Legal Regulations**

and

**Overview on the ISO 14001 Pro-active Approach
with Regard to the Environmental Protection
and Continual Improvement.**

ISO 14001 – What is it? [1]

**Specification for Environmental
Management Systems**



ISO14001 – What is it? [2]

- Requires the establishment and implementation of an **ENVIRONMENTAL PROTECTION SYSTEM**.
- Introduction – introduces environmental issues.
- Scope [1] - to whom the Standard could be applicable.
- Definitions [3] - words and phrases used in the standard which have a particular meaning in relation to establishing and implementing an EMS.
- Specified **REQUIREMENTS** for an EMS [4].
- Requires **CONTINUAL IMPROVEMENT**.

ISO14001 – Extracts – (1)

- The **overall aim** of this international standard is to support **ENVIRONMENTAL PROTECTION** and **PREVENTION OF POLLUTION** in balance with socio-economic needs.

Introduction

ISO14001 – Extracts – (2)

- **Top Management** shall define the organization's **environmental policy** and ensure,....
 - b) include a commitment to **CONTINUAL IMPROVEMENT** and **PREVENTION OF POLLUTION**.
 - c) include a commitment to **COMPLY WITH APPLICABLE LEGAL AND OTHER REQUIREMENTS...**

environmental policy - 4.2

ISO14001 – Extracts – (3)

- The organization shall....
 - a) Identify and have access to the applicable **LEGAL REQUIREMENTS** and other requirements.

Legal & other requirements - 4.3.2

ISO14001 – Extracts – (4)

- Consistent with its **COMMITMENT TO COMPLIANCE**, the organization shall establish, implement and maintain a procedures for **PERIODICALLY EVALUATING COMPLIANCE WITH APPLICABLE LEGAL REQUIREMENTS**

Evaluation of compliance – 4.5.2.1

Role of the Certification Bodies in the Enforcement of Compliance with the Legal Regulations.

ISO 14001 Certification Pillars

- **ENVIRONMENTAL LEGAL COMPLIANCE**
- **PREVENTION OF POLLUTION**
- **CONTINUAL IMPROVEMENT**

ISO 14001 Certification

- Ensure that all **SIGNIFICANT ENVIRONMENTAL ASPECTS** and Relevant **LEGAL REGULATIONS** are Identified.
- Verify that all Operations & Activities Associated with **SIGNIFICANT ENVIRONMENTAL ASPECTS** are **CONTROLLED** and Carried out Under Specified Conditions, In addition to Emergency Plans in place to **PREVENT AND MITIGATE** Adverse Environmental Impacts.
- Review and Verify **COMPLIANCE** with Applicable **REGULATIONS**.
- Interview Personnel & Subcontractors to Verify Environmental **KNOWLEDGE** and **AWARENESS**.
- Verify the **CONTINUAL IMPROVEMENT** Process



Overview on other Environmental Standards and Specifications Related to the Protection of Environment



- **EMAS**
- **ISO 14064 Validation and verification of Greenhouse Gas emissions (GHG)**
- **EU Emission Trading Scheme Phase 2 (EU ETS2)**
- **Clean Development Mechanism (CDM)**



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