

The background is a solid green color with a faint, repeating pattern of stylized leaves and branches in a slightly darker shade of green. The text is centered and has a white outline.

# **10. Environmental Management Systems and ISO 14000**

# 10.1. Environmental Management Systems (EMS's)

An EMS is built around how an enterprise operates, focusing on its processes and its general system of management. An EMS does not focus on the “nitty-gritty” of fugitive emissions, waste streams and the like. In other words, an EMS focuses more on *how* rather than on *what*.

# Problems with the traditional approach

The traditional approach to environmental issues is *reactive*-nothing is done until:

- a new regulation comes into force.
- competitors may steal a lead by using a cleaner process that is more efficient.
- an embarrassing incident forces the issue, perhaps involving lawsuits.



Upper [picture](#) by NASA, public domain

Lower [picture](#) by Susie Shapira from WM Commons, CC license.

# Environmental Management System



By contrast, an EMS (like a quality management system) is *strategic*-progress is made through a deliberate and continual process of analysis, planning and implementation. The process can be summed up in four words: *plan, act, review & revise.*

# Commitment



Note that the EMS will only succeed if management are *genuinely committed* to the whole process (and seen by employees to be so)- if it is simply a token PR exercise it will fail.

## 10.2. ISO 14000



- Based on British standard BS7750, the International Standards Office (based in Geneva) introduced ISO 14001 as its main EMS component. Now generally accepted worldwide.

# The ISO 14000 “family”

- ISO 14001 Environmental Management Systems-specification with guidance for use.
- ISO 14004 Environmental Management Systems-general guidelines
- ISO 14010s Guidelines on Environmental Auditing
- ISO 14020s Environmental Labeling
- ISO 14030s Evaluation of Environmental Performance
- ISO 14040s Life Cycle Assessment
- ISO 14050 Terms & Definitions
- ISO 14060 Guide for Including Environmental Aspects in Product Standards

# 10.2.1. ISO 14001



This Certificate is issued by SGS International Certification Services, Inc.

Certificate Number: US2000/2143

This is to certify that the Environmental Management Systems of:

**AMERICAN BUREAU OF SHIPPING**  
16855 Northchase Drive  
Houston, Texas 77060-6008

have been assessed and registered as meeting the requirements of ISO 14001: 1996.

Scope of Assessment:

*Development and verification of standards for the design, construction, and operational maintenance of marine related facilities and equipment.*

Authorized by:

Director

For:  
SGS International Certification Services, Inc.  
Meadows Office Complex  
201 Route 17 North  
Rutherford, New Jersey 07070

Issue No.: 1, June 19, 2000  
Valid through June 19, 2003



The SGS ICS certification mark indicates satisfactory assessment of the applicable Quality Management Systems of the holder by SGS ICS in accordance with the indicated standard, ANSI-RAB accreditation, the SGS ICS Codes of Practice, and the scope of assessment. This certificate remains the property of SGS ICS to whom it must be returned upon request.

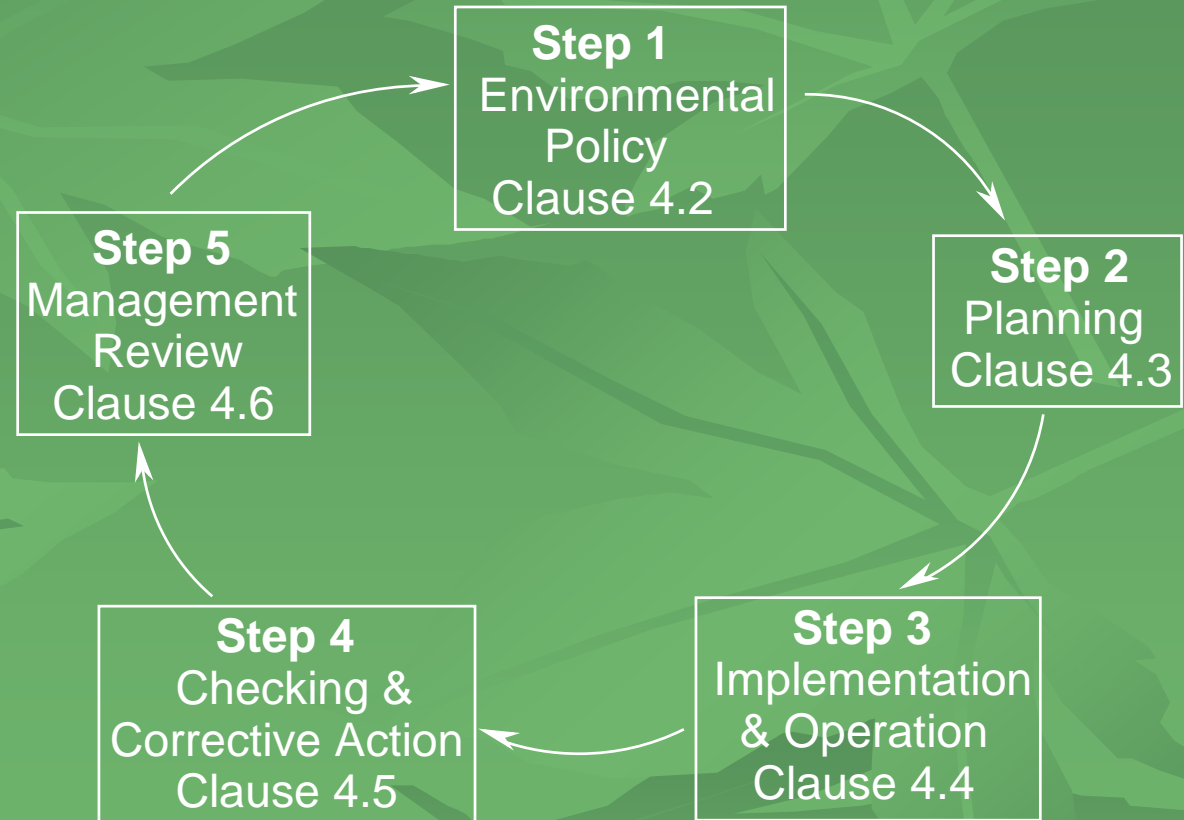


- This is the only part that is required for certification- the remainder are optional guidelines.



# The EMS process in ISO 14001

1. Environmental policy
2. Planning
3. Implementation and operation
4. Checking & corrective action
5. Management review



# Essential elements of the ISO 14001 EMS

- Commitment & involvement of top management.
- The enterprise's environmental policy- this must include commitments to:
  - Compliance with environmental regulations
  - Continual improvement
  - Pollution prevention (P2)
- Environmental management programs (action plans, projects, initiatives).