

CONSTRAINTS AND OPPORTUNITIES FOR THE WORK OF THE ENVIRONMENTAL MANAGER

D. C. Cawsey

Environmental Training Consultancy, Pencroft Farm, Uplyme, Devon, England

Keywords: Environmental manager, environmental management, environmental management systems, compliance, competitive advantage, environmental improvement, stakeholders, environmental auditing, life cycle management, eco-efficiency, eco-innovation, legislation, globalization, ethics, EMAS, ISO 14000 series, prosecution, BATNEEC, waste minimization, energy efficiency, environmental training, GM foods, life cycle assessment, eco-compass, packaging waste, producer responsibility, social responsibility.

Contents

1. Introduction
 2. What is an environmental manager?
 3. Constraints external to the enterprise
 - 3.1. Compliance
 - 3.2. Competitive Advantage
 - 3.3. Stakeholders
 4. Constraints Internal to the enterprise
 - 4.1. Internal Strategy
 - 4.2. Environmental Management Systems
 - 4.3. The role of environmental auditing in EMS
 - 4.4. Benefits of EMS
 - 4.5. Life Cycle Management
 - 4.6. Eco-Efficiency
 5. Future trends
- Glossary
Bibliography
Biographical Sketch

Summary

This article examines the work of the Environmental Manager. To do this it is necessary to understand the many operational constraints imposed on the environmental manager, both internally from within the enterprise, and externally from many different agencies. Some of these 'constraints' can also be used as opportunities. External constraints include: compliance with national and international legislation; competitive advantage; and stakeholder pressure. Internal issues include: strategy of enterprise; environmental management systems and auditing; life cycle management; and eco-efficiency. Future trends include: new legislation; pressures for eco-efficiency; globalization; and ethical considerations. These trends indicate the increasingly demanding role of the environmental manager and the need for flexible, high quality, up-to-date education and training to provide the range of knowledge and skills required.

1. Introduction

This article examines the work of the Environmental Manager. To do this it is necessary to understand the many operational constraints imposed on the environmental manager, both internally from within the enterprise, and externally from many different agencies. Some of these 'constraints' can also be used as opportunities. Future trends are explored which indicate the increasingly demanding role of the environmental manager and the need for flexible, high quality, up-to-date education and training to provide the range of knowledge and skills required.

2. What is an Environmental Manager?

An environmental manager is an employee of an enterprise with responsibility for controlling the impact of the enterprise on the environment, however, in reality the role and tasks of such a person may differ considerably from one enterprise to another. In this respect two important factors are: the size of the enterprise; and the extent to which the activities of the enterprise impact on the environment.

Larger enterprises often have a central environmental department together with a manager responsible for environmental matters at each operating site. In smaller enterprises the role is often combined with other responsibilities such as health and safety.

Some enterprises, such as those in the chemical industry, undertake activities which can have significant environmental impacts. In such enterprises the role of the environmental manager is important and often high profile. For some enterprises, such as office-based enterprises, the activities may not have such obvious and immediate environmental impacts, and the role of the environmental manager may be considered to be less important.

Whatever the size and scope of the activities of the enterprise, the work of the environmental manager is largely defined by both external and internal constraints. The nature of these constraints will now be examined.

3. Constraints External to the Enterprise

3.1. Compliance

All enterprises are required to demonstrate compliance with international and national environmental legislation. Failure to ensure compliance with the legislation can result in prosecution of the enterprise as a corporate entity and/or prosecution of individual employees or directors of the enterprise deemed to be responsible for the transgression. In some cases a successful prosecution by the relevant enforcement agency can result in one or more of the following: withdrawal of license to operate; heavy fines; imprisonment. At the minimum such an outcome may result in some bad publicity for the enterprise. At the maximum it may result in the enterprise going out of business.

Some examples of successful prosecutions brought by the UK Environment Agency are

given in Appendix 1. Although these offences are of different types, they all resulted from failure of the employees responsible for environmental management to ensure compliance with the current legislation.

Appendix

Example 1

£270,000 PROSECUTION OF SARP UK LTD AFTER 2 TOXIC GAS CLOUDS ESCAPED OVER KILLAMARSH (NEAR SHEFFIELD) IN MAY 1998

Offences included:

“Keeping controlled waste, namely special waste comprising a mixture of acids, in a manner likely to cause pollution of the environment or harm to human health contrary to Sec 33 (1)C and Sec (33) (9) of the Environmental Protection Act 1990”

“I was delighted with the outcome. These were serious offences and the penalties were sufficiently large to gain the attention of the boardroom. I hope this sets a trend for future sentences”

Ed Gallagher, EA Chief Executive

(UK Environment Agency Press Release 23 December 1999)

Example 2

RHODIA ECO SERVICES FINED £13K +COSTS FOR 2 OFFENCES OF DISCHARGING TOXIC EFFLUENT CONTAINING MERCURY IN THE RIVER ROTHER NEAR CHESTERFIELD IN 1998

Offences:

“failure to comply with authorisation to carry out a process using the best available techniques not entailing excessive cost. Contrary to Sections 6, 7, 23 of the Environmental Protection Act 1990”

“did cause poisonous, noxious or polluting matter namely effluent containing mercury to enter controlled waters namely the River Rother. Contrary to Sections 85 (1), 85 (6) of the Water resources Act 1991”

(UK Environment Agency Press Release 9 December 1999)

Example 3

COMPANY DIRECTOR FINED £5K +COSTS FOR ILLEGALLY DUMPING DEMOLITION WASTE NEAR HARROGATE

ALSO DISQUALIFIED FOR BEING A COMPANY DIRECTOR FOR 2 YEARS

(UK Environment Agency Press Release 10 January 2000)

Example 4

LEIGH ENVIRONMENTAL FINED OVER £100K FOR FALSIFICATION OF LANDFILL DATA SENT TO EA FROM SITES NEAR TELFORD AND WARWICK

Data for difficult waste (including cyanide, mercury, cadmium, arsenic) and leachate were regularly

falsified.

“This incident was extremely serious, especially considering Leigh Environmental Ltd’s poor environmental record in the West Midlands....

This case resulted partially from the company not taking the due diligence required of an organisation which handles dangerous substances.”

EA Area Manager

(UK Environment Agency Press Release 6 January 2000)

Appendix 1: Examples of Successful Prosecutions of Enterprises by the UK Environment Agency.

3.2. Competitive Advantage

Although companies are clearly primarily in business in order to produce profits for their owners or shareholders, all enterprises including governmental and non-governmental organizations prefer to operate efficiently and reduce costs to the minimum. This can appear to be a constraint for the environmental manager because the achievement of environmental improvements in the enterprise may require capital investment. Even training of employees in environmental awareness and improved environmental practices can be seen as a cost for the enterprise. Such attitudes may apparently reduce costs in the short-term, but in the longer term may result in unsatisfactory compliance with legislation, poor environmental practices and a loss of competitive advantage. Many enterprises have recognized that relatively simple improvements, for example in energy efficiency and waste minimization, can lead to substantial cost savings with relatively short payback periods. An example is provided in Appendix 2.

Skippingdale Paper Products Ltd – nappy pads

Improvement 1

- *Old process:* Cutting by high pressure water jets. Water and fibre slurry waste to landfill – 5t/day.
- *New process:* Moulding. No slurry waste.
- *Saving:* £20k/yr landfill; £800k/yr material costs.
- *Payback:* 1 year.

Improvement 2

- *Changed process:* Reduction in pack volume by c60%.
- *Saving:* £195k/yr transportation costs - 600k km less per year.
- *Payback:* 6 months.

Appendix 2: Examples of Environmental Improvements

There are other competitive advantages that may result from improved environmental performance. These can include:

- Improved materials and energy efficiencies;
- Better product quality;
- Customer satisfaction and loyalty;
- Improved external 'image';
- Increased staff commitment;
- Reduced risk exposure;
- Lower insurance premiums;
- Cheaper finance.

Some enterprises have recognized these competitive advantages and have deliberately set out to be identified as 'environmentally friendly'. In its advertising the Co-operative Bank in the UK stated "We promise to never invest our customers' money in companies that needlessly pollute". The Swedish-based chain-store IKEA has also adopted practical 'green' policies, for example by eliminating the use of chlorine bleached paper and substituting polypropylene and wood products for PVC products. In such enterprises where the directors are committed to a comprehensive long-term environmental strategy, then environmental improvement becomes integral to all aspects of the operation of the enterprise. In this context the environmental manager is a key employee involved in developing and implementing the strategy.

-
-
-

TO ACCESS ALL THE **19 PAGES** OF THIS CHAPTER,
Visit: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>

Bibliography

Commission of the European Union (CEC) (1993). Allowing Voluntary Participation by Companies in the Industrial Sector in a Community Eco-Management and Audit Scheme, Council Regulation No 183 6/93, June 1993, Official Journal of the European Communities No L 168/1, 10 July 1993. [The EU regulation introducing EMAS.]

Fussler, C. (1996). *Driving Eco-Innovation*, Pitman, London. [This work explains the opportunities and barriers for eco-innovation by businesses. It includes description of the eco-compass.]

Gilbert, M. and Gould, R. (1998). *Achieving Environmental Standards*, 2nd Edition, Financial Times Pitman Publishing, London. [A practical guide to implementing an environmental management systems in an enterprise.]

Gouldson, A. and Murphy, J. (1998). *Regulatory Realities: The Implementation and Impact of Industrial Environmental Regulation*, Earthscan, London. [This work considers the impact of regulation on enterprises.]

International Standards Organisation (ISO) (1996). *ISO 14001 Environmental Management Systems – Specification with Guidance for Use*, Geneva. [The international standard. NB Status of the ISO 14000 Series standards and copies can be obtained from ISO Secretariat, Case Postale 56, CH-1211 Geneva 10,

Switzerland, telephone +41 22 749 0111, fax +41 22 733 3430, <http://www.iso.ch>].

Krut, R. and Gleckman, H. (1998). ISO 14001 – A missed opportunity for sustainable global industrial development, Earthscan, London. [An assessment of the international standard with background information on the issues involved in the development of the standard.]

Mitchell, J. (1998). *Companies in a World of Conflict: NGOs, Sanctions and Corporate Responsibility*, Royal Institute of International Affairs and Earthscan, London. [A series of papers considering the ethical and other issues affecting enterprises arising from globalization.]

Poyry, S., Pringle, J. and Hagstrom, A. (1998). *Innovation Strategies for Economy and Environment*, Proceedings ENTRÉE '98, UETP-EEE, Brussels. [A collection of papers dealing primarily with environmental management and strategies for improving environmental performance.]

Poyry, S., and Hagstrom, A. (1999). *Sustainable Use of Natural Resources – Cooperative Planning and Actions*, Proceedings ENTRÉE '99, EEE Network, Brussels. [A collection of papers including environmental management and education. It includes 'Environmental Challenges in the New Millennium: Facing Facts, Solving Problems' by D C Cawsey and containing the Figure 1 in this article.]

World Business Council for Sustainable Development (1998). *Proceedings EuroEnvironment Conference*, Aalborg, Denmark. [A collection of papers dealing with a range of responses by enterprises to environmental issues.]

Biographical Sketch

Professor David Cawsey has an honors degree in Geology and a doctorate in Civil Engineering. He is a Chartered Geologist and a Fellow of the Geological Society of London. His wide experience includes working for central and local governments, higher education, and industry in engineering geology and subsequently in environmental engineering and management. He is the author of more than 50 publications in these fields. Other professional activities have included leading successful international environmental and training programs, and acting as external examiner and adviser for degree programs and doctorates. He now combines some university teaching with consultancy and professional activities.