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Protecting the environment: the role of environmental management systems

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Abstract

Environmental management and auditing systems are increasingly important. They have significant roles to play in relation to environmental protection, workplace safety and public health. Businesses and non-commercial organisations adopt such systems for a variety of reasons. The extent to which they are used varies very considerably between developed countries. The effectiveness of national regulatory systems seems to be a major factor. In the United Kingdom environmental regulators have traditionally sought the voluntary compliance of businesses. This strategy is closely associated with the near absence of administrative penalties. It seems that a wide range of environmental administrative penalties will be introduced in the near future. This may greatly encourage more firms to introduce environmental management and auditing systems.

INTRODUCTION

Environmental Management Systems (EMSs) have existed for several decades. The first EMSs were essentially a corporate response to well-publicized accidents at industrial sites in Canada and the USA. In 1975, for example, a man employed at a pesticide factory in Virginia, USA., experienced 'dizzy spells'. Subsequent blood tests suggested that the health of workers was at risk and the manufacturing facility was ordered to cease operations. The relevant company (the Allied Chemical Corporation) was eventually permitted to resume production after it agreed to establish an EMS.¹

The emergence of industry-wide codes of conduct was a parallel development. The American and Canadian Chemical Industry's 'Responsible Care Program' is an early example. These codes of conduct evolved into more formalized EMSs, i.e. systems and standards that were generally applicable.² The best known are the International Standardization Organization's ISO 14001 and the European Community's Eco-Management and Auditing Scheme (EMAS). These share certain similarities and became closely aligned in 2001.^{3,4}

Most EMSs share certain features. These include:⁴

- ♦ the identification of environmental goals and targets;

- ♦ the identification of an organization's environmental impacts;
- ♦ the identification of relevant legislation/regulatory structures;
- ♦ the establishment of control, measurement and monitoring procedures;
- ♦ the introduction of appropriate training programmes for employees;
- ♦ the introduction of structured documentation systems (a prerequisite of effective environmental auditing systems).

WORLDWIDE RECOGNITION

Environmental management and auditing systems and standards are becoming increasingly popular. The global total of ISO 14001 certifications was 66,070 in December 2003 – 16,621 more than a year earlier.⁵ Certifications are not, of course, evenly distributed. Most are in Europe (48%), the Far East (36%) and North America (8%). At the time of the survey, the UK had 5460 certificates – 2547 more than in December 2002 (a remarkable annual growth rate of 87%). Only Japan had more certifications (13,416). The USA was sixth in the world (with 3553 certifications) – just ahead of Sweden (with 3404).

British businesses and other organizations appear to be far less enthusiastic about EMAS (which,

unlike ISO 14001, requires participants to publish environmental statements). In January 2005 there were 3067 EMAS registered organizations (and 4093 sites) in the European Community.⁶ Germany and Spain had 1641 and 412 registered organizations respectively. The UK had 66 registered organizations (and 67 sites).

The significance of this apparent neglect of EMAS should not be exaggerated. Businesses in other highly developed European countries appear to have reservations about EMAS. France had 2344 ISO 14001 certificates and 20 EMAS registered organizations. The situation in the Netherlands is similar. There were 1162 ISO 14001 certificates and 25 EMAS registered organizations.

ENVIRONMENTAL REGULATION

These variations seem to be largely attributable to the different legal and regulatory systems and traditions which exist in modern developed states. In essence, companies in some countries are given real incentives to adopt environmental management and auditing systems and standards. In other countries, these incentives are much weaker.

Indeed, the disincentives may be much stronger than any incentives.⁷ It has been calculated that Germany has approximately 35,000 environmental regulations.⁸ Although this figure takes account of the laws of the sixteen states (*länder*), the extreme complexity of German environmental law cannot be denied. This encourages businesses to adopt environmental management and auditing systems. It would be impossible for many German businesses to operate within the law without such systems.

In Germany, environmental regulators expect a high degree of compliance. Firms which are EMAS registered often get favourable treatment (e.g. concessions regarding reporting and documentation requirements). Administrative/civil penalties (*geldbusse*) are used to punish those which commit administrative offences (*ordnungswidrigkeiten*). There is no fault requirement. Penalties are imposed by regulatory agencies – although there is a right of appeal to an administrative tribunal.⁹

In the United Kingdom, regulatory bodies such as the Environment Agency for

England and Wales (the Agency) have traditionally sought the voluntary compliance of businesses and other organisations. They have preferred persuasion to coercion. Because of the near-absence of effective administrative penalties, this approach has rested (ultimately) on the threat of prosecution. This is often a highly unsatisfactory deterrent.¹⁰

British Businesses and the Environment

In many respects, the United Kingdom's environment has improved very substantially over the past half century. This has major health implications. Gone are the 'smogs' (mixtures of smoke and fog) for which Britain was once infamous. This development alone has saved tens of thousands of lives.¹⁵ The quality of rivers and beaches has improved immeasurably. Domestic water supplies are far better than was once the case.

It would, of course, be wrong to be complacent. Pollution and other environmental hazards continue to endanger health. Recent research suggests that toxic emissions into the atmosphere continue to cause heart disease and cancer. Children appear to be particularly vulnerable.^{11,12,14}

It would also be wrong to conclude that all businesses take their environmental responsibilities seriously. Many appear to be completely unaware of them. A 2002 Agency survey of 1175 small and medium sized enterprises (SMEs) revealed that only 18% could identify environmental legislation that applied to them. Over half did not undertake any form of environmental action.¹⁵

Problems with Command and Control Regulation

According to Bridget Hutter, 'Command and control pollution regulation [involves] the "command" of the law and the legal authority of the State'¹⁶ This can take the form of unambiguous prohibitions. This is sometimes necessary to avoid potentially catastrophic developments (the bans on the production of ozone-depleting chlorofluorocarbons – CFCs – and hydrofluorocarbons – HFCs – are well-known examples). More generally, it requires individuals and businesses to obtain licences/permits.

Anglers usually require licences. If they fish in a river with a licence they act within the law. If they fish without one, they are open to prosecution. In similar fashion, a company that wishes to discharge substances into a river must first obtain the necessary authorisation. A business that discharges waste into the environment without such permission (or which exceeds the terms of the permission granted) may also be prosecuted. Similar rules exist in relation to the transportation and disposal of waste. The command and control approach need not depend on criminal sanctions. In most developed countries it depends on a mixture of civil sanctions (e.g. citizen suits), administrative penalties (e.g. civil fines and licence suspensions) and criminal prosecutions. In the United Kingdom it has relied (unusually) on prosecution. There is growing evidence that this is about to change.

Problems with Prosecution

Some environmental offences are more obviously 'criminal' than others. Illegal waste disposal is a good example. Huge profits can be made by people who engage in commercial fly-tipping. Highly toxic waste may be (falsely) reclassified as non-hazardous. Many 'professional criminals' are engaged in a variety of activities.

Commercial fly-tipping is dominated by criminal gangs. Operations often depend on intimidation and/or bribery.¹⁷ These are obviously criminal activities. Prosecutions are justified in such cases. Those convicted should be sentenced appropriately (as should those engaged in comparable activities such as trafficking in animals and animal products). But most environmental crimes are strict liability offences.¹⁸ The majority are essentially regulatory breaches. There is no need for the prosecution to establish *mens rea* (i.e. fault in the form of intention, recklessness or even negligence). An inadvertent discharge of effluent into a river is a good example.

Although the incident may have very significant health implications, prosecuting a factory owner or farmer in such circumstances raises a number of difficulties. These include the need to prove a case to the criminal standard (i.e. beyond reasonable doubt), the time and effort necessary to prepare cases, and the modest

finances that are received by most environmental offenders. Those prosecuted generally plead guilty in court and concentrate on trivializing their 'misdemeanors'. Their ability to do this is facilitated by the fact that most magistrates and judges see very few environmental cases.¹⁹ Prosecutions can also destroy relationships between regulators and the regulated. For Environment Agency officers it is a 'last resort'. Stephen Fineman has produced an interesting study of Agency staff:²⁰

Few inspectors trusted the courts and magistrates to deliver punishments sufficient to fit the environmental crime or deter re-offending... Prosecution was... resisted. It could leave a 'prickly', 'antagonistic' legacy, complicating future inspection visits. Inspectors typically wanted to go through the motions of getting tough without going 'the whole way'. For them, sabre-rattling was part of the appropriate regulatory ritual, but actual prosecution was not.

Bridget Hutter's excellent study of environmental health officers reached broadly similar conclusions:²¹

'Enforcing the law' to an Environmental Health Officer means securing compliance to the law through persuasion and advice, rather than the apprehension and subsequent punishment of offenders... The reluctance of officers to regard themselves as dealing with criminal activity is no more strongly stated than in their reaction to the suggestion that environmental health offenders should be regarded as criminals... Whereas the majority of officers admitted that 'some' offences were crimes, they felt that only 'seldom' – not 'sometimes' – were they dealing with criminals.

Most of those interviewed were very reluctant to prosecute offenders:²²

[E]ven the most experienced officers go to the courts only rarely. Some inexperienced officers enter the courtroom with trepidation. Not only are they nervous about appearing in court but, like many of their more experienced colleagues, they fear unsympathetic treatment by magistrates.

Administrative Penalties

According to the authors of a recent report titled *Environmental Civil Penalties*, an excessive reliance on criminal enforcement can lead to

the undermining of the concept of criminality by its extension to morally neutral 'offences'; the trivialisation of criminal cases through the use of inappropriate 'defences' in front of sympathetic judges; the practical difficulties arising from regulators having to meet the criminal standard of proof in terms of costs, time and resources; and the 'lottery' of the fines applied by the criminal courts, which fails to provide proper recompense for the damage caused to the environment.

The authors conclude that the current regulatory system 'does not provide the flexibility, fairness or moral accuracy to achieve optimal compliance and therefore the adequate protection and conservation of the environment.'²³

Administrative penalties have several advantages. They greatly strengthen the position of regulators by enabling them to impose civil fines (usually with considerable discretion) without necessarily accusing businesses of criminal conduct. The costs, delays and excuses associated with prosecutions can be avoided. More fundamentally, financial penalties may be linked to the harm done (or to corporate turnover). Creating a risk to health would be an aggravating factor. It is generally accepted that criminal fines for environmental offences tend to be very low. It is also clear that most – the vast majority, in fact – are never prosecuted.²⁴ At present, it is often economically rational (if morally deplorable) for individuals and companies to engage in environmental crime.²⁵

The Use of Administrative Penalties in the United Kingdom

The use of administrative penalties has been increasing for many years. They are used by the Office of Fair Trading to punish/deter conduct which distorts British trade. The maximum penalty is currently 10% of the relevant business's turnover. They are also used to punish/deter anti-social behaviour by individuals (e.g. being drunk and disorderly).

Administrative penalties are sometimes (though rarely) used to protect the environment. The emission of excessive noise from domestic premises at night can, for example, lead to the imposition of a fixed penalty (currently £100). If this is paid within 14 days any possible criminal liability is automatically discharged.²⁶

Administrative Penalties and Environmental Protection

At a conference organised by the Department for the Environment, Food and Rural Affairs (DEFRA) in November 2004, administrative penalties were discussed in some detail. The Environment Minister, Elliot Morley, said:²⁷

We want a new approach to the law and to the punishment of environmental crimes, and more flexibility in making the punishment fit the crime. Decent companies who break the law inadvertently are receiving criminal sanctions, while others are breaking the law and receiving fines that have been derisory.

A report published by Environmental Data Services (ENDS) claims that administrative penalties 'appear to be the flavour of the month for a Government keen to be seen doing something about environmental justice'. Parliament is likely to enact the necessary legislation in the near future. What are the implications for British businesses? According to ENDS, administrative penalties²⁸

if used with any serious intent, would be bound to upset the present equilibrium between businesses and regulators – an equilibrium which, crucially, commonly incorporates a degree of tolerance for breaches of permits... Across the country, there must be many thousands of breaches of permits each week, and most currently pass without sanction... A new climate in which operators could no longer expect to infringe permit conditions without sanction as regularly as now would be bound to have knock-on effects on their relationship with regulators.

Conclusion

Polluting the environment has serious and long-term implications for public health.

According to one authority, 'it is more important for the future of the human race that we protect the environment than that we reduce the number of road accidents'.³⁰ However tragic motor fatalities may be, the loss of the ozone layer would be a much more serious matter. It seems clear that the United Kingdom's environmental regulators will soon have administrative penalties at their disposal.³¹ Issues relating to the nature and use of these penalties are less clear. If linked to annual corporate turnover they could be far more severe punishments than the fines that magistrates

currently impose on environmental offenders. The likelihood of punishment is another important factor. At present, most environmental offenders are never prosecuted. There is therefore a small chance of receiving a financial penalty (which is likely to be modest). In the future there may be a high chance of receiving a very substantial penalty.

How will British businesses respond? A more robust approach to environmental regulation might discourage some companies from reporting permit infringements and publishing

environmental reports.³² Other companies may prefer to adopt environmental management and auditing systems such as EMAS that (in addition to their other advantages) help businesses to operate within the law. This would have significant health implications.

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