THE ENFORCEMENT OF ENVIRONMENTAL LAW IN ENGLAND AND WALES

By

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11.5 Research Aim 4: To investigate the types of enforcement policies prevalent in regulatory agencies and evaluate their varying levels of effectiveness.
11.6 Research Aim 5: To determine the level of consistency in the approach to enforcement within and between regulatory agencies.
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11.8 Research Aim 7: To suggest improvements to the system where required.

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National Rivers Authority v Wright Engineering Co. Ltd [1994] 4 All ER 281

National Rivers Authority v Yorkshire Water Services Ltd [1995] 1 AC 444

Network Housing Association Ltd v Westminster City Council (1995) 27 HLR 189

Overseas Tankship (UK) Ltd. v Morts Dock & Engineering Co. Ltd. (The Wagon Mound) [1961] 2 WLR 126

Price v Cromack [1975] 1 WLR 988

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R v Dovermoss Ltd [1995] Env LR 258

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R v Secretary of State for the Environment and Ministry of Agriculture, Fisheries and Food ex parte Standley and Others Case C-293/97, ECJ, 29 April 1999

R v Secretary of State for the Environment, ex parte Friends of the Earth [1995] Env LR 11

R v Secretary of State for the Environment, ex parte Friends of the Earth and Andrew Lees [1994] 2 CMLR 760

R v Secretary of State for the Environment, ex parte Rose Theatre Trust [1990] 2 WLR 186

R v Secretary of State for Trade and Industry, ex parte Dudridge [1995] Env LR 151

R v Sevenoaks District Council, ex parte Palley [1994] EGCS 148

R v Yorkshire Water Services Ltd. [1994] Water Law 175

Read v J. Lyons & Co. Ltd. [1947] AC 156

Rylands v Fletcher (1868) LR 3 HL 330

St Helen's Smelting Co. v Tipping [1865] 11 HL Cas 642

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<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACA</td>
<td>Angler's Co-operative Association</td>
</tr>
<tr>
<td>AMA</td>
<td>Association of Metropolitan Authorities</td>
</tr>
<tr>
<td>BATNEEC</td>
<td>Best Available Technique Not Entailing Excessive Cost</td>
</tr>
<tr>
<td>BOD</td>
<td>Biological Oxygen Demand</td>
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<tr>
<td>BPEO</td>
<td>Best Practicable Environmental Option</td>
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<tr>
<td>BPM</td>
<td>Best Practicable Means</td>
</tr>
<tr>
<td>CAA</td>
<td>Clean Air Act 1993</td>
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<tr>
<td>CBI</td>
<td>Confederation of British Industry</td>
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<tr>
<td>CIA</td>
<td>Chemical Industries Association</td>
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<td>CIEH</td>
<td>Chartered Institute of Environmental Health</td>
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<tr>
<td>COPA</td>
<td>Control of Pollution Act 1974</td>
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<td>CPS</td>
<td>Crown Prosecution Service</td>
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<tr>
<td>CRI</td>
<td>Chemical Release Inventory</td>
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<tr>
<td>DC</td>
<td>District Council</td>
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<tr>
<td>DoE</td>
<td>Department of the Environment</td>
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<tr>
<td>DETR</td>
<td>Department of Environment, Transport and the Regions</td>
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<tr>
<td>DOJ</td>
<td>Department of Justice</td>
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<tr>
<td>EA</td>
<td>Environment Act 1995</td>
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<td>ECJ</td>
<td>European Court of Justice</td>
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<tr>
<td>EIB</td>
<td>Environment Information Bulletin</td>
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<td>EIC</td>
<td>Environmental Industries Commission</td>
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<td>ELB</td>
<td>Environment Law Brief</td>
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<td>ELM</td>
<td>Environmental Law Monthly</td>
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<td>EM</td>
<td>Environmental Manager</td>
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<td>EMS</td>
<td>Environmental Management System</td>
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<td>ENDS</td>
<td>ENDS Report</td>
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<td>EPA</td>
<td>Environmental Protection Act 1990</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>FoE</td>
<td>Friends of the Earth</td>
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<td>HMIP</td>
<td>Her Majesty's Inspectorate of Pollution</td>
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<tr>
<td>HMIPi</td>
<td>Her Majesty's Industrial Pollution Inspectorate</td>
</tr>
<tr>
<td>ISR</td>
<td>Inventory of Sources and Releases</td>
</tr>
<tr>
<td>IPC</td>
<td>Integrated Pollution Control</td>
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<tr>
<td>IPPC</td>
<td>Integrated Pollution Prevention and Control</td>
</tr>
<tr>
<td>LA</td>
<td>Local Authority</td>
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<tr>
<td>LAAPC</td>
<td>Local Authority Air Pollution Control</td>
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<tr>
<td>MAFF</td>
<td>Ministry of Agriculture, Fisheries and Food</td>
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<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>NRA</td>
<td>National Rivers Authority</td>
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<td>NSAs</td>
<td>Nitrate Sensitive Areas</td>
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<td>NSCA</td>
<td>National Society for Clean Air</td>
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<td>NVZs</td>
<td>Nitrate Vulnerable Zones</td>
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<td>NWC</td>
<td>National Water Council</td>
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<td>OPRA</td>
<td>Operator Pollution Risk Appraisal</td>
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<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>PER</td>
<td>Polluting Emissions Register</td>
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<td>RCEP</td>
<td>Royal Commission on Environmental Pollution</td>
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<tr>
<td>SEPA</td>
<td>Scottish Environmental Protection Agency</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>SME</td>
<td>Small and Medium-Sized Enterprise</td>
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<td>SSSI</td>
<td>Site of Special Scientific Interest</td>
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<tr>
<td>TRI</td>
<td>Toxic Release Inventory</td>
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<td>WA</td>
<td>Water Act 1989</td>
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<td>WIA</td>
<td>Water Industry Act 1991</td>
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<tr>
<td>WPZs</td>
<td>Water Protection Zones</td>
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<td>WQOs</td>
<td>Water Quality Objectives</td>
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<td>WRA</td>
<td>Water Resources Act 1991</td>
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<td>ZIP</td>
<td>Zone of Industrial Pollution</td>
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The Enforcement of Environmental Law in England and Wales - By Lisa Jane Page

Abstract

The control of environmentally damaging activities has become one of the most important areas for concern in recent years. The amount of legislation relating to this subject area has increased several-fold, with European Directives and domestic laws being introduced in response to pressure from a variety of avenues. Key studies on the enforcement of environmental law have been carried out. However, this work was undertaken prior to the expansion of legislative provisions at the start of the 1990s.

In the light of this new legislation, new regulatory agencies, and changing public opinion, the following research aims were formulated:

1. To assess the approach to enforcement by regulatory agencies (co-operation versus confrontation).
2. To determine the extent and rate of utilisation of enforcement methods by the regulatory authorities, and the reasons for non-utilisation.
3. To determine which factors influence the strategic decision making process, and to measure the relative importance of each factor.
4. To investigate the types of enforcement policies prevalent in regulatory agencies and evaluate their varying levels of effectiveness.
5. To determine the level of consistency in the approach to enforcement within and between regulatory agencies.
6. To examine the consistency of the levels of penalties applied by the courts.
7. To suggest improvements to the system where required.

The first phase of the research involved a postal questionnaire to local authorities. This was followed by structured interviews with NRA and HMIP personnel. An assessment of the consistency of the regulators' enforcement action was made through responses to a regulated community questionnaire, and an appraisal of the consistency of penalties applied by the courts was achieved by analysis of case reports.

The main findings from the research were:

1. Regulatory agencies adopted a co-operative enforcement approach in the first instance, followed by more stringent action if required.
2. Most regulatory bodies did not use the full array of enforcement methods at their disposal.
3. A large variety of factors relating to the incident affects the decision making process.
4. Not all local authorities had an enforcement policy. Of those that did, a wide variation in the type of enforcement policies existed.
5. Regulators were found to be inconsistent in their enforcement practices.
6. The levels of penalties applied by the courts were also found to be inconsistent.

Improvements to the system were suggested as a result of these research findings.
CHAPTER 1

INTRODUCTION

1.1 Background

Concern for the environment has risen considerably in the past two decades. Areas requiring attention have been identified from a global (ozone depletion, global warming, etc.) to a local (noise nuisance, litter, etc.) scale. The realisation that certain activities can destroy particular environments and have a detrimental effect on the health of the population, has been accompanied by a call to restrict such practices. In response to pressure from the media, the European Union, non-governmental organisations and the general public, new legislation has been created to limit environmental degradation and pollution.

The introduction of domestic environmental legislation has been a rather piecemeal affair, occurring on an ad hoc basis (Doolittle, 1993). The Control of Pollution Act (COPA) 1974 was considered by many to be the first real attempt by the government to formulate a substantial and comprehensive law relating to matters such as the disposal of waste, water pollution, noise, etc. COPA 1974 has now, on the whole, been replaced by the Environmental Protection Act (EPA) 1990, the Water Resources Act (WRA) 1991 and the Environment Act 1995. In addition, Europe has played a key role in the formulation of legislation, having issued a plethora of directives and regulations relating to the environment (Kramer, 1993; Macrory 1992; Winter, 1996).

Although it seems that governments are now starting to take the notion of protecting the environment seriously, it must be made clear that any amount of legislation is rendered
virtually useless if the enforcement of that legislation is not carried out in an effective, appropriate and consistent manner. In the absence of an effective enforcement system, any incentive to comply with the legal requirements will be severely diminished or even removed altogether (Fukuyama et al. 1996). As McLoughlin and Bellinger (1993) observe "enforcement forms a necessary element within a complete system of pollution control."

Three major studies have been carried out in the field of environmental law enforcement in the UK. Hawkins (1984) and Richardson et al. (1982) investigated the enforcement of water pollution laws under the Control of Pollution Act 1974. The work by Hutter (1988) dealt with the enforcement role of local authority environmental health officers. This research provided an important insight into the methodologies and strategies employed by enforcement personnel, and will be discussed at greater length in subsequent chapters. However, it must be noted that all three pieces of research were carried out during the 1970s and 1980s and thus relate specifically to legislation in force at that time. As the body of environmental legislation has continued to expand throughout recent years, this research has become increasingly outdated. Furthermore, the re-structuring of enforcement agencies and the changing attitudes of governments and the general public1 to environmental pollution has probably had a substantial impact on enforcement practices.

A gap in the literature has thus been identified. This research was undertaken to provide information relating to the state of environmental law enforcement during the 1990s in England and Wales.

1 A MORI poll carried out in 1995 showed that 51% of respondents wanted equal attention given to environmental and economic considerations, whilst a further 31% wanted environmental considerations to be dominant with respect to investment. (Green Alliance Parliamentary Newsletter, 19/5/95). More recently, another MORI poll in 1997 (Business and the Environment 1997, Attitudes and Behaviour of the General Public) indicated that 77% of those interviewed thought that British companies do not pay sufficient attention to the treatment of the environment (Environment Action 1997/8 11: 10).
1.2 Research Aims

The problem with such a rapidly evolving field of study is that the law is continuously introducing changes to the system, one of the most recent being the establishment of the Environment Agency in April 1996. As Lazarus (1996) observes, "the only constant in environmental law is change." This study therefore aims to provide a 'snapshot' of working practices during the period 1995-1996 when the empirical data collection was undertaken. The advantage of working with this time window is that the enforcement agencies involved (National Rivers Authority (NRA), Her Majesty's Inspectorate of Pollution (HMIP) and local authorities) had all been in existence for several years. Enforcement routines had thus been established, in addition to working relationships with the regulated community. Although the Environment Agency has been formed since the empirical research was carried out, the findings of this research are very much applicable to the present day. This is because:

1. The legislation being enforced by the Agency is the same as that enforced by the NRA and HMIP, with one or two minor exceptions that are detailed in the text.
2. The Agency was formed from a merger of the NRA and HMIP (and Waste Regulation Authorities), thus producing a unified body with virtually the same enforcement powers.
3. The work of the local authorities pertaining to air pollution control has remained unchanged in recent years.

Changes to the structural integrity of the enforcement system being investigated in this study have therefore been minimal since the empirical research was carried out.
The specific aims of the research can be broken down into three distinct areas, namely:

- to obtain information relating to the methods, methodologies and strategies employed by the regulatory agencies in environmental law enforcement;

- to investigate the consistency of enforcement action by the authorities and the consistency of treatment by the courts through information obtained from the regulated community;

- to assess the consistency and levels of penalties applied by the courts by utilising case histories.

Little is known of the strategies and decision making processes employed by regulatory agencies when utilising enforcement measures. A number of factors that may influence this process have been isolated from the literature (see Chapter 3), but research is required to confirm this information. Such factors may include the severity of the incident (Downing and Kimball, 1982; Hunter and Waterman, 1992; Weait, 1989; Starr, 1991) and the attitude displayed by the offender (Watchman et al., 1988; Marella, 1992; McGregor, 1994; Rowan-Robinson and Ross, 1994; Ross, 1995), for example. By ascertaining whether these factors do in fact influence the process, and the relative contribution made by each factor, it may be possible to utilise this information in order to produce a more systematic methodology for the choice of enforcement action and thus promote uniformity throughout the regulatory agencies.

The uniform implementation of legislation is paramount to ensure fair enforcement amongst the regulated community and thus encourage the ideal of a 'level playing field' for industrial
competitors (Brittan, 1984; Makkai and Braithwaite, 1996). Furthermore, it also preserves the integrity of the regulatory authorities and fosters a better working relationship between the regulators and the regulated (Richardson et al. 1982, p.96-99). Little information was available relating to the uniformity of relevant enforcement agencies' actions prior to this study.

Another important aspect of enforcement is the utilisation of policies by regulatory agencies. The type of policies used, their mode of application and any effect this may have on the enforcement process needs to be investigated. Previous studies have indicated that structured policies relating to the enforcement of legislation have not been utilised by regulatory agencies (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988). Therefore, investigation of the effects of enforcement policies on the procedures and practices of regulatory authorities will provide original data relating to this novel subject area. This important aspect of the study has been reflected by the adoption of a formal and public enforcement and prosecution policy by the Environment Agency in November 1998. Further details of this policy can be found in Chapter 5.

Finally, information is required concerning the extent of utilisation of the variety of enforcement measures available to the authorities. Suggestions for improvements to the system could then be made in the light of these findings in order to maximise utilisation of specific methodologies that may currently be under exploited.

Moving on to the second aim of the research, a measure of the perceived consistency of enforcement action by the regulated community is essential to provide a balanced overview of the system. The regulated community's perceptions and opinions are extremely important
and play a pivotal role in their degree of cooperation with the regulatory bodies. Examination of both the consistency of the application of enforcement action and the levels of penalties applied by the courts needs to be undertaken. These two aspects of the process are obviously inextricably linked. Prosecution as a method of enforcement must be backed up by appropriate and consistent penalties otherwise the entire system is discredited (Adler, 1991; Burton, 1991; Cohen, 1992; Samuels, 1994).

Finally, details concerning the consistency of penalties may also be obtained from case studies. A review of case studies relating to the legislation in question has not previously been carried out. Consequently, no information exists on the differing levels of penalties applied by the courts, although comparison of two or three similar cases has led some authors to propose that inconsistencies do exist (ELB 1993 4(6):69; ELB 1994 5(8):96; ENDS 1997 273: 47). These proposals need to be thoroughly investigated using an appropriate sample size so viable conclusions may be drawn.

1.3 Choice of Legislation

It has already been noted that the amount of legislation pertaining to the environment is substantial. Therefore this study had to be limited to specific Acts. Two of the most important pieces of legislation to be enacted in recent years are the Environmental Protection Act (EPA) 1990 and the Water Resources Act (WRA) 1991.

The Water Act 1989, later consolidated into the WRA 1991, served to abolish water authorities in England and Wales. The National Rivers Authority (NRA) was established on
1st September 1989 and took over the water authorities' regulatory function. Duties relating to abstraction and impounding, water pollution, flood defence and the control of fisheries were covered by the WRA. This study specifically relates to the duties and powers of the NRA in respect of water pollution i.e. Part III of Chapter II of the WRA 1991.

In order to complement this area of interest, it was decided to investigate enforcement of the EPA 1990, particularly in relation to Parts I and III of this Act. Part I of the EPA introduced the concept of Integrated Pollution Control (IPC) whereby Her Majesty's Inspectorate of Pollution (HMIP) dealt with emissions from the most polluting processes to all environmental media (water, air and land). The powers of local authorities have also been increased under this Act, rendering the control of less polluting emissions into the atmosphere to these bodies. Part III of the EPA is concerned with the control of statutory nuisances principally by local authorities.

In choosing this legislation for investigation, an overview of enforcement practices relating to the pollution of all three environmental media (air, water and land) may be obtained. Furthermore, this legislation is closely interrelated to form an integrated system of pollution control (for example, both the EPA Part I and the WRA regulate water pollution, both EPA Parts I and III relate to air pollution, etc.), thus making these particular pieces of legislation a logical choice for the research.

An investigation of the enforcement of this legislation will result in the study of three very different regulatory authorities, namely the NRA, HMIP and local authorities, thus enabling a comparison between their approach to enforcement. Furthermore, these legislative requirements had been in force for a substantial time period before the empirical data
collection was carried out. It was important to choose legislation where this was the case for a number of reasons:

- to enable the regulatory authorities to become familiar with the legislative requirements and the array of enforcement methods available to them;

- to enable regulatory authorities to establish enforcement policies, practices and routines;

- to provide time for the regulated community to familiarise themselves with their duties and responsibilities under the legislation;

- to allow the relationship between the regulator and regulated community to become established (especially in the case of the NRA being newly formed);

- to provide an appropriate amount of time for substantial enforcement to be carried out in order to generate enough data for the research;

- to provide an appropriate amount of time for a number of cases to be heard through to completion in the courts, bearing in mind that bringing a prosecution can be a long and protracted process.

1.4 Research Methodologies

A number of research methodologies were utilised in this study. These included postal questionnaires, structured interviews and reviews of case studies. The choice of these
different methodologies for each aspect of the research was based on a number of characteristics of the respondents and the type of data to be generated. Chapter 6 contains full details of these methodologies.

1.5 Research Plan

Figure 1.1 illustrates the plan for the research. Chapter 1 of the thesis serves to place the research in context with a discussion of the importance of the subject area, identification of gaps in the literature and formulation of generalised research aims.

The next stage of the research was a review of available literature in Chapters 2 to 5. Chapter 2 provides an overview of enforcement, introducing the principles and key players involved in the process. The factors affecting the strategic decision making process are covered in Chapter 3, whilst a review of the legislation, the methods of enforcement available to regulatory authorities (both under the legislation and other more informal methods that may be utilised), and cases pertinent to the subject area are discussed in Chapter 4. Finally, an overview of the regulators, their structure and enforcement policies can be found in Chapter 5.
Figure 1.1

Research Plan

Background
Identification of gaps in literature
Formulation of research aims
Chapter 1

Overview of environmental enforcement: principles, and key players.
Chapter 2

Factors affecting the strategic decision making process.
Chapter 3

Literature review

Legislation overview, enforcement methodologies and case reviews.
Chapter 4

Review of the regulatory authorities; enforcement policies.
Chapter 5

Formulation of primary research aims and methodologies
Chapter 6

Local authority questionnaire
Chapter 7

NRA and HMIP interviews
Chapter 8

Regulated community questionnaire
Chapter 9

Consistency of sentencing in courts
Chapter 10

Empirical data collection and analysis

Interpretation and discussion of findings
Chapter 11

Conclusions and recommendations
Chapter 12
Formulation of primary research aims upon which to base the empirical data collection is carried out in Chapter 6. In addition, this chapter reviews the available research methodologies, and describes the ones used in this case. The choice of statistical techniques and their application to the data is also discussed.

Following on from Chapter 6 is the section concerned with empirical data collection and analysis of results. Chapters 7 to 10 relate to the results obtained from the local authority questionnaire, NRA and HMIP interviews, the regulated community questionnaire and a review of cases to provide information on the consistency of sentencing by the courts. Interpretation and discussion of these findings can be found in Chapter 11. Finally, Chapter 12 considers the conclusions that may be drawn from the findings, and delineates possibilities for future research.
CHAPTER 2
BACKGROUND TO ENFORCEMENT: SYSTEMS, STANDARDS, PRINCIPLES AND KEY PLAYERS

2.1 Introduction

This chapter can be divided into two sub-sections. The first serves to introduce the concept of enforcement, the system of controlling pollution in the UK and the environment within which the regulators must work. The second sub-section provides an overview of the key players involved in the enforcement process.

One of the main aims of this research is to obtain information relating to the methods, methodologies and strategies employed by regulatory agencies in environmental law enforcement. As a starting point it is therefore important to ascertain how enforcement is actually carried out in the UK, the various methods of enforcement available to regulators and the utilisation of different types of sanctions, how the regulators apply standards and limits to emissions, and the principles upon which regulatory officials base their work. This introductory overview forms the first element of this chapter and provides a basis for the discussion of related subject matter in subsequent sections and chapters.

The actual enforcement of environmental law may appear, at first glance, to be quite a simple process, consisting of the regulated community deciding whether or not to take a particular action against an offender. However, on closer examination it can be seen that this is far from the case. Numerous other key players all affect enforcement to a greater or lesser degree, making it impossible to consider regulatory bodies in isolation when investigating
enforcement of legislation. Apart from regulatory bodies, these key players include the UK Government, the European Community, the Royal Commission and Select Committees, the regulated community, pressure groups, the general public, the media and the courts. The actual enforcement action may therefore be viewed as the final step in a much wider chain of events where key players can interact and apply pressure to each other in order to change the final outcome.

The second element of this chapter discusses each of these key players in turn and determines what effect they have on the final action taken. This is important to provide a wider overview of the system, so research in later chapters may be placed in context. Knowledge of the whole system is needed before the strategies employed by regulatory bodies can be investigated, as one will have a profound influence on the other. This chapter therefore provides a background for the review of factors affecting the decision making process within regulatory agencies (covered in Chapter 3), and for the collection of empirical data from regulatory bodies to establish which methodologies and strategies are employed within these organisations (Chapters 7 and 8).

Sections 2.2 - 2.5 below cover the system of regulation in England and Wales, and introduces the concepts of different types of enforcement, environmental standards and principles. Sections 2.6 onwards are concerned with consideration of enforcement as an interactive process and discuss each of the key players in turn. Within this portion of the chapter, section 2.7 provides an overview of regulatory agencies and their 'traditional' enforcement approach in some detail. A review of the literature provided information relating to the strategies and methodologies employed by agencies during the 1980s from the three major studies carried out in the field of environmental law enforcement in the UK.
during this time (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988). This information was central to the theme of this research, and provided a solid base from which to formulate questionnaires for the collection of empirical data.

2.2 Administrative Regulation and Methods of Enforcement

In the UK, the system of controlling environmental pollution is based primarily upon the administrative regulation of certain processes and actions that can be considered damaging to the environment. Administrative regulation may be defined as "the application of rules and procedures by public bodies so as to achieve a measure of control over activities carried out by individuals and firms" (Bell, 1997, p.95). Regulatory agencies work within the legislative framework developed through central government and have a number of mechanisms available to them to enforce these regulations.

Enforcement methods can be divided broadly into two categories, namely formal and informal. Within the category of 'formal' methods of enforcement are a number of actions that vary widely in their severity. Prosecution may be considered to be at the top of the scale as the ultimate sanction for an environmental offence. Other methods such as the variation or revocation of a consent to discharge effluent may be used either as a sanction or purely as a procedural requirement as the needs of businesses change. Another possible required outcome is the remediation of polluted areas by, for example, clean-up of contaminated land or replacement of species affected by the pollution. Furthermore, other measures may be taken such as the formal sampling procedure (see Chapter 4 for details) or a formal warning letter. These actions contain no element of punishment in themselves, but serve to inform the offender of his wrongdoing and may precede other enforcement measures.
Informal methods of enforcement, for example increased monitoring of a site, verbal warnings, or informal problem-solving mechanisms such as discussions with businesses, have been found to be used extensively by the regulators (Richardson et al., 1982; Brittan, 1984; Hawkins, 1984; Hutter, 1988). These authors found that a conciliatory approach to enforcement was taken by regulators on the whole, with emphasis on discussion, education and co-operation rather than the utilisation of formal sanctions (see section 2.7 and Chapter 3 for further details).

A full discussion of the variety of enforcement methods available to regulatory agencies can be found in Chapter 4. Part of the empirical research for this study involved an assessment of the utilisation of different enforcement measures by regulatory authorities and the reasons for favouring particular types of action over others.

2.3 Criminal and Civil Enforcement

The overall objective for regulators is said to be to secure compliance with the regulations using the most appropriate and effective means at its disposal (Bell, 1997, p.131-133). In many cases it is thought that punishment of the offender assumes a secondary role. However, the use of criminal sanctions can have the effect of deterring individuals and businesses from future violations and thus prevent pollution incidents (McGregor, 1994; Yang, 1995).

Dimento (1993) offers several arguments for and against the use of criminal sanctions as a tool for reaching environmental objectives. Criminal sanctions may be viewed as the most effective for deterrent purposes (Posner, 1980). Incarceration of an offender can serve to
deter that individual from repeat violations, in addition to discouraging other prospective offending individuals or businesses. Furthermore, this sanction focuses directly on the individuals creating the risk and cannot be passed onto the consumer (Hedman, 1991). In addition, the bad publicity attracted by a criminal prosecution can prove extremely detrimental to the corporate image and in many instances can be far more damaging than the actual punishment bestowed by the courts (Hutter, 1988).

Another important argument for the utilisation of the criminal law is the message conveyed to the regulated community concerning the seriousness of the offence. Environmental offences have traditionally been viewed as morally ambivalent (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988; Ogus, 1994). In many cases, economic considerations have taken precedence over environmental problems, with strict control of environmentally damaging practices often taking a back seat to the preservation of jobs (McLoughlin and Bellinger, 1993). In recent years, however, the importance of controlling pollution (to protect the public's health and the environment as a whole) has been increasingly recognised (McGregor, 1994). Utilisation of the criminal law for enforcement purposes thus communicates the gravity of the offence to the regulated community.

Finally, undertaking criminal prosecutions reflects a moral imperative to punish the offender. Some environmental crimes are carried out by wilful polluters and result in irreversible damage to ecosystems or deleterious health effects. In these cases, it is argued that only criminal sanctions reflect the seriousness of such actions (Dimento, 1993).

Arguments against the use of the criminal law include high costs, procedural complexity and potential overkill effects, where the continued use of criminal sanctions for relatively minor
incidents can diminish the deterrent effect (Dimento, 1993). Furthermore, the burden of proof is greater under the criminal law than the civil law. Fortunately, in the UK most environmental offences are those of strict liability meaning that the appropriate mens rea or intent to commit a crime does not have to be proven.

Apart from the types of enforcement discussed above (formal and informal, criminal and civil), other methods of ensuring compliance may be utilised. These include economic incentives or penalties and educational strategies, for example. Further details of the variety of enforcement methods available can be found in Chapter 4.

2.4 Environmental Standards

On the whole, the approach by the UK in setting environmental standards differs to the one taken by the rest of Europe. The UK's system of pollution control is largely based upon locally set and variable emission standards in relation to the local environmental quality and its capacity for receiving specific types and quantities of pollutant. In comparison, other countries in the European Union (EU) tend to favour centrally set, uniform emission standards (Bell, 1997, p.106-107). For a review of the varying approaches taken by different Member States in the EU, the reader is referred to Handler (1997).

The regulatory agencies are responsible for setting local standards by issuing consents or authorisations that have a number of conditions attached to them. These conditions may include, for example, the type and quantity of emission and details relating to the manufacturing process. They can be formulated as precise standards (e.g. the concentration of a particular chemical), or may be more general in their nature (e.g. a requirement to use
the Best Available Technique Not Entailing Excessive Cost - BATNEEC (typically known as a process standard) - see Chapter 4 for further details). Although this is the usual way of setting standards, in some cases (for example, in relation to certain dangerous substances) uniform standards or limit values are adopted throughout the UK (see for example, EC Directive 76/464/EEC on Dangerous Substances in the Environment and the Surface Waters (Dangerous Substances) (Classification) Regulations 1989 (SI 1989/1148)).

The employment of differing methodologies in Britain and the rest of the EU has its roots in the traditional discretionary approach to pollution control by regulators in the UK. Setting emissions according to the condition of the receiving environment ensures a highly flexible system. This can take advantage of the capacity of the environment to receive more pollutants in certain areas, thus making the system more economically efficient. On the other hand, centrally set emission standards are uniform throughout the regulated community, introducing the concept of a level playing field for businesses. In addition, uniform standards by their very nature are easier to implement, monitor and enforce (Bell, 1997, p.106).

Richardson et al. (1982, p.96-99) found that regulatory officials were in favour of setting differentiated consent standards. They based this opinion on the capacity of different areas to receive different concentrations and volume of effluent, and stated that trade effluent conditions should form part of the decision to locate in one particular area rather than another (in a similar way to land prices, etc.). Only a tiny minority of regulatory officials supported the notion of universally applicable standards.
2.5 The Principle of Uniformity

Legal environmental regulation may be perceived as "a series of strata in which the everyday rules of law are underpinned by a set of principles themselves underlain by moral and ethical requirements" (Hughes, 1995). These principles may be used to guide the formulation of new laws or the application of rules in specific cases, but have no actual legal force.

Makkai and Braithwaite (1996) have identified six different facets of procedural justice. These are consistency, decision quality or accuracy, correctability, control, impartiality and ethicality. 'Consistency' or uniformity in the domain of business regulation relates to the equal treatment of different businesses in similar situations. 'Decision quality or accuracy' equates to valid control by the regulators, whilst 'correctability' ensures that businesses have recourse to an agency or organisation in the case of unfair treatment by law enforcers. 'Control' relates to the degree of control exerted by different parties; 'impartiality' means the absence of bias. Finally, ethicality incorporates the general standards of fairness and morality.

These six facets may be simplified into the concepts of fairness and uniformity. Fair and uniform treatment of businesses and individuals within the enforcement process is essential to promote, encourage and convey the validity of the process, whilst introducing a level playing field upon which businesses can compete. A system of enforcement that does not strive to ensure fairness and uniformity quickly becomes discredited, resulting in a lack of co-operation by the regulated (Hutter, 1988, p.188-189).
The fairness of treatment of the regulated community is extremely difficult to measure, having a number of variables relying on the judgement of different individuals. Personal perceptions of what is fair, ethical and just can alter dramatically from one individual to the next. The concept of uniformity or consistency, however, is more easily measured, and an assessment of the consistency of enforcement action by the regulators from the point of view of the regulated community forms an integral part of the empirical research in this study (see Chapter 9).

Despite its importance, previous research has found that decisions made by regulatory agencies have been anything but uniform in the past. As Tromans (1995) notes ".....principles are of limited value, they only start to make a difference when they are put into practice."

Richardson et al. (1982, p.134) in their study of enforcement by water authorities found a large discrepancy in the number of prosecutions taken by different authorities (48 prosecutions taken by one authority, whilst none taken by another in the same three year period). Brittan (1984, p.25-27) also discovered a wide variety in consent standards amongst firms that may have affected their ability to compete. Although this may have been due to a variety in the state of the receiving environment (and thus the capacity of the environment to deal with different amounts of effluent), businesses' perception of justice was that similar firms should be treated in a similar fashion. Companies were actually able to negotiate with the water authority during the setting of consent standards in order to obtain the 'best possible deal'. The vigour of the enforcement of consent standards was also said to vary widely even within the same regional water authority, with different enforcement officials displaying varying degrees of tolerance towards non-compliance. Therefore, many dischargers felt "the
system of enforcement was haphazard and unjust" (Brittan, 1984, p.67), and that the inconsistent application of standards and enforcement procedures had unfairly affected their competitive position.

Apart from complaints originating in the business sector, some regulatory officials also expressed doubts about the system (Richardson et al., 1982, p.96-105). Under the wide system of discretion used at the time of the research, some officers found the lack of uniformity and common enforcement policy led to large amounts of uncertainty when conducting their duties. In addition, industry did not know their position with respect to breaches of the law. One of the aims of this research project is to establish the level of consistency of enforcement in current practices, and whether an explicit enforcement policy can have an advantageous effect on the level of compliance.

2.6 Enforcement as an Interactive Process

Although the vast majority of enforcement action itself is carried out by the regulatory agencies, other individuals, groups or bodies can play an extremely influential part in the process. They may affect enforcement strategies by the formulation or application of policies, direct enforcement action or increasing the pressure for a change in policy or to take enforcement action in a particular case. For example, in the now infamous Brent Spar issue, a combination of NGO pressure and media attention caused a U-turn in government policy (Bentley, 1995; Green Alliance, 1995; Green Alliance Parliamentary Newsletter 23/6/95; Bennie, 1998).
The key players in the enforcement process include regulatory agencies, UK and EU governments, bodies such as the Royal Commission, industry, the general public, NGOs, the media and the courts. Enforcement must then be viewed as an interactive process with contributions to its continued development being made from a number of sources. Figure 2.1 illustrates the relationship of these key players and how they interact. The role played by each of these participants is discussed in section 2.7.
Figure 2.1

Enforcement as an Interactive Process: the Relationship of Key Players
This research will investigate the strategies and methodologies employed by three regulatory agencies, namely the NRA, HMIP (both now replaced by the Environment Agency) and local authorities. Details of each agency (their structure, types of enforcement policies used, etc.) can be found in Chapter 5. As mentioned previously, this study aims to provide a 'snapshot' of working practices during the period 1995-1996 when the empirical data collection was undertaken, making these agencies a logical choice for the research. The results can be compared with earlier studies that revealed the strategies utilised by water regulatory officials before the formation of the NRA (Richardson et al., 1982; Hawkins, 1984), and local authority environmental health officers (Hutter, 1988).

Although a comparison between the research in this thesis and the research carried out in the earlier studies named above is viable, it must be recognised that certain differences exist in the enforcement agencies involved and type of processes being regulated. One of the more noteworthy differences can be found between the regulation of water pollution in the 1980s and 1990s. The former water authorities had responsibility for trade effluent regulation in relation to discharges to sewers and discharges of pollutants to water courses. Under the Water Act 1989 and the Water Industry Act 1991, these two regulatory functions passed to two distinct and separate bodies. The NRA took responsibility for discharges to controlled waters, whilst the regulation of discharges of trade effluent to sewers passed to sewerage undertakers. It must therefore be made clear that the findings of Richardson et al. (1982) and Hawkins (1984) could equally relate to enforcement of legislation governing discharges to sewers as well as the regulation of discharges to controlled waters. As such, there are certain
limitations in the direct comparison of previous research with the findings of this study, and regard should be given to these limitations where comparisons are made within the text.

The findings from this research also provide a basis from which comparisons with working practices employed within the Environment Agency may be made in future studies. Any changes or developments in enforcement strategies and methodologies over time may thus be monitored, alongside any changes in the levels of compliance. Conclusions may then be drawn relating to the most successful enforcement strategies, and recommendations made to improve the system in the light of these findings.

As discussed above, an important aspect of this work is to compare the approach to enforcement made by regulatory agencies several years ago with that of the methodologies employed more recently. The following discussion therefore provides a critique of what is commonly referred to as the 'traditional approach to enforcement', as revealed by previous studies. This section covers the enforcement approach of regulators during the 1980s (including proactive and reactive enforcement, the level of discretion enjoyed by officials and the strategies employed), why the regulated community comply with the regulations and a discussion of the effectiveness of the regulators' approach.

2.7.1 Proactive and Reactive Enforcement

Hutter (1986) describes two types of enforcement strategies - proactive and reactive - in reference to ways of organising and mobilising resources within an agency. The proactive strategy involves mainly preventative work, including routine inspections and sampling procedures, spot checks and educational visits. On the other hand, the reactive strategy is
used when an incident has already occurred, normally in response to a complaint or report of an accident from the public.

Hutter (1986) states that a balance is needed between the two strategies so they may inform and complement each other. Disproportionate utilisation of one strategy rather than another can create a number of problems. For example, extensive resources may be required to undertake proactive work, leading to the proposition that a concentration of resources in reactive work would prove more effective. In other words, policing problem areas rather than inspecting those areas that remain relatively problem-free. To take this stance however, would lead to the regulated becoming more removed and remote from the regulators, thus promoting a disinclination on the part of the regulated to co-operate and comply with the regulations. In addition, 'prevention is better than cure', especially relating to pollution incidents that may invoke irreversible health or environmental damage. Furthermore, officials in the course of proactive work often discover other incidents that are worthy of inspection. Therefore, both proactive and reactive enforcement have a part to play in ensuring compliance with the regulations, and this was found to be the case from other research (Richardson et al., 1982; Brittan, 1984; Hawkins, 1984; Hutter, 1988).

2.7.2 The Exercise of Discretion

The choice of enforcement procedures, whether proactive or reactive, was found to be largely dependant upon recommendations made by officials working at various levels within an agency (Richardson et al., 1982; Brittan, 1984; Hawkins, 1984; Hutter, 1988). These officials may be inspectors in the field, managers or legal representatives. One common
thread that ran throughout the entire decision making process was the high level of discretion afforded to regulatory personnel.

The broad range of discretion and autonomy enjoyed by the regulators stems from the form of environmental legislation encompassing general standards and prescriptions for interpretation, rather that a set of precisely defined rules. The discretionary characteristic of environmental law enforcement enables each case to be judged on its merits, taking account of the varying economic, social and technical circumstances. The legislation is generally worded so regulators have a power to take action (for example prosecuting offenders), but rarely do they have a duty to take particular action under certain circumstances. There are exceptions to this general rule, for example an abatement notice must be served by a local authority when they believe that a statutory nuisance exists or is likely to occur or recur (s.80(1) Part III of the EPA). This is illustrated in the case of R v Carrick District Council, ex parte Shelley [1996] Env LR 273. The case related to two sewage outfalls contaminating sea water and a beach. Residents complained to the council who then decided to defer dealing with the problem in the light of an appeal being made by South West Water to the Secretary of State concerning the outfalls. This lack of action on the part of the council was challenged by the applicants by way of judicial review. A determination of whether a statutory nuisance existed had to be made. This was found to be the case and the council was then under a duty to serve an abatement notice. Examples of cases also exist where the discretionary powers of regulatory authorities have been called into question in the planning context (see R v Sevenoaks District Council, ex parte Palley [1994] EGCS 148 and R v Ealing London Borough Council, ex parte Zainuddin [1994] EGCS 130). Powers and duties of regulators under the legislation is discussed more fully in Chapter 4.
The two extremes of discretion have been described as 'uncontrolled discretion' and 'legalism' (Hutter, 1988, p.43). Advocates of legalism argue that although a small amount of discretion is necessary, this should be kept to a minimum whilst adhering to a predetermined set of rules.

"They propose that in those cases where discretion cannot be limited then every effort should be made to control enforcement discretion by, for instance, making public the agency's decision making criteria and subjecting decisions to external checks and adjudication. Their concern is that a wide degree of discretion carries the concomitant danger of injustice, arbitrary decisions, and the increased possibility of non-legal factors influencing outcomes." (Hutter, 1988).

On the other hand, supporters of uncontrolled discretion argue the need for flexibility in interpreting the law. Their view is that wide discretion is required to deal with different situations and the variety of circumstances that may be encountered, in addition to technological changes that can take place. Previous studies (Richardson et al., 1982; Brittan, 1984; Hawkins, 1984; Hutter, 1988) revealed that this was the type of discretion favoured by environmental regulatory officials during the 1980s.

Richardson et al. (1982, Chapter 7) noted that even though pre-determined guidelines for dealing with the regulated community existed, many different aspects of the process could be influenced by a number of factors. For example, the personal goals and inclinations of junior employees and officers' perceptions of the process of consent-setting. Hawkins (1984, Chapter 4) noted that field men received little formal guidance from legal rules or administrative policy. Instead, their work was based on previous experience and a vague notion of their agency's requirements.
A very general policy of applying the principle of uniformity existed, although not much emphasis was placed upon it. When officials perceived a conflict between applying standards that were considered as substantively justifiable or fair and those that were uniform in nature, in many cases the 'fair' standards were applied rather than the consistent ones. Deviations from the principle of uniformity were considered appropriate in cases where individual businesses required special consideration, or with the allocation of differential consent limits for newcomers when compared with long-established businesses (Hawkins, 1984).

Hutter (1988) found that certain departments worked to a policy plan. The hallmarks of such a plan were found to be broad guidelines, flexibility and co-operation with the regulated community and a high level of discretion afforded to regulatory personnel.

Although often difficult to attain, achieving a proper balance between consistency of enforcement on the one hand and flexibility on the other should remain a priority with regulatory agencies (Dimento, 1986). A compromise between legalism and uncontrolled discretion should be sought to negate the problems of uncertainty and lack of accountability.

2.7.3 Enforcement strategies: conciliatory and coercive mechanisms.

"Law may be enforced by compulsion and coercion, or by conciliation and compromise". This statement by Hawkins (1984, p.3) succinctly describes the two methodologies of law enforcement outlined by numerous authors. Hawkins proposes terminology for these two strategies, namely the 'compliance' strategy (incorporating the conciliatory style of enforcement) and the 'sanctioning' strategy (relating to a penal style of enforcement). Hutter (1988) uses the terms 'persuasive' and 'insistent'.
Richardson et al. (1982), Brittan (1984), Hawkins (1984) and Hutter (1988) all found an overwhelming inclination on the part of the regulators to favour conciliation and persuasion as the methods used to obtain compliance with the regulations. This methodology is characterised by the utilisation of dialogue and diagnosis with the emphasis placed upon regulators taking specific circumstances into account, rather than 'going by the book' and using fixed rules and fines for violations (Selznick, 1994). Hawkins (1984) describes pollution control work as ".....an art in which personal qualities are most important [and enforcement] requires a constant display of helpfulness and reasonableness".

Richardson et al. (1982, p.62) found that only in extremely rare cases was the ultimate sanction of criminal prosecution used. In certain areas, 30% of all samples of effluent regularly failed their consent limits but a prosecution had not been brought since 1974. Numbers of prosecutions for the period 1970-74 indicated that on average only 2-5% of contraventions resulted in prosecution. Rowan-Robinson et al. (1990) report figures lower than this for the enforcement of noise nuisance regulations between 1980-1986. 83% were resolved informally by discussion or an informal warning letter, 10% with noise abatement notices and only 1% resulting in prosecution. A similar figure was cited by Hawkins (1984, p.177), where less than 1% of water pollution incidents were prosecuted.

A number of stages characterises the conciliatory approach taken by enforcers, as observed by Richardson et al. (1982) and Hawkins (1984):

- presenting the problem - the first stage in the process aiming to create a favourable impression on the business by making reasonable demands;
- problem solving - persuasion and education, explaining the circumstances and offering advice;
- presence - using a more assertive strategy and making regular visits with companies less responsive to persuasion and advice;
- threats - becoming more specific and explicit in the cases of continued non-compliance.

(Richardson et al., 1982)

Only after all the above measures had been exhausted would the regulators consider taking more rigorous enforcement action. In this way, the compliance strategy relies on negotiated conformity with an incremental application of pressure on those that repeatedly refuse to comply (Hawkins, 1984). As a result, the process of enforcement may become quite a protracted affair spanning several months or even years.

Hutter (1988, p.134 and 158) noted a difference in the approach taken by Environmental Health Officers in smaller, more rural departments than that taken by officials in larger, urban areas. Officers in smaller, rural regions were more likely to adopt the persuasive strategy of law enforcement, even in the face of long-term, persistent offending, whereas officials in larger departments adopted a more 'insistent' strategy. The initial accommodative approach was basically the same in both cases. However, once an offence had been discovered in larger areas, officers were less likely to spend long periods of time patiently cajoling offenders into compliance. They resorted to more stringent action much more quickly if the accommodative approach was not producing the desired effects. This is reflected in the numbers of prosecutions resulting from the two types of departments. The total numbers of prosecutions taken by two smaller, rural departments between 1977-1979 was 41, whilst for the same period the number of prosecutions taken by two larger, more
urban departments was 640. This variation may be explained to some extent by the size of the respective local authorities and the number of offences coming to light in each of the areas. However, in Hutter's view, the large discrepancy in the figures cannot be fully explained by these differences.

The majority of enforcement officials of all ranks believed control could not be achieved without industry's co-operation (Richardson et al., 1982). In order to promote this co-operation, an accommodative approach to enforcement was taken rather than using confrontational methods.

It has been suggested that the need for co-operation on the part of industry stems from economic factors (Richardson et al., 1982; Hawkins, 1984). Resource constraints placed on the regulator limits the work they can effectively carry out within a set time period, and this work would take considerably longer if a particular business decided not to co-operate. The economic impact of the regulations on industry and the cost of compliance is also a factor in the regulators assuming an accommodative approach.

Richardson et al. (1982) and Brittan (1984) found there was a marked tendency for regulatory bodies to favour consent conditions that were acceptable to industry as a whole. This led to consents being set that were likely to result in compliance, being tailored to industry's needs rather than environmental ones. 'Bargaining' was an accepted method involved in the setting of consent standards. This was characterised by the two parties (the regulator and the regulated) having a continuing and interdependent relationship.
It has been proposed that the co-operative stance is adopted by regulatory agencies for a number of other reasons apart from economic factors. One such reason is the traditional classification of environmental crimes as not truly criminal in nature. As Richardson et al. (1982, p. 14-15) notes, "enforcement agencies are disinclined to prosecute and juries to convict for behaviour they equate with socially acceptable business practice". In many cases, regulators are required to act in a preventative manner and enforce the law in situations that pose a potential danger. Harm need not be caused for an offence to be committed, and as such offences may not at first appear obviously injurious (Hutter, 1988). Furthermore, many pollution incidents may be chronic, accumulating slowly over time, or may be dispersed and diffuse in nature. In such cases, their impact and resultant harm caused may not be apparent to an observer (Hawkins, 1984). In these situations, regulators could appear over-zealous by taking a confrontational approach (Bardach and Kagan, 1982).

Hutter (1988) found that Environmental Health Officers were far more willing to denote food offences as criminal than pollution offences. This was because food offences often resulted through a lack of attention to detail and were relatively easy to remedy, whereas pollution offences could be both costly and difficult to remedy. There was also a reluctance on the part of the officers to classify environmental offenders as 'criminals'. This was because many offences stemmed from an ignorance of the law or an inability to solve problems through lack of finances (Hutter, 1988).

Regulators must therefore work in a political environment between the opposing viewpoints of 'businesses' and 'environmentalists' (Hawkins, 1984). On the one hand, there are businesses proclaiming the burden of environmental regulatory control and the resultant excessive cost. This is accompanied by government intrusion into business operation, in
many cases for what it often views as trivial matters. Many businesses tend to under-play their environmental impact and support a 'hands-off' approach to enforcement. Conversely, environmentalists hold the opinion that substantial expenditure on environmental enforcement is required, urging wider restraint on certain economic pursuits in order to minimise environmental harm from unregulated behaviour. They view regulatory agencies as being ineffective and legal sanctions as impotent (Hawkins, 1984).

The moral neutrality of environmental offences may be due in part to their relatively recent classification as criminal. Such offences are normally classified as 'white collar crime', with the offender usually occupying a position of responsibility and high social status within the community. Many environmental offences are therefore not viewed as truly criminal in nature by the courts. A good example can be found in *Alphacell Ltd v Woodward* [1972] AC 824, where the House of Lords considered water pollution offences to be "acts which in the public interest are prohibited under a penalty."

Furthermore, there is often not a clear distinction between what may be viewed as deviation and compliance in behaviour controlled by regulatory instruments. The rules may be quite broad, complex and ambiguous in nature providing a fine line over which the regulated should not cross (Hutter, 1988). Terminology that defies simple definitions such as 'reasonable', 'best practicable means' and 'best available techniques not entailing excessive cost' are all used frequently in the regulations.

Regulatory non-compliance is perceived by enforcement personnel as generally being carried out by three categories of offenders:
amoral calculators - companies motivated entirely by profit that are willing to disregard the law when it is in their interest to do so, regardless of the consequences;

- political citizens - firms that have principled disagreements with the regulations and refuse to implement measures on the grounds of their unreasonableness;

- organisationally incompetent - businesses that show ignorance of the regulations and a lack of expertise to undertake changes.

(Bell, 1997, p.135)

Generally, regulators have been shown to only resort to more stringent methods of enforcement when faced with amoral calculators (Richardson et al., 1982). In the other two cases, compliance is achieved using conciliatory mechanisms.

Another reason for adopting an accommodative approach to enforcement is the strict liability aspect of environmental offences. As the appropriate intent to commit a crime (or mens rea) does not have to be proven in strict liability offences, the regulators tended to take an easier line with the regulated community (Richardson et al., 1982). Although the concept of strict liability may present moral problems in its utilisation (blame does not have to be proven in order to secure a conviction), it does have other advantages that are especially important in its application to environmental law. These include:

- the regulators and courts do not need to invest time and money investigating culpability;
- establishing blame may be difficult if the incident was a result of a complicated chain of events;
- the regulated community is encouraged to take extreme care in its actions and the preventative measures that it employs.
It may be argued that even in offences of strict liability there must be some element of culpability (even if it is just ignorance of the law, for example). However, as Richardson et al. (1982) notes, this culpability can only be considered as 'low-grade' attracting a concomitant 'low-grade' punishment that in turn has implications for its deterrent effect. This may explain why penalties imposed by the courts for environmental offences have traditionally been very low. Hawkins (1984) reported that the average fine levied for a water pollution offence over one particular 12 month period was just £49 (for more recent levels of fines see later in this chapter and also Chapter 4). "It is as if the legislature wishes both to compromise the criminalising effect of conviction and to mitigate the impact of a prosecution facilitated by strict liability" (Hawkins, 1984). Regulators' opinions of the levels of penalties imposed by the courts varied from 'adequate' to 'ridiculously low' for noise nuisances (Rowan-Robinson et al., 1990). It was thought that prosecution in itself did not have any real deterrent effect for other potential offenders, but did result in the nuisance being resolved. The threat of prosecution was generally felt to be a more useful tool in encouraging compliance.

Many regulators viewed their primary task as the achievement of the appropriate level of compliance, with the enforcement of regulations per se as a secondary goal (Richardson et al., 1982). Compliance with the law was not an end in itself, but was useful in securing satisfactory environmental protection (e.g. emission levels). Furthermore, importance was attached to achieving improvements in the future. As a result, the regulators were of the opinion that nothing would be gained by prosecuting a company that was making every effort to comply even though their emissions were not quite 'up to scratch'. Hutter (1984) states that "compliance strategy seeks to prevent harm rather than punish an evil". In this way, recourse
to the legal process is very rare as this strategy is concerned with 'repair and results' rather than retribution. Hutter (1988, p.68) carried out a poll of 53 Environmental Health Officers, and found that 53% considered the main reason for undertaking a prosecution was to change the offenders attitudes and deter future offences. Only 19% and 17% respectively thought the action was mainly to punish the offender or to warn other potential offenders.

In Environment Agency v Stanford [1999] Env LR 286, the High Court rejected a submission that a prosecution, which followed a period of negotiation relating to compliance with waste management regulations, was an abuse of process. The methods of negotiation and accommodation were clearly given judicial approval. Bingham L.C.J. said (at p. 296):

"It is quite plain from those findings [of the justices] that Mr Mitchell, as one would hope any responsible public official would do, was seeking to secure compliance with the regulations by Mr Stanford. That was his primary aim, no doubt recognising that prosecution of Mr Stanford (which was not a decision for him to make anyway) would make life more difficult for Mr Stanford and perhaps imperil his livelihood, without promoting the objects of this legislation. There is nothing in any way open to criticism in that."

Another reason for the accommodative approach adopted in the 1980s was that the regulators viewed this type of enforcement as the normal requirements of their job. A healthy dialogue between the regulators and regulated was seen as an achievement on the part of the regulators. Recourse to more strict enforcement measures usually only occurred after the breakdown of communications and was often viewed as failure by regulatory officials (Rowan-Robinson et al., 1990). "In a compliance system, the 'good' officer is one who gets results quietly and efficiently" (Hawkins, 1984). Prosecution was considered to be 'unproductive' in the area of pollution prevention by many regulatory officials. Recourse to this sanction was only taken when offenders persisted in their non-compliance, in part to
enable the regulators to retain their credibility for future negotiations, and when an incident caused substantial and noticeable damage leaving the regulators with no other choice (Hawkins, 1984).

The co-operative stance was also adopted in the sphere of personal liability for environmental offences (Richardson et al., 1982). This was attributed to the problem of attaching personal liability to a particular individual, especially in a large corporation. In addition, many regulators felt that these offences are committed for rational economic motives (to avoid expenditure on abatement equipment and thus increase profits). Therefore, any action taken should be against the company, rather than an individual, in order to negate the effects of increased profits.

2.7.4. Why do the Regulated Community Comply?

As we have seen from the above analysis, an accommodative approach to enforcement was widely taken by regulatory officials. Prosecutions were seldom, and the resultant penalties for rare prosecutions were very low and thus could not be viewed as having a deterrent effect on potential offenders. In addition, considerable investment may have been required to raise effluent quality to compliance standards. Furthermore, knowledge of environmental legislation amongst industry has traditionally been very 'patchy' (Brittan, 1984; ELB 1993 4(1): 3-4; Hutchinson, 1994; ENDS 1995 240:12-13).

Taking the above factors into account, it must be asked why the regulated community comply at all. Brittan (1984, p.70) carried out a survey of the regulated community and found that 90% of trade effluent dischargers and 44% of direct dischargers complied with the
regulations because of a 'moral obligation'. These results suggest that the majority of businesses try to adopt a socially responsible stance to their impact on the environment. Other dischargers, notably from larger, nationalised industries, also indicated that internal pressure played a significant part in promoting compliance with the regulations. These larger companies actively encouraged compliance for a number of reasons, including their need to avoid adverse publicity, and a perception that the regulators scrutinised their activities much more closely than smaller companies and would be far less tolerant in the event of a breach.

In the same survey, only one direct discharger and one trade effluent discharger (out of a total of 50) stated that legal obligation was a reason for compliance. However, more recent surveys have indicated that legislation may now be the main driving force behind compliance, suggesting a change in priorities for many companies (Magat and Viscusi, 1990; Hill, 1994; Environmental Policy Consultants, 1995; Rickman, 1995; Sykes, 1995; Viney and James, 1995). Research carried out in 1995 found that compliance with legislation was of high concern for 79% of the 200 top grossing UK corporations. (Viney and James, 1995). This compares with a survey of attitudes to the environment carried out in 1993 of 325 companies "broadly representative of the British corporate economy", when only 36% of directors stated that the need to comply with legislation was the top priority (ENDS 1993 221: 6). This could suggest a change in attitude in more recent years, or point to the fact that larger companies are more in touch with their environmental requirements under the legislation. It has, in fact, been found that smaller companies are less likely to understand and comply with their environmental legal responsibilities (Hill, 1994; Groundwork Trust, 1995).

In a more recent survey by Mehta and Hawkins (1998) of companies regulated under IPC, these findings were reinforced. Larger companies were acutely aware of their environmental
responsibilities and often employed specialists to deal solely with this aspect of their business. On the other hand, smaller firms tended to be overwhelmed by the complexity of their legal requirements, and were notably lacking in specialist knowledge. They were largely ignorant of the regulators' powers, procedures and available penalties and so could be more easily intimidated into compliance by the regulators. It was found that enforcement officials regularly took advantage of this position. Inspectors stated that their limited budgets meant that constant litigation was not an option, and so preferred to threaten smaller firms into compliance by fostering a belief that prosecution was in fact extremely common. The threat of further enforcement action alone was thus found to be a very useful tool in gaining compliance.

Threats were also widely used within larger companies, but for different reasons. Large companies were well aware of the rate of prosecution by regulatory agencies and the level of evidence required for a prosecution to succeed. Enforcement officials therefore used a different approach with these companies. Whilst most smaller firms mostly feared the financial implications of a prosecution, larger firms were mainly concerned with the attendant bad publicity that would ensue from non-compliance. Therefore enforcement officials regularly threatened to inform the media if compliance with the regulations was not observed. Another ace up the sleeve of regulatory officials was also the threat of notifying central government for breach of regulations by a company registered under an Environmental Management System (EMS) (see below). Non-compliance with legislation can lead to the removal of accreditation and further bad publicity.

Mehta and Hawkins (1998) found no 'amoral calculators' (see section 2.7.3) within their sample. Most firms agreed with the general aims of IPC, but many small companies didn't
know how to put them into practice. This was also compounded by a lack of resources for environmental improvements. A moral and legal obligation to comply with the regulations was cited by most respondents.

Secondary reasons for compliance and environmental improvements have also been noted (Royal Society of Arts, 1987; Barton, 1993; Institute of Business Ethics, 1994; Christie, 1995; Mudie, 1995; Wehrmeyer, 1995; Mehta and Hawkins, 1998). These include:

- a desire to gain competitive advantage;
- pressure from customers or suppliers;
- corporate commitment to social and environmental responsibility;
- financial benefits from cost savings and improved process efficiency;
- higher staff morale;
- self interest and self-preservation e.g. rigorous process management with hazardous plants so as not to jeopardise site safety and thus survival;
- to enhance the chance of being accredited with an EMS rating. These ratings, such as ISO14001, indicate when a company has achieved a satisfactory level of environmental management. They can be extremely useful in encouraging sales and numbers of contracts and improving public image and relationships with business partners. Environmental offences and poor references from regulators are an obvious bar from certification.

2.7.5. Is the Accommodative Approach Effective?

It has been discussed above how the approach taken by different local authority and water regulators within and between regions varied greatly. In all cases, however, an
accommodative approach to enforcement was taken in the initial stages (see section 2.7.3). Variations then arose in dealing with subsequent non-compliance after the initial warnings. Some authorities tended to take a tougher stance, whilst others continued along the accommodative path. Fukuyama et al. (1996) propose that effective enforcement can only be carried out when a co-operative approach is backed up by a harsh punishment strategy of strict enforcement in the face of continued non-compliance - the so-called 'review strategy'. The use of such a strategy provides deterrence and a concentration of limited agency resources on repeating offenders.

The various strategies used by regulatory authorities (and explained in this overview) can be represented in a diagrammatic form. Figure 2.2 illustrates the stages of enforcement and the different terminology used to describe the variety of methodologies and strategies utilised by regulatory bodies. An explanation of proactive and reactive strategies can be found in section 2.7.1, a discussion of coercive and conciliatory mechanisms in section 2.7.3, and a definition of the review strategy can be found above.
Conciliatory, accommodative or co-operative methodologies: the 'compliance strategy' (Hawkins, 1984) and the 'persuasive strategy' (Hutter, 1988).

The 'review strategy' (Fukuyama et al., 1996)

Coercive, stringent or strict methodologies: the 'sanctioning strategy' (Hawkins, 1984) and the 'insistent strategy' (Hutter, 1988)

Stages of Enforcement

- Presenting the problem to the regulated community
  - compliance
  - non-compliance

- Problem solving: persuasion, education and advice
  - compliance
  - non-compliance

- Presence: assertive strategy, regular visits
  - compliance
  - non-compliance

- Threats: specific and explicit
  - compliance
  - non-compliance

- More stringent methods of enforcement e.g. notices, statutory samples, etc.
  - compliance
  - non-compliance

- Prosecution as the ultimate sanction
  - compliance
  - non-compliance
In relation to the effectiveness of the accommodative approach, Brittan (1984) found little deterrent effect existed amongst the regulated community. When dischargers were asked what action would be taken if they exceeded their consent limits, many said they thought nothing would happen. Others reported that an increase in the number of visits from the regulators would result. This low expectation of the action taken by the regulators in the case of non-compliance indicates excessive utilisation of the accommodative approach, producing little in the way of incentive to comply (Brittan, 1984).

A stricter approach to enforcement can be seen to have an advantageous effect on compliance. Hutter (1988) reports one particular incident where a new officer felt it his duty to take an individual or company to court each time a relatively serious violation occurred. Businesses became aware of this stricter enforcement approach, and altered their practices accordingly. In the words of the interviewee, a fellow regulatory official:

"When he first arrived he brought several prosecutions a month. He did us good and made people outside buck up too. Our approach had been that we should only prosecute as a last resort; his attitude was a good balance for us".

Unfortunately, the officer's action met with substantial opposition from his superiors whom did not want a department with such a stringent approach, and the officer in question left after only a short time.

Brittan (1984) pointed out many inadequacies of the accommodative system of enforcement, including:

- providing an incentive for officers to set low emission standards to achieve high levels of compliance;
- often the water authority (pre NRA) just charged the company a further amount for
dealing with emissions outside their consent limits, rather than taking alternative
enforcement action;
- sampling routines were often found to be inadequate, with officers failing to take regular
and accurate samples.

Using a more stringent approach to enforcement has resulted in a significant increase in the
deterrent effect. Gray and Scholz (1993) carried out a study of the enforcement of OSHA
(Occupational Safety and Health Administration) regulations in the US, and found that those
inspections resulting in the imposition of penalties produced a 22% decline in injuries in the
following years. This is despite the fact that penalties are normally low and far below the
cost of implementing measures for compliance. Gray and Scholz (1993) suggest that
inspections where a penalty is imposed appears to focus managerial attention on safety issues
which leads to broader efforts to comply with the regulations. Deviations from organisational
beliefs and accepted social behaviour seem to be the triggers that, when pointed out to
companies and backed up with the appropriate enforcement measure, produce compliant
behaviour.

Harrison (1995) carried out some comparative research in the light of criticism aimed at the
'adversarial' style of regulation often employed in the USA. She compared the enforcement
of environmental regulations in the US, using the pulp and paper industry as a case study,
with that of Canada where a much more accommodative approach is utilised. Significantly
lower rates of compliance were found in Canada, suggesting utilisation of a stricter
enforcement strategy is more effective.
2.7.6 Summary

The role of the regulators in the enforcement of environmental law has been discussed at length. Previous research found that the enforcement approach during the 1980s was characterised by conciliation and compromise with an emphasis placed on resolving non-compliance through discussion and gentle persuasion. These findings provided a basis upon which empirical research for this study was carried out. In addition, this information enables comparisons to be made between the methodologies and strategies utilised by regulatory agencies in the 1980s with those in the 1990s.

The remaining sections in this chapter will focus on the impact of other key players in the enforcement system, beginning with the examination of the role of the UK government.

2.8 The UK Government

Policies and legislation introduced by central government have a far reaching impact on the regulation of business activities. Almost every aspect of running a business is controlled by legislation, the form of which can have far-reaching consequences on the level of compliance by businesses and the resultant enforcement approach adopted by regulatory agencies. Furthermore, central government policies can also directly influence agencies' enforcement activities. For example, the level of funding for the operation of HMIP was set by central government, an important factor having an effect upon the choice of enforcement action and staffing levels (see Chapter 3).
Examples of policies affecting the enforcement process that have been implemented in recent years include the drive for deregulation and a tendency to favour economic instruments to regulate business activities rather than the reliance on prescriptive rules and legislation. These two examples of the impact of central government on enforcement practices and procedures are discussed below.

According to the government, the drive for deregulation was carried out in order to reduce the red tape which is said to 'choke' industry, and promote a more open, accountable and fairer system of regulation (DTI, 1993). This resulted in the passing of the Deregulation and Contracting Out Act 1994. A DTI code *Working With Business - a code for enforcement agencies* (1993b) was produced which had to be adopted by a number of regulatory agencies, including the NRA and HMIP. The code set out a number of principles that had to be adhered to, including

- the introduction of an effective, easily accessible complaints procedure incorporating an element of independence;
- minimisation of the costs of compliance borne by industry;
- the requirement for consultation with business in cases of compliance failure;
- information provision on the regulations.

This DTI code has been translated into the authorities' policy with the publication of the *Customer Charter* (1994) and *Pollution Prevention - our common concern* (1994) by the NRA and HMIP respectively. Furthermore, local authorities have been encouraged to initiate Local Business Partnerships (outlined in the DTI documents *Local government and Business - making regulations work* (1993) and *Local Business Partnerships - a good practice guide*...
(1993)) in order to facilitate the exchange of information between businesses and local authorities, and thus improve the relationship between the regulator and the regulated. A Deregulation Task Force was established by the government to identify areas for the deregulation initiative (ELM 1996 5(1):12; ENDS 1996 260: 29-30).

Although the principle of deregulation seems very attractive, some of the measures proposed by the government, including repealing provisions of the Clean Air Act 1993 (ELB 1993 4(8): 90), the alteration of consents under the Water Resources Act 1991 (ENDS 1993 226: 31-33) and the option of businesses to challenge enforcement activity (ENDS 1994 237: 27-28), have proved to be very controversial (Ogus, 1994; Sykes, 1995). Criticism of deregulatory measures has originated from many diverse organisations including the Association of Environmental Consultancies (ELB 1993 4(9): 103-104), the Institute of Wastes Management (ENDS 1993 221: 3), the Environmental Industries Commission (ENDS 1996 257: 8-9) and even representatives from industry itself (EM 1993 1(2): 8-10). In certain cases, the measures have introduced more red tape and bureaucracy rather than reducing it (ENDS 1996 263: 3-4).

Although the drive for deregulation was initiated and encouraged by the Conservative Government, the future of this policy under the current Labour Government is uncertain. However, there have been indications that the present Government is not such a staunch supporter of the initiative. Through provisions in the Deregulation and Contracting Out Act 1994, Ministers were able to make orders instructing regulatory authorities to amend their enforcement procedures in line with the Act. As a result, new provisions were introduced allowing businesses to object to proposed enforcement action, requiring businesses to be notified in advance of any such action and barring enforcement action for a set period of time.
following notification. These measures have now been scrapped, and the Government has
drawn up a 'concordat' in their place. This document recommends that regulatory agencies
draw up enforcement standards with businesses and other interested parties, with emphasis
placed on openness, proportionality and consistent enforcement (ENDS 1998 278: 39).

However, the deregulation drive has not altogether been abandoned by the Labour
Government. The Better Regulation Task Force (recently renamed the Regulatory Impact
Unit) have outlined new proposals for the enforcement of legislation. In their reports
(Principles of Good Regulation, published in January 1998 and Enforcement published on
20th April 1999), they outline five key areas that should form the basis of all enforcement
practices. These are that enforcement is:

- targeted - the approach taken is aimed at the problem and not universally;
- consistent - even enforcement by the regulatory authorities;
- transparent - those being regulated understand their obligations and know what to expect
  from the enforcing authorities;
- proportionate - any enforcement action is in proportion to the seriousness of the offence;
- and
- accountable - the regulators are accountable to government, citizens and Parliament.

The Government responded to the report Enforcement in June 1999, and agreed with the
principles set out in it. Other important points highlighted in the response included:

- that enforcement should be targeted in accordance with risk;
that the majority of enforcement bodies have adopted the Enforcement Concordat, and will therefore be publishing performance indicators in the near future;

that the Government should co-ordinate the production of a guidance pack specifically aimed at small businesses, and that it should be made electronically available.

The second example of the impact of central government on enforcement practices and procedures is the utilisation of economic instruments to encourage good environmental practice. Economic instruments as a tool for regulatory control have been promoted by the government in the past:

"Regulation should be proportionate to the problem and should not be used when an alternative, such as an economic instrument, could be as effective".

(This Common Inheritance, 3rd Year Report, HMSO 1994)

The basis of their use is that industry or the general public pays to use a particular environmental resource or to dispose of their waste, examples including the landfill tax or VAT on fuel. The more resource used, or the more waste disposed of, results in more tax being paid. Alternatively, the economic instrument may be incentive based. For example, the introduction of recycling credits payable to a waste collection authority from a waste disposal authority for waste that it recycles, thus providing a monetary incentive for the waste collection authority to remove material from the waste stream. In this way, the government can structure policy initiatives to make desired actions economically attractive. Although proponents of economic instruments say that reliance on market mechanisms is one of the least-cost ways of ensuring compliance, their uptake has been limited and slow. There are several reasons for this, including:
• uncertainty at what level the initial fee should be set - too high resulting in the demise of smaller businesses, and too low negating its effect;

• reluctance by industry to endorse economic instruments because of an uncertainty of future pricing levels;

• discrimination against the smaller firm as a result of difficulty in monitoring large companies;

• their non-viability in the disposal of certain toxic wastes;

• paying the tax produces a 'right to pollute';

• inequalities in taxing all possible routes for waste disposal, for example, results in a shift to those having lower penalties.

(Dimento, 1986; Howarth, 1994; Edwards-Jones and Mitchell, 1995; 
Green Alliance Parliamentary Newsletter 8/12/95)

The current Labour Government, however, is not such a staunch supporter of market mechanisms as the best way to secure environmental goals as its predecessors. In its environmental policy document In Trust for Tomorrow (1994), it states that:

"Labour does not accept that a market mechanism is inherently superior to regulation. Environmental charges require just as much administration and enforcement as regulations; they require the same subjective judgements in formulation; and they deliver a less certain outcome. Nevertheless, charges can in some circumstances and for some issues work more efficiently."

A full review of regulatory and economic instruments as tools for pollution control can be found in Bernstein (1991) and Scott (1998).
2.9 The European Community

EC law is well developed in the sphere of environmental protection, and many Directives have been passed that must be transposed into domestic law (often under resistance from individual Member States' governments). Other EC legislation in the form of Regulations are less common than Directives (Sunkin et al., 1998), and are directly enforceable in Member States without the need for transposition. The EC has adopted over 300 measures that have had an effect on the environment (Wolf and White, 1997).

In order for Member States to comply with EC Directives, they must fully and correctly implement the Directive into their domestic law within the required time period (formal compliance), and ensure the law is complied with in practice (actual compliance). Haigh (in ENDS 1996 257: 44-45) states that there are 5 essential steps to be considered in ensuring effective legislation, namely:

- drafting;
- transposition;
- practical implementation;
- enforcement;
- evaluation.

Although a framework of approximately 300 measures for protecting the environment have been adopted by the EU, their enforcement has been notably lacking in its stringency (ENDS 1997 274: 46-47). Some of the problems have arisen due to incomplete transposition and a
difficulty in detecting infringements, with the Commission generally having to rely on public complaints or information from the European Parliament. As Hawkins (1997) notes,

"EC over-regulation and under-enforcement is slowly but inexorably bringing EC environmental law into a general disrespect which will soon become contempt."

Under Article 171 of the Maastricht Treaty, the European Commission has the power to impose daily fines on non-complying countries. This power was exercised for the first time in January 1997, and has since proved very effective in ensuring compliance by particular countries (Croner's Waste Management Magazine 1997 3: 6-8). Some examples of questionable enforcement of European laws are discussed below.

In Commission v United Kingdom (case C-337/89) [1992] ECR I-6103, the European Court of Justice (ECJ) found that although Directive 80/778 on Drinking Water had been properly transposed into domestic law, the legislation was not being adequately enforced. As a result, the maximum level of nitrate allowed in drinking water was being exceeded in some areas. The ECJ thus found the UK in breach of Directive 80/778, stating that Member States have an absolute duty to implement and enforce the law rather than just taking all reasonable steps to comply. A further judgement was pronounced by the ECJ on 22 April 1999 (Commission v United Kingdom Case C-340/96 (1999) 291 ENDS Report 54). The court held that the system of undertakings used by the Government for dealing with cases where drinking water does not meet the required standards set out in Directive 80/778, is incompatible with the principles of Community law. Undertakings were agreements made between the water companies and the Government in order to phase in compliance with the Directive as investment programmes progressed.
Failure to implement Directives may also be challenged indirectly in the national courts. In *R v Secretary of State for the Environment, ex parte Friends of the Earth* [1995] Env LR 11, judicial review proceedings were brought in response to the ECJ decision relating to drinking water detailed above. In this case, the Secretary of State had accepted undertakings from water companies relating to the steps they would take to reduce nitrate levels. The Court of Appeal found that the Secretary of State was not in breach of EC law, as he had taken sufficiently speedy steps to remedy the situation. The findings in this case therefore conflict somewhat with the ECJ's decision, in that practical considerations may be taken into account.

Another example where British courts have failed to follow the more robust interpretation of the law usually made in the ECJ is that of *R v Secretary of State for Trade and Industry, ex parte Duddridge* [1995] Env LR 151. In this case, the Court of Appeal refused to apply the precautionary principle (where the protection of the environment should take precedence, even in the absence of firm evidence that a substance or process may have detrimental effects), stating that it should be viewed only as a general principle upon which to base policy decisions. This ruling was made despite the fact that the precautionary principle is now enshrined within Article 130r(2) of the EC Treaty. The Court stated that Article 130r only sets out the *aims* of EC environmental policy, rather than creating policy itself.

Although there is currently no specific EC body to monitor both formal *and* actual compliance within Member States, it has been proposed that the European Environment Agency may well evolve into such an inspectorate in the future (Bell, 1997, p.63).
The House of Lords Select Committee on the European Communities in its 9th Report on the Implementation and Enforcement of Environmental Legislation (1992), recommended that Member States must pay more attention to implementation and enforcement.

"Its place on the political agenda must be given more prominence. And,,,, perhaps most importantly of all, the whole system [of enforcement] should be made more transparent so that it can be properly scrutinised at each stage. Effective monitoring both of the natural environment and of specific processes is the only means of ensuring that the provisions of environmental legislation are being complied with......"

Another recommendation was that a watchdog system should be initiated to examine the policies and performances of Member States' regulatory agencies. This body should examine any shortcomings within these agencies (e.g. a lack of resources) and report on their approach to enforcement, including prosecution policies. It should also have the ability to recommend standards of inspection and methodologies for monitoring. It must be pointed out, however, that these recommendations do not have to be adhered to by the government, and many of these suggestions met with a rather 'lukewarm' reception in a subsequent debate in the House of Lords (ENDS 1997 274: 36-37).

In response to the poor implementation and enforcement of environmental laws by some European countries, the European Commission has published a document (Implementing Community Environmental Law, 1997) outlining the weaknesses of the current system and suggesting recommendations for improvement. Problems that are outlined include:

- the complaints procedure being too cumbersome and protracted;
- difficulties in coping with the volume of work and complexities of the issues raised;
- legal actions can only be commenced against Member States rather than private entities;
the sourcing of complaints from individuals and pressure groups providing sparse and unverifiable information.

The Commission has made recommendations to improve the system in its document. The main ones include issuing guidelines for inspection and enforcement rates by Member States, providing a locally based environmental ombudsman to deal with public complaints, improving sanction provisions for non-compliance and increasing awareness of EU law with education programmes for judges and private practitioners. However, representatives from the Member States have been less than enthusiastic about the proposals, with the result that they remain unlikely to be adopted.

However, the environmental policy of the EC as a whole does exert an important influence on the stance taken by the UK government (Ward et al., 1996). Individual member states with well-developed policies on certain aspects of environmental law have brought increasing pressure to bear on other member states whose rules are not harmonious with their own. Examples include the extent of civil liability in the sphere of environmental protection (Hill et al., 1994), and the extension of locus standi (the right to bring an action or challenge a decision) to interest groups and citizens (Somsen and Bovis, 1992; ENDS 1996 257: 44-45).

It can therefore be seen that the EC has an extensive influence on the amount, content and direction of environmental regulation, both at a Community level and within each Member State. This in turn has far-reaching implications for the enforcement action required from regulatory agencies, and the powers of private citizens and pressure groups in bringing enforcement action.
An overview of the wide-ranging effect of the EC on environmental law can be found in numerous texts, including Crocket and Schultz (1991), Kramer (1993), Somsen (1996) and Gillies (1999).

2.10 The Royal Commission on Environmental Pollution (RCEP) and Parliamentary Select Committees

The Royal Commission on Environmental Pollution was established in 1970 and periodically produces reports on a variety of environmental matters. Although recommendations made in the reports do not have to be adhered to, they do exert a substantial influence on the direction of future environmental policy (Bell, 1997, p.42). A total of 19 reports have been produced on diverse subject matters relating to the environment. Many of the concepts and ideas outlined in the reports have been taken on board by the government and have played a significant role in the formulation of subsequent legislation. This in turn, of course, has implications for the working practices of regulatory bodies, having to adhere to these principles embodied in the legislation. Examples of such reports include:

- the formulation of the Environmental Protection Act 1990 Part I in order to tackle air pollution in an integrated manner (RCEP 5th Report 1976, Air Pollution Control: An Integrated Approach);

- the introduction of the concept of the Duty of Care relating to waste management in the Environmental Protection Act 1990 Part II s.34 (RCEP 11th Report 1985, Managing Waste: the Duty of Care);
having regard for the Best Practicable Environmental Option (see Chapter 4) when
deciding which process to use, as detailed in the Environmental Protection Act 1990 Part I
s.7(7) (RCEP 12th Report 1988, Best Practicable Environmental Option).

In a similar fashion, Parliamentary Select Committees, both in the House of Commons and
House of Lords, also produce reports on a variety of matters that influence government
decisions. On a day-to-day basis, the committees' function is to keep a close watch on the
activities of the Government, in addition to helping inform public debate outside Parliament.
Recommendations have been made by the House of Commons Select Committee on the
Environment relating to contaminated land (Report on Contaminated Land, 1st Report
1990), pollution of rivers, estuaries (Pollution of Rivers and Estuaries, 3rd Report 1987) and
beaches (Pollution of Beaches, 4th Report 1990) and toxic waste (Toxic Waste, 2nd Report
1989) amongst others.

2.11 The Regulated Community

The regulated community's opinions and behaviour play an important role in the enforcement
process. We have seen how its co-operation with the regulatory authorities is required for the
enforcement system to work - wide scale intransigence inevitably producing an over-
stretched regulatory system with enforcing bodies and their finite resources unable to cope
(Richardson et al., 1982; Hawkins, 1984). Businesses and their representatives (e.g. the
Confederation of British Industry (CBI) and Chemical Industries Association (CIA)) can also
exert substantial pressure on the government to adapt or introduce policies or legislation that
would prove beneficial for them. The parameters affecting the regulated community's level of compliance are discussed below.

It has been found through various surveys that the level of awareness of environmental legislation, especially in the SME (small and medium sized enterprise) sector, is quite low (Hutchinson, 1994; Rowe and Enticott, 1998; see section 2.7.4). Such a lack of knowledge can have important implications for the level of compliance within industry - ignorance of the legislation itself will inevitably lead to many regulations not being adhered to. It has been suggested that the environmental performance of SMEs could be improved by the introduction of Small Business Compliance Centres like those established in the USA (Bailey, 1997). The centres provide information relating to legislative requirements, abatement technology, reporting requirements, waste disposal information and provide compliance assistance for different industrial sectors. Several centres have been so successful that they now provide information on their own websites.

Another factor that can affect the level of compliance is the availability of resources to invest in clean technology and staff training. In recent years, projections for spending on environmental technology have not been realised (ENDS 1995 244: 6; ENDS 1995 251: 4-5; ENDS 1996 257: 3-4). One of the main reasons cited by some organisations is the inconsistent and poor enforcement of legislation encouraging industries to delay investment in pollution control (The Environmental Industries Commission, 1998). Others feel that weak legislation itself is also a contributory factor (The Guardian, 20/2/95). In fact, many companies actively support environmental legislation. In a survey by Entec and the Green Alliance in 1996 (UK Business and the Environment Trends Survey), 74% of respondents
from 300 companies that were interviewed stated that environmental regulations were not too onerous, and 56% wanted them to be more rigorously enforced.

Whilst spending on clean technology has remained at a relatively low level, investment in education and training has been virtually non-existent. In 1993, only 1% of all environmental expenditure was centred on education and training (*A Review of UK Environmental Expenditure*, HMSO 1993). Other research found that the basic education of 61% of environmental managers had no environmental content (*Environmental Managers in Business*, ENDS 1993).

The regulated community's opinion of the legislation, mode of operation of regulatory officials and enforcement of regulations was elicited by Brittan (1984). Four major areas for improvement were outlined, namely:

1. Increased provision for education and information, with leaflets and pamphlets being produced in easy-to-understand language explaining the requirements of the legislation. One suggestion also included the setting up of information libraries.

2. Improved levels of communication between the regulators and the regulated community. Many respondents complained of being told to do one thing by one officer, and something completely different by another. Permanent liaison committees were proposed to assist in understanding problems faced by dischargers and enforcement officers.
3. For the regulatory officials to become more conscious of the costs involved in installing abatement equipment. Equipment was often recommended that was outside the financial constraints of many companies.

4. A less bureaucratic approach to enforcement being adopted.

Some of these complaints were echoed in the results of a survey commissioned by ENDS (Allott, 1994 - *IPC: the First Three Years*). Questionnaires were sent to all businesses in receipt of one or more IPC authorisation by 1/4/93. The survey resulted in 145 responses from a sample size of 328, and produced some interesting feedback from the regulated community on the implementation and operation of the IPC system.

A broad spread of opinions on the IPC system was noted, but with the respondents generally falling into one of four groups:

1. *The believers* - respondents that envisaged significant benefits resulting from IPC and whom had embraced the concept of operator responsibility.

2. *The pragmatists* - those that had no great enthusiasm for the legislation but had resigned themselves to compliance.

3. *The disillusioned ex-believers* - those that supported the principles embodied in IPC but couldn't seem to get beyond the paperwork.
4. *The sceptics* - respondents that never believed IPC would be effective, or those that felt the environmental impact of their process was too small to require significant control or improvement.

Most respondents were found to fall in categories (2) or (3). Of those operators not embracing the system, most were either overwhelmed by the scale of requirements, felt their process had little environmental impact or thought improvements were an unnecessary expense. In fact, 50% of all respondents thought IPC to be 'burdensome', with the major burdens cited as the fees charged (subsistence fee and application fee), the cost of meeting conditions and the lack of flexibility.

Many companies (58%) thought that IPC requirements would result in a 'moderate' reduction in the environmental impact of their process, whilst only 9% said it would have a 'significant' impact. 33% thought it would have no effect whatsoever. These opinions were not really borne out by reality, however. In many cases HMIP required significant improvements in upgrading plans, emissions monitoring and abatement equipment than those proposed by industry, before it would grant an authorisation. Some companies, of the opinion that they ran an environmentally sound operation before the introduction of IPC, did not even conform to the minimum standards set out in the regulations.

Comments from other respondents indicated that IPC had made them examine their process carefully, pinpoint areas for improvement and subsequently reap the benefits from these changes. Waste minimisation, improved process control, taking on board environmental management systems and the production of corporate environmental policies were just some of the actions precipitated from the introduction of IPC.
In many cases, therefore, IPC set the pace for environmental improvements in the early 1990s. The ENDS survey found that, when left up to their own devices, most companies would not instigate change. However, for the system to produce these environmental improvements in reality, from the standards imposed by regulatory authorities, effective enforcement is essential.

Whilst IPC may be considered as setting the pace for change, it also had specific weaknesses that were greeted with hostility by industry. Industrial representatives aired their views and suggested areas for improvement at a meeting with government and HMIP personnel in June 1993 (EM 1993 l(l): 9-11). Many recommendations were put forward by the industrial representatives, including:

- improved dialogue and consultation;
- a greater certainty and consistency in the agency's actions;
- clearer guidance on the meaning of key concepts;
- a greater transparency in decision making;
- the work of HMIP providing demonstrable value for money i.e. a clear indication of how costs to industry are derived.

However, in a recent survey carried out by the CBI (Shaping Up: Report of the Environmental Protection Survey, CBI, 1999), it seems that many of these issues have still not been addressed, and little has changed since 1993. The report details responses obtained from CBI members regarding activities of the Environment Agency. Criticisms included:
difficulties in locating the correct person within the Agency to answer queries;
the integrated approach to pollution control not being achieved by the Agency, with companies having to consult several different officials/departments to deal with different aspects of their business;
the steep rise in charges in the past couple of years, with 55% of IPC respondents of the opinion that they were not getting value for money;
insufficient transparency in the charging regimes, leading the CBI to advocate the publication of detailed accounts by the Agency showing how charge income is spent;
efficiency problems arising from the creation of the separate licensing and enforcement teams for the Agency's water and waste functions.

The efficiency of the Agency's IPC and water inspectors were, however, rated highly by the respondents. 88% of IPC inspectors were rated as 'satisfactory', 'good' or 'very good', with this figure falling only slightly to 82% for water.

Cost has been one of the most contentious issues relating to IPC. Mehta and Hawkins (1998) found that the firms bearing proportionately the heaviest monetary burdens from complying with the requirements set out in the IPC system were the smallest and largest companies. Very small companies had to contend with substantial investment in time and money just to learn the rudiments of requirements under the legislation and install basic abatement equipment. As firms employing less than 50 people make up 99% of all British firms (Mehta and Hawkins, 1998), this presents particularly bad news for a large number of companies. Many of the bigger firms opted for the highest expenditure to gain competitive advantage. The middle section of companies (1,000 - 10,000 employees) were proportionately the least burdened by IPC.
As a follow-up to previous studies, the research for this thesis also included a questionnaire sent to the regulated community. In this particular case, the respondents' opinions relating to the consistency of enforcement by the regulators were obtained. This provided a useful indication of how the regulated community perceive the work of enforcement agencies, and whether improvements have been made in their mode of operation in the light of prior criticism.

The CBI and CIA, representatives of the regulated community, are able to exert not inconsiderable pressure on the government in its approach to environmental regulation. One of the more notable policies supported by these associations is a reliance upon self-regulation.

Self-regulation is a term that encompasses a wide range of instruments, including:

- voluntary and co-operative agreements;
- environmental covenants;
- codes of practice;
- environmental partnerships;
- environmental management systems (such as ISO 14001, for example);
- corporate environmental reporting;
- environmental self-auditing.

(Sinclair, 1997)
Whereas the principal rationale underlying mandatory regulation is the theory of deterrence (with negative sanctions providing the regulated community with a strong incentive to avoid transgressions), self-regulation relies on the goodwill and co-operation of individual firms for their compliance. Emphasis is placed on a moral commitment from participants with a dependence on information, education, technology sharing and peer group pressure to achieve compliance.

Supporters of a voluntary compliance system point to the fact that numerous practical difficulties are associated with mandatory regulation leaving it rarely able to live up to the theoretical ideal. These include limited resources, a reluctance by authorities to prosecute, a reluctance by courts to impose maximum penalties and an inability by regulators to successfully monitor businesses and their activities. Furthermore, advantages of a voluntary compliance system include reduced costs for the regulators and regulated, improved flexibility for the regulated community, a reduction in the demands on the judicial system and a re-direction of resources away from lawyers and other defence costs into measures that protect the environment (Basse, 1994; Pevato, 1995; Saxe, 1997).

Conversely, a reliance on self-regulation alone would not address the problem of wilful polluters who would not adhere to voluntary codes, nor the special problem of certain pollutants that could bring about irreversible or acute environmental damage. In addition, many surveys have pointed to the fact that the driving force behind the implementation of environmental improvement measures has been the imposition of mandatory regulation (see earlier in this section and section 2.7.4). Furthermore, many 'voluntary' mechanisms are in fact driven by the threat of government intervention in the form of legislation if the problem is not addressed. An example of this is the disclosure of environmental information in the
form of reports. Although there is no legislation in place at the moment in the UK for businesses to disclose certain information (e.g. annual reports of their environmental records, the amount of investment in clean technology, energy efficiency measures employed, etc.), many believe it will only be a matter of time before this requirement becomes mandatory (Campanale, 1994; Posner, 1995; Russel, 1995). As a result, the CIA is encouraging its members to undertake voluntary disclosure before the introduction of the legislation.

Sinclair (1997) proposes that mandatory controls and self regulation cannot be considered in isolation. Rather than viewing these methodologies as mutually exclusive options he suggests that both systems can be used to optimise control of environmental pollutants. A combination of self-regulation and command and control mechanisms can be used to produce the ideal regulatory outcome, with emphasis placed on one methodology or another depending upon the specific circumstance of a particular environmental issue.

The role played by voluntary mechanisms in environmental regulation will probably remain minor, as regulatory authorities generally view mandatory measures to be the most effective in reaching their goals. As Les Stuffins, once deputy head of HMIP's field operations stated:

"I have never been a great believer in self-regulation. It never worked in the Garden of Eden, and I've no confidence it will work today".  
(Allott, 1994).

2.12 Citizen Action and Pressure Groups

The general public and NGOs (pressure groups such as Greenpeace or Friends of the Earth (FoE), and organisations with a common goal of protecting their interests such as the
Angler's Co-operative Association) may affect the enforcement process in a number of ways, as illustrated in Figure 2.1. Direct action (e.g. private prosecutions) may be taken, in addition to applying pressure on the regulatory agencies to step up their action, persuading businesses to alter their working practices and governments to alter or implement their policies (McEldowney and McEldowney, 1996). The general public can also act as 'policemen', informing the regulators of pollution incidents in their locality. Although private individuals or pressure groups are able to bring a private prosecution unless expressly forbidden in the legislation, it must be made clear that the array of enforcement mechanisms made available to regulatory agencies (such as the issuing of notices, cautions and taking statutory samples) are not available for use by individuals or NGOs.

Various surveys have indicated that the environment has become a priority with the general public (Digest of Environmental Protection and Water Statistics No 16, HMSO 1994; Worcester, 1994; ENDS 1996 259: 20-21). Many people are disillusioned with the efforts of the government and favour action at a European level. In addition, they are more likely to regard information arising from pressure groups as being trustworthy rather than that originating from public authorities (Worcester, 1994). Furthermore, public confidence in industry as a whole is particularly low, with few people believing that industry is making greater efforts to control pollution and be more open with its environmental information (ENDS 1996 259: 20-21).

Various remedies may be sought by the general public and pressure groups, using a variety of methods in the courts:
Any person is able to prosecute an offender for an environmental criminal offence provided there are no stated restrictions on the right to prosecute in the legislation. For example, the offence of damaging a Site of Special Scientific Interest under s.28 of the Wildlife and Countryside Act 1981 proscribe private prosecution without the consent of the Director of Public Prosecutions. For the offences with which this thesis is concerned under WRA 1991 and EPA 1990 Parts I and III, there are no restrictions on the right to bring a private prosecution, so this course of action is possible.

When a body fails in its statutory duty to enforce regulations, an interested person can seek judicial review (see Chapter 4 for further details on the definition of an 'interested person' and the constraints placed on this method of enforcement through the limitations of standing).

To protect a private interest the common law may be used (public and private nuisance, negligence, trespass and the rule in Rylands v Fletcher (1868) LR 3 HL 330).

(Law Centres Federation, 1992)

The system of common law in the UK relating to the environment has developed over several hundreds of years, specifically to deal with complaints relating to land use. As an aside, some of the law made through decisions on certain cases also had the effect of protecting the environment. However, as its primary function was the protection of an individual's rights, its application in the field of environmental protection has a number of limitations. These include:
1. To bring an action in private nuisance, one must show a proprietary interest, as the law of nuisance is concerned with 'the unlawful interference with a person's use or enjoyment of land, or of some right over or in connection with it' (Read v J. Lyons & Co. Ltd. [1947] AC 156). This has been reaffirmed by the House of Lords in Hunter v Canary Wharf [1997] 2 WLR 684, where they overturned a decision made by the Court of Appeal to allow those without any legal interest in land to bring an action in nuisance.

2. For a nuisance to be actionable, it must be more than just of temporary duration (Harrison v Southwark and Vauxhall Water Co. [1891] 2 Ch 409).


4. Decisions are made based upon the 'reasonableness' of actions of the two opposing parties, rather than precise standards or limits (Saunders-Clark v Grosvenor Mansions Co. Ltd. [1900] 2 Ch 373).

5. The 'locality doctrine' in private nuisance takes into account the state of the surrounding environment (St Helen's Smelting Co. v Tipping [1865] 11 HL Cas 642). Those people living in an urban environment are to expect more in the way of noise and pollution than those residing in a rural area. Therefore, areas requiring more attention in terms of environmental degradation, receive less protection under the common law.
6. An action brought under negligence requires proof of fault by the person creating the damage, and a duty of care owed to the plaintiff by the defendant (*Lochgelly Iron and Coal Co. v McMullen* [1954] AC 1). In many cases, pollution incidents are the result of accidental occurrences where fault is difficult to ascribe and a duty of care may be difficult to prove.

7. In order for a common law action to be taken, some environmental damage must have already occurred. The remedy is therefore not preventative in nature (although abatement orders may be served once it has been established that a problem exists), and does not provide any redress in terms of environmental remediation. Instead, it relies mainly upon remedies that are reactive and compensatory.  

(Bell, 1997).

Although there are important limitations on the use of the common law for the protection of the environment, in certain cases a civil action may be used to claim damages where a criminal prosecution has failed. For example, in *NRA and Angler’s Co-operative Association v Clarke* (ENDS 1994 232: 45), a pig farmer was found guilty of knowingly permitting poisonous or injurious matter to enter a river. The farmer was fined £10,000 with costs awarded to the NRA of £20,000 to cover legal expenses. However, the decision was subsequently overturned by the Court of Appeal. The NRA, in conjunction with the ACA, then proceeded with a civil claim for damages and remediation expenses. The NRA was awarded £90,000 for legal expenses and the cost of restocking the fishery, whilst the ACA was awarded £8,400 for legal expenses and the local angling club £8,450 in damages. This is an example of one of the many common law actions taken by the ACA on behalf of angling clubs.
It must also be noted that even when a business has received the required authorisation for its activities by a regulatory agency, this will not necessarily preclude the option for an individual to bring a prosecution under the common law. The exception is in certain cases where planning permission may change the character of a neighbourhood. *(Gillingham Borough Council v Medway (Chatham) Dock Co. Ltd [1993] QB 343)*. In a recent case, however, it was determined that waste disposal operations are temporary in nature and a licence for such operations could not be said to have changed the character of a neighbourhood *(Blackburn v ARC Ltd (1998) 276 ENDS Report 51)*. The plaintiffs were awarded damages for the reduction in value of their properties as a result of the operation of the waste disposal facility.

Although the common law as a tool for the protection of the environment may be useful in certain cases, this particular aspect of environmental protection is beyond the scope of this research. Further information can be found in Pugh and Day (1992), Harvey and Marston (1996), Harpwood (1997), Mullis and Oliphant (1997), Thornton and Beckwith (1997) and Brazier and Murphy (1999).

A steady increase in the number of prosecutions taken by individuals or pressure groups has been noted throughout the 1980s and 1990s (Feller, 1983; Boyer and Meidinger, 1985; Austin, 1987; Marks, 1987; Mumma, 1992; Naysnerski and Tietenberg, 1992; Alder and Wilkinson, 1999). Although the actual number of private prosecutions brought for regulatory offences remains small (approximately 2% overall) (Ogus, 1994), they can play a significant role in the strategy of pressure groups and provide a focus for media attention. In many cases, action has resulted through dissatisfaction with the steps taken by regulatory agencies and
government departments (Hurrell and Kingsbury, 1992; Harris, 1993; Harris, 1994). As Kramer (1992) notes:

"Environmental issues are issues of general interest and therefore need public discussion, public decision-making and monitoring under the control of the public".

As previously mentioned, individuals or NGOs may take direct action in the courts by bringing a private prosecution for an environmental criminal offence, taking common law actions or using judicial review. Indirect action includes the application of pressure to regulatory authorities, the government, the regulated community or European Community, using a variety of means and often assisted by widespread media coverage. Some of the more well-known examples of direct and indirect NGO action include:

1. A challenge by Greenpeace to an official decision allowing BNFL to test a new reprocessing plant at Sellafield (R v Her Majesty's Inspectorate of Pollution, ex parte Greenpeace (No 2) [1994] 4 All ER 329). In this case, Greenpeace were granted leave to apply for judicial review relating to a decision to allow BNFL to test its new thermal oxide reprocessing plant (THORP) at Sellafield. The High Court rejected the challenge by Greenpeace, but the case was significant because of the court's approach to the issue of standing. Statutory provisions relating to judicial review state that an applicant must have 'sufficient interest' (s. 31(3) of the Supreme Court Act 1981). BNFL had argued at the main hearing that Greenpeace did not have legal standing to challenge the decision. However, the judge in the case, Mr Justice Otton, made it clear that Greenpeace was a responsible and respected body with a genuine interest in BNFL's activities and had 2,500 members in the Cumbrian area. The contention that Greenpeace did not have sufficient interest was therefore strongly rejected, and the decision could have wide implications for
future action taken by other pressure groups (ENDS 1993 225: 42-43; ENDS 1993 227: 8-9).

2. FoE threatening to take private prosecutions against directors of companies that regularly breach their effluent consents (ENDS 1993 221: 8). 14 directors of companies in Yorkshire were threatened with this action unless the quality of their effluent improved under s. 217 of the WRA 1991, that allows for the personal prosecution of a director or other senior official when their 'consent, connivance or neglect' can be shown.

3. A prosecution against British Coal by the Anglers Co-operative Association relating to river pollution caused by mine abandonment (R v British Coal Corporation (Cardiff Crown Court, 2 December 1993); ENDS 1993 227: 44-45). The prosecution was brought by the ACA under s. 85 of the WRA 1991, after British Coal switched off the pumps from closed mines and iron pyrite deposits were flushed out into a local river. The judge directed the jury to acquit, as he held that switching off the pumps had not been a cause of the pollution but just formed part of the surrounding circumstances.

Efforts on an individual level, with the corresponding lack of resources, often do not achieve the same effects as on a collective level (Barnett, 1993; Kye, 1995). However, there have been a couple of notable exceptions, when the plaintiffs had sufficient resources at their disposal to pursue an action. Michael Saltmarsh, the owner of a private beach in North Devon instituted civil proceedings in respect of nuisance and trespass and issued a £1 million writ against South West Water plc for sewage contamination of his beach, whilst Mohamed Al Fayed sued the Department of Transport and Surrey County Council over surface water run-off from the M25 that was contaminating his lake (ELB 1994 5(5): 57; Payne, 1994).
Both parties settled out of court - Mr Saltmarsh for an undisclosed sum and Mr Al Fayed for £5,000 damages and £250,000 legal costs.

As the number of private actions has increased in recent years, a variety of texts offering guidance on citizen rights and the process involved in bringing an action relating to the environment have been published (Green Rights and Responsibilities: a Citizen's Guide to the Environment, DoE 1992; Your Council and the Environment, DoE 1993; Murdie, 1993; European Environment Bureau, 1994; Polden and Jackson, 1994; Robinson and Dunkley, 1995; Alder and Wilkinson, 1999). However, the growth in this field of enforcement has been somewhat limited due to a number of factors (Day, 1994; Murdie, 1994; Upson and Hughes, 1994; Sands, 1996; Lawrence, 1998). These include:

- resource implications and limitations for the granting of legal aid;
- implications of locus standi - the ability of a person to show a sufficient legal interest in a matter to allow them to bring a case to court (see Chapter 4);
- difficulty in proving causation;
- access to information.

Environmental information became more widely available under the 1990 EC Directive on the Freedom of Access to Environmental Information (90/313), transposed into domestic law by the Environmental Information Regulations 1992 (amended by the Environmental Information (Amendment) Regulations 1998 SI 1998/1447). However, these regulations and the registers of information made available have been criticised for a number of reasons (Birtles, 1993; Burton, 1993; Fyfe, 1993; Jenn, 1993; Jones, 1994; Ross and Rowan-
Robinson, 1994; Wheeler, 1994; ENDS 1996 254: 33-34; ENDS 1996 262: 27-28). These include:

- restrictions on the bodies subject to the regulations;
- excessive charges for information;
- exemptions from disclosure of certain types of information (e.g. information that relate to matters that are subject to legal proceedings);
- practical problems of accessing the data;
- comprehensibility of information to the layman;
- a definition of 'information relating to the environment' not given in the Regulations;
- a public lack of awareness of the Regulations and registers;
- incomplete registers;
- a request for information being refused if it is too general in nature;
- a restriction on information from internal communications;
- incomplete records not being made available;
- appeals against a body's refusal to release information can only be taken through the courts.

Rowan-Robinson et al. (1996) carried out a survey of the effectiveness of public registers and reports as a means of providing environmental information. The research (undertaken in Scotland) involved gathering perspectives from environmental protection agencies, industry and public interest groups by way of questionnaires, and analysis of a sample of registers and reports. They found that registers, on the whole, have a limited role in information provision resulting in wasted resources in their production and maintenance. The reasons for this included low public awareness, limited access (in terms of geography, administrative
arrangement and format), a large variability in cost for copies of material and an absence of a 'culture of participation'. Rowan-Robinson et al. concluded that this culture of participation and environmental stewardship needs to be developed by encouraging wider and more open information provision by regulated companies.

The provision of adequate information is regarded as one of the most important requisites for individuals and pressure groups to take action (Wolf and White, 1997, p.158). Without access to the necessary information their ability to take enforcement action would be severely restricted. Knowledge of authorisations or consents, the conditions attached to them, and the results of monitoring activities would be required in order to determine a company's level of compliance and decide whether to take enforcement action. The above problems encountered with the extent of information provision can therefore be considered as a substantial barrier preventing private actions.

A report by the House of Lords Select Committee on the European Community relating to information provision (Freedom of Access to Information on the Environment, 1st Report, 1997) was recently debated in the House of Lords. Baroness Hilton described the DoE's attitude to complying with the Environmental Information Regulations as "laissez faire" (ENDS 1997 274: 36-37). In June 1998, The European Court gave its first judgement on the interpretation of the 1990 EC Directive on the Freedom of Access to Environmental Information (Wilhelm Mecklenburg v Kries Pinneberg - Der Landrat Case C-321/96, European Court of Justice, 17 June 1998). Questions of what was information relating to the environment, and access to information relating to matters under enquiry were posed in the case. The ECJ adopted a rather liberal approach that will have implications for the UK where
questions of interpretation arise. (For an overview of the case see Macrory in ENDS 1998 283: 45).

In reply to the wide criticism of the Environmental Information Regulations and their implementation, the Government have published a white paper on the freedom of information that proposes to reform the whole system (*Your Right to Know: The Government's Proposals for a Freedom of Information Act*, HMSO 1997). The white paper proposes to create a general right of access to all official information, as well as that relating to the environment. It includes:

- more liberal tests for disclosure decisions, being based on a 'presumption of openness';
- provision for an Information Commissioner to hear appeals against a refusal to release information by public bodies;
- proposals to list the organisations to whom the regulations will apply;
- making the exemptions from disclosure much more specific.

The white paper has been welcomed by campaigners for the freedom of information (ENDS 1997 275: 24-26) and will hopefully prove useful in facilitating enforcement action by private individuals and NGOs. However, it will be some time before the full impact of the proposals may be assessed, as a Freedom of Information Act has not appeared on the statute book as yet. In May 1999, however, draft proposals for the Bill were published by the Home Secretary who subsequently ran into a barrage of criticism for back-tracking on many of the ideas set out in the White Paper (ENDS 1999 292: 42-44). The Home Office now intends to repeal the original regulations that implemented the 1990 EC Directive, and use the provisions contained in the Bill to implement the Directive afresh.
On a secondary level, environmental information can also be used to determine a company's track record in the environmental field. This in turn may influence the choice of suppliers for firms with a high environmental profile, or can serve to inform consumers and affect their spending (Grabosky, 1994; Wolf and White, 1997). A recent survey indicated that 50% of businesses take the environmental record of companies into account when making choices between suppliers (ELM 1996 5(2): 10-11). It may also have the effect of improving a company's environmental performance if the information is published.

In 1987 the Toxic Release Inventory (TRI) was introduced in the USA. Under this scheme, manufacturing plants with 10 or more employees must provide the Environmental Protection Agency with details of their emissions for a designated set of over 600 toxic substances (Brehm and Hamilton, 1996). Failure to provide the information can incur penalties of up to $25,000 per day (Robbins, 1994). The information is made widely available through electronic sources and hard copies, and since the introduction of the inventory toxic releases have decreased by 43% (ENDS 1995 249: 8-9; EM 1996 3(1): 8-9). However, it has since been proposed that some of these reductions could be attributed to changes in methods of calculating releases (ENDS 1998 283:7-8).

HMIP introduced a similar system by producing a Chemical Release Inventory (CRI). However, the CRI attracted criticism from many sources (ENDS 1993 219: 30-32; ENDS 1994 236: 6-7), most notably for failing to provide information on emissions from specific companies.
A fervent critic of the CRI has been Friends of the Earth who has argued for an inventory comparable to the TRI where league tables of companies were compiled to enable comparisons of environmental performance between competitors. Dissatisfaction with the inventory prompted FoE to publish its own version of the information on the internet (http://www.foe.co.uk/cri), with individual site data readily accessible. Over a one year period HMIP received approximately 200 requests for data held on the CRI, whilst FoE's website logged over 6,000 visits within the first four hours of its launch (ENDS 1995 249: 8-9). In February 1999, FoE relaunched the website (http://www.foe.co.uk/factorywatch/) detailing emissions for processes controlled under IPC showing a league table of polluters ranked by potential health hazards. The website again has attracted substantial interest, far outstripping the low level of enquiries for information from the Agency's largely paper-based CRI data or IPC public registers (ENDS 1999 289: 9-10). Furthermore, it has also prompted the CIA to call for a comprehensive database for all types of emissions.

In response, the Environment Agency published a league table of companies fined for environmental offences in 1998 - dubbed the "Hall of Shame" by the Agency - in March 1999 (ENDS 1999 290: 6). The league table is based on the total monetary value of fines imposed for environmental offences, with ICI placed in the top position with fines of £382,500. One of the drawbacks of the list is that recurrent offenders awarded smaller penalties do not appear. Another table based on the number of convictions would also prove valuable in promoting compliance.

In addition, the Environment Agency published a new Pollution Inventory on the Internet on 12th May 1999 showing emissions from all processes controlled under the IPC regime (http://www.environment-agency.gov.uk). This information was collated from businesses
regulated under IPC as a result of the Agency varying all 2,000 or so IPC authorisations in November 1998 (ENDS 1998 287: 37-38). This had the effect that these businesses were required to report their 1998 releases against a core list of more than 150 substances provided they exceeded given thresholds. The new Pollution Inventory has been described as a "huge improvement" on the CRI (ENDS 1999 292: 24-27), with it focusing attention on polluting emissions and pressing for their reduction. Problems with the CRI such as inconsistent reporting and incomplete data have been addressed with the new inventory. Moreover, the database may be searched in a variety of ways - by pollutant, postcode, areas delineated by maps, industrial sector or company name. As such, company league tables may be produced showing the main sources of different types of pollutant. The power of electronic means for disseminating such information was illustrated by the number of visits to the Pollution Inventory website in its first week - 2,700 visitors compared to the low level of requests for information held on the CRI (ENDS 1999 292: 24-27).

It is therefore clear that although private individuals and pressure groups have an important role to play in the enforcement process, their ability to take direct action is often impeded by regulatory and resource constraints. Indirect action is often taken as an alternative, and the application of pressure upon the regulators, businesses and government can be just as effective in producing the desired results. The media often plays a significant role in this indirect action, and its contribution to the enforcement process is discussed below.

2.13 The Media

The media has an important role to play in enforcement, highlighting problem areas and thus increasing the impetus for change (Elliott et al., 1995; Osborn, 1997). This has also been
acknowledged by regulatory authorities, with the NRA making particular reference to the importance of focusing media coverage in its 1993 report on *Water Quality Strategy*. Furthermore, many regulatory officials utilise the threat of media coverage, especially with larger firms fearing bad publicity, to gain compliance with the legislation (Mehta and Hawkins, 1998). Regulatory agencies normally issue press releases on a regular basis revealing details of prosecutions (Lerry and Connolly, 1992).

Particular cases that receive substantial media coverage are more likely to invoke stricter enforcement action, as the regulators feel a need to 'prove themselves' whilst under the spotlight of public attention and project a favourable image of themselves (Richardson *et al.*, 1982). Regulatory authorities generally strive to have the appearance of vigilance in the face of public and media pressure.

In cases where an isolated incident has occurred which is entirely accidental, the overriding factors in bringing a prosecution are the severity of the offence and the threat of extreme damage to the environment or health of individuals (see Chapter 3). With wide media coverage, the regulatory agency will be more likely to impose strict enforcement procedures because of public accountability pressures. This will produce a well publicised profile of the agency utilising a rigorous enforcement policy, which in turn will have a deterrent effect on other potential polluters (Richardson *et al.*, 1982; Doerr, 1985; Dimento, 1986).

Examples of the use of the media to focus public attention and bring about changes relating to the environment can be traced back to the 1950s when extensive media coverage was instrumental in bringing about changes to counteract the London smogs (McCormick, 1991). Public pressure as a result of media attention was a causal factor in the government setting
up a committee of enquiry which precipitated the introduction of the Clean Air Act in 1956. More recent examples of cases attracting substantial media coverage include the Shell case for their pollution of the Mersey which resulted in a £1 million fine (*National Rivers Authority v Shell (UK)* [1990] Water Law 40), and the Camelford incident where substantial quantities of aluminium sulphate were washed into the water supply and had detrimental effects on the local population. In 1997, Castle Cement, Lancashire was found guilty of four separate offences of exceeding sulphur dioxide emission limits and was fined £6,500 with £2,000 costs. The company had been subject to extensive media coverage (The Sunday Times, 1/6/97; The Observer 27/7/97, 19/10/97 and 16/11/97) stating that residents were suffering heart, liver and breathing problems that they attributed to the plant.

It can therefore be seen that the media can have a not inconsiderable influence on the action taken by governments and regulatory agencies.

### 2.14 The Courts

The vast majority of enforcement activities undertaken by regulatory officials (informal methods, warning letters, serving notices, etc. - see Chapter 4 for further details) do not involve any court action. However, when the courts do become involved in the enforcement process (prosecutions, judicial review, etc.), they can be extremely influential in the message they convey to potential and actual polluters and the choice of action taken by regulatory authorities. Some of the more important considerations for regulators and individuals/NGOs are the levels of fines imposed, the apportionment of appropriate remedies (injunction, fines, incarceration, abatement orders, etc.), the ease of access to the courts for NGOs (in relation to the rules on * locus standi*) and the cost and complexity of proceedings (Lawrence, 1998).
In many cases, especially in the past when fines for environmental crimes were notoriously small, the low levels of penalties imposed by the courts would act as a disincentive for bringing a prosecution (Richardson et al., 1982; Hutter, 1988; Watchman et al., 1988; Rowan-Robinson et al., 1990). Hutter (1988, p.75-80) stated that some departments had experience of fines for environmental offences at just £5, and over 60% of Environmental Health Officers regarded the maximum allowable penalties as 'low' or 'very low'. The EPA 1990 s.145(1) raised the maximum fine on summary conviction from £2,000 to £20,000 for many environmental offences. However, these fines still appear inconsequential when compared to fines in other countries. For example, in the USA, the maximum fine that may be incurred for violation of the Clean Water Act and Clean Air Act is $25,000 per day per offence (Morelli, 1997).

Prior to 1990, although the maximum fine was set at £2,000 the average fine imposed by the courts was estimated at only £250 (Carter, 1992). This low level of fines implied that the crime had in turn a low level of seriousness attached to it (Rowan-Robinson et al., 1990). However, statistics for the years 1989-93 show an overall increase in the level of fines levied in the Magistrates' courts to an average of £1,566 (Simpson and Carless, 1997). Fines for IPC offences (in both the Magistrates' and Crown Courts) have been rising steadily since 1992, with a slight decrease during 1997/8. The following table (adapted from ENDS 1997 269: 47-48, the Environment Agency Annual Report 1997/8 and ENDS 1999 293: 49) illustrates this trend.
Table 2.1 Average levels of fines for IPC offences 1992-1999

<table>
<thead>
<tr>
<th>Year</th>
<th>Average fine per case (£)</th>
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<td>1992-93</td>
<td>7,214</td>
</tr>
<tr>
<td>1993-94</td>
<td>7,292</td>
</tr>
<tr>
<td>1994-95</td>
<td>9,100</td>
</tr>
<tr>
<td>1995-96</td>
<td>14,893 (excluding the exceptional fine of £150,000 levied against Coalite in February 1996)</td>
</tr>
<tr>
<td>1996-97</td>
<td>15,250</td>
</tr>
<tr>
<td>1997-98</td>
<td>14,000 (excluding the £150,000 fine levied against ICI in March 1998)</td>
</tr>
<tr>
<td>1998-99</td>
<td>15,833</td>
</tr>
</tbody>
</table>

However, the average fine for a prosecution brought by the Environment Agency (including waste, water, IPC and radioactive substances offences) during 1998 was only £2,786 (ENDS 1999 290: 6).

Increasing numbers of prosecutions are taking place in the Crown Court where unlimited fines may be imposed (Carter, 1992; Mumma, 1993; De Prez, 1997)). However, the imposition of higher penalties is quite rare, an example being the now infamous Shell case in 1990 (National Rivers Authority v Shell (UK) [1990] Water Law 40). The resultant £1 million fine was thought by many to herald a new era in a more appropriate level of penalties for environmental offences. However, this has not been realised, and comments from the Chief Executive of the Environment Agency have indicated its disappointment at the levels of fines still being apportioned by the courts (Environment Agency, Annual Report 1998). This often makes the time invested in bringing a prosecution unjustifiable (estimated at 9.5 man days per prosecution - Smith, 1993). As the Environment Agency have stated:
"We need heavier fines for pollution incidents - current levels are little more than a flea bite for many industries. [They] represent no real deterrent to mismanagement and send the wrong signals both to the boardroom and the public at large". (Environment Action 1997 9: 4).

At the 1997 Environment Agency's AGM, it was stated that the largest fine during 1996/7 represented the equivalent of a £15 fine on someone earning £30,000 a year (EIB 1997: 73: 11-13).

Although the Labour Government has also indicated a desire to see tougher penalties for environmental offences (Ending the Waste, The Labour Party 1996; Michael Meacher (Environment Minister) in EIB 1997 73: 11-13), it does not state how it intends to achieve this.

The imposition of a fine greater in magnitude to that in the Shell case for an environmental offence did not occur until very recently. In January 1999, Milford Haven Port Authority was fined £4 million and £825,000 costs for its role in the 1996 Sea Empress oil disaster (ENDS 1999 288: 50-51. The prosecution was brought by the Environment Agency under section 85(1) of the Water Resources Act 1991 for the offence of causing polluting matter to enter controlled waters (see Chapter 4 for a discussion of 'cause'). Several shortcomings in the Port Authority's operations were pointed out, including the inappropriate seniority of the pilot, disregard for tidal constraints and an ineffective radar system. Oiling of 200 km of the shoreline resulted, with an estimate of the overall economic costs to the region placed at £106-226 million. During sentencing, the judge made it clear that the fine would have been much larger for a major oil company. Whilst the Port Authority is now considering an appeal against the level of the fine, the owner of the Sea Empress may bring a civil claim against the Port Authority for the cost of repairs to the vessel and loss of earnings.
Despite the rise in the maximum penalties allowed for offences, a large degree of the problem is an unwillingness by judges, on the whole, to utilise penalties at the higher end of the scale (Watchman et al., 1988). This unwillingness may be attributed to the moral status attached to environmental offences (see section 2.7.3), and a view held by many magistrates and judges that these offences form part of socially acceptable business practice (Simpson and Carless, 1997). For example, in R v Yorkshire Water Services Ltd. [1994] Water Law 175, the fine was substantially reduced from £75,000 to £15,000 on appeal. The judge based his decision on the fact that the offence was one of strict liability and no moral blame could be attached to the defendant. Furthermore, it has been noted that lay magistrates are often ill-equipped to comprehend much of the technical data submitted as evidence during environmental proceedings (Gerjuoy, 1995), and therefore do not often appreciate the seriousness of the offence.

Croall (1988) studied a number of different cases as they progressed through the courts, that were being prosecuted for food offences under Environmental Health legislation. These offences were characterised by infrequent prosecution, strict liability, lenient sentences and the regulators favouring a compliance strategy of enforcement. Many similarities therefore existed between these offences and those under environmental pollution legislation. Croall found many inconsistencies in the court process. Larger companies were often able to neutralise the moral blameworthiness of their offence by masking its severity. However, amongst smaller firms with limited knowledge of the law that did not have legal representation, substantial confusion existed in relation to aspects of law and what could be considered as mitigating factors. Furthermore, the magistrates themselves were often unclear of the legislation and the maximum allowable penalties. Clerks were frequently consulted by
the magistrates prior to sentencing discussions. In addition, regulatory officials complained of magistrates being 'taken in' by excuses offered up by the companies to explain their intransigence, and details of previous offences, unheeded warnings prior to the incident and numerous site visits were frequently not revealed.

A further example of an unwillingness to impose stricter penalties is the limited use of the incarceration of corporate officials. The provisions in the legislation relevant to this research (both EPA 1990 s.157 and WRA 1991 s.217) have been in force for a number of years but the measure was only used very recently for the first time. In October 1997, the owner of a bottling business was prosecuted for causing polluting matter to enter controlled waters (contrary to section 85(1) and (6) of the WRA 1991), after polluting a nearby watercourse with gas oil leaking from an unbunded storage tank (ENDS 1997 273: 45). The Environment Agency had given numerous warnings about the unbunded tank that had been disregarded by the defendant. He was given a two-month prison sentence for the offence, to run concurrently with two other two-month jail terms administered for five food hygiene offences.

This type of penalty has also been utilised sparingly by judges in relation to waste offences, the first example relating to a fly-tipping offence in 1988 (ENDS 1993 217: 43). Since then, approximately a dozen offenders have been jailed for environmental offences, with the longest custodial sentence imposed being 2 years (ENDS 1998 277: 48). Incarceration can be very useful in its deterrent effect. In the USA, threat of jail has caused many corporate officials to be much more compliance conscious (Starr, 1991).

Passing lower sentences could explain, in part, why a number of regulatory agencies have traditionally favoured the negotiated method of compliance rather than a confrontational
approach (Richardson, *et al.*, 1982). If the penalties resulting from a prosecution are so low that it becomes more economically attractive to pollute the environment and pay a negligible fine, then the deterrent effect of using a confrontational strategy is negated and the regulators will take an accommodative stance (Segerson and Tietenberg, 1992).

A large degree of variation in fines for similar offences has also been noted (*Pollution of Rivers and Estuaries*, House of Commons Select Committee on the Environment, 1987; Hutter, 1988). The two extremes of fines under the WA 1989 and WRA 1991 range from £30 imposed by Amptill magistrates (Simpson and Carless, 1997) to £4 million in the *Sea Empress* case.

Hutter (1988, p.77) reports that enforcement officers described the fines imposed by different magistrates as "varying tremendously" for similar offences. In many instances, the level of fines were dependent upon the defendant's ability to pay rather than the extent of environmental damage incurred as a result of the incident.

In fact, in all criminal offences the magistrate must have regard to the seriousness of the offence and the financial circumstances of the offender, as set out in the magistrates' sentencing guidelines (ELB 1993 4(7): 81; Samuels, 1994b; O'Keefe, 1998). For example, vast quantities of silage and slurry can have a considerable impact on the receiving environment, but this type of incident attracts the lowest fines when compared to other industrial sectors such as the oil industry, probably because of farmers' inability to pay higher fines when compared with large oil companies. Between the years 1989-1993, the average fine imposed for agricultural incidents was £660 compared to £6,010 for oil spills (excluding the *Shell* fine) (Simpson and Carless, 1997).
In addition to this disparity in the level of fines applied to different industrial sectors, there also appears to be dissimilar penalties awarded according to the location of the court and the predisposition of the magistrate or judge (Simpson and Carless, 1997). In fact, researchers have found that even the physical attractiveness of defendants is related to the harshness of treatment, with attractive offenders being treated more leniently than unattractive ones! (McKelvie et al., 1993).

This disparity in the levels of fines could be corrected by the introduction of a series of sentencing guidelines similar to that found in the USA (Adler and Lord, 1991; Strock, 1991; Cohen, 1992; Hunt and Wilkins, 1992; Marella, 1992; Lowenthal, 1993; McGregor, 1994). The USA's sentencing guidelines, introduced in 1987, aim to eliminate unwarranted disparity, seek proportional punishment for different offences and consistent punishment for similar crimes (Lowenthal, 1993). The guidelines state that account must be taken of past criminal record, the type of pollutant released, the extent of clean up required, the extent and duration of the violation and whether the offender reported the incident, amongst others. The Environmental Protection Agency in the USA has developed detailed internal guidelines to assist in calculating suitable penalties. Mandatory sentencing laws (i.e. when a specific circumstance exists in connection with an offence then the court must sentence the defendant to prison) are also widespread. Some authors have argued that the sentences imposed in the Magistrates' court in this country should use the maximum level as a starting point, and then be incrementally reduced in the light of mitigating circumstances (Smith, 1993).

The judgement on a recent case in the UK concerning a health and safety offence, sets out a number of principles that should be taken into account by the judiciary when sentencing (R v
F. Howe and Son (Engineers) Ltd (1999) 288 ENDS Report 51). The Court of Appeal stated that in deciding on an appropriate sentence, a number of aggravating and mitigating factors should be taken into account. Mitigating factors could include:

- a guilty plea;
- a previous clean record.

Aggravating factors made reference to in the case included:

- that there was continuing non-compliance with the law rather than an isolated lapse;
- a deliberate flouting of regulations to save money;
- death or serious injury.

Although the size of the company should be taken into account when fixing the level of fine, this factor should not in itself act in mitigation. Furthermore, the starting point for fixing the penalty should be to consider how far the defendants fell short of the appropriate standard laid down by the law.

These principles appear to be equally applicable in the environmental field, and the judgement could provide a useful benchmark to assess the levels of penalties that should be applied. However, it was emphasised by the court that the circumstances of each case vary considerably, making it impossible to lay down a tariff. It thus seems that, at present, there is little prospect of the USA's formalised approach to sentencing being adopted in the UK.
As part of the empirical research for this thesis, a comparative study was made of the levels of fines awarded across England and Wales from 1993-5 for cases prosecuted under the WRA 1991 and EPA 1990 Parts I and III. The results can be found in Chapter 10.

It has been widely proposed that the setting up of an environmental court or tribunal would ensure a more efficient and uniform treatment of environmental cases (McAuslen, 1991; Woolf, 1991-2; Carnwath, 1992; ENDS 1993 216: 26-27; Polden and Jackson, 1994; Burnett-Hall, 1997). This would remove several problems encountered under the current system, including the comprehension of detailed technological reports by lay tribunals, determining which, if any, remedial work is to be undertaken, a more efficient and cheaper processing of environmental cases and a uniform scale of penalties imposed. In many cases, such as noise nuisance, hearings could become more of a conciliation process with the judge taking a proactive role in finding a solution acceptable to both parties (Environmental Law Foundation and the Green Alliance, 1996).

In New South Wales, Australia such a court has been in existence for nearly two decades, dealing with civil and criminal matters (Woolf, 1992-3; Hemmings, 1993). The court is a highly specialised and efficient body consisting of four judges and nine technical and conciliation staff. Cases are usually heard within 3 months and decisions on appeals are final and binding. In addition, any person can bring proceedings, with the rules on locus standi being scrapped. This change would remove problem of proving 'sufficient interest' currently experienced by interest groups in the UK (see Chapter 4), and harmonise the rules throughout member states in the EU (Somsen and Bovis, 1992). An environmental court could be established at both a national and European level, ensuring proper implementation of European laws and a 'level playing field' for environmental standards throughout Europe.
The Labour Government made it clear in its pre-election policy document that it intends to introduce some form of environmental court (*In Trust for Tomorrow*, The Labour Party 1994). It stated that the court would be based on some of the principles enshrined in the Australian example, and would consist of both lawyers and technical assessors. In certain cases (e.g. judicial review or criminal proceedings) it would act as a court, whilst in others (e.g. disputes relating to the provision of environmental information) it would assume the role of a tribunal. The restrictions on standing would be removed, with the judge given discretion to refuse cases considered to be frivolous. In addition, when the case is deemed to be one of public interest, unsuccessful plaintiffs will not be made liable for the defendant’s costs. This has since been reaffirmed by the Environment Minister stating that a separate Environment Division of the High Court hearing both civil and criminal cases will be established (ENDS 1997 264: 3-5). However, no time scale has been placed on the proposals as yet.

Certain authors have dismissed the need for many environmental offences to be referred to a separate division of the High Court with its costly pomp and circumstance. Bates (1997) proposes that a specialist tribunal would be more suited to dealing with many environmental cases, with such a tribunal being staffed by specialist stipendiary magistrates.

2.15 Summary

The enforcement of environmental law can therefore be viewed as a complex system of interacting principles, policies, regulations and key players. These numerous key players all affect enforcement action to varying degrees, and each has its own role to play in the
enforcement process. However, to investigate the impact of all of these constituent groups on present day environmental law enforcement would have provided too broad a scope for study and resulted in findings that were lacking in detail. It was therefore decided that the principle aim of this research would be to investigate in-depth the methodologies and strategies employed by regulatory agencies, bearing in mind the variety of external influences detailed in this chapter that affect their work.

A review of the literature published in the 1980s revealed that environmental regulatory officials adopted a conciliatory approach to enforcement, with recourse to more stringent methods used very sparingly or not at all. These findings provided a basis upon which to construct this research and enabled comparisons to be made between approaches adopted in the two decades. This was carried out in the light of new legislation and policies and changing attitudes towards the environment.

In order to investigate the methodologies and strategies employed by regulatory agencies, an examination of the variety of factors that the literature suggests will affect strategic decision making within these agencies needs to be carried out. The findings of this literature review are detailed in Chapter 3.
CHAPTER 3

FACTORS AFFECTING THE STRATEGIC DECISION MAKING
PROCESS

3.1 Introduction

Investigation of the methodologies and strategies employed by regulatory personnel provides an important insight into the enforcement process and the consistency of enforcement action by the authorities. Little is known of the strategies and decision making processes utilised by regulatory agencies when using enforcement measures. This includes the decision whether to take enforcement action at all, and which type of measure to use. A variety of actions are available to the regulators as a result of different breaches of the law and these are discussed fully in Chapter 4.

A number of factors that may influence the decision making process have been proposed as a result of previous studies on the enforcement of environmental law (Richardson et al., 1982; Hawkins, 1984; Hutter 1988). However, these authors' methods of data collection, which in the main consisted of shadowing of enforcement officers and making observations, has a number of problems connected with it. Many of these disadvantages were noted by Hawkins (p.225-232) and Hutter (p.205-218) themselves, and include:

- a questionable degree of objectivity displayed by the observer relating to the perception and interpretation of the information;
- the problem of the selection of relevant material, with a tendency for the observer to note the unusual rather than the usual;
distinguishing between observation and inference when explaining why a particular course of action was taken;

limitations on the number of regulatory personnel that can be observed within time constraints. Hutter (1988) shadowed a number of officials in just four Environmental Health Departments, whilst Richardson et al. (1982) and Hawkins (1984) carried out observations in only two water authorities each. Surveys of opinions can include a much larger sample size. For further discussion on this subject see Chapter 6.

the observer being viewed with trepidation by the observee, leading to the enforcement officer altering his working practices to what he should be doing rather than what he would normally do. This was particularly problematic when only a few days were spent with each field officer, as in the case of Hawkins (1984), and presented a clear hurdle in building a trusting relationship between the two parties;

difficulty in following cases from beginning to end because of time constraints and the protracted nature of certain investigations;

bias in the selection of officers for observation by their supervisors. As Hawkins (1984, p.228) noted, certain officers were not selected because "they were not especially good at their job and ..... [he] wouldn't learn anything from them". This decision was not questioned by Hawkins in order to preserve the good relations between himself and regulatory personnel.

Therefore, an assessment of the factors affecting enforcement practices in the 1990s should be made using an alternative data collection methodology in order to negate some of these problems. Such a study was carried out as part of this research, using postal questionnaires and structured interviews as the methods of data collection. As Hutter (1988) notes, "observation has greater limitations as a reliable method of data collection
than surveys of opinions". A discussion of the relative merits and drawbacks of different types of research methodologies can be found in more detail in Chapter 6.

Therefore, the process of deciding whether to take enforcement action, and which action to take, is governed by legislative constraints (for example, a criminal prosecution may only be taken when an offence has been committed under the legislation - see Chapter 4 for further details) and numerous other factors that are considered on a case to case basis. A review of these factors detailed in the available literature is covered in this chapter, and forms an important part of this study as it equips the author with information essential for subsequent empirical data collection. The research follows these logical steps of progression:

1. to study the factors important in the decision making process proposed by previous studies;
2. to assemble these factors from numerous studies in order to produce a systematic overview of the different information derived from a variety of authors;
3. to use this information to construct questionnaires for empirical data collection;
4. to ascertain from questionnaires sent to regulatory authorities whether these factors do in fact influence their decision making process in the light of changes in environmental regulation and attitudes towards environmental protection;
5. to ascertain from questionnaires sent to regulatory authorities whether similar results are obtained from this study compared to previous studies in the light of different data collection methodologies (postal questionnaires and structured interviews as opposed to observation in the field - see Chapter 6 for details), and with regard to the limitations of methods used in prior studies;
6. to also ascertain from these questionnaires the relative influence of each particular factor in the decision making process - a question not addressed by previous authors;
7. to present the results of this aspect of the research which may be used in order to produce a more systematic methodology for the choice of enforcement action and thus promote uniformity throughout regulatory agencies.

The importance of uniform implementation of legislation has been discussed in Chapter 2, and is required to:

- ensure fair enforcement amongst the regulated community;
- encourage the ideal of a 'level playing field' for industrial competitors;
- preserve the integrity of the regulatory authorities;
- foster a better working relationship between the regulators and the regulated.

The findings of this chapter therefore provide an important basis for later empirical research, the results of which can be found in Chapter 7.

The remainder of this chapter thus presents an overview of the factors affecting the choice of enforcement action as delineated in the existing literature. These factors are widely varied but were grouped into four main types for the purpose of this review, namely:

- characteristics and effects of the incident;
- characteristics of the offender;
- characteristics of the enforccing body/enforcement officer;
- external influences.
3.2 Characteristics and Effects of the Incident

Details of the characteristics described below can be found in Richardson et al., 1982, p.152-180; Hawkins, 1984, p.161-173; and Hutter, 1988, p.105-113.

3.2.1 Severity of the Offence

It has been shown that enforcement responses vary with the gravity of the violation (Downing and Kimball, 1982; Richardson et al., 1982; Hawkins, 1984; Hutter, 1988; Rowan-Robinson et al., 1990). The more serious an incident, the more likely it becomes that regulatory officials will resort to stringent methods of enforcement such as serving an official notice or bringing a prosecution. In the USA, interview data have illustrated that many Environmental Protection Agency water officials will not undertake an enforcement action unless the offence is 'substantial' or a 'persistent violation' (Hunter and Waterman, 1992). This stance has also been mirrored in the UK, with many officers believing that non-compliance with the regulations is only truly criminal in nature if there is a likelihood of serious harm (Richardson, 1987).

The severity of the offence can be measured in a number of ways, including:

- the threat of damage or actual damage to human health or life;
- death or injury to plants, fish or wildlife;
- the type of substance released (e.g. its toxicity, persistence, appearance, bioaccumulation and resultant biological oxygen demand (BOD) in water);
• the amount of substance released;
• the concentration of substance released;
• the actual and potential polluting effects of the incident;
• the margin by which the consent or authorisation has been surpassed.

(Richardson et al., 1982; Hawkins, 1984; Richardson, 1987; Hutter, 1988).

Hutter (1988) found that an incident of non-compliance associated with actual or potential harm to the general public played a crucial role in the decision making process resulting in the application of enforcement measures. Such incidents were liable to attract strict enforcement action.

Other factors contributing to the overall seriousness of the offence are the concentration, type and volume of effluent that together produce the polluting effects of the incident and are directly related to damage of flora and fauna. Two major types of pollutant exist, namely organic and inorganic. In rivers, organic pollutants can be responsible for considerable numbers of fish deaths, whilst inorganic pollutants generally do not have this effect unless they are toxic in nature. Richardson et al. (1982) found that toxic discharges promoted stricter enforcement action and generally attracted higher fines in cases where prosecutions were taken. However, this action was generally precipitated by a desire to protect sewage works rather than concern for the environment as a whole. Furthermore, regulatory officials taking part in Hawkins' study (1984) stated that even highly polluting effluents would be tolerated by them if they were short-lived in nature.

The level of fish kill is considered very important by regulatory officials when judging an incident (Hawkins, 1984). One reason behind this stance is due to the effect being a readily
observable sign of pollution that can generate a high level of public concern. Other types of pollutant such as dyes, oils, a high level of suspended solids, emulsified oils producing a 'milky' appearance in water, large amounts of foam created by detergents and chemicals with a noxious smell, may all attract attention and generate a large number of public complaints.

The extent of public involvement in a particular incident could be extremely influential in the choice of an enforcement action by regulatory officials. The reporting of an incident by a member of the public is more likely to be dealt with in a stricter fashion than one that was discovered in the course of an official's work or one reported by a member of the regulated community (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988; Weait, 1989; Burton, 1991). This is connected with a desire by the agency to promote an image of competency and efficiency, where they must be seen to be vigilant in cases that have been brought to the attention of the general public (through personal observations or media coverage). A public display of an agency's impotence was considered by many officials to encourage others to take less care and promote a weakening of the deterrent effect (Hawkins, 1984). Hutter (1988) found that offences brought to the attention of officers via complaints were not necessarily more serious than any others (but perhaps more visible), however, they still tended to result in more stringent action. In relation to dealings with the public, officials thus seemed to have less scope to exercise their discretion.

The type of complainant also had an effect on the stringency of action taken. Complaints from councillors or MPs were likely to be more thoroughly investigated and dealt with than those from the general public (Hawkins, 1984; Hutter, 1988). Furthermore,
complaints from anglers were often found to be unsubstantiated, promoting a cynical view amongst officials of complaints originating from such sources (Hawkins, 1984).

The impact of the pollution is also dependant on the receiving environment (see section 3.2.5 below) and is subject to the prevailing weather conditions and seasonal variations (Hawkins, 1984). For example, reduced river flows in summer and during periods of drought can exacerbate the problem due to the minimal capacity for dilution. Furthermore, watercourses used for recreational activity will come under increased scrutiny during the summer months when the number of visitors to these areas will be at its peak. Both of these factors will be taken on board by regulatory officials and may influence enforcement decisions (Hawkins, 1984).

The margin by which the consent or authorisation has been surpassed, or whether a business is operating without consent at all, is a more precise measurement of the seriousness of the offence rather than relying on the overall appearance of the polluted site (Hawkins, 1984). Samples must be taken and analysed to produce the required data. Of course this criteria may only be used to judge the seriousness of an incident where a consent or authorisation for a process actually exists, and not for 'one-off' dumping incidents from an undetermined source.

3.2.2 Duration and Frequency of the Violation

An incident which is ongoing and continuous will usually attract a tougher stance from the regulatory agencies rather than a violation which is an isolated incident of limited duration (Hawkins, 1984; Doerr, 1985). The priority of the regulators is the prevention of
environmental harm rather than punishment of the crime. Therefore, stricter enforcement action would generally be applied to ongoing incidents in order to bring about the cessation of pollution and thus prevent any further harm to the environment - the so-called 'potential for deterrence' (Doerr, 1985). Continuous violations also imply that the incident is not accidental in nature, pointing instead to deliberate pollution or plant mismanagement. This characteristic is therefore linked to many aspects of the offender and their motives behind the incident (see section 3.3 for further details).

3.2.3 Established Practice

In cases where the violation is an established practice that has been accepted by the local community for a number of years, this may affect the enforcement action employed, generally precipitating less stringent enforcement measures (Doerr, 1985). The perception of environmental crimes is a very important aspect that determines which, if any, action is taken. When a greater degree of outrage is expressed by the public after a pollution incident, increased pressure will be placed on the regulatory agencies to stringently enforce the law. However, in other cases, a process may have been used for a number of years and its environmental impact not questioned. The local residents will have more readily accepted the pollution over a period of time in return for the provision of jobs and the economic viability of the region (see section 3.2.4). The strict enforcement of environmental legislation in such cases may be viewed by the local community as unwarranted and unwelcome interference, especially if a loss of jobs ensues.
3.2.4 Economic Considerations

The amount of money spent by the government or regulatory agencies on clean-up and remedial measures after a pollution incident can be substantial. The likelihood of action being taken by these bodies to recover the money from the polluter would be increased in such cases (Schneider, 1982). For example, in *NRA and Angler's Co-operative Association v Clarke* (ENDS 1994 232: 45), the NRA was awarded £90,000 for legal expenses and the cost of restocking the fishery after taking a civil action against a local pig farmer. Alternatively, criminal proceedings may be initiated in order to deter potential polluters, thus avoiding the expense of similar incidents in the future. Therefore, the economic implications of an incident can influence the action taken, with increased costs of remedial measures often leading to a stricter enforcement approach, and additional steps being taken by the authority to recover any clean-up expenses.

Conversely, over-enforcement can lead to the loss of jobs within an area. When the economic cost of complying outweighs the perceived benefits, there is a willingness on the behalf of the regulated to show more tolerance (Hutter, 1988). In addition, when an offender's business is of central economic importance to an area, most officials show less stringency (Richardson *et al.*, 1982; Brittan, 1984; Hawkins, 1984). Furthermore, the likelihood of the authority attracting bad publicity by prosecuting a 'struggling' firm would be increased, and there was thus a tendency to avoid such situations (Richardson *et al.*, 1982).

The state of the economy as a whole can be used to explain differing enforcement styles. Hutter (1988) suggests that in periods of recession officials will adopt a less stringent
attitude, realising the difficulties faced by numerous firms. The opposite stance will apply in times of growth and expansion, as companies will be more able to afford to make the required alterations to their plant and machinery.

Enforcement officials consider whether a prosecution can be justified in terms of the general environmental and economic benefit to the community versus the financial and social detriment to the offender. In order to do this, officials must determine the 'tolerance' levels of the community in each case by taking on board:

- past experiences;
- the presence or absence of complaints;
- the public's reaction to an enforcement action;
- the decision of the courts in cases that have been prosecuted;
- the reaction of the regulated community.

(Hutter, 1988).

3.2.5 Effect on the Condition of the Receiving Environment

The state of the receiving environment can play an important role in the decision making process (Richardson et al., 1982; Hawkins, 1984). A pristine environmental area which has been subjected to a pollution incident is more likely to have suffered a greater degree of harm or loss in ecological terms than an industrial region which is subject to ongoing emissions. Species diversity will be higher and resistance to pollution lower in normally unpolluted areas. As Hawkins (1984) notes, "a water course used primarily as an effluent carrier will be thought better able to tolerate further pollution".
The impact of the incident in relatively unspoilt areas will also be more noticeable by comparison with the usual situation and obvious direct effects of the incident such as fish kill, water discoloration, etc. Clean areas supporting a high density of wildlife will obviously lead to increased numbers of mortalities than polluted areas supporting a limited number and diversity of species (Hawkins, 1984). This will often lead to increased pressure from the general public being applied on the regulatory authorities to take action, promoting stricter enforcement measures (see section 3.2.1).

The high amenity value of an area (for example bathing waters and water used for other recreational purposes) and the use of a particular body of water for abstraction and drinking water supply are also important considerations. Pollution of these types of waters would pose a substantial risk to human health, and thus warrant strict enforcement measures (Hawkins, 1984).

3.3 Characteristics of the Offender

Details of the characteristics described below can be found in Richardson et al., 1982, p.152-180; Hawkins, 1984, p.110-117 & 161-170; and Hutter, 1988, p.109-125.

3.3.1 Type of Offender

Regulatory officials normally formulate opinions of the regulated community based on their activities displayed in the course of running their business, their general demeanour,
the type and size of the firm and the motives behind their behaviour. Numerous authors have identified different 'types' of traders from the descriptions of these officials.

Consideration of the River Purification Boards in Scotland by Watchman et al. (1988), led them to conclude that offenders were considered as 'reputable' or 'disreputable', with definitions based largely on the type of industry being considered. The degree of enforcement action taken depended to a certain extent on the classification of the polluter. Reputable offenders were those willing to take steps to avoid pollution incidents and the stigma associated with them, and included large corporations, nationalised industries and local government. On the other hand, disreputable offenders were those that refused to take the advice of regulatory agencies and would not change their methods in order to reduce pollution. Examples cited by Watchman et al. (1988) included small businesses and farmers.

Hutter (1988) denoted the character of offenders as 'good' or 'bad', 'deserving or 'non-deserving' and 'blameworthy' or 'faultless'.

Hawkins (1984, p.110-114) categorised offenders into four groups, namely:

1. The Socially Responsible Polluter - members of the regulated community that comply with the regulations as a matter of principle. If an incident were to occur they would alert the agency, co-operate fully with the clean-up and take the required steps to prevent its recurrence.
2. The Unfortunate Polluter - those who find it difficult to comply due to financial or technical difficulties, usually considered as a genuine reason for non-compliance by the regulatory authorities.

3. The Careless Polluter - incidents occur through sloppy mismanagement, inadequate internal sanctions, poor training or negligence.

4. The Malicious Polluter - purposive and calculating members of the regulated community whom deliberately pollute to avoid the costs of waste treatment or disposal.

Usually enforcement officers were more likely to be less stringent with the first two categories, more strict with careless polluters and very strict with the malicious polluter, who were considered "prime candidates" for prosecution (Hawkins, 1984). In cases of ignorance, oversight or an accident, formal action was considered inappropriate by many officials, preferring instead to offer advice, guidance and education (Hawkins, 1984; Rowan-Robinson and Ross, 1994). These characterisations of the regulated community were made on the basis of a number of factors discussed in sections 3.3.2 to 3.3.8.

3.3.2 Intent and Degree of Negligence

In general terms, a tougher line of enforcement was taken against those who wilfully pollute to increase profits. For ongoing and continuous violations the intent to pollute was the single most important factor identified by inspectors for bringing a prosecution (Richardson, 1987).
The degree of negligence displayed is an important factor. Of significant importance is whether a prior warning was issued and adhered to, and whether the incident and resultant damage was foreseeable and avoidable (Richardson, 1987). Prosecutions were carried out when warnings and advice (for example, the execution of certain steps in order to prevent pollution incidents) from the regulatory agencies have been ignored by the violator (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988; Rowan-Robinson and Ross, 1994; Ross, 1995). The degree of negligence was also found to be important, with "mild incompetence" attracting a problem solving approach, whilst a "gross lack of foresight" was dealt with severely (Richardson et al., 1982).

The majority of environmental offences are those of strict liability where no element of blame needs to be attached to the offender before a prosecution can be undertaken. However, strict enforcement in cases where there is no culpability can alienate the regulated community and lead to a breakdown in co-operation between the regulators and the regulated. This could lead to a difficult situation where the stretched resources of the regulatory agencies may not be able to cope with a complete lack of co-operation from industry itself. Furthermore, the authority's public image may suffer if it is seen to be 'bullying' a well-intentioned firm. The authorities may therefore hold the opinion that 'justice is seen to be done' in those cases which are 'deserving' in order to preserve a favourable public image and a good relationship between the regulators and the regulated (Richardson et al., 1982; Hawkins, 1984). In cases where there is no evidence of intent or moral blameworthiness, officials are often loathe to prosecute (Rowan-Robinson et al., 1990). The policy of only prosecuting strict liability offences where fault can be established has been found to be widespread (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988; Watchman et al., 1988).
Mitigating factors are taken into account and can include bad weather, an incident in spite of installation of the latest technology, machinery failure even though it was properly serviced and supervised, adequately trained staff, immediate steps taken to rectify the damage and the incident being caused by the act of a third party (Samuels, 1994). Regulators judged the overall moral culpability of an offender by assessing their past history of compliance, the attitude of the offender, their own account of the incident and whether it 'fits' with the available evidence (vigorous protestations of innocence were regarded with suspicion by many regulators - Hawkins, 1984), the quality and maintenance of the plant, methods of storage and transport and resource constraints (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988).

Of course these assessments are very subjective, relying on an individual officer's perceptions and intuition and thus are left open to the danger of bias and non-uniform decisions entering the enforcement process. Richardson et al. (1982) found that officers often had widely varying opinions, with some attaching a greater weight to words and others to actions. Furthermore, in instances where operator fault had caused pollution, some officials said this excuse failed entirely to absolve the trader as precautions against this occurrence should have been taken with proper training. Conversely, others were more lenient, stating that continual supervision of the work force was impractical.

However, in cases of very serious violations, the authorities were often under pressure to prosecute even in the absence of blameworthiness in order to appease external bodies (Hawkins, 1984; Richardson, 1987; Hutter, 1988). The existing research also suggests that although an element of intent was normally required to justify a prosecution, this element
alone would not necessarily result in such an action (Richardson, 1987). For example, when a deliberate violation had occurred, prosecution could be avoided by the offender undertaking adequate remedial action.

Although earlier studies indicate that officials sought justifications in fairness and reasonableness for their actions, and thus placed great importance on establishing moral blame before taking stringent enforcement action, this necessarily meant that details of the formal law outlining offences of strict liability were seldom considered. In effect, enforcement officers were ignoring the essence of the regulations and providing reduced protection to the public and the environment. More recent case law indicates that regulatory authorities and the courts are now more willing to pay attention to the strict liability nature of most environmental offences. For example, in *National Rivers Authority v Yorkshire Water Services Ltd* [1995] 1 AC 444, an industrial solvent had been discharged illegally from an unknown source into the sewers. It then travelled to sewage works owned by Yorkshire Water Services and from here was discharged into controlled waters. Water treatment on the plant involved a gravity system, making it impossible for Yorkshire Water Services to prevent the pollution. The NRA decided to prosecute the water company, and the House of Lords found it to be responsible for causing the pollution. However, the conviction was avoided by application of the special defence in s. 87(2) of the WRA 1991 relating to unauthorised discharges by third parties into the sewage system.

A further example of prosecution in the absence of moral culpability can be found in *CPC (UK) Ltd v National Rivers Authority* [1995] Env LR 131. This case involved the pollution of a river by cleaning fluid following the fracture of a pipe. The cause of the fracture was
found to be latently defective work carried out by subcontractors of the previous owners of the site. However, the current owners were prosecuted and were found to have caused the pollution solely by their operation of the plant at the time the incident took place. The Court of Appeal upheld their conviction.

Finally, in *Empress Car Company (Abertillery) Ltd. v National Rivers Authority [1998] 1 All ER 481*, the tap on a diesel tank was opened by an unknown person resulting in the entire contents of the tank entering a local river. The House of Lords held that the company had caused the pollution by the fact that they actually maintained a diesel tank. Emphasis was placed on the strict liability aspect of offences prosecuted under s. 85(1) of the Water Resources Act 1991 by Lord Hoffmann, negating the need to consider foreseeability, negligence, fault or intention. However, although the fault of the defendant should not be considered in determining their guilt in cases of strict liability, the nature of the penalty imposed often reflects their culpability. This was seen in the case of *CPC (UK) Ltd. v NRA* detailed above which attracted an absolute discharge.

3.3.3 Persistence of the Offender and History of Compliance

In many cases, enforcement action would not be taken by regulatory agencies unless the offender is known as a 'persistent violator' (Weait, 1989; Rowan-Robinson *et al.*, 1990; Hunter and Waterman, 1992). A distinction can be made between a 'one-off' violation and the offence being ongoing and continuous. The nature of ongoing incidents suggests that they are more unlikely to be accidental, and thus were considered to have an element of criminal intent by many regulators resulting in more stringent enforcement action (Hutter, 1988). Again, however, differences in the approach of regulatory officials were reported...
by Richardson et al. (1982). They found that one regional division of water regulators had a policy of giving the "benefit of the doubt" for accidental incidents, whilst a neighbouring division dealt strictly with such situations. Furthermore, Hawkins (1984) reports that when persistent violations only marginally exceeded their consent limits, they were attributed to a lack of adequate resources or knowledge and deemed as "technical" violations attracting only a modest enforcement response.

As discussed in section 3.3.1, a distinction may be made between the 'good' and 'bad' firm. The 'bad' firm often has a history of poor compliance, and consequently strict enforcement action would be more likely to be taken for each violation (Scholz, 1984). Prosecution may not always result in all cases due to the regulatory agency's limited resources (see section 3.4.2) or other mitigating factors such as the financial status of the company (see section 3.3.8). The 'good' firm, on the other hand, displays a favourable compliance record and would therefore be likely to be approached in a co-operative manner, with technical violations overlooked and fines small if prosecuted (Hawkins and Hutter, 1993).

Previous convictions for similar offences in the past are usually taken into account by the authorities (Samuels, 1994). Watchman et al. (1988) found that the Clyde and Forth River Purification Boards came down heavily on second offenders. They employed a policy whereby if a written warning was given for a first offence, then a repetition of the offence would result in prosecution. In this way the compliance strategy initially utilised gave way to a deterrence strategy. Furthermore, a failure to respond to previous warnings, to meet deadlines for improvements and to take remedial action were all considered as indicators of a poor compliance record (see section 3.3.2).
3.3.4 Attitude and Degree of Co-operation Displayed by the Offender

Members of the regulated community that display an unfavourable attitude towards complying with regulations or requests from officials are more likely to be subject to stricter enforcement measures than those that are co-operative (Gunningham, 1974; see section 3.3.2).

In cases where a large degree of co-operation has been displayed by the offender, leniency on the part of the regulatory agency will often result (Doerr, 1985; Rauncher, 1992). Department of Justice (DOJ) Guidelines in the USA state that some form of leniency should be evident when violators have shown good faith (Marella, 1992). A willingness to co-operate may be demonstrated in a number of ways. For example, warning the agency as soon as possible after an incident has taken place is viewed as a sign of good faith, as is the voluntary provision of information concerning processes on site. The admission of responsibility and willingness to help in the clean-up suggests the incident was genuinely accidental to many officials, whilst a display of indifference and persistent denial of responsibility by offenders may be interpreted as evidence of calculation and thus attract stricter enforcement measures (Hawkins, 1984).

A voluntary disclosure system has been partially introduced in the USA, and has a number of advantages and disadvantages (Starr, 1991; Hunt and Wilkins, 1992; Marella, 1992; Elliott et al., 1992; McGregor, 1994). In the DOJ Guidelines, a distinction is made between disclosure which is required by law, regulations or the conditions of an authorisation or consent, and disclosure which is entirely voluntary and not lawfully required. One of the most difficult dilemmas facing a company is that of the voluntary
disclosure of information concerning non-compliance. Full disclosure of all information must be made if leniency is to be applied and this could make the difference between a prosecution and some other lesser form of enforcement. However, although attractive in principle, the scheme poses a number of disadvantages to industry which makes its universal acceptance and use rather unlikely. For example, there is no guarantee of non-prosecution, the possibility exists that the crime would otherwise go undetected, an increased probability of scrutiny by the regulators after disclosure, and further investigation of the incident itself to ascertain if all pertinent information has in fact been submitted. An example of a case that illustrates the problem is R v Naylors (R & L) Ltd. and Associated Heat Services plc and Anr. ex parte National Rivers Authority [1992] 1 Env LR 15. In this case, the NRA decided to bring a prosecution based mainly on the evidence of a voluntary 'confession' outlined in a letter sent to the NRA from the company in response to a request for information.

Richardson et al. (1982), Hawkins (1984) and Hutter (1988) all found that regulatory officials looked favourably on the reporting of an incident by the company responsible. Many officials feared that to punish such an offender would deter future reporting and leave them open to criticism, and therefore assumed a more lenient position.

3.3.5 Size of the Company

It has been proposed that the size of the regulated company determines to some extent the type of enforcement action taken or whether any action is taken at all. Doerr (1985), Dimento (1986), Yeager (1987) and Mehta and Hawkins (1998) suggest that large, powerful businesses have a substantial influence which they can use to prevent certain
enforcement actions. Enforcers are more reluctant to prosecute larger firms because of the finances and expertise at their disposal, with an increased likelihood of them appealing against court decisions (Mehta and Hawkins, 1998). Furthermore, most large corporations are considered by officials to be socially responsible entities that would not intentionally pollute (Yeager, 1987).

Small firms, on the whole, are generally less knowledgeable of legal obligations and less familiar with requirements of inspectors (Hawkins and Hutter, 1993). They lack technical knowledge and expertise and may be considered as being disproportionately burdened with legislative requirements when compared with larger firms, all of which may contribute to them appearing more frequently on the list of violators (Hawkins, 1984; Yeager, 1987). Furthermore, they lack political and economic muscle and are therefore a more likely target for prosecution. However, Richardson et al. (1982), Hawkins (1984), Hutter (1988) and Rowan-Robinson et al. (1990) found that in cases where financial or technical difficulties were apparent, or non-compliance was a result of ignorance of the regulations, enforcement officials tended to take a less stringent approach. Furthermore, small companies would be less able to afford large fines or clean-up costs that may be imposed by the courts than their larger counterparts. An inability to pay these sometimes substantial amounts of money was taken into account when deciding on the course of enforcement action (Richardson et al., 1982). Alternative methods of enforcement, other than prosecution, which would be more suited to smaller firms was often used in such cases.

The setting of a large complex corporation can make tracing the decisions and actions that have led to the violation of an environmental law extremely difficult and hard to pinpoint.
(Doerr, 1985; Dimento, 1986). This problem may be overcome by prosecuting the company itself rather than individuals, although prosecuting the corporation provides no incentive for the individual that violated the law to change his actions, unless the company regards his conduct as a disciplinary matter. Alternatively, when the employee responsible for the incident can be traced, joint and several liability could be imposed on the corporation and the individual that carried out the action. For further details on director and officer liability provisions under the legislation see Chapter 4.

The threat of prosecution of a well known, large corporation can be more effective in producing compliance than threatening a small company (Doerr, 1985; Mehta and Hawkins, 1998). The large, high profile company would attract an unwelcome, poor public image for flouting environmental laws. The greater public interest in larger corporations and the stigma of prosecution could lead to a substantial negative consumer reaction, present and future economic loss, and a detrimental impact on the goodwill of customers and shareholders (Schneider, 1982; Hawkins, 1984; Dimento, 1986; Rowan-Robinson et al., 1990; DiMento, 1993).

A large company usually attracts more site visits on an annual basis from inspectors than smaller firms (Hawkins, 1984). These findings were reinforced by Mehta and Hawkins (1998), whose investigation of companies regulated under IPC discovered that small firms averaged a visit from an inspector once every 17 months, whilst for large firms this figure was reduced to once every 11.5 months. This is probably because larger, more complex industries have a greater number of sources of violation and therefore warrant increased scrutiny.
Two scenarios may result from this increased number of inspections. Firstly, violations are more likely to be identified in larger firms through a greater degree of inspection, or, secondly, the relationship between regulator and regulated develops more fully and expectations of inspectors become familiar to industry. In turn, degrees of compliance may be enhanced as a result in larger firms (Hawkins and Hutter, 1993). Smaller firms needing assistance are often neglected and are usually intimidated into compliance as a result of their lack of specialist knowledge (Mehta and Hawkins, 1998). Consequently, larger firms tend to enjoy a more negotiated form of enforcement from the regulators, whilst small firms bear the brunt of stricter enforcement.

3.3.6 Type of Industry

A specific type of industry may be perceived by inspectors as being more likely to contravene pollution laws. For example, industries requiring precision engineering and a clean working environment (such as light electronics) may be perceived as being less likely to cause a pollution incident than industries employing a high number of manual workers within a dirty and untidy environment (e.g. the steel industry) (Hawkins and Hutter, 1993).

This view of the offender can lead to a disparity in the type of pollution incident and number of prosecutions brought. For example, between 1980-84, the majority of pollution incidents were recorded by the Scottish River Purification Boards as being caused by oil and sewage effluent (1858 and 1492 cases respectively as opposed to 1297 cases of farm waste pollution). However, the majority of prosecutions brought in that same period were for pollution from farms in the form of silage or slurry - oil and sewage prosecutions
totalled 6 and 1 respectively as opposed to 70 for farm waste (Watchman et al., 1988). Farmers have been traditionally considered by enforcement officials as being 'disreputable' polluters because of their tendency for repeated violations and characteristic stubbornness (Hawkins, 1984). Environmental Health Officials had a tendency to view street vendors and landlords as "anti-social" and "criminal", and levels of prosecution were higher for these groups than industrialists (Hutter, 1988). Furthermore, Hutter found that a much more accommodative stance was taken with elderly or handicapped people.

### 3.3.7 Location

More stringent enforcement action was generally observed in urban areas when compared to rural settings (Hutter, 1988; Rowan-Robinson et al., 1990). This was explained by the assumption that "honest, law-abiding country folk" would be less criminal in nature. Furthermore, in the close-knit rural communities it was considered more important by officials to build and maintain good relations with businesses and thus avoid the impression of 'heavy-handedness'. Regulatory officials in urban areas generally did not display such close relationships, often not having the time to develop them (Hutter, 1988).

The length of time in a particular location could also have an effect on the stringency of enforcement actions. Richardson et al. (1982) found that firms or farmers established for several years in a particular place were treated much more leniently in the light of complaints from new users of the same locality. The officials took the viewpoint that the company or farm had been operating in the same way for several decades, and a problem was only created after a new development, such as a housing estate, was built.
3.4 Characteristics of the Enforcing Body/Enforcement Officers

Details of the characteristics described below can be found in Richardson et al., 1982, p.181-192; Hawkins, 1984, p.129-154; and Hutter, 1988, p.55-128.

3.4.1 Type of Regulatory Agency

Three different regulatory agencies existed under the legislation being considered, namely the local authorities, the National Rivers Authority (NRA) and Her Majesty's Inspectorate of Pollution (HMIP). Significant differences existed between each agency.

The fact that local authorities are multi-functional can result in a conflict of interests when deciding whether or not to take enforcement action. The maintenance of job numbers in an economically deprived area will probably take precedence over a strenuous enforcement of environmental laws (Rowan-Robinson and Ross, 1994). The political persuasion of the local authority will also influence, to a certain extent, which action is taken. Reports from Environmental Health Departments to council committees were found to be carefully worded in order to take account of their political persuasion (Hutter, 1988). Councils had close control over the resources available to Environmental Health Departments and were therefore able to determine the priorities of enforcement within these departments. There was a large degree of accountability to the council on the part of officials, and a strong encouragement by numerous councillors to rely on the persuasive strategy of enforcement. Furthermore, election times were found to be busy periods for enforcement officers due to increased activity by councillors and MPs acting on behalf of the local electorate. Although political influences played an important role in the decisions made by officials,
Hutter (1988) found no evidence to indicate that one political party showed a greater interest in enforcement than another.

In contrast to local government influencing the enforcement activities of Environmental Health Departments, one of the major influences affecting the functioning of the NRA and HMIP were policies of central government. HMIP actually formed part of the Department of the Environment and so was directly answerable to the government. The NRA, however, was established as an independent public body but was still accountable to the Secretary of State for the Environment. Furthermore, both bodies were only able to function due to the provision of grants from the government. The level of finances made available to regulatory authorities is crucial in determining their activities and is discussed in section 3.4.2 below.

3.4.2 Resource Restrictions

The level of resources at the disposal of regulatory agencies will have a considerable effect on the type of enforcement action, if any, that is used (Richardson et al., 1982; Hawkins, 1984; DiMento, 1986; Richardson, 1987; Hutter, 1988; Watchman et al., 1988; Weait, 1989; Rowan-Robinson et al., 1990; Rowan-Robinson and Ross, 1994). These can include constraints in a monetary sense, staffing levels or time factors (Downing and Kimball, 1982). Restrictive resources can lead to a reduction in routine inspections, a lower profile being adopted by the regulators and polluters becoming more complacent.

One of the major drains on such resources is prosecution, which can be very costly and time consuming (Doerr, 1985; Hutter, 1988; Rowan-Robinson and Ross, 1994). As a
result, selective prosecution is often taken just for the worst offenders, with plea bargaining for improvements with other firms, i.e. a co-operative stance is employed (Scholz, 1984; Burton, 1991; Ross, 1995). This maximises the deterrent effect that can be mustered with limited resources. Furthermore, the time required to establish good working relationships with the regulated community and to undertake routine monitoring duties would be reduced with restricted finances, forcing officials to concentrate on the reactive side of enforcement rather than proactive visits that enhance prevention of incidents. Monetary shortfalls can often be made up by increasing the charges on the regulated community. However, this could have the effect of alienation and increased non-compliance.

Each of the regulatory authorities being investigated in this study have been subjected to resource restrictions. In 1993 it was estimated that HMIP had a shortfall of inspectors in the region of 130, leaving only 169 inspectors to cover the whole of England and Wales (Ball and Bell, 1994). In addition, the annual inspection rate had fallen dramatically from over 10,000 in the early 1980's to under 4,000 in 1990/1. In such a situation of limited resources it is difficult to see how a broad confrontational approach may be adopted, the regulators having to rely instead on the co-operation of industry to keep within their emission limits. The problem is not restricted to the UK. Inadequate staffing has been cited as a reason for infrequent inspections in North Carolina's water treatment plants (Downing and Kimball, 1982).

Severe financial restraints also affect local authorities. Research carried out by Enviro Technology Services showed that 37% of the 200 local authorities surveyed did not have a budget for air pollution monitoring equipment (Land Management and Environmental
Law Report 1992 4(6): 201-202). The actual monitoring process also showed large variations in the methods used between each local authority. Each authority can be funded from different sources, which could explain the large variation observed in enforcement standards (McKenna, 1993). A survey of local authorities on their provisions for noise control by the National Society for Clean Air (NSCA) was carried out in 1994. It was found that of the 78% of local authorities that returned the questionnaire, 77% stated that staffing levels were inadequate and 49% said the law for noise control would be adequate if they had more resources (NSCA, 1994).

The NRA have also encountered financial problems. A systematic cut in the grant aid received from the government occurred from the year 1993/4 to 1994/5 (cut by 9%) and from 1994/5 to 1995/6 (cut by 19%) (ENDS 1993 226: 3). This even led the NRA to consider proposals for privatising enforcement (NRA, 1993 - 1993/4 Corporate Plan and Look Forward to 1996/7). It seems that the problems of limited resources are ongoing as the Environment Agency continue to be dogged by financial constraints (ENDS 1997 266: 3-4).

3.4.3 Regional Organisation

Considerable diversity has been noted within an agency on a regional basis. Richardson et al. (1982), Hawkins (1984) and Hutter (1988) all found contrasting and quite dissimilar approaches between different authorities or different regional offices that were enforcing the same regulations. Hutter (1988) investigated a number of different authorities and found a striking difference in their approaches - some favouring an accommodative approach whilst others appeared much more stringent in their actions. The same
hypothetical situation was described by Hutter to a number of regulatory officials from different authorities, asking for their most probable enforcement response in such a case. A large variation in the numbers of officials that would favour prosecution was found. In one authority, only 25% of officers said they would recommend prosecution, whilst in another the number was 90%.

Prior to the implementation of the Food Safety Act 1990, the Audit Commission carried out a survey to ascertain the attitude of local authority inspectors to enforcement policy. Four areas were studied, namely food, housing, occupational health and pollution. It was found that a considerable degree of diversity was displayed between local authorities, especially in the area of pollution control. A tougher stance concerning prosecutions was taken by the Metropolitan districts when compared to London Borough Councils, which in turn showed a large disparity in enforcement measures when compared with Shire Districts (Carter, 1992).

The variation in approach displayed by regional offices and different local authorities has major implications for the uniform enforcement of regulations and the introduction of a level playing field for businesses (see section 2.5).

3.4.4 Internal Organisation of the Regulatory Agency

In many situations, inspectors in the field are far removed from the people who actually take enforcement decisions (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988). This can lead to a disparity in the outcome that would result if closer discussion and consultation was carried out between these two groups. Inspectors can lose sight of the
aims and aspects of their work which have the most relevance, whilst office workers and management who make the decisions probably do not have a full picture of the situation on the ground. Therefore, the degree of involvement of inspectors in the decision making process makes an important contribution to the outcome.

Hutter (1988) found that in many local authorities the decision of whether to prosecute or serve a formal notice was made by council committees based on the nature of the contravention, the number of previous warnings, the offender's attitude and their previous record. The committee's ability to veto an action was found to be a major source of irritation to enforcement officers, who generally considered the technical knowledge required to understand the complexities of particular cases somewhat lacking in councillors. In certain cases, legal proceedings were halted at committee level without even an explanation. It therefore came as no surprise to Hutter that the department utilising the most stringent methods of enforcement was the one that had been delegated the power to initiate legal action without the prior approval of committee.

Even in regulatory agencies where committees did not exist (such as the water authorities), enforcement officials often found their attempts to initiate a prosecution thwarted by their superiors (Richardson et al., 1982). In certain cases that were strongly linked with a concern over public relations, headquarters would intervene on enforcement decisions. Senior staff, on the whole, were found to be more sensitive to the image of the authority, and the need to display reasonableness in the exercise of its power. In many cases they would therefore recommend less stringent action in order to preserve this image (Hawkins, 1984). This stance was often criticised by field officers who felt their superiors were too cautious because they were not able to view the incident and its effects at "the sharp end".
Many field officers had little direct contact with the legal department or the process of bringing a prosecution and its associated difficulties (such as evidential requirements - see section 3.4.12), and therefore failed to appreciate the problems that could be encountered. Conversely, many local authority solicitors were not held in very high regard by field officers due to their lack of environmental knowledge, and often would not prosecute unless they had a watertight case. In addition, a loss of momentum of enforcement proceedings was observed when cases were passed from one department to another, slowing down the whole procedure. Differential resource allocation between departments was found to be a common feature which could further impede the process (Rowan-Robinson and Ross, 1994).

3.4.5 Training and Expertise of the Enforcement Agency's Employees

In certain regulatory bodies, the training and expertise of the employees has been lacking (DiMento, 1986). As mentioned above, many councillors and members of legal departments do not have extensive environmental knowledge. However, the problem does not stop here. Many enforcement officials are not aware of the availability of the array of sanctions at their disposal (DiMento, 1993), and have scant knowledge of the law that they are administering and enforcing (Hawkins, 1984). However, many officials argue that a complete understanding of the legalities involved is not required, as long as an appearance of knowledge can be communicated to the offender (Hawkins, 1984).
This position occupied by regulatory officials inevitably leads to the conclusion that a lack of knowledge on the availability of sanctions means that the full array of enforcement measures is not being utilised.

3.4.6 The Enforcer's Perception of Themselves

The main function of environmental enforcement is seen by officers as the prevention of harm rather than the punishment of wrongdoing (Richardson et al., 1982; Hawkins, 1984). The majority of enforcement staff see themselves as educators and advisors rather than policemen (Rowan-Robinson et al., 1990; Rowan-Robinson and Ross, 1994). This perception of themselves will in turn affect the type of action taken in different cases. Where compliance can be achieved by offering information and advice and recommending certain steps that should be taken, this co-operative stance will be the preferred option, with the regulators only resorting to stricter methodologies in cases of recalcitrance (May and Burbury, 1998).

3.4.7 The Enforcer's Perception of the Offence and Offender

The enforcer's perception of the offence and offender is based on the number of factors discussed in sections 3.2 and 3.3. Using these factors to assess particular situations provides the enforcement official with information upon which to base an evaluation of the moral culpability of the offender. When an inspector believes that the law is unjust from the point of view of the regulated community, he may use his discretion to enforce that law in a less stringent manner (Richardson, 1987). In many cases, strict liability
offences are displaced in practice by notions of fault liability (Rowan-Robinson and Ross, 1994).

This contrasts with the situation found in other European countries, where environmental crime is perceived as being as serious as other criminal activity such as theft. This is borne out by the involvement of the police force for the investigation of environmental crimes in such countries (McKenna, 1993). For example, in Germany the police have a legal obligation to investigate and prosecute environmental crimes, and the Dutch police force display a high degree of collaboration with the environmental regulatory authorities. In Denmark, the involvement of the police has been extended even further with the formation of a specialist police squad to investigate more complex and serious environmental violations. However, this situation is unlikely to be extended to the UK unless there is a major shift in policy and a substantial increase in the funding of the police force. Furthermore, in many European countries environmental crime is not that of strict liability, and some form of culpability must be shown by the offender.

3.4.8 Public Profile

All regulatory authorities have a high level of accountability to the general public and other external bodies such as central government (see Chapter 2). Agencies must strike a balance between appearing too vigilant in the case of minor infringements and 'resting on their laurels' whilst major infractions are taking place. This concern to promote a favourable public image and avoid criticism from the general public, NGOs and the media, often leads to a curtailing of enforcement action in cases where leniency would meet with
general approval. Alternatively, it may result in the utilisation of the strictest measures when required by public pressure.

Richardson et al. (1982) states that the need for a favourable agency public profile is prompted by a requirement to:

- ensure the survival of the authority;
- legitimise its activities;
- attract further resources;
- have their enforcement work appreciated.

A bad reputation may prejudice dealings with members of the regulated community and damage relations with the local population.

The public profile of an agency and the past examples of its enforcement activities are also important measures upon which the regulated community bases its activities, knowing what will and will not be tolerated by the agency. This has important implications for the deterrent effect of enforcement activity, discussed in section 3.4.9 below.

3.4.9 The Required Outcome of Enforcement

There are a number of strategies adopted by regulatory agencies (Richardson, 1987). The type of enforcement taken will depend, to a large extent, on the required outcome of the action, which usually falls into four categories:
• deterrence for the wrongdoer (current and future violations);
• deterrence for other potential violators;
• punishment for the wrongdoer;
• remedial action to restore the environment to its former state.

The deterrence factor for environmental crimes is very important (Doerr, 1985). Harm to the environment in certain cases cannot be fully remedied, and permanent or long-term damage results. In addition, irreversible damage to human health or life may also take place. The decision to bring a prosecution will probably not be taken if the deterrent effect is minimal (Rowan-Robinson and Ross, 1994). The threat of an action on its own can often be enough to deter polluters (Doerr, 1985), and is considered as a very useful weapon by enforcement officers (Richardson et al., 1982; Hawkins, 1984; Mehta and Hawkins, 1998).

3.4.10 Enforcement Policy

Reserving the strictest methods of enforcement for the most severe cases in which culpability can be attributed, results in a more effective assignment of the finite resources of the agency. It also promotes the view that prosecutions only result from serious pollution incidents thus avoiding trivialising this enforcement action. This stance was found to be a common theme throughout the studies analysed in this literature review (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988, Watchman et al., 1988). However, although this generalised policy of working was adopted by the majority of the regulatory officials i.e. a 'bottom-up' policy evolved from the day to day working practices of inspectors, in none of the cases was there a formalised 'top-down' policy in place. Such a
formalised enforcement policy can compel agency officials to work in a particular way and thus avoid the problems associated with inconsistency and regulatory personnel being unsure of how to approach many situations (Rowan-Robinson et al., 1990). Industry has made it clear that such a policy would be preferred, and would like it to be made openly available so they would know their position in relation to different levels of non-compliance (Dimento, 1986). Regulatory officials interviewed by Richardson et al. (1982) also favoured a more explicit policy within their own authority and nationwide to ensure reasonableness and to guide the exercise of their discretion.

Unlike HMIP that had an enforcement policy couched in very general terms, the NRA had a uniform recommended procedure to follow in the decision making process which probably helped to limit regional variations and ensure prompt action. This procedure was set out in the manual "Enforcement and Prosecution with Respect to Pollution Incidents Affecting Controlled Waters" (NRA, 1994). Enforcement policies of the regulatory agencies investigated in this study are discussed more fully in Chapter 5.

3.4.11 Success in Previous Cases of a Particular Enforcement Action

In similar cases, where experience has shown that the action has been unsuccessful, it will be more likely that the same action will not be brought a second time (Hawkins, 1984; Richardson, 1987). Some officials have stated that it is more important that a prosecution is successful than the fact that it has actually occurred in the first place (Weait, 1989). Unsuccessful prosecutions are liable to damage the credibility of an agency and make it appear vindictive. Conversely, a successful prosecution resulting in a substantial fine, can raise the profile of the agency and attract useful publicity. The benefits as a result of this in
terms of deterrence for potential offenders can far outweigh the actual cost of bringing the
table in the first place (Rowan-Robinson et al., 1990).

The imposition of small penalties by the courts may dissuade the regulatory authority from
bringing a prosecution as the resultant deterrence effect is greatly reduced. Derisory fines
that attract publicity may reveal that the threat of prosecution is no more than a "paper
tiger" (Hutter, 1988). A minority of officers actually felt that prosecution was such an
ineffective sanction in terms of deterrence that it should never be used, relying instead on
the threat of such action with its associated trauma, mystique and stigma of a court
appearance to bring about compliance (Hutter, 1988).

Experience of previous court cases often caused officers to approach a court appearance
with "fear and trepidation" (Hutter, 1988). As a result, many officers would be loathe to
recommend a prosecution in anticipation of their treatment by the courts. Those that had
appeared in court complained of their treatment by the magistrates, whom had reacted as
though they were the criminal, not the defendant, by accusing them of being "too
officious". As a result, regulatory officials felt a need to moderate their behaviour with the
offender in cases of intended prosecution, making sure they had treated the defendant
fairly and given plenty of warnings before proceedings were initiated. As a respondent
from Hutter's research notes:

".....we can't be too harsh; if a policeman doesn't give someone time to rectify
an offence, he is praised; if we take immediate action we are rebuked by the
courts. Some magistrates bend over backwards to be fair to offenders,
sometimes to the detriment of the prosecuting official."
Further discussion of the impact of the position adopted by the courts and levels of penalties applied can be found in section 2.14

3.4.12 The Quality of Evidence Obtained

Sufficient evidence of a high quality must be obtained if a prosecution is to be brought. The expense of bringing a prosecution and the risk of having to pay the costs of the acquitted defendant is such that only watertight cases are usually pursued through the courts (Hutter, 1988). This is rather an understandable approach considering the stretched resources of many regulatory agencies. Furthermore, the burden of proof for a criminal prosecution (beyond reasonable doubt) may be too onerous to pursue this type of action in particular cases (Doerr, 1985).

The Crown Prosecution Service (CPS) also recognises the importance of the quality of evidence. In the code of practice for Crown Prosecutors that sets down guidelines for bringing a prosecution (The Code for Crown Prosecutors, CPS, 1994), it asserts that two tests should be passed before prosecution is considered. Firstly the Evidential Test states that the evidence should be reliable enough to present a realistic prospect of conviction. Secondly, the Public Interest Test encompasses various factors relating to the seriousness of the offence.

The problems of obtaining reliable and conclusive evidence to support a case were experienced by Greenpeace in 1994 when it decided to prosecute ICI for exceeding the consent limits at its Hillhouse and Wilton sites (ENDS 1994 234: 47). Greenpeace were ordered to pay £28,849 in costs when two private prosecutions failed on analytical and
technical difficulties. Results of the analysis of samples from the works could not be admitted for two reasons. Firstly, Greenpeace failed to actually prove that the samples were taken from the ICI outfalls; secondly, the tests were not carried out by an accredited analytical laboratory and they failed to incorporate a sufficiently wide margin of error in the results. Similar mistakes made by a regulatory agency would no doubt produce a major dent in their public confidence.

Further information and evidence could be obtained to support cases if employees were given protection against dismissal or other action, after the disclosure of information relating to an incident - the so called 'whistleblower protection'. In the USA, statutory protection is given to employees volunteering information of this kind (Homewood and Lewis, 1993; Vinten, 1994; Homewood, 1995). In certain cases, rewards of several thousand dollars may be given for information leading to the conviction of people or companies found violating environmental statutes (Barton, 1993). In the UK, the Public Interest Disclosure Bill providing protection for employees disclosing information relating to their companies passed from the House of Commons for consideration in the House of Lords on 24th April 1998 (ENDS 1998 279: 30-31), and the Public Interest Disclosure Act 1998 came into force on 1st July 1999.

3.5 External Influences

External influences have an important influence on the choice of enforcement action by regulatory officials. They include such things as central government policy, the degree of pressure brought to bear on regulatory authorities through complaints from the general public, the stance taken by the courts and levels of penalties applied, media attention,
action by individuals and NGOs, the economic climate and general level of public opinion. They will all have a significant effect on the type of enforcement strategy employed by the regulators, and further information can be found in Chapter 2. In addition, restrictions and requirements set down in the legislation play a fundamental role in the decision making process (see Chapter 4).

3.6 Summary

A review of previous research has found that regulatory agencies' choice of enforcement action was based on a number of enforcement stimuli that are strongly moralistic in character. Activity was centred on handling individual cases and the management of particular problems, with each case being judged on its own merits. Formalised enforcement policies did not exist. Instead, the accumulation of individualised decisions produced an informal, practical policy that steered field officers in a particular direction. As a result, enforcement work was found to be fragmented and inconsistent.

Throughout the enforcement process, officers made decisions based on reasonableness in situations that were generally not perceived as being morally wrong. This conciliatory position enhanced good relations between the regulator and the regulated and promoted co-operation between the two parties. Securing the co-operation of the regulated community was considered essential by regulatory officials against a background of stretched resources, limited public support, judicial irreverence and the low levels of penalties resulting from prosecutions. As a result, many officials were reluctant to exploit the range of enforcement opportunities provided in the formal law.
A number of important changes have taken place during the 1990s. They include improved legislation, further development of public support for the protection of the environment, substantial media interest, an increase in the levels of fines available for environmental offences, the introduction of new, high profile enforcement agencies and the consolidation of many NGOs into influential and respected environmental bodies.

In light of these changes, it would be expected that the methodologies and strategies employed by regulatory agencies would also have changed. The review of literature discussed in this chapter has provided an overview of the factors that influence the enforcement decision making process, and these are represented diagrammatically in Figure 3.1.
Figure 3.1
Factors Affecting the Choice of Enforcement Action by Regulatory Authorities

LEGISLATIVE RESTRICTIONS AND REQUIREMENTS (see Chapter 4)

CHARACTERISTICS & EFFECTS OF INCIDENT

- Duration & frequency
- Severity
- Established practice
- Economic considerations
- Effect on receiving environment

CHARACTERISTICS OF OFFENDER

- Persistence & history of compliance
- Location
- Size
- Type of industry
- Intent & degree of negligence

CHARACTERISTICS OF ENFORCING BODY/ENFORCEMENT OFFICERS

- Previous success
- Quality of evidence
- Type
- Public profile
- Enforcement policy
- Perception of offence/offender
- Perception of themselves
- Required outcome
- Training & Expertise
- Resource restrictions
- Internal organisation
- Regional organisation

EXTERNAL INFLUENCES (see Chapter 2)

- Numbers of complaints
- Attitude of courts and levels of penalties
- Public opinion
- Media
- NGOs
- Environmental climate
- Government policy
- Citizen action

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This review provided a basis for undertaking empirical research to produce updated information relating to these influential factors and the methodologies utilised by regulatory agencies. An assessment of the factors that do in fact influence the process in the light of recent changes, and the relative importance placed on each factor by regulatory officials was made. Furthermore, this analysis of factors affecting enforcement was compared against the structure of the enforcement policies of different regulators described in Chapter 5. How one subject area interacts with the other is discussed in Chapter 11.

As stated above, one of the major changes in recent years has been the introduction of substantial amounts of new and comprehensive environmental legislation. An understanding of this legislation, and the powers and duties it confers on regulatory officials, is essential to provide an overview of the background in which these officials must work and the legislative restrictions and requirements that apply to them. This review is provided in Chapter 4.
CHAPTER 4

LEGISLATION OVERVIEW, METHODS OF ENFORCEMENT AND 
CASE REVIEWS

4.1 Introduction

This chapter provides an overview of the legislation relevant to this study in force at the time of the empirical work, the variety of methods of enforcement available and a discussion of the cases that illustrate the points of law which arise. Reference is also made to significant legislative changes made since the empirical work, especially to enforcement methods. The legislation review and discussion of cases used to illustrate specific points has been carried out in order to provide information concerning:

- the way in which control of activities affecting the environment takes place in England and Wales;
- the background in which environmental regulators must form policies and make decisions;
- the duties that bind the regulators and thus influence their activities;
- the discretionary powers afforded to the regulators through specific methods of enforcement set out in the legislation;
All of the above points directly relate to the subject matter of this thesis, thus making this chapter an essential part of the literature review. Section 4.2 is concerned with the Environmental Protection Act Part I, section 4.3 the Environmental Protection Act Part III and section 4.4 the Water Resources Act 1991. Furthermore, not all the methods of enforcement available to the regulators are expressly set out in the legislation discussed in sections 4.2 - 4.4. As a result, section 4.5 provides an overview of all the available methods. This section includes a summary table of those discussed throughout the chapter that can be found in legislative provisions relevant to this study, and remaining methods not previously mentioned. This information was used to help formulate questionnaires for collection of empirical data relating to which methods were used by the regulators (and the extent of their utilisation), and those that were not used at all.

The nature of regulatory control in England and Wales is based on a number of principles outlined below:

- The regulation of pollution by prior permission that allows industry to emit certain waste materials in a controlled manner. Regulators specify the content, volume and other characteristics of these emissions by a system of conditional consents, authorisations or licences, thus allowing certain pollutants to enter the environment in a controlled fashion.

- Regulatory authorities use their powers to determine the composition of emissions in order to comply with environmental quality objectives, or EC or international laws.
Environmental improvements can be made by assessing and re-defining the parameters set out in authorisations or consents as technology advances.

- Regulatory authorities must monitor compliance with these consents, authorisations and licences, and ensure that all conditions are met. Compliance with these conditions is enforced through a system of sanctions and criminal offences. In addition, operating without an authorisation or consent when one is required is also an offence, against which enforcement action can be taken.

These principles are discussed in further detail throughout this chapter, beginning with the system of regulation set out in the Environmental Protection Act Part I.

4.2 The Environmental Protection Act 1990 Part I

4.2.1 Introduction

Part I of the Environmental Protection Act (EPA) relates to two parallel systems of pollution control. Prior to the formation of the Environment Agency and the Scottish Environmental Protection Agency (SEPA), Her Majesty's Inspectorate of Pollution (HMIP) dealt with discharges of waste from the most polluting industrial, commercial and business processes to the three environmental media of air, land and water in England and Wales. In Scotland, Her Majesty's Industrial Pollution Inspectorate (HMIP) had
jurisdiction over the most polluting processes. Local authorities are concerned with the regulation of discharges of less polluting substances to air alone.

The introduction of Integrated Pollution Control (IPC) with regard to processes that fell under the jurisdiction of HMIP, was a main feature of this part of the EPA. IPC aimed to bring the control of pollution to all environmental media under one authority in an integrated fashion. The most serious pollutants (e.g. sulphur dioxide, benzene, carbon monoxide, hydrogen cyanide and oxides of nitrogen, mercury and cadmium) are subject to 'first tier' control which required that releases of these substances are prevented or minimised. 'Second tier' control is much wider and involves the rendering harmless of any substances that are released (s.7(2)).

The need for an integrated approach to pollution control was recognised by the Royal Commission on Environmental Pollution in its 5th Report, *Air Pollution Control: An Integrated Approach*, 1976. It drew attention to the fact that the single medium approach that had developed in the UK did not take account of optimum environmental solutions to pollution and the transferability of waste from one medium to another (e.g. water pollution from waste tipped on land). It recommended that an integrated, more coordinated approach to pollution control, taking into account the effect of waste produced on all environmental media, was the only way to proceed. These recommendations were finally adopted with the introduction of the IPC system and its cross-media approach.
The purpose of the Act is described in the introductory section of the legislation "to make provision for the improved control of pollution arising from certain industrial and other processes". To this end, a system of prior registration of prescribed processes producing waste is included in the regulations - the process of authorisation. Specific conditions can be imposed on individual processes in order to reduce pollution from that process, and these conditions are included in the authorisation that is granted by the regulatory authority.

Part I of the EPA replaced the old Alkali etc. Works Regulation Act 1906, as amended by the Health and Safety at Work Act 1974, which covered the emission of pollutants from certain industrial processes. Operators of processes falling under the control of this legislation were required only to use the Best Practicable Means (BPM) to prevent the emission of noxious or offensive substances. The new system of requiring authorisations for prescribed processes, introduced by the EPA, enables the imposition of definitive quality standards on discharges of pollutants.

The prevention or minimisation of the release of pollutants is subject to the controls imposed by a requirement to use the Best Available Techniques Not Entailing Excessive Cost (BATNEEC). Furthermore, in some cases, a process under the control of the regulatory body can involve the emission of waste to more than one environmental medium. BATNEEC is then be supplemented with the concept of Best Practicable Environmental Option (BPEO). BPEO takes into consideration the effect of emissions to the different environmental media, and a decision on the route of waste production is
made on the basis of the least overall environmental pollution. These two concepts are discussed at greater length later in the text.

Conditions attached to an authorisation notice for a prescribed process includes specific requirements set by the enforcing authority to adhere to the principles of BATNEEC and BPEO, as well as to achieve other objectives such as compliance with EU or international obligations. However, the operator also has a duty to ensure that he is carrying out all aspects of the process not covered in the authorisation with regard to BATNEEC. It was envisaged that as the available technology improved, the conditions of an authorisation would be varied in order to take account of these changes.

Processes falling under the regulation of EPA part I were detailed in the Environmental Protection (Prescribed Processes and Substances) Regulations 1991 SI 1991/472 which came into force in England and Wales on 1st April 1991, amended by the introduction of a series of other regulations (SI 1991/836, SI 1992/614, SI 1993/1749, SI 1993/2405, SI 1994/1271, SI 1994/1329, SI 1995/3247, SI 1996/2678 and SI 1998/767). These amendments caused processes to be, or cease to be, subject to IPC or LAAPC, or to move them from one category to another. Each of the six chapters in schedule 1 of these regulations is divided into part A and part B. Part A processes fell under the jurisdiction of HMIP (now controlled by the Environment Agency), whilst part B processes are regulated by local authorities. Part B processes relate to those processes that produce less polluting emissions to air alone. The more polluting processes producing emissions to air are covered under Part A, in addition to the most polluting processes producing emissions.
to water and land. As such, Part A processes fall under the IPC umbrella and are thus subject to the application of the BPEO principle. This is where the effect of emissions to the different environmental media is taken into consideration, and a decision on the route of waste production is made on the basis of the least overall environmental pollution. Obviously, Part A processes cannot take BPEO into account as they only relate to air emissions. However, the principle of BATNEEC must still be applied to Part A processes, and this principle is discussed in more detail below. A list of part A and B processes covered in the regulations can be found in Appendix 1.

The number of facilities regulated by HMIP increased significantly under this legislation - 5,000 facilities in the UK compared to 2,800 processes subject to control under the old system (Purdue, 1991). Approximately 30,000 activities fell under the jurisdiction of local authorities for air pollution control (15,000 being small waste oil burners).

Another important aspect of the Act was the provision of public access to information kept by HMIP and local authorities with regards to applications for authorisations, enforcement, variation and prohibition notices, convictions for contravention, etc. Some information has restricted access and can be excluded from public registers due to its commercial confidentiality or threat to national security.

Section 3 of the EPA came into force on 19/12/90, whilst the remainder of Part I came in force on 1/1/91. A timetable for the gradual introduction of authorisations for different processes was set out in Schedule 3 of the Environmental Protection (Prescribed
Processes and Substances Regulations) 1991, producing full implementation of the system by 1996.

As previously mentioned, the law relating to the environment is in a constant state of flux and change. One of the most important changes to IPC beginning shortly and occurring over the next few years, will result from the adoption of the IPPC Directive, seen by many as heralding a new phase in the control of industrial processes and emissions.

In September 1996, the European Council adopted EC Directive 96/61/EC requiring all Member States to establish a system of Integrated Pollution Prevention and Control (IPPC). The system is broadly based on the IPC regime, with certain differences. The time scale for introducing the new scheme starts in October 1999, covering new processes. All existing processes must be integrated into the scheme by 2007, with the phased process of introduction beginning in 2000 and peaking in 2003-5. For further details of IPPC see section 4.2.17.

4.2.2 The Scope of EPA Part I

Section 1 sets out definitions for terms used throughout many provisions in the Act. The 'environment' is the media of air, land and water, and includes the medium of air within buildings and other structures above or below ground. 'Pollution of the environment' is defined as the release of substances which are capable of causing harm to man or any other living organisms supported by the environment. 'Harm' encompasses detrimental
effects on the health of living organisms or interference with ecological systems, and
offence to any of man's senses or harm to his property. 'Substance' is treated as including
electricity and heat. These broad definitions provide for the protection of the environment
as a whole, in comparison with previous legislation such as the Control of Pollution Act
1974, where the emphasis was on the protection of public health by ensuring basic
standards of environmental protection.

4.2.3 HMIP and Integrated Pollution Control (IPC)

Details of the structure and variety of functions of HMIP can be found in Chapter 5.
Implementation of Integrated Pollution Control was one of its duties outlined under the
EPA. A Chief Inspector was appointed by the Secretary of State, and most of the duties
and powers were formally under his control, delegated to other officials. His job purpose
with regards to the EPA Part I was described as the "prevention or minimisation of
pollution of the environment due to the release of substances into any environmental
medium" (s.4(2)).

Guidance on the implementation of IPC was issued by the Department of the
Environment (Integrated Pollution Control: A Practical Guide, 1992). In this guide the
main objectives of IPC were outlined as:

1. to prevent or minimise the release of prescribed substances and to render harmless
   any such substances which are released; and
2. to develop an approach to pollution control that considers releases from industrial processes to all media in the context of the effect on the environment as a whole.

Additional aims included:

1. to improve the efficiency and effectiveness of pollution controls on industry;
2. to streamline and strengthen the regulatory system, clarify the roles and responsibilities of HMIP, other regulatory authorities, and the firms they regulate;
3. to contain the burden on industry by providing one system of pollution control for the potentially most serious polluting processes;
4. to provide the appropriate framework to encourage cleaner technologies and the minimisation of waste;
5. to encourage public confidence in the regulatory system through accessibility to information;
6. to provide a flexible framework that is capable of responding to changing pollution abatement technology and to new knowledge on the effects of pollutants;
7. to provide a means to fulfil international obligations relating to environmental protection.

Although guidance notes are not legally binding documents, the above stated aims in this particular guide form a number of principles upon which HMIP should have based their regulatory duties with respect to the implementation and enforcement of the EPA. The overall emphasis is placed on the protection of the environment as a whole and
improvement of environmental standards, whilst operating in an effective, efficient and open manner. There was also an emphasis on flexibility so as not to place too much of a burden on industry.

4.2.4 Local Authority Air Pollution Control (LAAPC)

The EPA introduced the concept of local authorities (LAs) acting as prior authorisation bodies, a role not covered by previous legislation. Their role was described as "preventing or minimising pollution of the environment due to the release of substances into the air" (s.4(3)). One of the duties of the local authorities is to follow developments in technology and techniques for reducing pollution (s.4(9)).

Section 4(11)(12) of Part I of the EPA defined 'local authority' as:

(a) In Greater London:

- a London borough council;
- the Common Council of the city of London;
- the Sub-Treasurer of the Inner Temple;
- the Under Treasurer of the Middle Temple;

(b) Outside Greater London:

- the district council;
- the Council of the Isles of Scilly;
(c) In Scotland:
   - an islands or district council;

(d) A port health authority.

See Chapter 5 for a general discussion of local authorities.

### 4.2.5 Terminology Used in the Act

#### 4.2.5.1 Prescribed Processes and Prescribed Substances

A prescribed process is defined as "a process for the carrying on of which after a prescribed date an authorisation is required under s.6" (s.2(1)). The Secretary of State has the power by virtue of s.2 to prescribe (by means of regulations) processes that require an authorisation under s.6. These regulations (the Environmental Protection (Prescribed Processes and Substances) Regulations SI 1991/472, as amended) set out details of prescribed processes in schedule 1. This schedule is broken down into six chapters covering broad industrial sectors. Within each chapter, more detailed lists of industrial processes are provided, which are further sub-divided into Part A and Part B processes. Part A processes fell under the control of HMIP (now regulated by the Environment Agency) and part B processes (relating to air pollution alone) fall under the remit of local authorities. In cases where an overlap between Part A and Part B processes
occurs, the whole process is controlled centrally under the IPC regime. A full list of prescribed processes can be found in Appendix 1.

Although the definition of a *prescribed* process is quite exact (i.e. any process prescribed in the regulations issued by the Secretary of State), the meaning of what is purely a 'process' has a very wide definition. s.1(5) defines a process as "*any activities carried on in Great Britain, whether on premises or by means of mobile plant, which are capable of causing pollution of the environment.*" 'Activities' is further defined under s.1(6) as "*industrial or commercial activities of any other nature whatsoever (including, with or without other activities, the keeping of a substance).*"

The definitions of processes and prescribed processes were considered in the case of *HMIP v Safety Kleen UK Ltd* (1994) 236 ENDS Report 45. In this case, Safety Kleen were successfully prosecuted by HMIP after 13,000 litres of fuel escaped from a tanker that was parked overnight at the premises into controlled waters. One of the arguments proposed by the defendant was that the parked tanker was not a prescribed process and thus was not covered by the regulations. However, the conditions of their IPC authorisation expressly forbade the release of substances into controlled waters. The court held that the description of the prescribed process in the authorisation included any other process carried on at that location as part of the whole process. This included the storage of a substance in a tanker. The defendant was found guilty and fined £7,500.
Substances can also be prescribed by the Secretary of State and their release become subject to control (s.2(5)). They are also listed in the Environmental Protection (Prescribed Processes and Substances) Regulations SI 1991/472 (as amended) in schedule 4 (releases into the air), schedule 5 (releases to water) and schedule 6 (release into land) - see Appendix 2. Prescribed substances for the release into air follow those set out in the 1984 Air Framework Directive 84/360/EEC. Substances prescribed for release to water were in accordance with those included on the 'Red List' (see below), whilst substances likely to be hazardous if disposed of directly to landfill were prescribed for release onto land. Therefore, the control of individual processes was incorporated into the Act alongside the control of a number of named substances. In many cases, the release of prescribed substances forms an integral part of a process, but the operator is still required to deal with these substances in a specified manner. The amount, concentration or time period involved in release can also be specified in the description of prescribed substances (s.2(6)).

Proposed lists of prescribed substances and processes were discussed in government consultative papers before the introduction of the EPA. Examples include Integrated Pollution Control (DOE, 1988) which examined the scheduling and authorisation of processes and Inputs of Dangerous Substances to Water: Proposals for a Unified System of Control (DOE, 1988) which proposed stricter controls over the discharge of waste to water. In this document, 26 substances posing the greatest threat through their persistence, bio-accumulation and toxicity were identified - the so called 'Red List' substances. This 'Red List' of substances includes, amongst others, all Black List
substances identified in the EC Directive on Dangerous Substances in Water (76/464), classified because of their high toxicity, persistence, carcinogenicity or liability to bio-accumulate.

Schedule 2 of the Environmental Protection (Prescribed Processes and Substances) Regulations 1991 provided rules for the interpretation of the regulations where disputes could arise (for example, concerning the categories Part A or Part B in which certain processes should be placed). Within the chemical industry, certain substances can be exempt from being prescribed if their release into air or land is "so trivial that it is incapable of causing harm or its capacity to cause harm is insignificant" (except where a process gives rise to an offensive smell noticeable outside the premises), or if their release into water is "in a concentration which is no greater than the background concentration". Other exemptions includes processes carried on as a domestic activity, those carried on in a working museum or engines used to propel a variety of vessels.

Anyone wishing to benefit form these exemptions must themselves establish that they fall in one of the above categories. This principle was explored in the case of Tandridge District Council v P & S Civil Engineering Ltd [1995] Env LR 67. In this case, Tandridge DC prosecuted the tarmac production company for undertaking a prescribed process without an authorisation. The defendant argued that the council had not proven that the exemptions under the above Regulations did not apply. The Divisional Court held that the burden of proving exemptions fell with the defendant, as stated in s.101 of the Magistrates' Court Act 1980.
4.2.5.2 Best Available Techniques Not Entailing Excessive Cost (BATNEEC) and Best Practicable Environmental Option (BPEO)

BATNEEC was one of a number of objectives included in s.7. All IPC and LAAPC processes are subject to BATNEEC and conditions have to be included in any authorisation which is granted, in order to fulfil this requirement. A full discussion of what is meant by the term BATNEEC can be found in Appendix 3. In general, however, BATNEEC must be used so that existing processes are upgraded as new technology emerges in order to improve emissions. New processes must utilise the best techniques (including technology) currently available that are not excessive in their cost. The legislation provides that this residual BATNEEC duty must apply to all processes falling under EPA 1990 Part I. Furthermore, specific conditions can be attached to an authorisation that require certain steps to be taken in order to satisfy the requirements of BATNEEC. A breach of either of these duties is an offence, and enforcement measures may be taken to ensure compliance (see later).

With reference to IPC processes under the jurisdiction of central control, and involving releases to more than one environmental medium, then the releases must have regard to the Best Practicable Environmental Option (BPEO). BPEO does not have any formal definition in the legislation. However, the concept of this principle was considered by the Royal Commission on Environmental Pollution in its 12th Report Best Practicable Environmental Option (1988), which stated that:
"The BPEO procedure establishes the option that provides the most benefit or the least damage to the environment as a whole, at acceptable cost, in the long term as well as the short term."

The use of BPEO therefore theoretically results in an optimum pollution control system where emissions to one particular environmental medium is chosen over a different medium in order to reduce the impact of that pollutant on the environment as a whole. However, BATNEEC is seen to take precedence over BPEO, as stated in s.7(7).

"BATNEEC will be used for minimising the pollution which may be caused to the environment taken as a whole by the releases having regard to the best practicable environmental option".

Although regulatory authorities have been criticised for their failure to deliver on the BPEO and BATNEEC principles (Allott, 1994: IPC: the First Three Years), there have been certain instances where the application of these concepts has produced an unwelcome outcome for the companies involved. For example, the application for an IPC authorisation by Hamilton Oil in 1995 for a gas terminal was turned down because it didn't fulfil the requirements of BATNEEC (ENDS 1995 245: 13-15). Construction of the terminal began in 1993, forming part of a £1.6 billion development. However, the company failed to consult with HMIP throughout its construction, installing a number of systems that did not comply with BPEO and BATNEEC. As a result, the company's application for an authorisation upon near-completion of the plant was refused.
4.2.6 The Authorisation Process

The authorisation process is viewed by many as a rather complicated and protracted affair. Many applications are supported by several hundreds of pages of documentation, with an estimation of each IPC application taking between 100-500 man hours to prepare (Wolf and White, 1997). The regulatory authorities must consider each application in turn, decide whether to grant or refuse the application, and attach conditions to it as they see fit. Details of this system, including the process of application, attaching conditions, the transfer of authorisations and application for the variation of conditions can be found in Appendix 3.

4.2.7 Fee and Charges

The charging scheme for EPA 1990 Part I operates on a 'component' system, where the fees payable for particular processes are linked to the defined number of components making up the entire process. Charges are made for applications for authorisations, a subsistence charge, fees for the variation of authorisations and a supplementary charge where applicable. For further details on the system of fees and charges see Appendix 3.
4.2.8 Enforcement Action

The following sections deal with the variety of enforcement measures available to the regulators as provided for in the EPA 1990 Part I. The extent of their utilisation in the past is discussed in sections 2.14, 4.2.14, 4.2.15 and 4.2.16.

4.2.8.1 Variation Notices

The conditions of an authorisation can be varied if so decided by the enforcing authority (s.10(1)). In such cases, the holder of the authorisation has to be notified and a variation notice served on him, specifying the variations on the original authorisation and the date from which these variations take place. The holder of the authorisation has to then inform the enforcing authority what action he plans to take in order to comply with the variation notice. A similar procedure is then followed to that when the operator applies for a variation of an authorisation, as outlined in Appendix 3. Section 10(3) of the EPA 1990, inserted by the Environment Act, enables a further notice to be served that varies a variation notice.

The ability to vary authorisations is important for authorisation notices to be kept in line with the available techniques. With the introduction of new technology to reduce pollution or as the information concerning certain pollutants grows, variation notices are required to incorporate this knowledge into the conditions of authorisations and ensure that processes take account of BATNEEC. The regulatory authorities are bound by a duty
to keep abreast of developments in pollution abatement techniques and technology, and have a duty to issue a variation notice if the conditions appropriate to fulfil the requirements of BATNEEC differ from those that the authorisation originally contained (s.10(1)). Appeals can be lodged against the decision to serve a variation notice as set out in the Environmental Protection (Applications, Appeals and Registers) Regulations 1991 SI 1991/507, SI 1992/614, SI 1993/1749, SI 1996/667, SI 1996/1979, SI 1996/2678 and the Environment Act 1995 s. 120(1) and Sch. 2. The variation notice remains in force pending the outcome of the appeal. Details of appeals can be found in Appendix 3.

4.2.8.2 Revocation of Authorisations

An enforcing authority has the power to revoke an authorisation at any time (s.12(1)), although the employment of this measure is subject to judicial review on the grounds of unreasonableness on the part of the enforcing authority (see later in this chapter for an explanation of judicial review). A revocation notice is served on the holder of the authorisation in writing, specifying the date by which the activity must cease (which must be no less than 28 days from the date of serving the notice). This date may then be extended before the revocation takes effect, or the notice may be withdrawn altogether. An appeal may be submitted against the revocation of an authorisation (see Appendix 3), with the revocation notice being suspended pending the outcome of the appeal. The Secretary of State has the power to order an enforcing authority to issue a revocation notice.
Revocation usually takes place when a prescribed process covered by an authorisation has not been carried out for a period of 12 months, thus preventing the restarting of an old operation without a fresh authorisation. Although the contravention of an authorisation is not a prerequisite for implementing this power, guidance from the DOE suggests that the revocation of an authorisation may be used "in cases where there has been persistent failure to comply with conditions" (Integrated Pollution Control: A Practical Guide, DOE 1992, section 11.3). In addition, the option of revoking an authorisation in the case of non-payment of the annual subsistence fees is stated in section 8(8). However, the Secretary of State's Guidance Note 1 for LAAPC (section 89) states that this provision should only be used as a last resort rather than a common tool for penalising non-payment.

The first business to have an IPC authorisation revoked by HMIP was AW Stokes and Sons of West Bromwich in 1994 (ENDS 1995 240: 8). The company had repeatedly failed to install emission control and monitoring equipment, stipulated by HMIP, for its incinerator. On 28th November 1994 HMIP served a revocation notice to take effect on 31st December 1994, resulting in a closure of that particular incinerator on the site.

4.2.8.3 Enforcement Notices

Enforcement notices relate to processes for which an authorisation has already been granted. When an authority is of the opinion that any conditions of an authorisation are not being adhered to (or unlikely to be in the future), an enforcement notice can be served
at the discretion of the authority (s.13(1)). This measure can therefore be used when a breach has already occurred, or the authority can take action in a preventative manner for breaches that are likely to occur.

The enforcement notice:

- states the opinion of the authority that conditions are being contravened;
- specifies the matters concerned with the contravention;
- specifies the steps taken to remedy the situation;
- specifies the period of time allowed for those steps to be carried out.

Enforcement notices are useful to reinforce an existing condition, or clarify a matter not covered in the specific conditions. The Secretary of State can direct the authority to issue such a notice and specify the steps which should be taken. Appeals against the serving of an enforcement notice may be made (see Appendix 3). Under a new s.13(4) of the EPA (incorporated by the Environment Act 1995), the enforcing authority is able to withdraw an enforcement notice.

4.2.8.4 Prohibition Notices

Where a process is being carried on under an authorisation which involves an imminent risk of serious pollution, the authority has a mandatory duty to serve a prohibition notice (s.14(1)). It can be served irrespective of whether any conditions of the authorisation have
been contravened, and can relate to any part of the process even if it is not covered by the conditions of the authorisation.

A prohibition notice involves:

- stating the authority's opinion;
- specifying the risk involved in the process;
- specifying the steps required to remove the risk, and the time allowance involved in this removal;
- wholly or partially (i.e. relating to a particular part of the process which must be specified in the notice) have the effect of rescinding the authorisation until the prohibition notice is withdrawn. Further conditions may be applied to a part of the process that is allowed to carry on.

The Secretary of State can again direct authorities to use this provision. The prohibition notice must be withdrawn once the authority is satisfied that the steps required have been carried out, or after a successful appeal (see Appendix 3).

'Imminent risk of serious pollution' is not defined in the legislation. The interpretation of the meaning of this statement is therefore left to individual inspectors, who must then decide whether to apply this enforcement measure. Prohibition notices should be used where immediate action is required to prevent a serious pollution incident. This could occur despite the fact that a process is being carried out within the conditions of an
authorisation, but where external factors could increase the risk of pollution. An example of this is where an accident at plant A could release substances which would react adversely with authorised emissions from a neighbouring plant B. In such a case, the serving of a prohibition notice on plant B would prevent a serious pollution incident occurring.

4.2.8.5 Powers of Entry, Examination, Investigation and Seizure

s.108 of the Environment Act 1995 (previously s.17 of the EPA 1990, in force at the time of this research) confers a wide range of powers on inspectors, so enabling them to carry out their duties and provide scope for enforcement action to be taken in a wide variety of situations. s.108 of the Environment Act was constructed to produce a harmonisation of the powers of inspectors from HMIP, the NRA and Waste Regulation Authorities. These powers of entry, examination, investigation and seizure may be exercised to:

- determine whether pollution control legislation is being or has been complied with;
- exercise or perform pollution control functions;
- determine whether and how such a function should be exercised.

This compares with the previous situation under the EPA, where HMIP could only enter premises where a prescribed process is being or has been carried on in the past.

The powers which can be utilised are:
• to enter premises which the inspector has reason to believe it is necessary for him to enter at any reasonable time. However, if there is an emergency, entry may be at any time and by force if necessary;

• to take with him any person authorised by the regulatory authority, and a constable if he feels an obstruction of his duty would be likely to occur;

• to take any equipment or materials required;

• to make any necessary examination or investigation;

• to order that any part of the premises be left undisturbed so an investigation may be carried out;

• to take measurements, photographs and recordings for the purpose of the investigation;

• to take samples of articles or substances found on the premises, or on the air, water or land on or in the vicinity of the premises;

• any article or substance so found and thought by the inspector to be the cause of the pollution can be subjected to tests. A responsible person on the premises must be notified that it has been removed. The substance may be detained:

  (i) for the purpose of the test,

  (ii) to prevent tampering with it before the test,

  (iii) to ensure its availability for use as evidence in proceedings for an offence (s.23), or any proceedings related to a variation, enforcement or prohibition notice;

• to question anyone he believes may have information relating to the investigation. This person can then be asked to sign a declaration of the truth of his answers;
• to require production of any records which must be kept under the regulations, or those that he must see to carry out the investigation fully. These records may be inspected and copies taken;

• to require full co-operation to enable him to carry out his duties.

During the inspection of premises, an inspector may find an article or substance which he feels to be the cause of imminent danger of serious pollution or serious harm to human health. In such cases, he is able to seize it and render it harmless by destruction or in another fashion (s.18 of the EPA, replaced by s.109 of the Environment Act). These actions are then detailed in a report by the inspector, a copy of which must be given to the responsible person at the premises and the owner of the article or substance. If the owner cannot be located, his copy is also served on the responsible person at the premises.

To ensure correct discharge of their functions, the authorities may require information from a person. This information must be requested in the form of a notice served on that person, detailing the exact information required and the time allowed for furnishing that information (s.19). The Secretary of State can also require certain information from enforcing authorities to be passed onto him at his written request.

A recent example of these powers being used to obtain information relating to environmental offences was seen in R v Green Environmental Industries Ltd and John Moynihan [1998] Env LR 153. The case related to waste offences under Part II of the EPA 1990, which confers similar powers on the Environment Agency to those in Part I
relating to its ability to obtain information. The company was operating an illegal clinical waste dump after entering into various contracts with other companies for the disposal of their waste. Upon investigation, large quantities of clinical waste were discovered, stored in lorries, vans and at a disused warehouse. Over 60,000 bags of decomposing clinical waste, 3,000 bins of contaminated sharps and 600 bins of body parts were found. The then waste regulation authority (the case arose prior to the formation of the EA) served several notices on Green Environmental Industries requesting information relating to the source of the waste and to verify that all the dumps had been discovered. However, the company refused to respond without assurances that the information would not be used in any subsequent prosecution. The regulatory authority did not give these assurances, and the company was prosecuted for failing to comply with the information requests. The company then applied for a judicial review of the decision of the regulatory authority to issue notices requiring information. The grounds for the review were that the notices contravened the right for non-self-incrimination. The Divisional Court dismissed the application. The company subsequently appealed to the Court of Appeal, who dismissed the appeal and upheld the decision of the regulatory authority to issue the notices.

4.2.8.6 The Power to Order or Take Remedial Action

In the case of conviction for the offences of contravention of an enforcement or prohibition notice or carrying out a prescribed process without an authorisation, it is within the power of the court to order the offender to take steps to remedy harm if this is possible (s.26). This may be done instead of or in addition to imposing other penalties
such as a fine, and results in the offender paying for clean-up costs which in many instances far exceed the fine imposed. A time is set by the court in which to carry out the remedial action, and this may be extended by application to the court. During this period of time, the offender will not be liable for further prosecution under s.23 (offences) for the same offence (s.26(3)).

Under s.27, the regulatory authority has the power to:

- arrange reasonable steps to remedy the harm;
- recover the costs of this remedial action from the convicted parties.

These powers may only be exercised when written approval has been obtained from the Secretary of State. Additionally, where any remedial steps are taken that would affect land occupied by another person, their permission must be obtained before any action can be taken.

The introduction of a scheme that extends liability for environmental damage has been supported by many authors over a number of years (Hawkins, 1992; Hill et al., 1994; Rickman, 1994; McDonald, 1996). This would deal with cases where existing legislation is inadequate. For example, when businesses cannot afford to take remedial action, when regulatory authorities cannot afford to take remedial action or when prior polluters cannot be found.
An EC White Paper on environmental liability is currently being constructed. However, the process for the introduction of such a regime is long and protracted, with legislation not being introduced most probably until 2003 (ENDS 1998 280: 44-45). Already the proposals, which include a strict liability standard, provisions on damage to the un-owned environment and apportioning liability in multiple party cases, have attracted vigorous complaints from industry representatives (ENDS 1998 282: 47-48). One of the most contentious issues is that the legislation will only relate to future pollution, leaving the legacy of past contaminated sites to be dealt with by Member States as they see fit.

The forthcoming IPPC regime (see section 4.2.17) includes provisions requiring the environmental restoration of sites used for IPPC processes, after the site is closed.

4.2.8.7 Prosecution and Injunction

There are a number of offences listed in the legislation (see section 4.2.8. below) for which prosecutions may be brought by the regulatory authority. Furthermore, the authority also has the option of injunction under certain circumstances. Injunction as a method of enforcement is discussed fully later in this chapter.

Although regulatory authorities have wide ranging powers of enforcement under the Act, recalcitrant businesses are able to give the authorities the 'run around' and continue running their business for a number of years whilst in breach of the regulations. The inadequacies of the Act in dealing with such businesses is illustrated in the case of
The saga began in 1995 when the rendering company was refused an authorisation for a Part B process. The company appealed to the Secretary of State, and the inspector recommended the appeal be refused because of odour nuisance on the site. However, the Secretary of State overruled his inspector, stating that an authorisation should be granted subject to several conditions (including the fitting of an airlock to prevent odour escape). The council subsequently granted the authorisation. However, the company failed to comply with the conditions and the council then served an enforcement notice. The company informed the council that it was seeking judicial review against the Secretary of State's decision, the decision of the authority to serve a notice, and the notice itself. The council then decided to seek an interlocutory injunction against the company - the first of its kind under the EPA 1990.

S.24 of the EPA states that civil proceedings (such as an injunction) in the High Court can be taken when a notice has not been complied with and when criminal proceedings would afford an ineffectual remedy. The High Court in this case decided not to grant an injunction as s.24 had not been strictly adhered to by the council. Meanwhile, the company announced that it would be appealing against the decision to serve the enforcement notice, and requested to make its case at a hearing.
The company's applications for leave for a judicial review against the Secretary of State's decision, the decision of the authority to serve a notice, and the notice itself was turned down by the High Court after two separate hearings in Autumn 1995 and February 1996. The company then announced its intention to appeal against the decision to the Court of Appeal.

By June 1996, decisions on both the appeal against the enforcement notice and the appeal against the High Court's refusal for leave for a judicial review had been made. In both instances the appeals were turned down. Tameside council were extremely critical of a lack of provisions in the EPA forcing costs to be paid by appellants who are held to have acted unreasonably or frivolously in bringing an enforcement appeal. Their total costs in the appeal were approximately £10,000.

The council then prosecuted the company, and in December 1996 Smith Brothers Ltd appeared before magistrates charged with 11 offences relating to breaches of its authorisation. They were fined a total of £216,000 (a then record for LAAPC offences) with £21,000 costs. However, the company still refused to adhere to the requirements of the authorisation and continued to operate their business, as they did throughout the saga, with a flagrant disregard for the law. Public complaints about the odour problem continued to pour in, and a second prosecution was brought against the company in June 1998. Manchester Crown Court fined the company a total of £330,000 (a second record under LAAPC) with £40,000 costs. It appears that the problem has eventually been
resolved, as the company went into voluntary liquidation shortly before the court hearing (ENDS 1998 281: 51).

4.2.9 Offences

It is an offence for a person to:

1. carry on a process after a prescribed date without an authorisation notice (s.6(1));
2. fail to give notice to the enforcing authority of the transferral of an authorisation to another person (s.9(2));
3. fail to comply with or contravene any requirement or prohibition imposed by an enforcement/prohibition notice;
4. fail to comply, without a reasonable excuse, with any requirement under s.108 of the Environment Act dealing with the powers of inspectors;
5. to prevent any person from appearing before an inspector and answering his questions;
6. to intentionally obstruct an inspector in the course of his duties;
7. to fail to furnish the enforcing authority, without reasonable excuse, with information required by them for the discharge of their functions (s.19(2));
8. to knowingly make a false or misleading statement concerning (i) the requirement to furnish the enforcing authority with information, or (ii) obtaining an authorisation notice or variation in authorisation;
9. to make a false entry in any record kept under s.7 (conditions of authorisations);
10. to intend to deceive, to forge or use a document relating to s.7;
11. to falsely pretend to be an inspector;

12. to fail to comply with any order made by the court under s.26 concerning remedial action.

Offenders can be tried in the magistrates' court or Crown Court. On summary conviction, a fine not exceeding £20,000 can be imposed, whilst conviction on indictment can lead to an unlimited fine or a term of imprisonment not exceeding 2-5 years, or both. The first jail sentence for an environmental offence is thought to be for fly-tipping in 1988 (ENDS 1993 217: 43). Liverpool Crown Court imposed two 28 day prison sentences to be served concurrently after a prosecution was taken under s.3(1) of the Control of Pollution Act 1974. However, such punishment has remained the exception rather than the rule for environmental offences, with the option for imprisonment used sparingly by judges for cases brought under Part I of the EPA 1990.

In proceedings for the offence (1), where failure to comply with the general condition of BATNEEC occurs, the onus of proof is on the accused to show that there was no better available technique not entailing excessive cost in order to satisfy the condition (s.25). Also, where an entry in the records is required under s.7 concerning the conditions of authorisations and the entry has not been made, then this shall be admissible in evidence that the condition has not been observed.
4.2.10 Managerial Liability

s.157 and s.158 of the EPA make important provisions concerning the liability of individuals within a company, and any third party to the offence. When an offence is committed by a company, but an individual within that company (a director, manager, company secretary or other similar officer) is found to have connived or consented to the offence or shown any neglect, then he is liable to be proceeded against and punished accordingly. Furthermore, proceedings may be taken against any third party whose act or default caused an offence to be committed. Maximum penalties are £20,000 fine and/or 6 months imprisonment in the magistrates' court, and an unlimited fine and/or 2 years imprisonment in the Crown Court.

Detailed explanations of the terminology used in s.157 can be found in Tromans and Irvine (1994) and Hawke (1997). The directors and company secretary will have their particulars filed at Companies House, and there will generally be no doubt as to their identity. A 'manager' will be someone who genuinely manages the affairs of the company and does not include a site manager or office manager, who are in no real position of authority regarding the running of a company (see Tesco Supermarkets Ltd v Nattrass [1972] AC 153, R v Boal [1992] 3 All ER 177 and Woodhouse v Walsall Metropolitan Borough Council [1994] 1 BCLC 435). 'Similar officer' means someone acting on a similar level to the director, manager or company secretary such as the Chief Executive.
Once it has been proven that the status of the person concerned is appropriate for prosecution, consent, connivance or neglect must then be established. Consent requires knowledge and positive approval of the offence by the offender. In *Attorney-General's Reference (No 1 of 1995)* [1996] 1 WLR 970, a director was prosecuted under the Banking Act 1987 whose provisions are similar to those in the EPA. The defendant argued that he had never heard of the relevant statutory provision and therefore could not have consented. The Court of Appeal held that ignorance of the law was no defence and found the defendant guilty.

'Connivance' implies "acquiescence in circumstances or conduct which is reasonably likely to lead to an offence being committed" (Tromans and Irvine, 1994). The director may be aware of what is going on, but chooses to ignore it and say nothing. 'Neglect' is seen as a failure to perform a duty.

Although the option to prosecute individuals exists, it has been used sparingly so far. This contrasts with the situation in other countries such as the USA where prosecution of managers and directors occurs far more frequently (Swiss, 1992; Irvine, 1994; Minister, 1994). Problems in its utilisation may arise from the difficulties in proving consent, connivance or neglect, or in tracing the person responsible for a particular decision. This can be especially problematic in larger firms where a number of people may have been involved in policy development or decision making (Estates Gazette 1997 9706: 149-150).
The first prosecution of a director for an IPC offence under s.157 occurred in May 1998 (ENDS 1998 281: 50). Gerald Jones, director of the company Gath Drums was successfully prosecuted and sentenced to 60 hours community service.

4.2.11 Appeals

The right of appeal against numerous decisions taken by regulatory authorities exists in the legislation. Details can be found in Appendix 3.

4.2.12 Public Registers of Information

Under s.20 every enforcing authority, with regard to prescribed processes, must keep a public register of information, details of which can be found in Appendix 3. Information relating to certain enforcement measures, such as prosecution and the serving of notices must also be held on this register. All registers should be available for inspection by the public at any reasonable time free of charge. Copies of these registers can be made by the public for a reasonable fee. This provision has important implications concerning the dissemination of information to the general public and environmental interest groups, making their active involvement in the authorisation procedure and enforcement process much more likely. However, problems obtaining information from these registers have been encountered and a full discussion of their merits and drawbacks can be found in Chapter 2.

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4.2.13 Interaction with Other Legislation

Although IPC aimed to produce a more integrated system of pollution control, a number of overlaps with other control mechanisms and legislation still exist. Details can be found in Appendix 3.

4.2.14 HMIP and IPC in Practice

A detailed survey of the operation of the IPC system during its first three years was commissioned by ENDS in 1994 (Allott, *IPC: the First Three Years*). This revealed some of the major problems with the regime. The main findings of the report were:

- An overall very poor standard of authorisation applications, with no mention in many cases of BATNEEC, BPEO, how to minimise harmful releases and the environmental impact of the process. In almost all of these cases, HMIP had failed to force the operator to address these issues. Much of industry's focus was still based on end-of-pipe abatement rather than minimisation at source. As a result of poor applications, very few had been determined within the prescribed three months.

- The public registers were distinctly lacking in information. Many of the companies own monitoring results were missing. Furthermore, there was not one entry for IPC processes on the registers relating to monitoring results undertaken by HMIP covering the first 29 months of the regime. It was also found that a large proportion of
information that should have been included in an application for an authorisation was not initially furnished by companies. HMIP requested this information at a later date and therefore was not bound to place it on the registers.

- HMIP had not taken a tough line on enforcement despite some significant breaches of authorisation conditions, taking only one prosecution under the IPC legislation between April 1991-3 and serving just a handful of enforcement notices. In many cases where a limit for emissions had been placed on an authorisation and that limit had been breached, HMIP's response was to vary the authorisation so as to permit a higher level of discharge. Furthermore, it was common practice to inform an operator of when a monitoring visit would be made.

- During the time of the report, HMIP were suffering a serious shortfall in staff, making the completion of their required duties very difficult.

- The response from industry was not too encouraging. More than 50% of those surveyed viewed the system as 'burdensome', with their most common complaint being the levels of fees charged. A severe underestimation of the cost of implementing and running the system meant that HMIP experienced a £2 million deficit in the cost-recovery scheme over the first two years of IPC. This lead to a dramatic rise in fees for the year 1992/3. Charges for submitting an application for an authorisation doubled, whilst the annual subsistence fee trebled. Industry also cited a loss of flexibility and excessive paperwork as other drawbacks of the system. Only 9% of those surveyed
could see any significant potential benefits resulting from the system such as waste minimisation and cost savings. Process guidance notes were generally held in low esteem by industry, stating that they offered no practical advice on how to implement the recommendations. However, many respondents were positive about the assistance received from local inspectors.

HMIP had been accused of having too close a working relationship with industry, and so had decided to adopt an 'arms length' approach at the beginning of the IPC regime. This led to a disastrous first round of applications for authorisations, with industry left to draw up their own applications without any guidance. Furthermore, many businesses in the beginning did not even know that the provisions applied to them (Wheatley, 1993). The 'arms length' approach was therefore abandoned and co-operation with industry was sought to improve IPC.

A knock-on effect of this change in policy was that more time was spent with industry to improve their applications. This, coupled with a shortfall in staff meant that monitoring and enforcement suffered as a result. HMIP inspections fell to an all-time low in 1990/91 of 3,867, compared to 10,164 in 1987/88 (ENDS 1992 210: 22). A report by the National Audit Office in 1991 (Control and Monitoring of Pollution: Review of the Pollution Inspectorate), was critical of HMIP's use of persuasion rather than prosecution for recurrent offenders. It stated that HMIP had "tolerated poor performance by operators without taking firm enforcement action", and recommended that the appropriate follow-up enforcement action should be taken in cases where persuasion had not succeeded.
Furthermore, inconsistencies in the working practices of HMIP within regions and between regions was complained of by the CBI (EIB 1994 37: 2).

Although there were many initial problems encountered with the IPC regime, things did not seem to improve that dramatically. During the period 1994/5 HMIP admitted that they were only carrying out 60% of the inspections believed needed to achieve full and effective regulation (ENDS 1994 239: 45). A concurrent rise in the number of complaints and pollution incidents was also observed in this period, indicating a deterioration in industry's performance, with the trend continuing up until its final year of operation (ENDS 1995 248: 8-9). Numbers of prosecutions taken by HMIP rose from just one or two a year initially to 12 in the year 1991/2 (HMIP Annual Report 1991-2), and remained at this level for subsequent years of operation. (N.B. This is the total number of prosecutions taken by HMIP and not just those relating to IPC). Approximately 50 notices a year were also served, reaching a peak of 80 in 1994/5 and falling to 69 in 1995/6.

The IPC system under the control of HMIP therefore suffered a number of drawbacks, most notably a lack of resources, insufficient or inappropriate enforcement and monitoring, and HMIP not fulfilling their duties required under the legislation relating to authorisation conditions and public registers. A rise in the number of complaints and pollution incidents was observed as a result. The following section discusses the performance of the Environment Agency against this background.
4.2.15 The Environment Agency and IPC

The Environment Agency has received criticism for its lack of openness, transparency and accountability. Minutes of Board meetings are currently not available for general viewing. However, changes have been planned from October 1999, when board meetings will be opened up to the general public. Papers and minutes from these meetings are also to be made available on the internet (ENDS 1999 290: 8).

The contents of Environment Agency's reports have been described as very "thin", containing limited details of their performance compared with those produced by their predecessors (ENDS 1998 284: 22-28). It has also been noted that recommendations made by the HMIP advisory committee concerning the publication of a variety of performance measures by the Environment Agency have not been adopted. These performance indicators would measure the outcome, impact and efficiency of the Agency, rather than activity alone, and would promote effective targeting of the Agency's resources and result in a more meaningful account of their achievements. No sign of these performance indicators were found in the Agency's Annual Report 1997/8. However, some statistics are available, making comparison between current and previous regulation possible to a certain extent.

Information from the first two Environment Agency Annual Reports (for the years 1996/7 and 1997/8) show an alarming rise of 55% in the numbers of substantiated pollution incidents under the IPC regime. For the year 1996/7, 846 incidents were reported,
increasing to 1,311 in 1997/8 out of a total of 1,992 regulated processes. In response to these incidents, 8 prosecutions were taken and only 34 notices were served in 1996/7, whilst in 1997/8 there were 7 prosecutions and 50 notices served. At least five of the regions took no prosecutions at all, raising questions about the Environment Agency's consistency of enforcement action. Numbers of IPC prosecutions for the year 1998/9 were comparable at 9 in total (ENDS 1999 293: 49).

Although the numbers of prosecutions are at a similar level to those taken by HMIP, the total number of notices served compares most unfavourably to HMIP who served 80 and 69 notices respectively in the last two years of their operation. The impetus for enforcement action therefore seems to have been considerably diluted even in the face of increasing numbers of pollution incidents. A possible reason for this is the capacity within which enforcement staff work not being made clear by senior management. In a recent survey of Agency staff, it was found that enforcement personnel have been left unsure of their role within the organisation (ENDS 1999 292: 7-8). They are reported as being uncertain whether to police compliance with the legislation or to be "nice to industry". Many officials also relate poorly to the concept of industry as their 'customer'.

Inspection rates of IPC sites have fallen well below both those employed by HMIP and the Environment Agency's own targets. In 1996/7, the Agency carried out 6,003 inspections which fell to 5,583 in 1997/8. This compares to approximately 6,600 carried out by HMIP during their final year of operation. In the Environment Agency's first Corporate Plan, their stated aim was for 6,900 inspections per annum. Furthermore, the
categorisation of inspections (routine, reactive or related to IPC applications) by HMIP has been discontinued by the Environment Agency, making an assessment of resource utilisation very difficult.

The Agency must now also carry out additional inspections relating to the four-yearly review of authorisations. These have already been causing problems within the organisation, and have so far been characterised by long delays and backlogs in the system. In an effort to catch up with the workload, many fear reviews will be rushed and proper consideration will not be given to BPEO and BATNEEC assessments (ENDS 1998 281: 5-6). This in turn will mean that equipment and processes are not upgraded or improved in an effort to reduce environmental pollution, one of the founding principles upon which the IPC regime was based.

4.2.16 Local Authorities and LAAPC

In May and October 1992 the National Society for Clean Air (NSCA), in collaboration with the Association of Metropolitan Authorities (AMA), carried out surveys of local authorities to determine the effectiveness of the LAAPC regime in its initial stages of operation (NSCA: Implementation of the Environmental Protection Act 1990, Clean Air 1992 22(2): 57-62 and 22(4): 190-194).

Nearly 80% of local authorities responded to the surveys, and many were highly critical of the system. Some of these criticisms included:
1. Dissatisfaction at the level of resources allocated for the system and support provided by central government. Provision of central guidance was considered 'poor' by the majority of respondents with 'vague' guidance notes. Many personnel were of the opinion that the codes of practice for monitoring were unworkable. This was coupled with 'inadequate' staff training and staffing levels. Smaller authorities had problems of limited expertise, especially when dealing with large, complex processes. Two thirds of councils said they had undertaken duties under the EPA at the expense of other Environmental Health work.

2. Determination periods were considered to be too short by many local authorities, with central government setting unrealistic timetables. This explains why many of the councils were exceeding their time allowances for determining applications.

3. Respondents stated that the system had not received the publicity it needed, with industry having been poorly informed about the new legislation and their requirements under it. As a result, only 85% of expected applications had been submitted when the second survey was carried out.

4. There was a general feeling amongst respondents that fees should be related to the size of a process. Instances were cited where smaller companies had changed their processes in order to avoid paying the fees, or had closed entirely through financial pressures.
Poor central guidance, as cited in the report, can lead to a lack of uniformity between different councils. The surveys found inconsistencies between councils both in enforcement practices and the detail required in authorisation applications. Large differences in the number of notices served by authorities were apparent. One authority had served a total of 246 notices, whilst others had served none at all. Furthermore, a minority of councils (4 in total) had returned all of their applications because of inadequate information, whilst a larger number (81 in total) had not returned any.

After another four years of operation of the system, the picture painted by a DoE report showed a considerable lack of improvement (Local Air Pollution Control in England and Wales: Five Year Report 1991-96, 1996). The report showed that minimal enforcement action had formed part of the authorities approach. The number of prosecutions taken was described by the DoE as "very low", with the serving of enforcement notices at a rate much lower than that of HMIP.

The following table (adapted from ENDS 1999 291: 15) shows the amount of formal enforcement action taken by local authorities through the 1990s and the level of fines for LAAPC offences. The DETR statistics for prosecution data are incomplete, with only 3 years of data being available.
Table 4.1 Enforcement Action and Level of Fines Under LAAPC

<table>
<thead>
<tr>
<th>Year</th>
<th>Enforcement notices</th>
<th>Prohibition notices</th>
<th>Section 10 variations</th>
<th>Successful prosecutions</th>
<th>No. where a fine imposed</th>
<th>Average fine (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991/2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992/3</td>
<td>114</td>
<td>1</td>
<td>536</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1993/4</td>
<td>125</td>
<td>2</td>
<td>567</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1994/5</td>
<td>240</td>
<td>4</td>
<td>1,046</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995/6</td>
<td>175</td>
<td>0</td>
<td>1,156</td>
<td>16</td>
<td>13</td>
<td>2,500</td>
</tr>
<tr>
<td>1996/7</td>
<td>104</td>
<td>1</td>
<td>1,013</td>
<td>8</td>
<td>6</td>
<td>3,674*</td>
</tr>
<tr>
<td>1997/8</td>
<td>150</td>
<td>5</td>
<td>1,172</td>
<td>18</td>
<td>16</td>
<td>3,466</td>
</tr>
</tbody>
</table>

(* excluding the record fine of £216,000 imposed on Smith Brothers for 11 offences at an animal rendering business in Cheshire)

Average fines for LAAPC offences are lower than for any other environmental regulatory regime, with the exception of waste (ENDS 1999 291: 15). Furthermore, only a small minority of councils actually take prosecutions - only 7 in 1996/7, rising to 20 the following year.

The 1996 report published by the DoE (Local Air Pollution Control in England and Wales: Five Year Report 1991-96) also indicated that only 66% of applications for existing processes were being decided within the statutory 12-month timetable. Furthermore, inconsistencies in the content of authorisations issued by different authorities were cited by industrial representatives.
A survey by Environmental Resources Management (ERM) in 1996 showed that many councils were failing to enforce upgrading deadlines set out in statutory guidance (ENDS 1996 263: 8). Around 40% had failed to meet their deadlines by the end of 1995, with officers estimating many could overrun by up to 2 years.

These relaxed enforcement practices and lack of consistency between inspectors and authorities were pinpointed by the Environmental Industries Commission (EIC) as the main reasons behind poor sales of air pollution abatement equipment in the UK. In their report (Remedying the Failures of Local Air Pollution Control), the EIC state that the "inconsistent and lacklustre approach to enforcement" by regulatory authorities is damaging the UK's environmental technology business. Furthermore, their report also describes specific examples where companies have threatened councils that they will close down or move to another area if forced to install abatement equipment. In such cases, many councils have subsequently taken a back seat with regards to enforcement and monitoring.

A report published by the Department of Environment, Transport and the Regions (DETR) in 1998 (Local Authority Progress in Implementing the LAAPC Regime, DETR, 1998), indicated an improvement in meeting upgrading deadlines, with only 11% of processes falling behind. However, 58% of operators were failing to submit their upgrading proposals by the set deadlines, and, more worryingly, the four-yearly review of authorisations had not been carried out for 60% of those that were due.
The report described process inspections as "largely ad-hoc, unplanned, apparently unstructured and driven by reactive complaint considerations". Some councils had no programmed inspections whatsoever, and only made site visits as a result of complaints. This shows considerable deviation from central government guidelines issued in 1995, which state that site inspection frequency should be biannual (ENDS 1998 284: 4-5). In addition, very few authorities owned or had access to monitoring equipment, and thus relied on companies own monitoring results. Furthermore, many authorities files contained little or no record of inspections that were carried out, making an informed and appropriate decision regarding enforcement action extremely difficult. This situation was clearly unacceptable, and required considerable investment for the purchase of equipment and staff training.

In an effort to resolve some of these problems, the government responded with a report recommending changes to the system (Action Plan and Response to the Auditor's Recommendations, DETR, 1998). The report states that the DETR will issue new guidance on inspections with an emphasis on upgrading, and establish a working party to produce guidance on the activities that should be carried out during an inspection. However, many of the recommendations made by Cardinal Environmental who carried out the initial report (Local Authority Progress in Implementing the LAAPC Regime), have been ignored. These include that a clear distinction should be made between programmed inspections and those that are complaint driven. Furthermore, a mechanism for regular review of authorisations, enforcement policies and inspection practices should be introduced.
Although some improvement has been noted from 1996/7 to 1997/8 in the area of numbers of inspections (a 6.2% rise - ENDS 1999 291: 15), the number of applications decided within the statutory four-month time period (up from 49% to 57%) and the number of notices served (see Table 4.1), enforcement activity remains well below the peak of 1994/5.

4.2.17 Future Developments and IPPC

Changes to the IPC regime have been proposed, including the introduction of risk-based targeting of inspections using the Operator Pollution Risk Appraisal (OPRA) methodology, and the identification of Zones of Industrial Pollution (ZIPs) with subsequent action planning to combat the problem. However, the most important changes to IPC will result from the adoption of the IPPC Directive, seen by many as heralding a new phase in the control of industrial processes and emissions.

In September 1996, the European Council adopted EC Directive 96/61/EC requiring all Member States to establish a system of Integrated Pollution Prevention and Control (IPPC). The system is broadly based on the IPC regime, with a few significant differences. These include:

1. Wider coverage of processes controlled by the legislation. Currently, less than 2,500 processes are controlled under the IPC umbrella. This has been estimated by the
Environment Agency to rise to between 4-6,000 after the introduction of IPPC (ENDS 1998 284: 42-43). Some of the processes will be covered for the first time and include smaller landfill sites, large intensive livestock units and food and drink manufacturers. In addition, other processes will be transferred from control under LAAPC - approximately 1,600 processes in total (ENDS 1997 273: 21-24). However, in October 1998, the government confirmed that local authorities will continue to act as regulators for a "proportion" of IPPC installations (ENDS 1998 285: 37-38).

2. *A more integrated approach to pollution control.* The Directive is not just concerned with emission limits, but also imposes controls on, for example, the consumption of raw materials, prevention of accidents and energy usage.

3. *A wider definition of pollution.* Noise and vibration are also included under the regulations.

4. *A responsibility placed on operators for site remediation after cessation of activities.*

The Environment Agency has always considered the fact that regulation under IPC stops when the operation ceases to be a weakness with the regime. Article 3 of the Directive requires that "necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state".
5. *A wider definition of BPEO.* Due to the nature of the Directive encouraging a more integrated approach to pollution control, this will be extended to what is considered BPEO for a process. Instead of taking into account emissions alone in choosing the BPEO, consideration must also be given to energy, noise and consumption of raw materials before a decision can be made.

6. *A re-evaluation of BATNEEC.* BAT is used in the directive, as opposed to BATNEEC. However, it is stated that there should be regard to costs. Publication of guidance documents for what is the Best Available Technique for controlling releases in each industrial sector is being undertaken by the IPPC centre in Spain. Furthermore, Secretary of State guidance will also be published.

7. *The publication of a Polluting Emissions Register (PER).* The PER will be similar to the Chemical Releases Inventory (CRI) initiated under the IPC regime. However, it is hoped that the PER will not be dogged by the same problems experienced with the CRI, including difficulty in extracting specific information, lack of detail, inconsistent reporting requirements and the information being out of date (see section 2.12).

The Environment Agency has welcomed the IPPC Directive, saying it has *"presented an opportunity for improving pollution control law and practice in this country"* (Environment Action 1997/8 11: 5). The time scale for introducing the new scheme starts in October 1999, covering new processes. All existing processes must be integrated into the scheme by 2007. However, deferring the transition for all process until this deadline
would result in an impossible workload for the Agency. It is therefore proposed to undertake the transfer in a phased fashion, beginning in 2000 and peaking in 2003-5. It is hoped that the transfer will take place in conjunction with the four-yearly reviews of IPC authorisations (ENDS 1998 284: 42-43).

The Pollution Prevention and Control Bill designed to implement the IPPC Directive has not, however, had a trouble-free passage through Parliament (ENDS 1999 289: 33-34). In February 1999, it received strong criticism during its passage through the committee stage in the House of Lords. The main problems were:

- the unusually broad powers it confers on the Secretary of State to introduce regulations with little parliamentary scrutiny;
- the wide spectrum of activities that could be controlled by the Bill, as 'pollution' is not defined;
- the lack of independent consultation on regulations;
- excessive charges for operating the scheme.

Some amendments were tabled to counter these criticisms. However, many of the other potentially far-reaching elements of the Bill were not discussed. These include:

- the introduction of tradable emissions permits;
- to use alternatives to permit conditions;
- to introduce a new mechanism to implement EC Directives.
The Bill completed its passage through the House of Lords in May 1999 and passed through a fairly uneventful second reading and Committee stage in the Commons in June 1999 (ENDS 1999 293: 34).

**4.3 The Environmental Protection Act 1990 Part III**

**4.3.1 Introduction**

Statutory nuisances are controlled by the Environmental Protection Act Part III sections 79-85. Prior to the introduction of the EPA, provisions for statutory nuisance were found in the Public Health Act 1936 and the Public Health (Recurring Nuisances) Act 1969. Noise nuisance was covered by the Control of Pollution Act 1974 (s. 58-59) and smoke nuisances by the Clean Air Act 1956 (s. 16). Part III of the EPA makes provisions for the control of these statutory nuisances.

Statutory nuisance plays an important role in supplementing the common law of public and private nuisance. In many cases, these provisions can provide a quick and easy remedy to abate nuisances where the common law may prove to be too slow or expensive.

Part III of the EPA came into force on 1/1/91. It has subsequently been amended by the Noise and Statutory Nuisance Act 1993, with additional measures available for the control of night-time noise through the Noise Act 1996.
4.3.2 Terminology Used in the Act

A statutory nuisance is defined in section 79(1) of the EPA as follows:

- any premises that are prejudicial to health or a nuisance (definitions of what is 'prejudicial to health' and what constitutes a 'nuisance' can be found in Appendix 4).
- smoke emitted from premises which is prejudicial to health or a nuisance;
- fumes or gases emitted from premises that are prejudicial to health or a nuisance;
- dust, steam, smell or other effluvia which arises from industrial, trade or business premises and is prejudicial to health or a nuisance;
- an accumulation or deposit which is prejudicial to health or a nuisance;
- an animal kept in a place or manner which is prejudicial to health or a nuisance;
- noise emitted from premises which is prejudicial to health or a nuisance. S. 79(1) was amended by the Noise and Statutory Nuisance Act 1993 which inserted a new s. 79(1)(ga). This extended nuisance caused by noise in the street to that "emitted from or caused by a vehicle, machinery or equipment". It also included noise caused by car alarms and generators;
- any other matter declared by any enactment to be a statutory nuisance.

The definitions of statutory nuisance serve to draw together previous provisions under the various enactments mentioned in the introduction. In some cases, definitions have been
clarified, but the EPA is comparable to prior legislation, thus keeping existing case law relevant. For the various definitions of terminology used above see Appendix 4.

4.3.3 Local Authorities and Statutory Nuisances

Local authorities are the regulatory bodies that are responsible for the implementation of Part III of the EPA. For a definition of what is a local authority, see section 4.2.4.

In cases where a coastal region is included in the area of a local authority, the area under the authority's jurisdiction also extends to the territorial water around the coastline. Any vessel in these waters (apart from those powered by steam) must therefore comply with the legislation in Part III (s.79(11), 79(12)).

A statutory nuisance may exist within the area of one local authority, but the cause of the nuisance could originate from outside the area. In such cases, the local authority can act as if the nuisance took place in its entirety within the authority's boundary (s. 81(2). However, any appeals to the magistrates court must be heard in the court which has jurisdiction over the causal area (s.81(2)).
4.3.4 Enforcement Action

The following sections deal with the variety of enforcement measures available to the regulators as provided for in the EPA 1990 Part III. The extent of their utilisation in the past is discussed in section 4.3.8.

4.3.4.1 Duties of Inspection

The local authority has a mandatory duty to inspect the area falling under its jurisdiction from time to time in order to detect statutory nuisances (s. 79(1)). Any complaint of a statutory nuisance made to the authority by a person living in that area, must be fully investigated using reasonably practicable steps. A refusal to investigate could probably lead to the remedy of judicial review for the aggrieved applicant.

After the inspection of premises, a decision must be made concerning the existence of a statutory nuisance, or if a nuisance is likely to occur or recur in the future. This procedure may therefore be used to prevent a nuisance before it happens.

As previously mentioned, statutory nuisance proceedings may be taken for situations that are either 'prejudicial to health' or a 'nuisance'. The 'nuisance' aspect of offences will only apply to affected neighbours' properties (the definition of 'nuisance' in the legislation is taken as the same as that under common law - see Appendix 4 for further details), and in all cases a final decision is made only after considering respective neighbours' rights.
Comparisons can therefore be made with legal decisions made in common law nuisance, which take account of extraneous factors such as the nature, location, time and duration of the nuisance. Utilisation of the 'prejudicial to health' aspect of offences does not require 'affected neighbours' before proceedings can be brought.

4.3.4.2 Abatement Notices

When a local authority is satisfied that a statutory nuisance exists, or is likely to occur or recur in the future, then an abatement notice must be served (s.80(1)). This notice can impose requirements for abating the nuisance or prohibiting or restricting its occurrence or recurrence. It may also set out certain works or other steps that need to be taken to abate the nuisance, and the time limit allowed to comply with the notice must be specified. An abatement notice is of unlimited duration (see Wellingborough BC v Gordon [1993] Env LR 218).

The nature of the duty to serve an abatement notice was considered in R v Carrick District Council, ex parte Shelley [1996] Env LR 273 which related to serving an abatement notice for sewage discharges onto a Cornish beach that were already regulated by the Environment Agency (see section 2.7.2 for a discussion of this case). Despite these powers being recognised several years ago as posing an ideal opportunity for cleaning up sewage discharges onto beaches (Day and Hopkins, 1993), they have rarely been used by local authorities.
The above powers have, however, recently been utilised again by Carrick council. In June 1998 an abatement notice was issued to South West Water relating to high levels of faecal organisms in a stream that flows onto a nearby beach. The notice required that ultra-violet treatment of the discharge be undertaken. Two weeks later, another abatement notice was served by Falmouth and Truro Port Health Authority relating to a discharge into the Fal estuary (ENDS 1998 282: 10). South West Water contested both notices, and was granted leave for judicial review of the Fal decision. In the hearing (R v Falmouth and Truro Port Health Authority ex parte South West Water Ltd [1999] The Times 6 May), the court considered the meaning of s. 259 of the Public Health Act 1936 which provides as a nuisance "any pond, ditch, gutter, or watercourse which is so foul or in such a state as to be prejudicial to health or a nuisance". This section of the Public Health Act is one of those specifically listed in s. 79 of the EPA Part III that falls under the remit of "any other matter declared by any enactment to be a statutory nuisance" (see Appendix 4 - Definitions of Terminology). The High Court concluded that in the context of public health legislation 'watercourse' did not include rivers or estuaries and the decision to issue an abatement notice by the Port Authority was quashed. In addition, rulings were made regarding the situations in which consultation procedures should be adhered to.

The abatement notice should be easily understood by the recipient, and make clear what is required to abate the nuisance. In Network Housing Association Ltd v Westminster City Council (1995) 27 HLR 189, an abatement notice was served on a housing association requiring them to carry out alterations to reduce noise levels for their tenants. However,
the notice was found to be insufficient in detailing what works were required and was therefore quashed by the courts.

The notice is usually served on the person responsible for the nuisance i.e. the person "to whose act, default or sufferance the nuisance is attributable" (s. 79(7)). This wide definition can include, for example, a local authority or a landlord who has allowed a tenant to carry out certain activities. Exceptions to the definition include:

- when the nuisance arises from structural defects found on premises, in which case the notice is served on the owner;
- in cases where the person responsible for the nuisance cannot be found or the nuisance has yet to occur, then the notice is served on the owner or occupier of the premises (s.80(2)).

When more than one person is responsible for a statutory nuisance, then each person is liable, even if their separate actions alone would not constitute a nuisance (s. 81(1)).

S. 80 has been amended by the Noise and Statutory Nuisance Act 1993 s. 3. A new s. 80A has been inserted regarding abatement notices in respect of noise in the street. In the case of car alarms, or when the noise comes from an unattended vehicle, an abatement notice may be served on the person responsible if he can be found within 1 hour. If he cannot be found, the abatement notice can be attached to the vehicle. Where the notice is not complied with, the local authority can open the vehicle, using force if necessary, or
remove the vehicle to a secure place (EPA 1990 sch. 3 para. 2A). The police must be informed of these proposed steps before they are taken (sch. 3 para. 2A).

Non-compliance with an abatement notice leaves the authority with three further options:

- to abate the nuisance;
- to institute summary proceedings;
- to take proceedings in the High Court (injunctions).

These methods of enforcement are discussed below.

4.3.4.3 Powers of Intervention and Recovery of Costs

Where non-compliance with an abatement notice has occurred, the local authority has the power to abate the nuisance and do whatever may be necessary in execution of the notice (s. 81(3)). Any expenses reasonably incurred by the authority in abating the nuisance or preventing its recurrence can be recovered from the person responsible for the nuisance (s.81(4)).

S. 81A and 81B inserted by the Noise and Statutory Nuisance Act 1993 s. 10, fills the gap previously provided for by the Public Health Act 1936, but which was not previously covered by the EPA 1990. This relates to expenses involved in dealing with statutory nuisances, which can now be recovered as a charge on premises.
s. 81(a) of the EPA, inserted by the Noise and Statutory Nuisance Act enables a local authority serving a notice to recover costs, to make a charge on premises owned by the person in default.

4.3.4.4 Powers of Entry, Examination, Investigation and Seizure

Any person authorised by a local authority may enter premises at any reasonable time to ascertain the existence of a statutory nuisance, or to undertake any work or action authorised or required by Part III of the EPA (sch. 3). Twenty four hours notice of intended entry must be given to the occupier of residential premises, except in cases of emergency, i.e. under circumstances which are likely to endanger life or health (sch. 3 para. 2(3)).

Under certain conditions, a warrant may be granted from a justice of the peace to obtain entry, by force if necessary. These conditions are:

- refusal of admission to any premises;
- where refusal of admission is expected;
- the premises are unoccupied or the occupier is temporarily absent;
- the case is one of emergency;
- an application for admission would defeat the object of entry (sch. 3 para. 2(3)).
There must be reasonable grounds for entry, which should be submitted to the justice in writing, in addition to any other relevant information.

An authorised person who has entered any premises may take with him other persons or necessary equipment. Inspections, measurements and tests may then be carried out on the premises and samples or articles may be taken away (sch. 3 para 2(4)).

4.3.4.5 Prosecution and Injunction

Under s. 80(4) it is an offence for a person to contravene, or fail to comply with, any requirement or prohibition imposed by an abatement notice, without a reasonable excuse. In the case of industrial, trade or business premises, a person committing such an offence is liable on summary conviction to a fine not exceeding £20,000. In other cases, the person is liable on summary conviction to a fine not exceeding level 5 on the standard scale (£5,000). Additionally, if the nuisance continues, a further fine for each day of the continuing nuisance can be imposed not exceeding one tenth of this level (s.80(5)). A fine at this level may also be imposed for contravention of an abatement order issued directly from a magistrates' court following action by an aggrieved individual (see 4.3.4.6 below).

It is also an offence for a person to wilfully obstruct an inspector during the entrance of premises, site inspections, the taking of samples, etc. (sch. 3 para 3(1)). Such a person is liable on summary conviction to a fine not exceeding level 3 on the standard scale (£1,000).
As with the EPA Part I, injunctions may also be sought through the courts. In cases where a local authority is of the opinion that proceedings in a magistrates' court would provide an inadequate remedy (in terms of gravity or speed), proceedings may be taken in the High Court to secure the abatement of the nuisance (s. 81(5)). This would normally be done by seeking an injunction. The right to take action in the High Court can be used after an abatement notice has been served, but prior to the prosecution for contravention, in order to rapidly secure the abatement of the nuisance. However, it is not necessary for a local authority to have first exhausted procedures in the magistrates' court before an injunction can be sought. They do need to be satisfied, however, that the statutory nuisance provisions relating to other forms of enforcement would provide an "inadequate remedy" before resorting to the High Court. Considering that the High Court would provide a more convenient and satisfactory settlement is not the correct legal test and such action would therefore be disallowed (Vale of White Horse District Council v DC and RJ Allen (1997) 264 ENDS Report 43). Injunctions are a discretionary remedy and will only be granted in cases where the duration or gravity of the nuisance warrants such action.

In City of London Corp. v Bovis Construction Ltd [1992] All ER 3 697, the local council issued a writ for an injunction under s.222 of the Local Government Act 1972 to restrain the contractors from causing a noise nuisance outside permitted hours. An interlocutory injunction was granted after the judge decided that nearby residents had been caused the greatest possible inconvenience by the noise at night and at the weekends. The defendants
appealed on the grounds that it was not established that they had committed an offence. The appeal was dismissed because the court's discretion to grant an injunction relied upon the likelihood that the defendant's operations would continue unless effectively restrained by the law. It was held that nothing short of an injunction would produce this outcome, considering that serving a notice restricting hours of work and the threat of prosecution by the local authority had had no effect.

When an injunction has been granted, but not adhered to by the defendant, then a prison sentence may result. This has in fact occurred with several cases relating to noise nuisance. One example involved an injunction requiring an individual to play his stereo at a reduced volume so as not to disturb his neighbours. The music continued at a deafening level, resulting in the defendant being sentenced to six jail sentences of 56 days to run concurrently (ELB 1993 4(8): 95).

4.3.4.6 Action by Aggrieved Individuals

An individual aggrieved by the existence of a statutory nuisance can issue a complaint directly to the magistrates' court (s. 82). This provision is useful when the local authority has limited resources and time to deal with statutory nuisances, and provides a more affordable and time effective course of action than private proceedings. However, the nuisance must exist at the time of complaint as there is no provision to take such action for potential nuisances.
If the magistrates' court is satisfied that a nuisance does exist, or that an abated nuisance is likely to recur on the same premises, the court has a duty to issue an abatement notice that:

- requires the defendant to abate the nuisance within a specified time, and/or
- prohibits the recurrence of the nuisance (s.82(2)).

A fine not exceeding £5,000 may also be imposed. In certain cases, premises may be deemed as unfit for human habitation by the court (s.82(3)). The abatement notice can prohibit habitation in such premises until the court is satisfied they are rendered fit for such purposes.

Although no provision exists in the EPA statutory nuisance legislation, magistrates are able to (in addition to or instead of a fine) order the offender to pay up to £5,000 compensation to the victim under the Powers of Criminal Courts Act 1973. The compensation, however, can only relate to a limited period of time as illustrated in R v Liverpool City Council ex parte Cooke (1996) 259 ENDS Report 36.

Prior to the initiation of proceedings, the aggrieved individual must give notice of his intentions to the person against whom the action will be brought. Not less than three days notice specifying the matter complained of must be given with respect to noise nuisance, and not less than 21 days for other nuisances (s.82(7)). The provision allows an opportunity for abatement to be undertaken without going to court. Recent case law has
made it clear that the notice of intention to bring proceedings should specify the matter complained of, but does not need to be excessively detailed in its content (*East Staffordshire Borough Council v Fairless* (1998) 286 ENDS Report 47). Furthermore, this remedy should not be undermined by over-legalistic technicalities regarding the exact address to which the notice must be served (*Hall v Kingston-upon-Hull City Council* (1999) 289 Ends Report 52).

When the person responsible for the nuisance, or the owner or occupier of the premises cannot be found, the magistrates' court can direct the local authority to execute works required by the abatement notice (s.82(13)). In cases where a nuisance existed at the date of making the complaint, but had ceased by the time of the hearing, then the defendant will be ordered to compensate the aggrieved individual for any expenses incurred in bringing the complaint (s.82(12)).

Costs can be awarded to the individual for expenses "properly incurred by him in the proceedings", including those brought about in establishing that the nuisance existed prior to bringing proceedings (see *Hollis v Dudley Metropolitan Borough Council* (1998) 278 ENDS Report 46 and *Taylor v Walsall and District Property and Investment Company* (1998) 278 ENDS Report 46).
4.3.5 Defences

Several defences may be used by defendants, including the defence of Best Practicable Means and 'reasonable excuse'. Details of these defences can be found in Appendix 4, in addition to proposed defences that have not been deemed acceptable in previous cases.

4.3.6 Appeals

The system for appeals against decisions made by local authorities was detailed in The Statutory Nuisance (Appeals) Regulations 1990 SI 1990/2276 and The Statutory Nuisance (Appeals) (Amendment) Regulations 1990 SI 1990/2483. These Regulations have since been revoked and replaced by the Statutory Nuisance (Appeals) Regulations 1995 SI 1995/2644. Pending the outcome of an appeal, an abatement notice may be suspended by the court. Further details can be found in Appendix 4.

4.3.7 Interaction with Other Legislation

See Appendix 4 for further information regarding the interaction of Part III of the EPA with Part I, and the Health and Safety at Work Act 1974. As previously mentioned, the provisions in the EPA Part III have been amended by the Noise and Statutory Nuisance Act 1993, with further measures for the control of night-time noise available through the Noise Act 1996. Details of these pieces of legislation can be found in Appendix 5.
4.3.8 Local Authorities and the Control of Statutory Nuisances


In the year 1990/1, domestic noise complaints were at a level of 2,264 per million of the population. The latest report by the CIEH published in 1998 show a rise in these complaints of 123% - up to a level of 5,051 per million of the population. However, after several years of annual increases at around 20%, the last report only places the annual increase from the previous year at 3%, which may indicated a levelling off of the figures.

Commercial and industrial noise complaints have also risen sharply, but not quite so dramatically as those relating to domestic noise. During 1990/1, they numbered 913 per million population, rising by 61% to 1,466 in 1996/7.
However, those noise cases that were confirmed remained a relatively small proportion (approximately a third) of those complained of. Comments were made that people often have unrealistic expectations of what is an acceptable noise level.

A large rise in the numbers of complaints relating to odour pollution (both industrial and agricultural) was also noted. Complaints rose from 433 per million of the population in 1990/1 to a peak of 852 in 1995/6, an increase of 97%. A subsequent drop of 15% was then noted from 1995/6 to 1996/7.

Of those local authorities that responded to the survey in 1996/7, a total of 6,040 notices were served and 490 prosecutions were taken (322 successful) for domestic noise offences. By far the greatest utilisation of enforcement measures was of informal methods, used in 51,492 of cases. Industrial and commercial noise nuisances attracted a proportionate number of the different types of sanctions, with over 1,500 notices served and over 100 prosecutions taken. Odour nuisances led to 79 notices being served and 15 prosecutions.

One of the major problems cited by many local authorities in the CIEH/IEHO reports was the lack of resources allocated to deal effectively with statutory nuisances, especially in the face of such a burgeoning problem.
4.4 The Water Resources Act 1991

4.4.1 Introduction

The Water Resources Act (WRA) came into force on 1/12/91, and extends to all of England and Wales. It covers areas such as water resource management, pollution control, fisheries regulation and navigation, although this research is only concerned with the pollution control provisions. The control of the pollution of water is covered in Part III of the Water Resources Act, reproducing the provisions set out in the Water Act 1989. Prior to the introduction of the 1989 Act, water pollution was covered by the Control of Pollution Act 1974.

The legislation relating to water pollution was changed significantly by the Water Act 1989. The National Rivers Authority (NRA) was set up under the 1989 Act and replaced the old water authorities who regulated the system under the Control of Pollution Act 1974 (COPA). The NRA has since been replaced by the Environment Agency. Water supply and sewerage services were also privatised under the Water Act 1989.

In 1991, Parliament passed five Acts to consolidate various legislative provisions relating to all aspects of the water industry and protection of water resources. The main Acts were the WRA 1991 and the Water Industry Act (WIA) 1991. Provisions in the WIA 1991 relate to water supply and sewerage services, and are beyond the scope of this text. The Environment Act (EA) 1995 served to transfer the functions of the NRA to the
Environment Agency, resulting in the demise of the NRA. Certain regulatory provisions were slightly changed by the EA, and these will be discussed later in this chapter.

Water pollution can occur from three main sources:

- from a specified discharge outlet such as a pipe;
- from diffuse sources such as run-off or percolation from industrial areas or agricultural land;
- accidental spillages.

The WRA 1991 was formulated to control all the above types of pollution, including a system of consents to discharge effluent issued by the regulatory authority.

A number of significant changes were incorporated into the Water Act 1989. These include:

- water quality objectives and targets to achieve these objectives taking statutory form (s.104-106);
- the power to make charges for consents by the regulatory authority (Sch. 12);
- conditions set by the regulatory authority in discharge consents can include process requirements and require pre-treatment of effluent (Sch. 12);
- the ability to establish nitrate sensitive areas (s.122);
- provisions to control diffuse as well as point sources of pollution;
an emphasis on precautionary measures (s.110);

more specific and strengthened provisions for the creation of water protection zones (s.111).

4.4.2 Functions and Duties of the NRA

Between 1989 and April 1996, during the time empirical research for this thesis was carried out, the NRA was the main regulatory body responsible for controlling water pollution. Certain discharges to water from the most polluting processes were controlled by HMIP under the IPC regime (see section 4.2). The duties and responsibilities of both these regulatory agencies were transferred to the Environment Agency on 1/4/96. As empirical research was undertaken within the NRA, it is essential to consider its role in environmental protection.

The NRA, a body corporate unlike HMIP which was part of the Department of the Environment, had a number of responsibilities laid down in s. 2 of the WRA 1991, including:

- water resources (Part II of the WRA 1991);
- water pollution (Part III of the WRA 1991);
- flood defence and land drainage (Part IV and other enactments);
- fisheries (Part V and other enactments);
functions of the navigation authority, harbour authority or conservancy authority (transferred by Part III of the WA 1989).

The NRA also had a general duty under s. 16 to:

- promote the conservation and enhancement of the natural beauty and amenity of inland and coastal waters and their surrounding land,
- promote the conservation of flora and fauna dependant on the aquatic environment, and
- promote the use of such waters and land for recreational purposes.

For a more detailed discussion of the NRA's structure, functions and enforcement policy see Chapter 5.

4.4.3 Functions and Duties of the Environment Agency

By virtue of s. 2 of the Environment Act 1996, the functions of the NRA under the WRA 1991 were transferred to the Environment Agency. Control of the IPC system was also transferred to the Environment Agency from HMIP, thus giving the Agency overall control of water resources and water pollution. The Agency's general duties relating to the promotion of water conservation, the conservation of flora and fauna and recreational use are covered in s. 6 of the EA 1996.
For a more detailed discussion of the Environment Agency's structure, functions and enforcement policy see Chapter 5.

4.4.4 The Meaning of 'Controlled Waters'

Pollution provisions under Part III of the Water Resources Act 1991 apply to 'controlled waters'. This basically covers all inland waters, lakes, rivers, streams and coastal waters. Marine pollution is regulated under other legislation. A full definition of what constitutes controlled waters can be found in Appendix 6.

The regulatory authority has a general duty to monitor the extent of pollution in controlled waters (s.84(2)), with particulars of its findings being placed on the public register maintained under s.190.

4.4.5 Water Quality Classification

Under s.82, the Secretary of State is able to classify controlled waters through regulations. Section 82(2) states that the criteria specified in the regulations in relation to classifications should consist of one or more of the following:

- the purposes for which the waters are suitable, in general terms;
• specific requirements concerning the substances (micro-organisms, natural or artificial substances, solids, liquids, gases or vapours) and their concentrations which should be present or absent in the water;

• specific requirements concerning other characteristics of the waters.

The classification of waters in such a manner forms the basis of the pollution control system and leads to the setting of water quality objectives for different bodies of water. Classification systems used in the past were not statutory and rendered the formal implementation of European legislation more difficult.

Classification of waters is left entirely up to the discretion of the Secretary of State. Not all waters must be classified, although classification is a prerequisite for establishing statutory water quality objectives (s.83(1)(a)) (see section 4.4.6 below). The criteria which may be applied to each classification is also very broad, ranging from general use of the water to specific concentrations of a particular substance. The first set of classifications made under the Water Act 1989 through the Surface Water (Classification) Regulations 1989 (SI 1989 No. 1148), related to the suitability of the abstraction of water for drinking purposes. These regulations served to translate into domestic law the mandatory quality levels for drinking water set out in Directive 75/440 on Surface Water for Drinking.

Revision of classifications may be carried out without any consultative procedures via subsequent regulations.
Prior to the statutory classification system, an alternative method of classifying water existed. This was introduced by the National Water Council (NWC) in the late 1970s, and has provided the principal means of monitoring water quality. Five broad classes of water quality exist within this system:

Good Quality (class 1a) - high quality water suitable for potable supply abstractions, high class fisheries and with a high amenity value;

Good Quality (class 1b) - water of less high quality than 1a, but suitable for substantially the same purposes;

Fair Quality (class 2) - waters suitable for potable supply after advanced treatment, supporting reasonable good course fisheries and of moderate amenity value;

Poor Quality (class 3) - waters that are polluted to an extent that fish are absent or only sporadically present, used for low grade industrial abstraction, considerable potential for further use if cleaned up;

Bad Quality (class 4) - waters that are grossly polluted and are likely to cause a nuisance.

4.4.6 Water Quality Objectives

Water Quality Objectives (WQOs) can be established at the discretion of the Secretary of State for bodies of water that have been classified under s.82. These objectives must be set "for the purpose of maintaining and improving the quality of controlled waters" (s.83(1)).
The process of setting and maintaining WQOs has begun by formulating classification systems under s.82 in order to comply with EU directives. The following Regulations have been introduced:

- The Surface Waters (Classification) Regulations 1989 SI 1989/1148 - classification of inland waters with respect to their suitability for drinking water.


- The Surface Waters (Fishlife) (Classification) Regulations 1997 SI 1997/1331 - the quality of fresh waters for supporting fish life.
• The Surface Waters (Shellfish) (Classification) Regulations 1997 SI 1997/1332 - the quality required for shellfish waters.

• The Surface Waters (Dangerous Substances) (Classification) Regulations 1997 SI 1997/2560 - classification with a view to reducing water pollution by dangerous substances.

• The Surface Waters (Dangerous Substances (Classification) Regulations 1998 SI 1998/389 - classification with a view to reducing water pollution by dangerous substances.

The criteria specified in Regulations made under s. 82 must consist of one or more of the following:

• classification according to the use of particular waters;
• specific requirements as to the substances and their concentrations that must be present or absent from the water;
• specific requirements relating to other characteristics of the water.

Once a range of classifications like those above have been established under s. 82, WQOs can be established under s. 83 so that the quality of a particular classification of water can be maintained and improved. The Secretary of State and the regulatory authority have a
duty to achieve these statutory WQOs at all times, "so far as it is practicable" (s.84(1)), by setting appropriate consent conditions and enforcing regulations. A review of water quality objectives may be carried out by the Secretary of State after a period of 5 years.

In spite of the NRA recommending numerous rivers for the application of WQOs, the Government have been reluctant to apply the scheme. In late 1996, the Environment Agency finalised proposals for Statutory WQOs in 8 pilot river catchments (ENDS 1996 262: 37-38). It is clear that full implementation of a system of statutory WQOs will take many years, with work still to be carried out on the development of precise classification criteria.

4.4.7 Water Protection Zones

The WRA 1991 placed substantial emphasis on the prevention of water pollution. Preventative measures that may currently be utilised include the designation of water protection zones, nitrate sensitive areas and nitrate vulnerable zones, codes of practice and the ability of the Secretary of State to make other precautionary regulations. These measures are discussed in the following sections.

The provision for creating water protection zones (WPZs) is set out in s.93. A WPZ may be created by an order made at the discretion of the Secretary of State (after consultation with the Minister of Agriculture, Fisheries and Food). The order sets out conditions restricting or prohibiting certain activities within that area, with a view to preventing or
controlling noxious, poisonous or polluting matter from entering controlled waters. Nitrate from agricultural sources is excluded, with control here being exercised by the designation of Nitrate Sensitive Areas (see 4.4.8 below). The order may confer power on the regulatory authority to determine which activities are restricted or prohibited (s.93(4)(a)). Different provisions can be made for different cases in respect of persons, circumstances or locality. Contravention of an order is an offence.

WPZs are potentially extremely useful for protecting sensitive areas, controlling non-point sources of pollution and applying restrictions for the protection of groundwater. However, as with WQOs, their utilisation has been very limited. In fact, the first WPZ was only designated in March 1999 (under the Water Protection Zones (River Dee Catchment) Designation Order 1999 SI 1999/915) - a full quarter of a century after the legal powers to do so were provided by Parliament (these powers were available under COPA 1974 prior to the introduction of the WRA 1991) (ENDS 1999 290: 11). Section 31 of COPA 1974 relating to the ability to designate WPZs was not brought into force until January 1985 because of the Government's concern about adding further costs to industry. In 1987, the authority responsible for regulating water pollution in the River Dee catchment area (the then Welsh Water Authority), applied for designation of this area as a WPZ. In 1994, the NRA made a fresh application under s. 93 of the WRA 1991. The proposals were 'put on ice' by the government, because of priorities in privatising the water industry and the drive for deregulation respectively, until a public enquiry was held in 1995. The results of the enquiry were reported to the Secretary of State where further proceedings stagnated until designation of the zone this year.
4.4.8 Nitrate Sensitive Areas and Nitrate Vulnerable Zones

The pollution of water from agricultural sources has been regarded as a special problem for a number of years (Howarth, 1992; Howarth and Rodgers, 1993; Hawke and Kovaleva, 1994; Young et al., 1995), especially in the light of increased intensification of farming practices. This was also recognised by the NRA, prompting them to publish reports suggesting how to address the situation (The Influence of Agriculture on the Quality of Natural Waters in England and Wales, 1992; River Pollution from Farms in England, 1995). Many of the controls relating to nitrate pollution have been driven by the Directive on the Protection of Water Against Pollution Caused by Nitrates from Agricultural Sources (91/676/EEC). The designation of Nitrate Sensitive Areas and Nitrate Vulnerable Zones can be used to limit nitrate pollution from fertilisers and animal waste. Furthermore, codes of good agricultural practice must be established under the Directive (see 4.4.9 below).

Nitrate Sensitive Areas (NSAs) can be designated under the WRA 1991 by the Secretary of State (in England and Wales) or the Minister of Agriculture, Fisheries and Food (in England only) (s.94), and are made in accordance with Schedule 12.

The purpose of such a designation is to prevent or control nitrate from agricultural sources from entering controlled waters. Requirements, prohibitions or restrictions relating to agricultural nitrate usage can be set out in orders designating these areas.
Different provisions can apply to different areas and different cases within any area, in relation to different people or circumstances (s.94(5)). Contravention of these conditions is an offence.

The regulatory authority may only apply for the designation of NSAs when:

- pollution (defined as 50 mg/l nitrate or above by Directive 80/778/EEC on drinking water) is caused or likely to be caused by the entry of nitrate into controlled waters as a result of agricultural activities;
- other provisions already in force are not sufficient to deal with the problem (Sch. 12 para. 2).

The purpose of designating NSAs is basically to control non-point sources of nitrate pollution i.e. the leaching of nitrates from agricultural land. This is especially important in controlling the level of nitrate that ends up in drinking water. NSAs differ from WPZs in three ways:

1. Positive action may be required from farmers in addition to restrictions and prohibitions. For example, the construction of new facilities for containing silage.
2. Financial compensation is available for the farmer.
3. MAFF is involved in the process of designation.

There are basically three different types of NSAs:
1. Voluntary areas with compensation available (s.95(2) & 95(3)).

2. Mandatory areas with compensation available (s.94(3)(b)).

3. Mandatory areas with no compensation (s.94(3)(a) & 94(4)(a)).

The first 10 trial areas were designated in 1990 in the Nitrate Sensitive Areas (Designation) Order 1990 SI 1990/1013, and favourable results concerning the level of nitrate present in groundwater samples were obtained after a relatively short period of time (ENDS 1995 242: 11). The Government placed great emphasis on the voluntary nature of the initial designations, although more coercive measures were available to them if the scheme was not generally accepted. In reality, many farmers voluntarily opted to participate in the scheme (approximately 87% of the agricultural land in the 10 areas - Bell, 1997). The scheme has since been expanded by the addition of a further 22 areas and additional regulations have been passed to incorporate the new sites (Nitrate Sensitive Areas Regulations 1994 SI 1994/1729, amended by SI 1995/1708, SI 1995/2095, SI 1996/3105, SI 1997/990, SI 1998/79, and SI 1998/2138). Farmers must give undertakings as to their farming operations for 5 years in return for payments of specified amounts per hectare per year.

Under Directive 91/676, Member States were also required to designate Nitrate Vulnerable Zones (NVZs) where inland waters or groundwaters are likely to contain more than 50 mg/l nitrate if protective action is not taken. Regulations (The Protection of Water Against Agriculture and Nitrate Pollution (England and Wales) Regulations 1996
Sl 1996/888) have been passed by the Government to implement this part of the Directive and designate NVZs. Action programmes containing restrictions on the use of nitrates, etc. are covered in the Action Programme for Nitrate Vulnerable Zones (England and Wales) Regulations 1998 SI 1998/1202, which came into force on the 19th December 1998.

There are slight differences between NSAs and NVZs. Within NSAs, there is the power to require farmers to take positive action (such as planting crop cover in the autumn), whereas within NVZs only restrictions or prohibitions are possible. In addition, participation in the NSA scheme has so far been on a voluntary basis (the option to use mandatory controls has not yet been utilised by the Government), whilst NVZ rules are mandatory. Furthermore, compensation has been available to those involved in the NSA scheme.

To date, 69 NVZs have been designated - 1 in Scotland and 68 in England and Wales. They include restrictions on the amount and timing of manure applications and require farmers to keep records of crops grown and fertiliser applications. However, the number of designations is set to rise dramatically following a ruling by the European Commission. The Commission has stated that all inland waters and groundwaters should be covered by the 50 mg/l limit for designation, rather than those just used for drinking water abstraction as is currently the case. It has been estimated by the House of Lords that designations will encompass entire river catchments covering "the great bulk of the UK arable production area" (ENDS 1998 287: 4-5).
In a recent challenge by farmers relating to the designation of NVZs (*R v Secretary of State for the Environment and Ministry of Agriculture, Fisheries and Food ex parte Standley and Others* Case C-293/97, ECJ, 29 April 1999), the ECJ has upheld the UK Government's approach in implementing the Directive. Several points of contention were raised by the farmers, including:

1. That identification of waters for the purpose of the Directive should take into account the source of nitrate in water, and designation should only be realised for those waters having a concentration of 50 mg/l nitrate or above that can be wholly attributed to agricultural activities. The ECJ disagreed, stating that this threshold level applied to waters *per se*, regardless of the source of the nitrate.

2. Secondly, more fundamental questions relating to general principles set out in the EC Treaty were raised. The farmers contended that the Directive infringed the principle of proportionality by them having to bear the responsibility for ensuring the 50 mg/l threshold was not breached, even when farming activities accounted for just a proportion of the nitrate present. Furthermore, the Directive was alleged to offend the 'polluter pays principle' under Article 130(2) of the Treaty, as farmers would have to bear the costs of reducing nitrate levels whilst other contributors to the problem would not. Thirdly, the Directive was said to offend the principle that pollution should be rectified at source by ignoring the part played by other industrial sectors and transport. Finally, the farmers maintained their property rights were being infringed by them.
having to meet the entire cost of dealing with the problem. In response to the first three points raised, the ECJ felt that the Directive was sufficiently flexible to overcome any potential problems. Farmers would not have to take on burdens to eliminate nitrate pollution to which they had not contributed. Furthermore, on the final point, a right to property is not an absolute right and can be restricted on the grounds of the protection of public health, as is the case in the control of nitrate in water. The validity of the Directive was therefore upheld.

4.4.9 Codes of Practice

Codes of Practice can be issued by the Secretary of State, Minister of Agriculture, Fisheries and Food or another party (s. 97), and give practical guidance for the avoidance of water pollution by agricultural activities. Compliance with a code is no longer a defence for a water pollution offence, as was the case under COPA 1974. Additionally, non-compliance is not a criminal or civil offence.

Codes have been issued for the protection of water, the safe use of pesticides, use of sewage sludge and the protection of the air. They were initially introduced in 1991, and revised by MAFF in 1998.
4.4.10 Other Precautionary Regulations

A general provision under s.92 gives the Secretary of State the power to make regulations concerning the prohibition of a person from having custody or control of noxious or polluting matter, unless certain precautions are taken in order to prevent its entry into controlled waters.

The authority can determine under which circumstances such a situation would arise, and the precautions which must be taken. This is communicated to the person in question by a notice. Appeals against such notices can be made to the Secretary of State.

Currently, only one set of regulations have been made under this section and they are the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 SI 1991/324 (amended by the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Amendment) Regulations 1996 SI 1996/2004 and SI 1997/547) . These regulations introduce precautionary controls over the operation and construction of silage, slurry and agricultural fuel oil stores. These operations involve substances which are potentially extremely polluting. The regulations have proved very useful in preventing pollution from agricultural sources, with a reported decline in serious pollution incidents of 68% between 1991-95 (ENDS 1996 256: 20-22).

Although regulations controlling the storage of industrial oil and chemicals have been promised by the Government since 1984 (ENDS 1996 256: 20-22), they have yet to be
4.4.11 Consents

The process of regulating water pollution under the Water Resources Act 1991 is governed by a system of consents that serves to restrict the quantity and quality of effluent entering controlled waters.

A consent is required from the authority for:

- any discharge of trade or sewage effluent into controlled waters;
- any discharge of trade or sewage effluent through a pipe from land into the sea outside the limits of controlled waters;
- any discharge where a prohibition is in force.

It is an offence to 'cause or knowingly permit' (see later) any of the above discharges without a consent. Furthermore, breaching the conditions of a consent is also an offence on its own, with no need to show that pollution occurred as a result of the breach.

The consent scheme is thus used to control specific, identifiable discharges from a known location, i.e. through a pipe. Other more diffuse sources of pollution, e.g. agricultural run-
off or accidental spillages, that could not easily be controlled by the consent system are subject to the general pollution offence under s. 85.

As with the process of granting authorisations under the EPA Part I, there are specific procedures for the application, granting, revocation and modification of consents set out in Schedule 10 to the WRA 1991. The Environment Act amended Schedule 10 entirely, introducing new provisions that are very similar to those concerning applications for IPC authorisations, and thus ensure a greater degree of uniformity between the various control measures. The new Schedule 10 also makes greater provision for the issuing of Regulations by the Secretary of State, and greater scope for issuing directions to the Environment Agency with regard to the applications procedure.

Details of these procedures, in addition to information relating to fees charged and the process of appealing against decisions can be found in Appendix 6.

4.4.12 Enforcement Action

The following sections deal with the variety of enforcement measures available to the regulators as provided for in the WRA 1991. The extent of their utilisation in the past is discussed in sections 4.4.17 and 4.4.18.
4.4.12.1 Variation and Revocation of Consents

The regulatory authority cannot impede or prevent a discharge which is fully covered by a consent, even if it has caused or is likely to cause pollution (s. 161(2). Instead, the consent can be varied or revoked.

The NRA had a duty to review consents to ensure that specific conditions met requirements specified in EC Directives. After a review, the consent could be revoked, the conditions varied or new conditions imposed. The new Schedule 10 states that instead of the Environment Agency being bound by this duty, it is now a power that may be used at their discretion.

Prior to amendments under the EA 1995, a minimum of two years from the initial granting of a consent had to have passed before the conditions could be varied. This time period has now been increased to four years, or sooner only with the agreement of the consent holder. There is no provision to vary the consent before this period of time has elapsed, even when the discharger has breached his consent, or to take account of changing situations. Exceptionally, the Secretary of State may direct a modification within the initial four-year period (para. 9 sch. 10). When no discharge has been made for a period of 12 months, the consent can be revoked.

Appeals to the Secretary of State can be made against the decision to vary or revoke a consent (see Appendix 6). Schedule 22 to the EA 1995 states that the appeal suspends the
operation of a notice, unless the authority includes a statement that no suspension is to take place for specific reasons.

4.4.12.2 Enforcement Notices

Under the new s. 90B of the WRA 1991 inserted by Sch. 22 to the EA 1995, the authority is able to use enforcement notices to control water pollution. This power was not available for use by the old NRA. The Environment Agency is able to serve an enforcement notice on the holder of:

- a discharge consent,
- a consent to deposit mine refuse, or
- a consent relating to removal of river bed material or depositing vegetation in water.

The enforcement notice can be served when the Agency is of the opinion that consent conditions are being breached or are likely to be breached in the future. They are therefore very useful as a preventative measure.

The notice must:

- state the Agency's opinion as to the anticipated or actual breach;
- specify the matters that are or will breach the condition;
- set out the steps needed to stop or prevent the breach;
specify the period in which these steps must be taken.

Non-compliance with an enforcement notice is an offence. Appeals can be made by the recipient of a notice to the Secretary of State within 21 days of receiving the notice. However, unlike variation or revocation notices, any appeal does not have the effect of suspending the notice.

4.4.12.3 Prohibition notices

The authority may serve a notice prohibiting a specific discharge (s.86(1)). Prohibitions in such cases may only come into force 3 months after serving the notice, except where the authority is satisfied there is an emergency. During these 3 months an application for a discharge consent may be made, and the prohibition will be suspended until the outcome of the application is known (s.86(6)). S. 86 serves to ensure that the broadly worded offences under s. 85(2) and 85(4) are effectively focused and applied to discharges requiring the most control. Prohibitions are aimed at preventing activities that may lead to indirect discharges.

4.4.12.4 Powers of Entry, Examination and Seizure

Powers of inspection and entry are now contained within s. 108 of the EA 1995. This section replaced the old s. 169 of the WRA 1991, relating to powers of entry by the NRA and the power to carry out inspections, measurements and tests. No notice is required to
enter non-residential premises at any reasonable time, or in an emergency at any time.

The powers can be used to:

- determine whether legislation has been complied with;
- enable the authority to exercise its duties and functions;
- make examinations and investigations;
- carry out inspections, measurements and tests;
- take photographs or make recordings;
- remove samples of water, effluent, land or articles;
- carry out experimental borings;
- install and operate monitoring equipment.

Forcible entry may be authorised by a justice of the peace if:

- entry has been refused;
- the premises are unoccupied;
- the case is urgent;
- an application for admission to the premises would defeat the object of entry.

Intentional obstruction of an authorised person gaining entry to premises is an offence. On summary conviction, a maximum fine of £1,000 can be imposed. It is also an offence to impersonate a person who has been authorised entry. The maximum fine on summary conviction is £2,500.
S. 209 of the WRA 1991 relating to sampling procedures created a number of problems for the regulatory authority until its repeal by s. 111 of the EA 1995. Under s. 209, the results of the analysis of a sample taken by, or on behalf of, the NRA was not admissible in legal proceedings unless it was a 'legal' or tripartite sample. The occupier of the land had to be notified of the intention to have the sample analysed. The sample had to be divided into three parts, with one sent for analysis, one given to the occupier and once retained for future comparison. A variety of practical problems were encountered with these regulations, including cost, timing and the difficulties of applying the correct procedure to samples taken by automated devices. Several cases tested the meaning of s. 209, including:

1. National Rivers Authority v Harcros Timber and Building Supplies Ltd [1993]Env LR 172. In this case, the Divisional Court ruled that the requirement of a legal sample applied to both samples of effluent and samples of the receiving waters.

2. CPC (UK) Ltd v National Rivers Authority [1995] Env LR 131. The Court of Appeal decided that readings from a continuous water monitor could not be considered as a 'sample' for the purposes of s. 209.

3. Attorney-General's Reference (No. 2 of 1994) [1995] Env LR 143. The Court of Appeal determined that notification of the occupier did not necessarily have to precede
the taking of a sample or its division. Furthermore, division of the sample into three parts could be carried out at, or proximate to, the site where it was taken.

S. 111 of the EA 1995 now simply states that information provided or obtained as a result of a licence condition is admissible as evidence, including samples provided by automatic measuring devices. For a more detailed discussion of monitoring and sampling see Howarth (1997).

4.4.12.5 Power to Obtain Information

The regulatory authority, Secretary of State or Minister of Agriculture, Fisheries and Food can serve a notice on anyone requesting them to furnish information so they can carry out their water pollution functions (s.202(2)). The information must be relinquished within the time, and in the form and manner specified in the notice. Failure to do so without reasonable excuse is an offence and on summary conviction a maximum fine of £5,000 can be imposed. The time limit available to bring a prosecution in cases relating to access to information is extended from the usual 6 to 12 months.

4.4.12.6 Remedial Powers

The regulatory authority has very wide powers to carry out remedial action and recover costs from the polluter, or order the person responsible for the pollution to carry out remedial action at his own expense.
Under s. 161 of the WRA 1991, when it appears likely to the authority that poisonous, noxious or polluting matter or solid waste will enter, is already present, or has been present in controlled waters, it can carry out certain works to:

- investigate the source of the pollution and identify the polluter;
- prevent the matter entering;
- remove the matter;
- remedy the pollution caused;
- restore the waters to their former state (including flora and fauna) as far as it is reasonably practicable to do so (s.161).

These powers in this format were available to the NRA. Expenses reasonably incurred in carrying out these steps were able to be recovered from the polluter under the legislation. However, in reality, difficulties were often experienced in recovering these expenses (see below). As a result, the legislation was changed in order to place the emphasis for undertaking remedial action on the polluters themselves.

S. 161 still remains in the legislation. However, under new provisions introduced by the Anti-Pollution Works Regulations 1999 SI 1999/1006 (on 30th April 1999) and the EA 1995 (s. 161A-C), the Environment Agency can only carry out remedial work when:

- it is necessary to carry out the works 'forthwith'; or
• when the person responsible for the pollution cannot be found.

Otherwise, a works notice will be served on the person responsible for the pollution. The works notice details work that needs to be carried out by the responsible person in order to prevent an incident, or to clean-up an area after an incident. Failure to comply with the notice is an offence. After a person has failed to comply with the works notice, the Agency can then exercise its ability to carry out the works in default. Costs and expenses reasonably incurred under these default powers may be recovered from the responsible person. In addition, the Agency is now able to recover costs incurred in investigating a pollution incident. However, only the costs that directly relate to the pollution incident, and not those incurred for any improvements to the area, may be recovered (see Bruton v Clarke [1994] Water Law 145).

There is a right of appeal to the Secretary of State regarding the serving of a works notice, which must be undertaken within 21 days of receipt of the notice. Notices, however, are not suspended pending the outcome of an appeal.

Prior to the amendments introduced by the EA 1995, the emphasis was on the regulatory authority undertaking remedial action and then recovering expenses from the person who caused or knowingly permitted the pollution. The problem with this situation was that the authority had to first undertake the work before recovering costs, leading to large monetary outlay with uncertainty over cost recovery. In the NRA's report River Pollution from Farms in England (1995), it is stated that cost recovery was realised in only 42% of
cases where some form of remedial action had been carried out. The new provisions place
the emphasis on the polluter undertaking remedial action themselves, thus negating
previous difficulties. The prospect of large cleanup expenses in many cases can serve as a
greater deterrent for pollution than prosecution.

The Agency is now only able to carry out works where no responsible person can be
found, or where the works need to be carried out 'forthwith'. This raises the question of
what will occur when immediate action is not needed and the responsible person has been
located but is unable to pay for works to be carried out. The Agency will probably have to
serve the works notice, wait for a failure to comply with the notice, and then exercise its
ability to carry out the works in default.

4.4.12.7 Prosecution and Injunction

Enforcement by prosecution and injunction is available (see later in this chapter for a
discussion of injunction as a method of enforcement). For most offences under the WRA
1991, the penalties are the same as those for contravention of IPC regulations. If found
guilty on summary conviction, a maximum fine of £20,000 or a 3 months term of
imprisonment or both can result. On conviction on indictment the maximum penalty is 2
years imprisonment, or a fine, or both (s.85(6)). Contravention of s.90 (disturbance of
deposits and vegetation in rivers) is also an offence. On summary conviction, the
maximum fine available is £2,500. The time limit for bringing summary proceedings
under this Part of the Act is extended from the usual 6 months to 12 months (s.101).
4.4.13 Offences

A number of pollution offences exist and are covered in Chapter II of this part of the Act.

Under s.85 it is an offence to 'cause or knowingly permit':

- any poisonous, noxious, polluting matter or solid waste matter to enter controlled waters (s.85(1));
- any matter, other than trade or sewage effluent (i.e. discharges of rainwater or domestic run-off), to enter controlled waters from a drain or sewer only if prohibited to do so (s.85(2)). Trade effluent is effluent from trade premises (including agriculture, fish farming and premises used for research) excluding domestic sewage or surface water (s. 221). Sewage effluent must come from a sewage works (excluding surface water) (s. 221);
- any trade or sewage effluent to be discharged into controlled waters or via a pipe outside the seaward limits of controlled waters (s.85(3));
- any trade or sewage effluent covered by a prohibition under s.86 (s.85(4));
- any matter to enter inland freshwaters which impedes the flow of the water and thus causes a substantial aggravation of pollution due to other causes. Liability applies even where partial blame can be attached to the offender (s.85(5)).
Certain defences are available for these offences, and mainly cover the fact that a person had a consent to discharge under the WRA 1991, or another form of a licence under other relevant legislative provisions, including:

- an authorisation under EPA 1990;
- a waste management or disposal licence under Part II of the EPA 1990;
- a licence under Part II of the Food and Environmental Protection Act 1985.

Other defences are available - see Appendix 6 for further details.

Prohibitions under s.86 serve to restrict the broad offences under s.85(2) and s.85(4) above to those that require the most control. Such prohibitions cover effluent:

- containing a prescribed substance;
- deriving from a prescribed process;
- deriving from a process involving the use of prescribed substances (s.86(2)).

The Trade Effluents (Prescribed Processes and Substances) Regulations 1989 SI 1989 No. 1156 amended by the Trade Effluents (Prescribed Processes and Substances) (Amendment) Regulations 1990 SI 1990 No. 1629 contains a list of prescribed processes and substances, and these are detailed in Appendix 7.
In addition, the breach of consent conditions is also an offence (s. 85(6)). There is no requirement to show that the receiving waters have actually been polluted. The offence consists of discharging without a consent or in breach of a consent. In *Severn Trent River Authority v Express Food Group* [1989] 153 JP 126, it was found that only one offence was committed for each discharge that breached the conditions of a consent, despite the fact that several conditions attached to the consent had been breached at once.

A specific offence concerned with disturbances to deposits and vegetation in rivers is set out under s.90. Under this section, it is an offence to carry out the following activities without the consent of the regulatory authority:

- cause deposits created by a dam, weir or sluice in inland freshwaters to be carried away in suspension;
- cut or uproot a substantial amount of vegetation in inland freshwaters, or let a substantial amount of vegetation fall into such waters and fail to take all reasonable steps to remove it.

### 4.4.13.1 'Cause or Knowingly Permit'

The term 'cause or knowingly permit' has been interpreted in many cases. It is clear that there are two separate offences - one of 'causing' pollution and the other of 'knowingly permitting' pollution. The offence of 'causing' is one of strict liability, because it is not
necessary to prove that the defendant knowingly, intentionally or negligently caused the pollution (*Alphacell v Woodward* [1972] AC 824).

The *Alphacell* test case has been reaffirmed in many others, more recently in *National Rivers Authority v Yorkshire Waters Services Ltd* [1995] 1 AC 444. The House of Lords emphasised that causation was a question of fact in each case. The Lords stated that Yorkshire Water would have been found guilty of causing pollution in this case as it discharged a solvent into controlled waters. However, as the solvent had been discharged illegally into the sewers from an unidentified source, the water company was able to use the special defence in s. 87(2) (see Appendix 6 for details) and the conviction was quashed.

In *Attorney General's Reference (No. 1 of 1994)* [1995] 1 WLR 599, the Court of Appeal decided that where a sewerage system is running in an un-maintained state and a pollution incident occurs, then the sewerage undertaker is guilty of causing pollution. The active operation here was considered to be the actual running of the sewerage system, and the incident could not be attributed to an omission on the part of the sewerage undertaker (i.e. allowing it to fall into an un-maintained state). Furthermore, it was made clear that it is possible for more than one person to be guilty of causing just one pollution incident.

In *CPC (UK) Ltd v National Rivers Authority* [1995] Env LR 131, the operator of a factory was held to have caused polluting matter to enter controlled waters following the fracture of a pipe carrying cleaning fluid. This ruling took place despite the fact that the
fracture occurred as a result of defective repairs carried out some time before the current owners had bought the factory. The reasoning behind the ruling was that the current owners had caused the pollution because they were operating the site when the incident had taken place.

In *Empress Car Company (Abertilley) Ltd v National Rivers Authority* [1998] 2 WLR 228 HL, the ruling by the House of Lords served to clarify the situation regarding pollution caused by acts of vandalism or other third parties. Prior to the *Empress* case, where trespassers had intervened, they were found to be the cause of the pollution (see *Impress (Worcester) Ltd v Rees* [1971] 2 All ER 357; see also Hughes, 1995b). In *National Rivers Authority v Wright Engineering Co. Ltd* [1994] 4 All ER 281, vandals had interfered with an oil storage tank that had subsequently leaked into controlled waters. The defendants were found not guilty of causing the pollution, but it was accepted that the foreseeability of vandalism was a relevant factor to be taken into consideration. Therefore, in this ruling, the person responsible for creating the situation that allowed the third party to intervene was not convicted. In *Empress*, the company was convicted of causing pollution despite evidence to suggest that escape of the pollutant was due to the wrongful intervention of a third party. The ruling in *CPC (UK) Ltd v National Rivers Authority* was reaffirmed in this case, namely that a person can be convicted of causing pollution to enter controlled waters if he operates the plant or system which gives rise to that entry. The relevant question regarding intervention of third parties is whether this intervention is a normal or extraordinary event. Vandalism in the *Empress* case was considered to be a normal and familiar fact of life and the conviction was upheld. Furthermore, the House of
Lords also stated that rulings in previous cases that had tried to distinguish situations where the defendant had been passive rather than active were wrong (see for example *Wychavon District Council v National Rivers Authority* [1993] 2 All ER 440). It is therefore *not* necessary to establish there is a positive and deliberate act before a person may be convicted of causing polluting matter to enter controlled waters. Purely the act of operating a business where the incident takes place is sufficient to prove causality.

The decision in *Empress* was reaffirmed more recently in *Environment Agency v Brock plc* (1998) The Times, 26 March. In this case, a leak of tip leachate had occurred from a pipe through rubber seals that had inexplicably failed. The pipe and seals had been checked thoroughly before pumping had begun. The company was held to have caused polluting matter to enter controlled waters in spite of the latent defect in the pipe.

In the case of *National Rivers Authority v Alfred McAlpine Homes East Ltd* [1994] 4 All ER 286 it was held that companies can be vicariously liable for acts of its employees, regardless of their seniority in the company. Furthermore, companies that have delegated responsibilities to contractors are responsible for proper supervision of the activities of those contractors. In *R v Yorkshire Water Services Ltd* (1994) The Times 19 July, Yorkshire Water were held to have caused pollution after maintenance work by Scarborough Borough Council on the sewerage system resulted in a spillage of raw sewage from the storm overflow.
In cases where the defendant stands by without actively participating but with knowledge of the incident, a charge may be brought under the 'knowingly permit' aspect of the offence (differences between 'cause' and 'knowingly permit' were outlined in *Price v Cromack* [1975] 1 WLR 988, but this has since been overruled in the *Empress* case). Far fewer prosecutions have been brought under the 'knowingly permit' aspect of water pollution offences, resulting in a lacuna of case law on the subject.

However, in *Schulmans Incorporated Ltd v National Rivers Authority* (unreported, 3 December 1991 QBD), a prosecution was brought under the Salmon and Freshwater Fisheries Act 1975 for a spill of fuel oil which leaked into a nearby river via the drainage system. The court set out the elements of knowledge that would be required before a successful prosecution could be brought under the 'knowingly permit' aspect of an offence. These included that the defendant had knowledge of:

1. the spill;
2. that the oil had entered the drainage system;
3. that the drainage system discharged into the river;
4. that unless preventative action was taken the oil would enter the river.

For a more detailed discussion of the 'knowingly permit' aspect of water pollution offences see Wilkinson (1993).
4.4.13.2 'Poisonous, Noxious or Polluting'

The term 'poisonous, noxious or polluting matter' is not defined in the legislation. The main case law on the subject includes National Rivers Authority v Egger (UK) Ltd [1992] Env LR 130, where it was stated that it is not necessary to determine whether harm has been done before the offence can be established.

In R v Dovermoss Ltd [1995] Env LR 258, the Court of Appeal decided that the definition of polluting matter should be based upon the Oxford English Dictionary's definition, namely "to make physically impure, foul or filthy; to dirty, stain, taint, befoul". The court held that 'pollution' is "the sort of material which, if introduced into the water, reduces the quality of the water". The need to prove actual harm therefore does not exist, only whether the matter is capable of causing, or likely to cause, harm to the receiving waters.

4.4.14 Managerial Liability

In the same way that s. 157 of the EPA 1990 allows for managerial liability (see 4.2.10 for further details), s. 217 of the WRA 1991 extends liability for water pollution offences to corporate officials. The same constraints exist in s. 217 relating to the type of official that can be liable, and the necessity to prove consent, connivance or neglect.
4.4.15 Information Provision

The regulatory authority must adhere to regulations relating to the provision of information. These regulations include details of what must be placed on the public registers, the requirement to produce annual reports, etc. - see Appendix 6.

4.4.16 Interaction with Other Legislation

Certain provisions in the WRA 1991 interact with other legislation. See Appendix 6 for details.

4.4.17 The NRA and Regulation of Water Pollution

Under regulation by the NRA, an overall improvement in river quality was observed. In the final annual report from the NRA (Annual Report and Accounts 1995/6, 1996), it stated that a net upgrading in river quality of 27.6% from the period 1988-90 to 1993-95 had occurred (see table below). Furthermore, the quality of estuaries had also improved, with the length of 'good' and 'fair' stretches increasing by 1.7%.
In addition, a noticeable reduction in pollution incidents originating from farms was also observed. From 1985 to 1993, the proportion of farming pollution incidents dropped from 17% to 12% (River Pollution from Farms in England, NRA, 1995). This was attributed to improved educational strategies by the NRA relating to waste minimisation, and information provision regarding methods of reducing of waste disposal risks.

Table 4.3 Water Pollution Incidents 1991-1995

<table>
<thead>
<tr>
<th>Year</th>
<th>All Incidents</th>
<th>Substantiated Incidents</th>
<th>Category 1 Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>29,372</td>
<td>22,469</td>
<td>386</td>
</tr>
<tr>
<td>1992</td>
<td>31,673</td>
<td>23,331</td>
<td>388</td>
</tr>
<tr>
<td>1993</td>
<td>34,296</td>
<td>25,299</td>
<td>331</td>
</tr>
<tr>
<td>1994</td>
<td>35,291</td>
<td>25,415</td>
<td>229</td>
</tr>
<tr>
<td>1995</td>
<td>35,891</td>
<td>23,463</td>
<td>199</td>
</tr>
</tbody>
</table>

Although a greater total number of pollution incidents were reported in 1995 compared to 1994 (up 1.7%), the numbers of Category 1 incidents declined by 13% in the same period, and a total of 48% from 1991.

Prosecutions remained at a relatively high level throughout the NRA's reign. Information obtained from the NRA's yearly Annual Report, illustrates its utilisation of this enforcement measure - typically between 300 to over 500 prosecutions in each year (see Annual Report and Accounts 1991/2 to 1995/6 inclusive).

However, it must be made clear that although these numbers seem very high when compared to the numbers of prosecutions taken by HMIP (see section 4.2.14), a direct comparison of numbers alone is rather misleading. This is because of the disparity in the number of processes regulated by each regime. Comparison of prosecutions as a percentage of the number of processes regulated is more representative of the actual situation. Examining these statistics for both the NRA and HMIP over a number of years showed the rate of prosecution at around 1% for both regulatory authorities. However, the NRA also utilised a considerable number of other enforcement measures (such as formal
cautions) which could explain why it was generally categorised as a more 'confrontational' enforcer than HMIP. In addition, difficulties may arise in directly comparing levels of prosecution between the NRA and its predecessors. Certain anecdotal evidence presented in previous studies (see section 2.7.3) could suggest that levels of prosecution were much higher under the old water authorities. However, national statistics relating to the numbers of processes regulated compared to the numbers of prosecutions were not available under this previous regime. Furthermore, research has revealed large inconsistencies in the enforcement activities of different water authorities, making it difficult to calculate national statistics purely from research in one authority.

4.4.18 The Environment Agency and Regulation of Water Pollution

The first year of operation of the Environment Agency saw a further decrease in the number of Category I incidents from 199 to 156. However, this trend has not continued, and 1997 saw a rise of 19% to 194 of these types of incidents (Water Pollution Incidents in England and Wales 1997, Environment Agency, 1998).

Furthermore, the level of prosecutions has also decreased to around 220 per annum for water pollution offences, whilst an overall deterioration in river quality has been observed following the improvements made by the NRA (Annual Report 1997/8, Environment Agency, 1998). Numbers of formal cautions were 91 and 138 respectively for the years 1996/7 and 1997/8 - somewhat below the number served by the NRA of around 200 plus per annum.
It therefore appears that the less stringent approach to enforcement adopted by the Environment Agency, could already be influencing the level of compliance with water pollution control legislation.

4.5 Methods of Enforcement

4.5.1 Introduction

The methods of enforcement that may be used by regulatory bodies are wide and varied. In the previous sections of this chapter the array of enforcement measures that are detailed in the legislation relevant to this research have been considered. However, many other methods are used by the authorities that are not expressly set out in these pieces of legislation.

These methods may be informal ones such as education, informal meetings with companies or an increase in the level of site visits. Alternatively, more formal methodologies that are also not detailed in the legislation may be used. A good example was the widespread use of formal cautions by the NRA, which was frequently utilised as the final warning before undertaking a prosecution. Judicial review of decisions made by the regulators can also be used to control enforcement action - either by forcing a particular action or overturning a decision that has been made. Sentencing options (other than fines or incarceration) exist that have their legal basis in different legislation, but
may also be used in respect of environmental offences. For example, the power of magistrates to order the offender to pay compensation under the Powers of Criminal Courts Act 1973. Finally, there are other novel enforcement methods (for example blacklisting - see section 4.5.7) that have so far been limited in their application to the enforcement of environmental law in the UK. Each of these subject areas are discussed below.

Identification and delineation of the methods of enforcement available to each regulatory authority formed an integral part of this research. Once these methods had been identified it was then possible to investigate the extent of their utilisation by regulatory authorities, identify particular methods that were under-exploited as a means of enforcement, and those that were favoured by the authorities, and determine why this was the case. The findings could then be used to propose improvements to the system.

4.5.2 Enforcement Methods Detailed in the EPA 1990 and WRA 1991

In order to provide an overview of the methods of enforcement available under the EPA 1990 and WRA 1991, Table 4.4 lists those methods already considered in previous sections of this chapter. The table serves to provide 'at a glance' information relating to the enforcement methods available under each Act. There are various constraints or duties relating to the utilisation of many of these measures. Some of the more important points are listed, but the reader is referred to the relevant section earlier in this chapter for a full
discussion of the restrictions in each case. An overview of injunctions can be found in section 4.5.2.1.

As much of this research compares enforcement activities in the 1990s with that in the 1980s, it would be helpful to provide an overview of the legislative background in which Richardson et al. (1982) and Hawkins (1984) carried out their research.

The Control Of Pollution Act (COPA) was enacted in 1974, but part II relating to water pollution was not brought into force until 1986, and then only in a piecemeal and gradual fashion. Some parts of the Act were never actually brought into force e.g. s. 46(1)-(3) on the powers of the water authorities to vary consents after an act of pollution. Many of the powers available to the NRA under the WRA 1991, were also available under COPA 1974. These included the power to vary or revoke consents, to take remedial action and recover expenses, powers of entry, inspection and seizure and to prosecute offenders that caused or knowingly permitted polluting matter to enter specified waters. Prior to the introduction of COPA, the Rivers (Prevention of Pollution) Act 1951 created the offence of causing or knowingly permitting any poisonous, noxious or polluting matter to enter a stream. It also introduced the first system of discharge consents. The Rivers (Prevention of Pollution) Act 1961 then extended this consent procedure to cover certain types of discharges that were operational before the 1951 Act. It also removed some of the defences that were available. COPA 1974 repealed both of these pieces of legislation.
Table 4.4 Summary of the Methods of Enforcement Discussed in 4.2 - 4.4

<table>
<thead>
<tr>
<th>Enforcement Method</th>
<th>EPA I</th>
<th>EPA III</th>
<th>WRA</th>
<th>Chapter Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abatement notice</td>
<td>✓</td>
<td>✓ 80</td>
<td></td>
<td>4.3.4.2</td>
</tr>
</tbody>
</table>

*When a local authority is satisfied that a statutory nuisance exists or is likely to occur or recur, it has a duty to serve an abatement notice.*

| Enforcement notice                       | ✓     | ✓ 90B   |         | 4.2.8.3, 4.4.12.2 |

*Enforcement notices were made available for use by the Environment Agency to control water pollution. This method of enforcement was not available for use by the NRA.*

| Variation notice                         | ✓ 10  | ✓ sch. 10|         | 4.2.8.1, 4.4.12.1 |

*Under EPA I, authorities have a duty to issue a variation notice if the conditions appropriate to fulfil the requirements of BATNEEC differ from those that the authorisation originally contained.*

| Prohibition notice                       | ✓ 14  | ✓ 86    |         | 4.2.8.4, 4.4.12.3 |

*Where a process under EPA I is being carried on under an authorisation which involves an imminent risk of serious pollution, the authority has a duty to serve a prohibition notice.*

| Revocation of authorisation/consent      | ✓ 12  | ✓ sch. 10|         | 4.2.8.2, 4.4.12.1 |

| Clean-up/works powers                   | ✓ 27  | ✓ 81    | ✓ 161   | 4.2.8.6, 4.3.4.3, 4.4.12.6 |

| Recovery of clean-up/works expenses     | ✓ 27  | ✓ 81    | ✓ 161   | 4.2.8.6, 4.4.12.6 |

| Power to order remedial/preventative action | ✓ 26  | ✓ 161   |         | 4.2.8.6, 4.4.12.6 |

*New provisions relating to works notices for water pollution were introduced by the EA.*

| Power of entry                          | ✓ as above | ✓ sch. 3 | ✓ as above | 4.2.8.5, 4.3.4.4, 4.4.12.4 |

*Local authorities have a duty under s. 79 to inspect their area in order to detect statutory nuisances. They also have a duty to investigate all complaints.*

| Power of seizure                         | ✓ as above | ✓ sch. 3 | ✓ as above | 4.2.8.5, 4.3.4.4, 4.4.12.4 |

| Power to obtain information              | ✓ 19     | ✓ 202   | ✓ as above | 4.2.8.5, 4.4.12.5 |

| Injunction                               | ✓ s. 24 EPA | ✓ s.81(5) | ✓         | 4.2.8.7, 4.3.4.5, 4.4.12.7 |

*No specific section for WRA, except s. 90B (backing enforcement notices) and s. 161D(4) (backing works notices). For more details on injunctions see below.*

| Prosecution                              | ✓       | ✓       | ✓         | 4.2.8.7, 4.3.4.5, 4.4.12.7 |

*Prosecutions may only be brought for the specific offences listed in the relevant legislation.*

| Prosecution of company directors         | ✓ 157   | ✓ 217   |         | 4.2.10, 4.4.14 |

| Action by aggrieved individuals          | ✓ 82    |         |         | 4.3.4.6 |

*Although individuals may bring a prosecution for any offence under EPA I, III or the WRA, a special provision exists relating to statutory nuisances. Under S. 82 aggrieved individuals can complain directly to the magistrates' court. If a nuisance exists, an abatement notice must be served. A fine may also be imposed.*
4.5.2.1 Injunction

An injunction is an order of the court that usually restrains the commission or continuance of some wrongful act or omission (a prohibitory injunction). Alternatively, it can also order the defendant to take positive action to rectify the consequences of any past acts (a mandatory injunction). It can be granted by the High Court or County Court. Injunctions are only usually granted when the gravity or duration of an offence warrants such action. A right or interest is required before the applicant can obtain this remedy.

The remedy of injunction to secure compliance with an environmental law can be very useful. It has a number of advantages over prosecution (Beloff, 1992; Payne, 1992), which are considered below.

1. *The speed at which an injunction may be granted.* Courts can act quickly, mainly because injunctions can be granted *ex parte* in cases of urgency, i.e. in the absence of the alleged offender. In less urgent cases, where notice must be given to the offender, the case may be heard within a few days rather than the usual several weeks taken for prosecution. This factor is important when considering the nature of environmental offences. Prompt enforcement may prevent a severe pollution incident from taking place.

2. *More effective enforcement.* The enforcement of injunctions is viewed as a serious matter by the courts. Failure to comply with an injunction is contempt of court. A
defendant can be punished with relative ease and rapidity, and this can result in an unlimited fine and/or a maximum of two years imprisonment. When injunctions are taken against companies, if a director of a company is aware of the injunction then he must take all reasonable steps to comply with the order made by the court. If he does not do so, then he may be held personally in contempt of court. Furthermore, sequestration of the defendants assets (money, goods and land) can be ordered. In cases where the defendant is a company, the sequestration of all the directors assets may also be carried out.

3. Appropriateness of the remedy. After the conviction of an individual, the usual penalty imposed is that of a fine. In many cases, this is an unsuitable remedy. Injunctions, on the other hand, can require an individual to carry out a specific action or refrain from an activity which is detrimental to the environment.

4. High Court judges are usually more experienced than their counterparts in the magistrates' courts. This enables the case to be dealt with more quickly and efficiently.

(Beloff, 1992; Payne, 1992)

These points make the use of injunctions a very effective enforcement tool, and as a result they have been used frequently in the sphere of environmental law.

The provisions made for the use of injunctions to enforce the law vary considerably between the different areas of legislation under consideration. However, in general terms,
the High Court has the discretionary power to grant an injunction under s. 37 of the Supreme Court Act 1981. This gives the Court the power to grant an interlocutory (temporary) or final injunction in all cases where it is "just and convenient to do so". The exercise of discretion in whether to grant an injunction or not will depend on the facts of the case and the wording of the particular statute giving rise to the regulatory authority's power (Lomas and Payne, 1993).

Provisions in EPA Part I (s.24) make the remedy of injunctions available only to support the enforcement of a prohibition or enforcement notice. In addition, the authority must hold the opinion that prosecution will provide an ineffectual remedy before such proceedings in the High Court can be taken.

Under EPA Part III, where the local authority is of the opinion that proceedings in a magistrates court would provide an inadequate remedy (in terms of gravity or speed), then injunctions can be sought to secure abatement of a nuisance (s.81(5)). Proceedings for an injunction are taken in the High Court, and this method of enforcement can be used after an abatement notice has been served but prior to prosecution i.e. statutory procedures do not have to be exhausted before resorting to injunctions to bring about compliance.

No specific reference is made to the use of injunctions in the WRA apart from in s. 90B (backing enforcement notices) and s. 161D(4) (backing works notices). However, the power to seek an injunction is probably made available under general powers that are
afforded to the regulatory authority, previously under s. 4(1) of the WRA for the NRA and currently s. 37 of the EA 1995 for the Environment Agency.

The general principles for granting injunctions have been developed through various case law (see, for example, Gouriet v Union of Post Office Workers [1977] 3 All ER 70, Stoke on Trent City Council v B & Q (Retail) Ltd [1984] AC 754 and City of London Corporation v Bovis Construction Ltd [1992] 3 All ER 697). In the Bovis case, certain points were made, including:

- injunctive jurisdiction was to be exercised exceptionally and with great caution;
- there was a need to show persistent and serious conduct before injunctions could be awarded;
- the defendant's unlawful act would continue unless it was restrained by an injunction, and that nothing short of an injunction would restrain them.

In the case of interlocutory injunctions, these are based on the principles established in American Cyanamid Co v Ethicon Ltd [1975] AC 396, and include:

that there is a good arguable claim for a permanent injunction;
that the balance of convenience is in favour of the regulator i.e. the likelihood of damage to the environment must outweigh the likelihood of damage to the defendant as a result of the injunction.
4.5.3 Informal Enforcement Options

A number of informal methods of enforcement have been identified (Hunter and Waterman, 1992), and include informal verbal warnings, informal warning letters, educational strategies, meetings, threatening to inform the media, etc. Informal actions may constitute the majority of action taken by a regulatory agency. For example, concerning violations of the Clean Water Act in the US from 1980-88, over 70% of all action taken was informal (Hunter and Waterman, 1992). Richardson et al. (1982), Hawkins (1984) and Hutter (1988) all noted that a heavy reliance was placed on these methodologies.

A problem with utilising these methods, however, is that no formal record of such contact is usually kept, or is required to be kept by the regulations. Their overall effectiveness is, therefore, difficult to assess and the number of informal warnings given to an offender in the past may not be known. Subsequent enforcement action may thus be based on an incomplete record of past compliance.

4.5.4 Other Formal Enforcement Options

4.5.4.1 Formal Warning Letters

The NRA had a system of issuing warning letters which was referred to in its procedural manual (*Enforcement and Prosecution with Respect to Pollution Incidents Affecting*
The letter was of a standard format and informed the recipient that his act or omission had resulted in a pollution incident. It also stated that any further pollution which could be attributed to him would "almost certainly lead to prosecution". Warning letters were normally issued for pollution incidents of lesser importance, i.e. category 2 or 3 incidents (see Chapter 5 for further details).

Prior to this study, no information existed regarding the extent of the utilisation of this method of enforcement by the NRA, or its employment by HMIP or local authorities.

4.5.4.2 Formal Cautions

Formal cautions were used by the NRA in cases where they considered it inappropriate to prosecute, but where it was clear that an offence has been committed of sufficient severity to warrant more vigorous enforcement than a warning letter. The purpose of a caution was:

- to deal quickly and simply with less serious incidents;
- to divert them from the criminal courts; and
- to reduce the chance of further offences being committed.

(NRA manual *Enforcement and Prosecution with respect to Pollution Incidents Affecting Controlled Waters*, 1994).
The admission of guilt and informed consent to being cautioned had to be obtained from the offender before a formal caution was issued. A formal caution was regarded as a serious matter by the NRA, and records were kept of such a step being taken. These could have been used to influence subsequent enforcement actions or court proceedings, and referred to as an aggravating factor for sentencing in a subsequent prosecution. For limited information on the use of cautions by the NRA and Environment Agency see sections 4.4.17 and 4.4.18. Again, prior to this study, scant information existed regarding the extent of the utilisation of this method of enforcement by the NRA, or its employment by HMIP or local authorities.

4.5.4.3 Formal Sampling

The formal sampling procedure, or more commonly known as taking a 'legal' by the old water authorities (Richardson et al., 1982; Hawkins, 1984) was often used by these authorities in order to gain compliance with the legislation. The threat implicit in such an action that more rigorous enforcement would be taken if circumstances did not improve, was recognised by the majority of the regulated community. The requirement to follow the tripartite sampling procedure has been repealed since the introduction of the EA 1995. However, taking a formal sample for the purpose of collecting evidence for future reference is still carried out.
4.5.4.4 Increased Site Visits, Monitoring and Sampling

This method of enforcement is similar to the formal sampling procedure, in that it was used primarily for threatening the regulated community into compliance. Hawkins (1984) noted that increased monitoring was regularly undertaken for deviant dischargers. Furthermore, periodic 'crackdowns' where organised enforcement was directed at particular industrial sectors was also observed.

4.5.5 Judicial Review

Although judicial review should not be regarded strictly as an enforcement measure, it may be used as an important means by which the abuse of power by public authorities can be prevented. Using this procedure, the Court can influence enforcement action by directing regulatory authorities to take action where they have neglected to do so, or overturn an enforcement decision that has already been made.

Hearings are conducted in the High Court. The respondent must be a public body, or bodies with public responsibilities, and the nature of the claim must be one of public interest. There are a number of grounds for judicial review, namely:

1. *Illegality* e.g. inconsistent action on the part of the authority; the authority acting outside its jurisdiction; when an error of law has been made; misdirection in law.
2. The abuse of power e.g. unreasonableness in the exercise of power; failure to take a relevant fact into account or taking an irrelevant fact into consideration; a display of bad faith on behalf of the authority; acting on an improper motive; a breach of duty so the objectives of an Act are not achieved; a display of unfairness which constitutes an abuse of power; the unlawful or improper delegation of power from one body to another; the adoption of an inflexible policy or rule by the authority; any other special grounds.

3. Procedural impropriety e.g. contravention of procedural rules; bias; the hearing not being conducted in a fair manner; material irregularity.

(Fordham and Singh, 1994; Moore, 1995)

In cases where a public body has acted in any of the above ways, aggrieved persons can apply for judicial review and a remedy may be granted. The remedies available are:

- to quash a decision (*certiorari*);
- restraining an activity (prohibition/injunction);
- clarifying a point of law (declaration);
- compelling an action (*mandamus*).

(Mumma, 1996)

Examples where judicial review may be used to reverse a decision or compel an action are wide and varied within the field of environmental law. The easiest application of the
rules is when a specific duty is set out in the legislation and the regulatory authority has clearly not abided by it. For example, if an authority has failed to serve an abatement notice under Part III of the EPA 1990, when it is satisfied a statutory nuisance exists (under s. 80(1) of the EPA 1990, the authority has a duty to serve an abatement notice when it is satisfied a statutory nuisance exists, or is likely to occur or recur). The boundaries become less clear when considering the use of discretionary powers such as prosecution by regulatory agencies. The Court must ensure such powers are not abused, whilst enabling public bodies to exercise a certain degree of discretion within the bounds of their functions, duties and procedures.

Hurdles to judicial review include:

- the action was not commenced promptly;
- there are statutory provisions precluding judicial review;
- there is an alternative method of challenging a decision (e.g. an appeal mechanism);
- the applicant lacks 'sufficient interest' or _locus standi_ in the subject matter.

The rules governing the utilisation of judicial review state that the person bringing an action must have sufficient interest or _locus standi_ in the matter to be decided. The case law on what constitutes _locus standi_ is complex. Environmental pressure groups have had varying degrees of success in their bid to be recognised as having sufficient interest in certain matters, a barrier that must be overcome before they are able to initiate judicial review proceedings.
In the case of *R v Secretary of State for the Environment, ex parte Rose Theatre Trust* [1990] 2 WLR 186, a restrictive viewpoint was adopted by court. They ruled that the Trust did not have sufficient standing to bring a judicial review of the Secretary of State's decision not to designate the site as one of national importance. Conversely, in *R v Her Majesty's Inspectorate of Pollution, ex parte Greenpeace* [1994] Env LR 76, Greenpeace were granted *locus standi* to challenge a decision made by HMIP to allow testing at the THORP reprocessing plant at Sellafield. The trend towards recognising the standing of pressure groups was given further support in

- *R v Secretary of State for Foreign Affairs, ex parte World Development Movement Ltd* [1995] 1 WLR 386 relating to a challenge of the government's funding of the Pergau Dam scheme, and

- *R v Secretary of State for the Environment, ex parte Friends of the Earth and Andrew Lees* [1994] 2 CMLR 760, where FoE sought to challenge the decision of the Secretary of State to accept undertakings from water companies in breach of the Drinking Water Directive rather than take enforcement action.

Hilson (1993) has stated that the decision of whether or not to prosecute by regulatory agencies could possibly be challenged by individuals or environmental organisations. Three conditions must be satisfied for this to take place, namely a policy must exist, it must be open and some of the provisions must be sufficiently detailed. In such cases, a
judicial review could be sought after a decision not to prosecute is made which clearly illustrates a failure to follow policy.


4.5.6 Sentencing Options

Following prosecution and the conviction for an offence, the offender is then sentenced by the court, which takes into account numerous factors before passing the sentence (see section 2.14). Sentencing may be viewed as the end result of a successful prosecution and therefore forms the final stage of this enforcement method. The type of sentence passed can have very important implications for the subsequent enforcement activities of regulatory agencies, the deterrent effect on the offender curtailing potential future violations and the deterrent effect on the regulated community as a whole.

The most common sentencing options are:

- absolute discharge - where a convicted defendant is released without imposing a punishment;
- conditional discharge - where a convicted defendant is released without punishment, provided that he is not convicted of any other offence within a specified period;
• fines;
• incarceration (after prosecution of individuals as opposed to companies) - may also be fined in conjunction with this sentence.

In addition to these conventional methods, there are other more unusual sentencing options that may be imposed by the courts. These are discussed below.

4.5.6.1 Profit Seizing

Fordham (1993) and Tromans and Turrall-Clarke (1994) have suggested that use could be made of the Criminal Justice Act 1988 Part IV, in order to seize profits made from illegal and detrimental polluting activities. He argues that money made from such activities should be viewed as 'dirty money' in the same way as profits from drugs and pornography, and therefore be treated in a similar fashion. Under the Criminal Justice Act, Crown Court judges can order that the convicted person pays the 'realisable benefit' of their crime, making profit-seizing an available option for indictable environmental crimes. The utilisation of this method of enforcement would deter businesses from participating in polluting activities purely for economic gain.

4.5.6.2 Community Service Orders

This penalty, as with incarceration, focuses directly on the individuals creating the risk, and cannot be passed onto the consumer as fines may be (Hedman, 1991). It does,
however, create positive benefits for society whilst avoiding the costs of incarceration. This form of penalty has had limited use in the sphere of environmental enforcement to date. The first community service order for a water pollution offence was made in 1996, when a demolition contractor causing extensive damage from pouring lindane and mercury down a drain was fined £1,500 and ordered to carry out 200 hours community service (ENDS 1996 258: 45).

4.5.6.3 Compensation Orders

Under the Powers of Criminal Courts Act 1973, the court may order an offender to pay compensation to any person injured or who suffers loss by the commission of an offence. This power could be used in relation to environmental offences, but it has been made clear by the courts that it should not be used in complex cases where the level of compensation could be difficult to determine, thus limiting its applicability to many pollution offences (Tromans and Irvine, 1994).

4.5.6.4 Confiscation of Property

Section 43 of the Powers of the Criminal Courts Act 1973 makes provision for the confiscation of property that has been used for the purpose of committing or facilitating the commission of an offence. This power is in addition to specific provisions included in the EPA 1990 and WRA 1991 for the seizure of property. The power conferred by s. 43 was utilised for the first time in relation to an environmental offence in 1998. In this case,
vehicles were confiscated from a man who had been operating an illegal waste business for several years (ENDS 1998 284: 48).

4.5.6.5 Disqualification

Under s. 2 of the Company Directors Disqualification Act 1986, a court can make a disqualification order against a person convicted of an indictable offence (Smith, 1994). The maximum disqualification periods are 5 years for cases heard in the magistrates' courts, and 15 years in the Crown Court. The disqualification has the effect of prohibiting the individual from being:

- a director of a company;
- a liquidator or administrator;
- a receiver or manager of a company's properties;
- involved in the promotion, formation or management of any company.

This sentencing option has been used very sparingly in relation to environmental offences. However, the method was used in 1992 when a director of a quarrying firm was disqualified for two years following breaches of a Health and Safety prohibition notice (ENDS 1992 213: 39-40).
4.5.6.6 Probationary Orders

Probationary orders can be made against companies. They allow the court to exercise supervisory powers by requiring a specific timetable of improvements which must be met by the offending company (De Prez, 1997). Under s. 6 of the Criminal Justice Act 1991, the offence must be serious enough in order to warrant such an order. No reported cases of the use of this sentencing option in relation to environmental offences have been located by the author.

4.5.7 Other Novel Enforcement Methods

In the USA there is a system of a mandatory listing for convictions of environmental criminal offences. Each company which is blacklisted is prohibited from entering into business with the government until such time as the conditions that lead to the conviction have been corrected (Elliot et al., 1992; Payne, 1995). It would be advantageous to have a similar system in the UK, as this sanction would be extremely useful in deterrent terms.

4.6 Summary

This chapter has provided:

- an overview of the legislation pertinent to this research;
- cases cited to illustrate the points of law;
• a discussion of the array of enforcement methods available to regulatory agencies;
• information relating to the background within which environmental regulators must carry out their duties and enforce the legislation.

Knowledge and comprehension of the above points were essential before questionnaires could be formulated in order to gather empirical data for this study.

Although certain information relating to the background in which regulators must work has been presented in this chapter, more detailed knowledge was required. This was especially relevant in relation to their enforcement policies - the existence, structure and different types of policies inevitably having a profound effect on enforcement strategies and methodologies. In order to satisfy this requirement, a review of the regulatory bodies studied in this thesis, and an analysis of their enforcement policies were carried out. A discussion of the findings can be found in Chapter 5.
CHAPTER 5
REVIEW OF THE REGULATORY AUTHORITIES AND THEIR
ENFORCEMENT POLICIES

5.1 Introduction

The system of environmental regulation in the UK has undergone many changes in recent years, with a concurrent rearrangement of the regulatory bodies responsible for enforcing the law. The most important changes in recent years have been the formation of the National Rivers Authority, followed by the amalgamation of this agency and other regulatory bodies to form the Environment Agency.

Prior to the establishment of the Environment Agency, environmental pollution control was largely divided between Her Majesty's Inspectorate of Pollution (HMIP), the National Rivers Authority (NRA) and local authorities, all with an obligation to enforce different statutory provisions. This fragmented system of control was borne from the piecemeal fashion in which environmental legislation has developed in the UK. Criticism was levelled at the system for its failure to take into account problems or incidents that had to be dealt with by a number of statutory provisions and regulatory agencies, and the ensuing confusion that was often experienced by the regulated community. In order to simplify the system, the functions of HMIP, the NRA and WRAs were transferred to the Environment Agency in 1996.

This chapter contains an overview of the structure and role of the regulatory bodies that were examined in this research, namely HMIP, NRA and local authorities. The different enforcement policies employed by each agency is also discussed. This assessment of the
regulatory bodies facilitated the choice of the most suitable methodologies for empirical data collection in this study (see Chapter 6), and provided a background upon which to formulate questionnaires. The authorities' structure, role and the existence and type of enforcement policy in each case probably had important implications for their overall mode of operation, which in turn could influence the day-to-day running of the organisation and their enforcement approach, suppositions examined in this research. This chapter aims to identify differences between the agencies, providing information that was used to explain a variety of enforcement approaches (see Chapter 11). An assessment of the relevance of different types of enforcement policies on the type and extent of enforcement action taken by regulatory agencies formed a particularly important aspect of this study. This chapter contains an overview of these policies where applicable, to provide a basis for this element of the research.

The Environment Agency is also discussed in this chapter. Although this regulatory body had not come into existence at the time of the empirical research in this study, its structure, role, enforcement policy and mode of operation plays a fundamental role in the current and future state of environmental regulation. Therefore the inclusion of an overview of this agency was considered as forming an important part of this aspect of the literature review.

5.2 Her Majesty's Inspectorate of Pollution (HMIP)

HMIP was created in 1987 by an amalgamation of existing government inspectorates - the Industrial Air Pollution Inspectorate, the Hazardous Waste Inspectorate, the Water Pollution Inspectorate and the Radiochemical Inspectorate. Its formation thus started the trend for unification of regulatory authorities, and the principle of dealing with pollution to all
environmental media was endorsed through its administration of the Integrated Pollution Control system.

HMIP formed part of the Department of the Environment, and operated on a regional basis, with each of the seven regions in England and Wales under central control of a Head Office in London. Apart from responsibilities under Part I of the EPA, it was also concerned with the control of radioactive substances and the monitoring of waste disposal, amongst other duties. Over 430 staff were employed in the organisation, often in the capacity of providing expert advice and support to government departments or serving on EC or international working groups.

Although the Government's aim for HMIP was for it to become self-financing through charges made to industry for authorisations and monitoring of IPC process, this was never achieved by the organisation. HMIP thus relied heavily on the government for both financial and political support, and indeed was so closely linked to the government that it actually formed part of a government department. This lack of autonomy and independence attracted criticism from numerous sources and it was suggested that this was one of the reasons for its poor prosecution record (see Chapter 4).

Numerous guidance notes were published by HMIP to assist both the regulated community and inspectors in the implementation of the IPC system. These covered aspects such as operating procedures, emission standards, pollution abatement techniques and BATNEEC for particular processes (see Chapter 4 and Appendix 3). One of the published guidelines related to bringing a prosecution, and this is discussed below.
5.2.1 HMIP Enforcement Policy

HMIP's enforcement policy was set out in the document *Guidelines for Prosecution* (HMIP, 1994). The policy was couched in very non-specific terms when compared with that of the NRA (see below), and throughout the two-page document emphasis was placed on it only being used as a 'general guideline' for inspectors, in other words regulatory staff were not bound to follow its recommendations. The document itself can be found in Appendix 8, but its salient features include:

1. Stating HMIP's policy to prosecute an offence caused by non-compliance with a notice.

2. For other offences, taking into account a number of factors before deciding on the appropriate action, including:

- whether any environmental harm has occurred;
- any environmental harm being localised or widespread;
- whether a nuisance was caused by the breach;
- was the nuisance short or long term, and did it have any health implications for the population;
- the attitude of the company;
- the company's record of non-compliance;
- the likelihood of the company carrying out remedial measures of its own accord;
- would the threat of prosecution be effective;
- was the incident foreseeable;
- what steps were taken to avoid the incident;
were the steps taken adequate and appropriate considering the resources of the company;
what would be gained by prosecution (e.g. public embarrassment, financial penalty, public
demonstration of HMIP's policy and attitude, a reflection of public concern).

It should be noted that the document only stated that the above factors should be considered by the inspector, and did not recommend which sort of enforcement action should be taken in the presence or absence of specific factors. The only substantial and unequivocal statement in the entire document was HMIP's stance on prosecuting an offence caused by non-compliance with a notice. This type of enforcement policy is an example of one with the standards stated so vaguely that it is clearly of limited use within the agency, one of the problems of regulatory policy documents outlined by Huddleston and Sands (1995).

5.3 National Rivers Authority (NRA)

The National Rivers Authority (NRA) was established as an independent regulatory agency by the Water Act 1989, in which the water industry was privatised and restructured. It was the main regulatory body for controlling water pollution, although HMIP was responsible for certain discharges to water under the IPC regime. The NRA had no operational responsibilities with respect to sewage functions, unlike the old regional water authorities, thus avoiding the conflict of interests that existed prior to its formation - the so-called 'poacher and gamekeeper' scenario (Bell, 1997, p.140).

The NRA was structured on a regional basis, corresponding to the old water authorities' catchment boundaries. It consisted of eight regions throughout England and Wales, with a Head Office based in Bristol.
The functions and duties of the NRA were detailed in the Water Resources Act 1991 (s.2), and included water resource management (Part II), pollution control (Part III), land drainage and flood protection (Part IV), fishery management (Part V), along with navigation functions and the general duty to promote conservation and recreation (s.16).

In contrast to HMIP, the NRA was established as an independent public body and "shall not be regarded as the servant or agent of the Crown" (s.1(5)). However, the Secretary of State and the Minister of Agriculture Fisheries and Food had broad powers to give the Authority directions in respect of its functions (s.5), thus reflecting the close involvement of the NRA with government policy. Furthermore, members of the governing board were appointed by the Government.

The NRA was regarded by many as a strong regulator (Bowman, 1992; Wolf and White, 1997, p.201), and this could be partially explained by its increased level of independence from the government when compared to HMIP. Its willingness to prosecute environmental offences (over 2,200 successful prosecutions between the years 1989-94 - Wolf and White, 1997, p.120) was indicative of a proactive approach to enforcement backed up by a definitive and authoritative enforcement policy (see 5.3.1 below). This compares to the low numbers of prosecutions that were taken when the water authorities regulated pollution (see Chapter 2).

5.3.1 NRA Enforcement Policy

The NRA had a comprehensive procedural manual entitled *Enforcement and Prosecution with Respect to Pollution Incidents Affecting Controlled Waters* (1994), the complete version
of which can be found in Appendix 9. This document, which served as guidance to NRA staff, detailed the classification of pollution incidents, appropriate enforcement action to be taken and the procedures followed in the decision making process. Pollution incidents were categorised based on actual or potential environmental impact in the following way:

1. Category 1 (major) - where the identity of the discharger was known and sufficient evidence had been collected, prosecution should have followed.

2. Category 2 (significant) - where the identity of the discharger was known, action taken would be prosecution, a formal caution or letter of warning depending on the prevailing circumstances.

3. Category 3 (minor) - where the identity of the discharger was known, a warning letter should have been sent, with consideration for formal cautions or prosecution in the cases where persistent pollution had taken place or where the incident resulted from a deliberate discharge.

4. Category 4 (unsubstantiated) - no action taken.

The classifications of major, significant and minor were based on a number of factors. A major incident was said to have occurred if one or more of the following requirements was satisfied:

- persistent effect on water quality or use;
- closure of an abstraction point;
• extensive fish mortality (i.e. in excess of 100 fish of any notable species);
• excessive breaches of consent conditions (a major or repeated failure) together with a readily observable impact on the water;
• instigation of extensive remedial measures to prevent, or alleviate the effect of, pollution;
• significant adverse effect on amenity value;
• significant adverse effect on SSSIs or other sites of conservation importance.

A 'significant' pollution incident was deemed to have occurred if it involved one or more of the following:

• notification of abstractors because of a potential or actual impact on water quality;
• a significant fish mortality of between 10 and 100 fish of any notable species;
• a readily observable effect on invertebrate life;
• the water rendered unfit for stock watering;
• the bed of the watercourse becoming heavily contaminated with fungal or bacterial growths, sewage debris or particulate matter;
• a reduction in amenity value.

Minor pollution incidents were classified as those of a localised environmental impact, involving some of the following criteria:

• notification of abstractors not necessary;
• a fish mortality of less than 10 fish of any species of no particular importance to the watercourse;
• no readily observable effect on invertebrate life;
• water not rendered unfit for stock watering;
• only a local contamination of the bed of the watercourse around the point of the discharge;
• minimal environmental impact and amenity value only marginally affected.

In the case of a significant pollution incident (category 2), a table was drawn up in the NRA's manual to assist in the decision making process concerning which action to bring (prosecution, formal warning or letter of caution). However, it is stated that this table was only to be used as a guide, with consideration given to the varying degrees of importance attached to each factor:

"For instance, the consideration of whether a discharge was deliberate or whether it could have been avoided is, from a pollution control viewpoint, absolutely fundamental to the course of any subsequent action. For the majority of incidents this will be more important than whether there was a delay in informing the NRA or the level of post incident work. As such there will always be an element of judgement to be exercised in every case.......

This table is reproduced below. With a clear majority under the 'Prosecute or Caution' heading, then a prosecution would normally have followed. A clear majority under the 'Warning Letter' column would have resulted in a warning letter being sent, and no clear majority would normally have lead to a caution.
Table 5.1 Factors Taken into Account by the NRA When Deciding Upon the Choice of
Enforcement Action for Category 2 Pollution Incidents

(reproduced from the NRA's procedural manual Enforcement and Prosecution with Respect
to Pollution Incidents Affecting Controlled Waters (1994)).

<table>
<thead>
<tr>
<th>Prosecution or Caution</th>
<th>Warning letter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discharge deliberate or avoidable</td>
<td>Discharge not foreseeable</td>
</tr>
<tr>
<td>High risk to abstractions</td>
<td>No risk to abstractions</td>
</tr>
<tr>
<td>Obvious fish kill</td>
<td>Minor or no fish kill</td>
</tr>
<tr>
<td>Amenity affected</td>
<td>Amenity not affected</td>
</tr>
<tr>
<td>Other significant effect on water use (e.g. stock watering)</td>
<td>Little other impact</td>
</tr>
<tr>
<td>Negligence</td>
<td>Accidental spillage/discharge</td>
</tr>
<tr>
<td>Previous history of pollution or breach of consent conditions at site or by polluter. Or evidence of chronic pollution.</td>
<td>No previous history or evidence</td>
</tr>
<tr>
<td>Poor operational management</td>
<td>Good operational management</td>
</tr>
<tr>
<td>Non-weather related</td>
<td>Weather related</td>
</tr>
<tr>
<td>No precautions taken</td>
<td>Precautions taken though ineffective</td>
</tr>
<tr>
<td>Little or no post incident remedial work</td>
<td>Post incident remedial work good</td>
</tr>
<tr>
<td>Consent conditions significantly breached</td>
<td>Consent conditions marginally breached</td>
</tr>
<tr>
<td>NRA not informed, or informed after delay</td>
<td>NRA informed promptly</td>
</tr>
<tr>
<td>Site security poor</td>
<td>Site security good</td>
</tr>
<tr>
<td>Pollution prevention advice or literature given</td>
<td>Little or no previous contact</td>
</tr>
<tr>
<td>Little or no co-operation</td>
<td>Discharger co-operated fully</td>
</tr>
<tr>
<td>Large number public complaints</td>
<td>Few or no public complaints</td>
</tr>
<tr>
<td>Considerable media interest</td>
<td>Little or no media interest</td>
</tr>
</tbody>
</table>

Although the existence of this document, with its detailed guidance for the choice of enforcement action probably made enforcement decisions easier for regulatory officials and much more consistent, it must be made clear that the document was an internal guidance note and not made widely available. In such a way, non-adherence to the policy document could not easily be called into question by outside observers. In fact, two reports in ENDS (ENDS 1992 211: 37; ENDS 1993 223: 41-42) suggest that despite the recommendations in this document, only around 30% of Category 1 incidents were prosecuted by the NRA.
Furthermore, these reports suggested that a large regional disparity existed, with certain regions prosecuting 100% of Category 1 incidents and others only doing so in a tiny minority of cases (less than 3%). In widely available publications, the NRA tended to rely on rather more vague statements regarding its enforcement policy. For example in *Discharge Consent and Compliance Policy: A Blueprint for the Future* (NRA, 1990), it is stated that:

"The NRA needs to consider all relevant circumstances in deciding on prosecution in individual cases.....Where a discharger has shown little or no care, or active contempt, for consent obligations over a period, this should be a factor in favour of prosecution. The NRA must not be regarded as reluctant to prosecute in situations where significant pollutions occur and relevant evidence is available".

### 5.4 Local Authorities (LAs)

Although the formation of the Environment Agency had a significant effect on certain organisations, for example taking over the functions and duties of HMIP and NRA, its effect on local authorities was minimal in relation to certain pollution control functions. Following the Environment Act 1995, local authorities continue to play a key role in environmental regulation. The most notable change came about through the transfer of Waste Regulation Authority functions (previously carried out by local authorities) to the Environment Agency. However, functions relating to local authority air pollution control and statutory nuisances, areas of regulation relevant to this research, remain unchanged. Local authorities are also responsible for other aspects of environmental regulation, including:

- controlling emissions of smoke under the Clean Air Act 1993 and the creation of Smoke Control Areas;
- responsibility for the planning control system under the Town and Country Planning legislation;

- responsibility for identifying areas of contaminated land, the ability to serve remediation notices and secure the clean-up of contaminated sites (under provisions in the EPA 1990 Part IIA, inserted by s.57 of the Environment Act 1995);


The regulation of statutory nuisances and air pollution control is carried out by the London Borough Councils, Metropolitan Borough Councils, District Councils and the new Unitary Authorities (formed from an amalgamation of County and District Councils in certain areas). At the time of the empirical research, a total of 402 separate councils were responsible for these two areas of control throughout England and Wales.

Local authorities are elected bodies and therefore tend to reflect policies adopted by the prevailing political party in that area. They are also directly answerable to the electorate. In theory, the elected councillors take the ultimate decisions by sitting on committees that recommend certain courses of action. However, in practice this is left to officers in the majority of cases with their recommendations being adopted as a matter of course. In certain cases, some regulatory officials have complained of a specific enforcement action being stopped at the committee stage for no particular reason (see Chapter 3).
5.4.1 Local Authority Enforcement Policies

Prior to this study there had been little information collated regarding environmental enforcement policies employed by local authorities. One of the aims of this research was to gather information relating to the extent, form and utilisation of enforcement policies in local authorities throughout England and Wales. A survey by the Audit Commission in 1991 (Towards a Healthier Environment: Managing Environmental Health Services, HMSO), suggested that only 39% of local authorities had a pollution control policy, although no information relating to the content or form of these policies was gathered. The same survey also found wide variations in enforcement practices between authorities, pointing to the fact that a wide variation in enforcement policies probably existed.

5.5 Environment Agency

The Environment Agency was established by the Environment Act 1995, and became fully operational in April 1996. The principal aim of its creation was to bring the responsibility for the protection of the environment as a whole under one unified environmental body. Functions of the NRA, HMIP and Waste Regulation Authorities were transferred to the Environment Agency, and these bodies ceased to exist from April 1996. However, although many duties were passed on to the Environment Agency, environmental control still cannot be considered entirely unified as certain responsibilities continue to fall within the remit of local authorities e.g. local authority air pollution control, statutory nuisances and contaminated land.
Like the former NRA, the Environment Agency is an independent body, although it is still accountable to central government through the Secretary of State. A regional structure for the Agency was adopted. For water regulation purposes, the boundaries correspond with the old boundaries used by the NRA, based on river catchments. For other pollution control functions, these same eight regional boundaries are used, modified to fit the local authority boundary closest to the water catchment boundary.

Apart from taking over the functions of the NRA, HMIP and Waste Regulation Authorities, the Agency also had additional powers in respect of contaminated land (s.57 of the Environment Act 1995) and air quality (Part IV).

The Environment Agency was created to:

- provide greater co-ordination of environmental protection;
- provide a 'one-stop' approach to pollution control;
- relieve some of the burdens on industry by providing a less complicated system of regulation. (Wolf and White, 1997, p.113).

However, the Agency has already attracted criticism from many quarters. Some of the principal concerns have included:

- A lack of proactive enforcement action (Hams, 1996), although the Agency believes that "any perceived problem of under-enforcement has been addressed by the agency" (Croner's Waste Management Magazine, 1998 6: 23-25).
• The problem of applying cost-benefit analysis to environmental regulation (Sykes, 1995b; Hill, 1996). Under s.39 of the Environment Act, the Agency must have regard to the costs and benefits of exercising any of its powers. One of the most contentious issues in the Act (and one that was not imposed on any of its predecessors), this duty has led to widespread opposition, with some believing it will leave the Agency open to numerous judicial reviews for failure to take this duty into account during their decision making.

• Under-resourcing (FoE, 1996).

• Too close a relationship with the government, compromising its status as an independent regulator (FoE, 1996).

• Too co-operative a relationship with industry, failing to provide proactive regulation. The Agency has made it clear that it will adopt a co-operative approach to regulation, with a shift from pollution to prevention and treat regulated businesses as 'customers' (EM 1996 3(1): 3-4).

5.5.1 Environment Agency Enforcement Policy

The full version of the document can be found in Appendix 10. The policy is rather general in its terminology, being reminiscent of the old HMIP enforcement policy, rather than the more detailed NRA policy. It outlines four principles of enforcement:

- proportionality
- consistency
- transparency
- targeting

The document also places emphasis on preventative or remedial action, and states that prosecution will be used in cases where it is warranted. Factors taken into account in deciding whether or not to prosecute include:

- sufficiency of evidence;
- the environmental effect of the offence;
- foreseeability;
- intent of the offender;
- history of offending;
- attitude of the offender;
- deterrent effect of the prosecution;
- personal circumstances of the offender.

It is stated that where there is sufficient evidence, a prosecution will normally (author's emphasis) be taken in the following circumstances:
- incidents with significant consequences for the environment;
- carrying out operations without a licence;
- excessive or persistent breaches of regulatory requirements;
- failure to comply with remedial requirements;
- reckless disregard for management or quality standards;
- failure to supply information, or deliberately supplying false information;
- obstruction of Agency staff or impersonating Agency staff.

It is stated that where a prosecution is not appropriate, then alternatives such as a formal caution or warning letter will be used.

One of the most notable features of the policy is its generality of expressions used in contrast to the clearly defined document adopted by the NRA. The general nature of the policy leaves considerable scope for interpretation on the part of the regulated community and regulatory officials. An enforcement policy using more specific definitions would provide clearer guidance for both parties.

5.6 Enforcement Policy Analysis

It can be seen from this review of enforcement policies that several distinct types of policy exist. Taking into account their coverage, tone, specificity and directionality, the policies discussed in this chapter can be assigned a policy 'type'. These are outlined below:

Type 1.
- the policy covers numerous enforcement methods;
its tone is confrontational rather than conciliatory;

specific mention is made to factors that affect the enforcement decision making process,
and the outcome is strongly based upon the balance of these factors;

its use is mandatory, with little discretionary input from the regulators.

Type 2.

- the policy covers a limited number of enforcement methods (1 or 2);
- its tone is a balance between confrontation and conciliation;
- factors may be discussed, but there is no definitive link between their presence or absence
  and a particular enforcement action being taken;
- its use may or may not be mandatory, with intermediate levels of discretion employed.

Type 3.

- the policy makes no specific reference to particular enforcement methods;
- a conciliatory tone is adopted;
- factors are only mentioned in passing or not at all;
- a non-mandatory policy with high levels of discretionary input.

From the analysis of enforcement policies in previous sections, it can be seen that the NRA's
policy was a Type 1 policy, the Environment Agency's a Type 2 and HMIP's a Type 3.
Delineation of the policies in such a way enables results from the empirical research to be
placed in context, and facilitates discussion of the research findings.
5.7 Summary

It can be seen that the regulatory bodies pertinent to this research were very different in their structure, role, spatial distribution and mode of operation. A large variation in their enforcement policies was also observed, with the NRA working to a detailed and structured policy, HMIP producing a policy that was rather vague and superficial, whilst little information on the enforcement policies of local authorities existed.

These differences that have been identified can now be examined in the context of this research. One of the main areas for investigation was how these differences actually influenced the day-to-day running of the different organisations, bearing in mind the variety of enforcement approaches.

Furthermore, this assessment of the number and spatial distribution of these regulatory bodies facilitated the choice of the most suitable methodologies for empirical data collection based on practical considerations. It also provided a background upon which to formulate questionnaires in order to assess how the different enforcement policies affected working practices within the organisations. Both of these aspects of the study are discussed in the following chapter - Research Aims and Methodology.
CHAPTER 6
RESEARCH AIMS AND METHODOLOGY

6.1 Introduction

The literature review covered in chapters 2-5 has discussed a number of topics of relevance to this research, including:

- the general approach to enforcement displayed by regulatory authorities in the past;
- the various methods of enforcement available to regulatory authorities;
- parameters that may influence the choice of enforcement action under different circumstances;
- enforcement policies;
- the importance of consistency of operation within and between regulatory authorities;
- the importance of consistency of sentencing by the courts.

A number of gaps in the literature have been identified, namely:

1. The approach to enforcement by the NRA, HMIP and local authorities. Previous literature (Richardson et al., 1982; Hawkins, 1984; Hutter, 1988) indicated that a co-operative approach was preferred to a confrontational methodology. Further research was needed to evaluate the approach preferred by the authorities in the light of more recent legislation and the drive to promote environmental awareness. After consideration of these findings, an assessment of the effectiveness of their approach could be made, and suggestions made for improvements in the system.
2. The extent of utilisation of enforcement methods available to the authorities. Numerous methods of enforcement have been identified from legislative provisions and the literature (see Chapter 4). The range of methods has developed since the previous work in the 1970s and 1980s was carried out. A measure of the extent of the utilisation of these methods by the authorities would give an indication of their effectiveness. Are all authorities aware of the array of methods available to them? Are some methods used more frequently than others? If so, why is this the case? Are some methods restricted in their utilisation because of legal complexity or limited resources? Measurement of these parameters, amongst others, would indicate which are the preferred methods and how utilisation of the less popular methods could be improved.

3. The influential factors in the decision making process and the level of relative importance attached to each factor. Several factors that influence the choice of enforcement action have been identified from the literature (see Chapter 3). Research was needed to confirm that these factors play a role in the enforcement decision making process in the light of legislative and policy developments. Furthermore, the level of importance placed on each of these factors in relation to each other has not been investigated. Are all these factors equally important? Is each one considered in every case, or are some considered rarely or not at all? Is information concerning a specific factor actively sought before action is taken? This information provided an insight into the strategic decision making processes employed by the regulatory authorities.

4. The utilisation of enforcement policies by regulatory authorities. The NRA and HMIP established enforcement policies to aid the decision making process and improve
consistency. How did these policies influence the decision making process? Are policies that are more flexible in their approach more or less effective than those which minimise personal input? How often were the policies used and to what extent were they viewed as a useful tool by regulatory personnel? An indication of the effectiveness of different types of policies can thus be obtained by finding answers to these questions, and provide important information for the formulation of similar policies in the future. Furthermore, there has been little research on the occurrence of policies in local authorities. Information relating to the proportion of councils where a policy existed and the form and level of utilisation of these policies was therefore needed to complete the picture.

5. The consistency in the approach to enforcement within and between different regulatory agencies. Ideally, all regulatory authorities should be consistent in their actions to promote confidence in the system and co-operation by the regulated (see Chapter 2). Little research was undertaken to measure consistency of enforcement within or between the authorities in question. Analysis of research from 1-4 above, in addition to information obtained from industry, would give an indication of the level of consistency of enforcement. Areas for improvement could thus be identified, providing benefits for both the regulators and the regulated alike.

6. The consistency in the application of penalties by the courts. Penalties resulting from court action should also assume a level of consistency. An increase in the levels of penalties applied by the courts for environmental offences has been noted in recent years (see chapter 2). However, little research has been carried out to determine the consistency of these
penalties. A measure of the levels of fines applied in similar cases provided the necessary information for such an analysis, and improvements may again be suggested if required.

Primary research aims were constructed from the various questions posed above to address the identified lacunae and form a basis for the empirical data collection.

6.2 Primary Research Aims

1. To assess the approach to enforcement by regulatory agencies (co-operation versus confrontation).
2. To determine the extent and rate of utilisation of enforcement methods by the regulatory authorities, and the reasons for non-utilisation.
3. To determine which factors influence the strategic decision making process, and to measure the relative importance of each factor.
4. To investigate the types of enforcement policies prevalent in regulatory agencies and evaluate their varying levels of effectiveness.
5. To determine the level of consistency in the approach to enforcement within and between regulatory agencies.
6. To examine the consistency of the levels of penalties applied by the courts.
7. To suggest improvements to the system where required.

Using the primary research aims as a foundation, a research plan was devised in order to structure the research. The plan is represented in diagrammatic form in Fig. 6.1. Its function is to illustrate the relationship between each of the primary research aims and the empirical
data collection and analysis required to satisfy these aims. It also provides an overview for the path of the research.

**Figure 6.1 Research Plan: Relationship of the Primary Research Aims with Empirical Data**

Collection and Analysis

![Diagram showing the relationship of primary research aims with empirical data collection.](#)
Having delineated the research aims, it is now necessary to consider the available methods of data collection and evaluate their appropriateness for the purpose of this study.

### 6.3 Overview of Research Methodologies

#### 6.3.1 Introduction

A distinction must first be made between qualitative and quantitative methodologies. Quantitative methods are those that generate large volumes of data and are suitable for detailed statistical analysis, such as the mail survey. Qualitative methodologies are those such as the structured interview giving rise to more involved and detailed responses that may not be quantifiable. Neither type of methodology should be considered in isolation, and frequently they complement each other effectively. Ackroyd and Hughes (1992, p.30) state that:

"It is the nature of the research problem that should dictate the appropriate research method......there is no intrinsic virtue to either style of method.....neither one [is] markedly superior to the other in all respects."

Four basic methods of data collection exist. These are experimentation, surveys, field research and research using available data. Richardson *et al.* (1982), Hawkins (1984) and Hutter, (1988), primarily used observational field research and informal discussions with regulatory personnel in the first instance, followed by semi-structured interviews and
examination of internal documents and records. For the purposes of this study, experimentation and field research were considered impractical due to the nature of the information required, geographical constraints and time limitations. Furthermore, many disadvantages have been associated with observational field research in the area of environmental regulation (see section 3.1). In order to overcome these limitations, it was decided that surveys, and research using available data, would be the most appropriate options. Each of these methodologies are considered in turn below.

6.3.2 Surveys

Surveys may take several forms, each one differing in their degree of formality and approach. The choice of survey must take account various parameters such as the numbers of respondents and their geographical spread, the type of information required from the survey and other logistical considerations such as the availability of resources. Two popular methods of survey are the self-administered postal questionnaire and the interview. After careful consideration it was concluded that both these methodologies should be utilised for different aspects of this study. However, when using these methodologies one must be aware of the restrictions inherent in their design. The advantages and disadvantages of each system are discussed below.

6.3.2.1 Questionnaire Design: Mail Surveys and Interviews

The most commonly used survey design is the 'cross-sectional design' in which data is collected from a sample of the population at essentially one point in time (Singleton et al.,
Conversely, 'longitudinal designs' are adopted to study the progress of change over time and incorporate two or more separate studies between which comparisons can be made.

Good questionnaire design is paramount to obtain reliable results that can be easily analysed and interpreted. There are numerous texts offering guidance and advice concerning the construction of questionnaires and how to avoid the most common pitfalls (Weisberg and Bowen, 1977; Dixon et al., 1987; Bailey, 1994). Particular attention should be given to the wording of questions in order to avoid the following:

- double-barrelled questions posing two or more questions in one;
- vague or ambiguous questions;
- questions worded in a complex manner making them difficult to understand;
- leading questions, or questions biased in their nature;
- questions of a sensitive or threatening nature;
- questions that the respondent is unable to answer through lack of knowledge.

The choice between inclusion of open-ended or closed-ended questions is dependent on the type of information one wishes to obtain. Closed-ended questions are those that have a specific number of set responses, usually in the form of tick-boxes. This contrasts with the open-ended type of question "that cannot be answered in a few simple categories but require more detail and discussion. They are used to elicit the respondent's unique views, philosophy or goals" (Bailey, 1994, p.122). As in most situations, there are advantages and disadvantages associated with each type of question. These are discussed by Bailey (1994, p.118-123), and can be condensed into tabular form as illustrated in Table 6.1.
### Table 6.1 A Comparison of Open- and Closed-Ended Questions

<table>
<thead>
<tr>
<th>OPEN-ENDED</th>
<th>CLOSED-ENDED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Useful when all possible answer categories are not known.</td>
<td>The appropriate category may not be provided leading to frustration on the part of the respondent.</td>
</tr>
<tr>
<td>Can result in irrelevant information being collected.</td>
<td>Very few irrelevant responses usually collected.</td>
</tr>
<tr>
<td>Allow detail and clarification by the respondent.</td>
<td>Clarification cannot be given even if the respondent feels it is necessary.</td>
</tr>
<tr>
<td>The data is not standardised making statistical analysis difficult.</td>
<td>Answers are standardised producing easier comparison and statistical analysis.</td>
</tr>
<tr>
<td>Useful when all possible categories are too numerous to list.</td>
<td>Categories may be too numerous to print or read out.</td>
</tr>
<tr>
<td>Requirement of a relatively high standard of writing skills, or an ability to express oneself orally.</td>
<td>Easier to answer by just choosing an available category.</td>
</tr>
<tr>
<td>Preferable for complex issues that can't be categorised.</td>
<td>Preferable for simple issues that can be condensed into categories.</td>
</tr>
<tr>
<td>Questions may be very general in their nature, making understanding difficult.</td>
<td>Meaning of the question is often straightforward.</td>
</tr>
<tr>
<td>Allow more opportunity for creativity and expression by the respondent.</td>
<td>Variations in the respondents may go undetected through forced choice responses.</td>
</tr>
<tr>
<td>Usually require more time for completion resulting in a higher refusal rate.</td>
<td>Usually quicker to complete.</td>
</tr>
<tr>
<td>Misinterpretation of the question is easier to detect from the answer.</td>
<td>Misinterpretation of the question can go undetected.</td>
</tr>
<tr>
<td>Sensitive questions requiring a specific answer may be ignored.</td>
<td>Sensitive questions can be categorised making the respondent more willing to answer them.</td>
</tr>
<tr>
<td>Clerical errors are unlikely</td>
<td>Clerical errors (e.g. ticking the wrong box) could occur.</td>
</tr>
</tbody>
</table>

Questions must also be placed in a logical order within the questionnaire. It is usual to ask general questions that are relatively easy to answer at the start of the questionnaire and confine ones that may require more thought, or that may be sensitive in nature, to the latter stages of the survey. An appropriate question order is likely to raise the response rate and increase the ease of answering the questions significantly. Instructions for respondents for the
completion of the questionnaire should be clearly set out in postal surveys. An accompanying cover letter is essential. There are four basic functions of the covering letter, namely:

- to identify the purpose of the research and the initiating organisation;
- to stress the importance of the research;
- to stress the importance of the co-operation of the respondent;
- to make assurances concerning the confidentiality of responses.

Inducements to reply (such as making the findings of the survey available to respondents), and the ease with which the questionnaire can be returned (for example, inclusion of a stamped, addressed return envelope) can also dramatically increase response rates (Bailey, 1994). Finally, pilot studies should be undertaken for a small percentage of the sample size to enable any flaws intrinsic to the questionnaire design to be identified and corrected.

6.3.2.2 Advantages and Disadvantages of Mailed Questionnaires and Interviews.

There are a number of advantages and disadvantages associated with each system. The major advantage of mailed questionnaires is that they enable surveys of large numbers of people spread over a wide geographical area with relatively small investments of time and money. Furthermore, the survey is completely standardised with no interviewer bias. In certain cases anonymity is assured making it more likely for socially undesirable answers to be revealed. However, clarification of questions or probing for more specific answers cannot be achieved without an interviewer being present. In addition, there is no control over the order in which
the questions are answered, and some questions may not be answered at all. It is highly unlikely for the respondent to refuse to answer questions in an interview situation.

The greater degree of flexibility of the interview usually facilitates a more complex survey to be undertaken. The interview environment and question order can be standardised. The major drawbacks of this system are time, cost, lack of accessibility to respondents and interviewer bias such as answer suggestion and voice inflection. The problem of time and cost can be substantially reduced using telephone interviews rather than face to face interviews. Studies have shown that response rates tend to be slightly lower for telephone interviews and are usually faster paced (Groves and Kahn, 1979, p.118-120). Otherwise, the answers to particular questions using each methodology show no statistical difference.

Response rates are usually higher for interviews rather than postal questionnaires. This may be due to a number of reasons such as:

- respondents being more unlikely to refuse a direct request for information;
- addresses for respondents in mail surveys not being current;
- respondents being more willing to express themselves orally rather than in writing.

It is accepted practice to calculate response rates by subtracting the number of undeliverable questionnaires from the initial sample size (Babbie, 1973). These may be returned through absence of the addressee, etc. A response rate of approximately 50% is generally considered adequate for analysis and reporting (Babbie, 1973). However, Weisberg and Bowen (1977, p.36) state that:
"...usually those who refuse to respond do not differ too much from those who do respond (other than being less co-operative). The higher the refusal rate, the more important it is to ascertain whether the refusals are concentrated among a certain group in the population......within limits, non-response can generally be ignored."

In conclusion, the choice of survey type thus depends on the nature of the information one wishes to obtain and the nature and location of the respondents. The characteristics of each particular study will indicate which methodology is the most suitable choice.

### 6.3.3 Research Using Available Data

The major advantage of this methodology is that it is appropriate for obtaining data that is not accessible in other forms due to practical constraints. Furthermore, the data has already been collected and disseminated into public records or reports, thus reducing the cost and time expenditure dramatically. In addition, such reports are normally constructed by skilled writers and may be far more instructive than poorly written responses in postal questionnaires. Interviewer bias and all the problems associated with questionnaire construction and application are removed.

However, the reports may be lacking in completeness, or may not contain the exact information that is sought. A lack of standardised format may also be commonplace. This can create problems for coding the data and subsequent statistical analysis. Hutter (1988), found this to be the case upon examination of records relating to enforcement practices. Difficulties were experienced in obtaining complete records, and individual case files were
often hard to locate because they had been mis-filed or through constraints on staff time for them to locate the information. Furthermore, Hutter (1988) found a large variation in the quality and quantity of evidence recorded. For example, the nature of the complaint and the outcome were often noted, but the reasons for taking a particular course of action were not.

Another disadvantage using available data is the bias inherent in their construction. For example, newspaper articles reporting unusual events rather than normal daily occurrences. Despite these drawbacks, document study can prove to be a valuable research tool as long as its limitations are realised.

**6.4 Methods of Data Collection and Analysis**

Copies of all questionnaires, design of structured interviews and covering letters used in this study can be found in Appendix 11.

**6.4.1 Mail Survey 1 - Local Authorities**

The purpose of this questionnaire was to evaluate the approach of local authorities to the enforcement of two aspects of environmental law, namely statutory nuisances and air pollution. The self-administered postal questionnaire was considered to be the most appropriate methodology considering the number and geographical spread of the respondents. The questionnaire was constructed paying particular attention to the problems associated with question formulation. The majority of the questions were of the closed-ended type to facilitate subsequent coding, taking into account the relatively large sample size (see
A covering letter explaining the purpose of the research and stressing its importance was included, along with a FREEPOST envelope. A pilot study was also undertaken.

The entire population (402 in total) of District, Metropolitan and London Borough Councils in England and Wales were surveyed to avoid sampling errors and problems associated with sample size. Identical copies of the questionnaires were sent to both the Environmental Health and Legal departments of each council, to ascertain their particular roles in environmental law enforcement. The total number of questionnaires sent thus totalled 804.

Questions 1-6 inclusive were designed to distinguish between the type of council, the type of respondent and departmental differences. These questions would generate background information that could be used to evaluate how these parameters affected the responses to remaining questions. For example, does a particular type of council use a specific method of enforcement more readily than others?

Information concerning enforcement policies was obtained using questions 7-12. The aims of this section were to determine the percentage of local authorities that have an enforcement policy, what form this policy takes and the frequency of its utilisation. Furthermore, this data could again be cross tabulated with responses in subsequent sections of the questionnaire to determine levels of correlation.

Questions 13-18 clarified the perceptions of respondents towards specific issues such as the introduction of guidelines for regulatory authorities and the courts, the current approach taken by regulators and the availability of resources.
Questions 19-24 were formulated to indicate the extent of utilisation of specific enforcement measures and detect possible reasons for their minimal application. The purpose of the penultimate section (questions 26-28) was to generate data indicating which factors were actively taken into account when choosing the enforcement action. Finally, question 29 was included to elicit additional comments from the respondent.

Analysis of the data generated from this questionnaire was carried out by calculating frequencies of responses (percentages), the Kruskal-Wallis one way analysis of variance (ANOVA), the Mann-Whitney U test and chi-square goodness-of-fit test.

The choice of an appropriate statistical test depends to a large extent on the type of data being analysed. Each test must be appropriate for different types of data, otherwise the test may fail and false assumptions could be made (Siegel and Castellan, 1988, p.19-22).

There are different types of data that can be categorised according to their scale. These are:

1. *The nominal or categorical scale* - measurement at its weakest level where a number or other symbols are used to classify data but have no other numerical meaning (e.g. male = 1, female = 2).

2. *The ordinal or ranking scale* - where a scale is used as some kind of measurement, although the differences between the numbers have no exact numerical meaning but rather
just measure the level of response (e.g. when a respondent is asked to agree to a statement on a level of 1 to 5, where 1 is total agreement and 5 is total disagreement).

3. *The interval scale* - where a scale is used as measurement and the differences between numbers have an actual numerical meaning. However, the zero point and the unit of measurement are arbitrary (e.g. temperature measured on the Farenheit and Celcius scale. Both scales are linearly related, but the unit of measurement and zero point are different).

4. *The ratio scale* - measurement at its strongest level where the numbers have actual numerical meaning and the scale has a starting point at zero (e.g. the measurement of weight in grams).

The first step in choosing an appropriate statistical test is to decide the type of data being analysed. Data of the nominal or ordinal type must be analysed using non-parametric methods, whilst data of the interval or ratio type can be analysed by parametric methods if the statistical model is valid for the data (Siegel and Castellan, 1988, p.33-35).

The following tests were found to be appropriate for different data sets in this questionnaire:

1. *Chi-square* - assesses the degree of correspondence between the observed and expected observations in each category. Suitable for data on the nominal scale upwards, with two or more categories.
2. Mann-Whitney U - used to test whether two independent groups have been drawn from the same population. Data must be of at least an ordinal type (the test is therefore not suitable for nominal data), and the test can be used for two categories.

3. Kruskal-Wallis ANOVA - tests whether a number of independent samples are from different populations. Data must again be of at least an ordinal type, and the test can be used for more than two categories.

6.4.2 Structured Interviews - HMIP and the NRA

The aims of this particular aspect of the research were similar to that of the first mail survey. In this case, an evaluation of the approach by HMIP and the NRA to enforcement was undertaken. The methodology used was different due to the small population size. Taking the small population size into account, it was considered that in-depth, structured interviews would be the most viable method of data collection in this case.

HMIP and the NRA consisted of a number of regional offices (7 and 8 respectively) throughout England and Wales. The number of people involved in the decision making process was small - usually the field officer who investigated the incident, the departmental manager and higher managerial personnel. The utilisation of a postal questionnaire, with its inherent problems of a lower response rate, was therefore deemed impractical. However, the data generated by in-depth interviews would be much more detailed and would give a better indication of the processes involved in the regulators' work.
Each of the regional offices was approached for an interview. The design of the questionnaire was similar in structure to the postal survey of local authorities. Questions were included to elicit responses on the use of policies, the extent of utilisation of particular enforcement methods, their overall approach to enforcement, etc. However, in contrast to the postal survey, all questions were of the open-ended form to encourage extensive discussion of the subject. Where possible, copies of the questionnaire were sent to the respondent before the interview took place. This ensured the interviewee was an appropriate person able to answer all the questions, and gave the respondent time to prepare his/her answers.

Analysis of this data was undertaken by a descriptive comparison of the responses elicited from the interviewees.

The mail survey of local authorities and the interviews with NRA and HMIP personnel were carried out to satisfy research aims 1-5 inclusive (see section 6.2), and to gain an insight into the strategic decision making processes employed within regulatory agencies.

6.4.3 Mail Survey 2 - The Regulated Community

The purpose of this survey was to assess the regulated community's perception of the level of consistency employed by regulatory authorities. In order to do this effectively, it was decided to investigate those companies that had experienced enforcement action by the NRA and HMIP. The NRA and HMIP were chosen for this study because they were national bodies that theoretically should have displayed consistency throughout their regional offices. Each authority had an enforcement policy that should have facilitated the consistent utilisation of
different methods of enforcement. However, these policies differed quite considerably in
their form and structure (see chapter 5) and in the level of guidance offered to regulatory
personnel. Therefore, the effect of a more highly structured enforcement policy (i.e. the
NRA's policy) on the level of observed consistency could be investigated.

Local authorities were not included in this study because of a number of undesirable
characteristics associated with them. Firstly, each council is likely to differ in its approach to
enforcement, thus making comparisons of consistency difficult. In addition, the number of
people experiencing enforcement action by local authorities was found to be relatively low,
making a study of this group statistically impractical. Furthermore, these authorities must
deal with the enforcement of two different areas of legislation relevant to this research,
namely statutory nuisances and air pollution. The type of enforcement employed could vary
extensively between the different legislation. For example, an individual initiating
neighbourhood noise would probably be treated differently to an industrial complex emitting
air pollutants. Taking these impracticalities into account, it was decided to confine the study
to the NRA and HMIP.

Limitations of using this type of study were realised. Firstly, the questionnaire measures the
perceived level of consistency as indicated by the regulated community, rather than actual
levels. Actual levels of consistency are very difficult to measure. Such information could
possibly be obtained by inspecting large numbers of case files and comparing the outcome in
similar cases. However, as the author discovered, complete files containing details of the
internal decision making processes are not usually made available to the general public. An
alternative methodology is that of observation of regulatory personnel in the field. Using
observation as a methodology, however, would restrict the observer to a limited number of regulatory personnel and particular areas - a far from ideal scenario for collecting information on consistency. Furthermore, the usual behaviour of officials could be dramatically altered by the presence of an outside observer.

This questionnaire measured the regulated community's perception of NRA and HMIP enforcement consistency. In terms of this research, perception can be considered to be at least as important as reality. It has already been discussed how the co-operation of industry plays a vital role in enabling regulatory authorities to undertake their duties (see chapter 2). If the regulated community believe they are being treated in an inconsistent manner, then widespread goodwill and co-operation will be lost and the whole regulatory system will fail. This questionnaire therefore addresses the key issue of industry's opinion of enforcement action consistency, with negative responses having important implications for the introduction of increased openness and consistency in decision making by regulatory authorities.

The second problem associated with this questionnaire was the nature of respondents. In certain cases, an antagonistic relationship could have existed between the regulators and the regulated. In such cases, it would be more likely for the respondents to indicate that the authorities were behaving in an inconsistent manner. This problem was overcome by asking the respondents to substantiate accusations of inconsistency (by making particular reference to a case in point), and thus validate their questionnaire.
Names of respondents experiencing prosecution, prohibition notices or enforcement notices were obtained from HMIP. The area covered the whole of England and Wales from the period 1990-1995, in order to provide a statistically workable sample. Addresses of the respondents were provided in certain cases, but in others were obtained from the telephone directory. The total population with obtainable postal addresses was 102.

Likewise, the names of respondents subject to prosecution or formal cautions between 1990-1995 were obtained from each of the regional offices of the NRA. In this case, the population size was too large, so it was decided that the study should be limited to just two regions. The South West region and Thames were chosen to incorporate areas of study that were both rural and industrial in nature. No addresses were provided with this data, minimising the numbers of respondents with a successfully matched address from the telephone directory. The total number of respondents from the South West region was 79. Although the available population in the Thames region was greater than this, it was necessary to restrict the numbers of respondents in this area also to 79 to prevent the introduction of regional bias. The sample was obtained for this region using the systematic selection procedure of random sampling (Weisberg and Bowen, 1977, p.22-23). Therefore, the entire sample size for this survey was 260.

Questions were formulated using a mixture of the open- and closed-ended type of question. A covering letter was enclosed with the survey, in addition to a FREEPOST envelope. A pilot survey was also undertaken.
The first section of the questionnaire contained objective, factual questions designed to acquire background information on the companies studied. Questions 3 (HMIP questionnaire) and 4 (NRA questionnaire) were included to obtain details on the number and type of enforcement action experienced by the respondent. Questions regarding the companies' perception of the agency's consistency were followed by a request for details of their experiences to substantiate their claims. Finally, their opinion of the consistency of penalties applied by the courts was obtained, followed by a space for any additional comments.

Analysis of the data generated from this questionnaire was carried out by calculating frequencies of responses (percentages), the Kruskal-Wallis one way analysis of variance (ANOVA), the Mann-Whitney U test and chi-square goodness-of-fit test (see section 6.4.1).

The overall aim of this survey was therefore to obtain a measure of the consistency of the actions of the NRA and HMIP (research aim 5). These agencies could also then be compared in the light of their differing policies, to ascertain whether the type of policy employed affects the consistency of their actions.

6.4.4 Assessment of Available Data - Consistency of Court Sentencing

The most appropriate method to investigate the consistency of penalties applied by the courts was analysis of data provided in reports of actual cases. Taking into account the fact that the majority of relevant cases are heard in magistrates courts and usually then only reported in local newspapers, the best single source of this data was found to be the ENDS Reports. The
sample of cases used were all those reported during 1993-1995 that were prosecuted under legislation relevant to this research - a total of 109. A number of observations were made from the data, including:

- the type of legislation
- the number of offences prosecuted
- the levels of fines, costs and clean-up fees applied
- the location of the incident
- the location of the court
- the type of plaintiff
- the type of defendant
- the plea
- the date of the hearing
- various characteristics of the incident (e.g. fish kill, release of dangerous substances, whether the incident was preventable, etc. - see Chapter 3)
- various characteristics displayed by the defendant (prior record, whether remedial action was taken by the offender, whether the regulatory authority was informed, etc. - see Chapter 3)

A full list of the variables can be found in Appendix 11.

Similar cases were identified by specifying certain characteristics that were noted in the case reports. Comparisons of the levels of fines awarded in similar cases was then carried out.
The purpose of this aspect of the research was to fulfil research aim 6, i.e. to provide an indication of the consistency of sentencing applied by the courts.

6.5 Summary

This chapter has delineated the primary research aims. It has provided a focus for the research and has placed each stage of the research in context with the overall aims. A discussion of the available methodologies revealed the advantages and disadvantages of each system. Therefore, an informed choice was able to be made concerning the type of methodology most appropriate to each stage of the study. The practical details of each stage of the research were then outlined.

The results obtained from the empirical research are outlined in Chapters 7 to 10 inclusive.
CHAPTER 7

RESULTS OF MAIL SURVEY 1

LOCAL AUTHORITY QUESTIONNAIRE

7.1 Introduction

The purpose of this questionnaire was to investigate the methodologies and strategies employed by local authorities in the enforcement of environmental law with specific reference to air pollution and statutory nuisances. This survey was constructed in order to satisfy a number of primary research aims delineated in section 6.2, namely:

1. To assess the approach to enforcement by local authorities (co-operation versus confrontation).

2. To determine the extent of utilisation of enforcement methods by the local authorities, and the reasons for non-utilisation.

3. To measure the relative importance of influential factors in the strategic decision making process.

4. To investigate the types of enforcement policies prevalent in local authorities and evaluate their varying levels of effectiveness.
5. To determine the level of consistency in the approach to enforcement between local authorities.

The results generated from this questionnaire are outlined collectively in section 7.10. This section provides an initial overview of the findings described throughout this chapter. A more detailed discussion and analysis of the results can be found in Chapter 11. Comparison of the findings with previous research, and a discussion of the results in the context of the research aims delineated in Chapter 1, were carried out.

7.2 Response Rate

The overall response rate from the questionnaire was 42% (see Chapter 6 for details of sample size). However, upon receipt of the completed questionnaires it was observed that notable differences existed between those completed by environmental health personnel and those completed by legal staff. It was apparent that legal staff were, in many cases, unable to answer certain questions due to the nature of their work and resultant lack of knowledge relating to areas dealt with by the environmental health departments. This was reflected in the different response rates elicited from the two departments which were 54% for environmental health departments and 30% for legal departments.

As the differences stated above were so marked, it was decided that separate analysis of the questionnaires should be carried out according to their originating departments. This would avoid the introduction of errors in the analysis through over-generalisation of local authority departments. Furthermore, separate analysis would provide specific information on the
varied roles of each department in the enforcement process. A more detailed discussion of this subject is included in the ensuing sections concerned with data analysis.

7.3 Sample Characteristics

Determination of various characteristics of the sample is important. Different characteristics of the respondent and the type of council with whom they are employed may affect many different aspects of the enforcement process. Section 1 of the questionnaire provided information on:

- the population size of the council catchment area;
- the location of the council (England or Wales);
- the type of council (District, Metropolitan Borough or London Borough);
- the type of catchment area (urban or rural);
- the type of work carried out by the respondent (field or office based);
- whether the respondent had any supervisory/managerial duties or not;
- the department in which the respondent was located.

There are several characteristics of the sample that returned the questionnaire which may be compared to the characteristics of the entire sample (the whole population in this case). This comparison is important to ascertain whether there are significant differences between respondents and non-respondents. In this way, it can be determined whether the returned questionnaires are representative of the sample as a whole. Findings from samples that are representative can then be confidently applied to the whole sample/population, whereas difficulties may arise applying the findings from non-representative returns.
In this particular survey, there were four characteristics of the councils that were known. These were population size of the catchment area, location in England or Wales, the type of council (District, Metropolitan Borough or London Borough) and the department (Environmental Health or Legal). A comparison between the total sample and actual returns can be found in the table below.

Table 7.1 A Comparison of Sample Characteristics and Characteristics of Actual Returns

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Whole Sample (%)</th>
<th>Actual Returns (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-50,000</td>
<td>4.3</td>
<td>5.6</td>
</tr>
<tr>
<td>50,001-100,000</td>
<td>44.9</td>
<td>42.3</td>
</tr>
<tr>
<td>100,001-150,000</td>
<td>26.8</td>
<td>28.9</td>
</tr>
<tr>
<td>150,001-200,000</td>
<td>9.2</td>
<td>9.7</td>
</tr>
<tr>
<td>200,001-250,000</td>
<td>5.8</td>
<td>5.6</td>
</tr>
<tr>
<td>250,001-300,000</td>
<td>4.6</td>
<td>4.1</td>
</tr>
<tr>
<td>300,001-350,000</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>350,001-400,000</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>400,001-highest (1,003,759)</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>English or Welsh</td>
<td></td>
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<td>English</td>
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<td>Welsh</td>
<td>8.7</td>
<td>8.9</td>
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<tr>
<td>Type of Council</td>
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<td>District Council</td>
<td>83.8</td>
<td>82.5</td>
</tr>
<tr>
<td>Metropolitan Borough Council</td>
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<td>7.7</td>
<td>7.7</td>
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<td>Department</td>
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<td>Environmental Health</td>
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<td>64.3</td>
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<tr>
<td>Legal</td>
<td>50</td>
<td>35.7</td>
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</table>

From the above table, it can be seen that the percentages of actual returns closely resembled those of the entire sample, with the exception of the type of department. Therefore it was assumed that the returned questionnaires were representative of the entire sample except in the case of department type. It was therefore decided to carry out separate analysis of those
questionnaires originating from different departments. As already stated, this prevented the introduction of errors in the analysis and provided more detailed analysis of the sample. It can be seen from the above table that a much larger proportion of returns originated from the Environmental Health Department. Two explanations are proposed for this difference, namely:

1. that the questionnaire was more appropriate for completion by Environmental Health personnel; and

2. that in many cases councils do not actually have a separate legal section, having instead contracts with outside firms that handle legal matters when required.

Both of the above proposals were found to be accurate after investigation of the additional comments written by the respondents at the end of the questionnaire. These will be discussed in more detail later in this chapter.

In addition to the sample characteristics discussed above, section 1 of the questionnaire also generated data on other characteristics, namely the catchment area of the council and the type of work carried out by the respondent. The responses generated by the questionnaire are illustrated in Figure 7.1.
It can be seen from the above diagrams that the catchment areas of the councils were fairly evenly distributed between mostly urban, mostly rural and half urban and half rural. The majority of respondents (70.9%) had jobs based predominantly in the office environment. 28.2% of respondents described their work as half office and half field based, whilst only a tiny proportion (0.9%) of respondents stated that their job was mostly field based. The vast majority of respondents (91.4%) had some supervisory or managerial duties.

7.4 Enforcement Policies

Section 2 of the questionnaire was designed to obtain information concerning various aspects of local authority enforcement policies. The results can be found in Table 7.2.
Table 7.2 Characteristics of Enforcement Policies

<table>
<thead>
<tr>
<th>Responses</th>
<th>Environmental Health Dept. (% response)</th>
<th>Legal Dept (% response)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q7 - Does your dept./organisation have an enforcement policy/policies?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>77.4</td>
<td>34.8</td>
</tr>
<tr>
<td>no</td>
<td>22.1</td>
<td>48.7</td>
</tr>
<tr>
<td>don't know</td>
<td>0.5</td>
<td>16.5</td>
</tr>
<tr>
<td>Q8 - What area does the policy relate to?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>air pollution</td>
<td>7.6</td>
<td>0</td>
</tr>
<tr>
<td>statutory nuisances</td>
<td>13.3</td>
<td>5.1</td>
</tr>
<tr>
<td>both</td>
<td>79.1</td>
<td>94.9</td>
</tr>
<tr>
<td>Q9 - Is the policy written or verbal?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>written</td>
<td>73.2</td>
<td>59.0</td>
</tr>
<tr>
<td>verbal</td>
<td>23.5</td>
<td>35.9</td>
</tr>
<tr>
<td>both</td>
<td>3.3</td>
<td>5.1</td>
</tr>
<tr>
<td>Q10 - How rigid or flexible is the policy?</td>
<td></td>
<td></td>
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<tr>
<td>very rigid, no discretion</td>
<td>0.6</td>
<td>0</td>
</tr>
<tr>
<td>quite rigid, some discretion</td>
<td>30.8</td>
<td>15.8</td>
</tr>
<tr>
<td>quite flexible, substantial discretion</td>
<td>57.1</td>
<td>50.0</td>
</tr>
<tr>
<td>very flexible, mainly relies on discretion</td>
<td>11.5</td>
<td>34.2</td>
</tr>
<tr>
<td>Q11 - When is the policy applied?</td>
<td></td>
<td></td>
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<tr>
<td>every case</td>
<td>41.0</td>
<td>38.5</td>
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<tr>
<td>majority of cases</td>
<td>59.0</td>
<td>59.0</td>
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<tr>
<td>minority of cases</td>
<td>0</td>
<td>2.6</td>
</tr>
<tr>
<td>never</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Q12 - Is reference made to specific methods of enforcement in the policy?</td>
<td></td>
<td></td>
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<tr>
<td>yes</td>
<td>71.7</td>
<td>71.8</td>
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<tr>
<td>no</td>
<td>28.3</td>
<td>28.2</td>
</tr>
</tbody>
</table>

The majority (77.4%) of Environmental Health Departments had an enforcement policy of some description. This contrasted with Legal Departments, where only 34.8% of respondents affirmed the existence of a policy. From the respondents who stated their council had a policy, information concerning a number of characteristics of that policy was obtained. From the above table it can be seen that the type of policy varied widely between different local authorities. The predominant policy type in both departments was one that related to both air pollution and statutory nuisances, had a written format, was quite flexible with a substantial
amount of employee or committee discretion, was applied in the majority of cases and made reference to specific methods of enforcement. Respondents were asked to state the methods of enforcement referred to in the policy. The results are detailed in Table 7.3.

Table 7.3 Methods of Enforcement Referred to in the Policy

<table>
<thead>
<tr>
<th>Method of Enforcement</th>
<th>%</th>
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<tbody>
<tr>
<td>Prosecution</td>
<td>18.1</td>
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<tr>
<td>Notices</td>
<td>14.7</td>
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<tr>
<td>Informal methods</td>
<td>10.1</td>
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<tr>
<td>Formal Caution</td>
<td>10.1</td>
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<tr>
<td>Formal letter</td>
<td>7.1</td>
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<tr>
<td>Verbal Contact</td>
<td>5.2</td>
</tr>
<tr>
<td>See enclosed policy</td>
<td>3.1</td>
</tr>
<tr>
<td>Work in default</td>
<td>1.2</td>
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<tr>
<td>Injunction</td>
<td>1.2</td>
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<tr>
<td>Education</td>
<td>0.9</td>
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<tr>
<td>Seizure</td>
<td>0.6</td>
</tr>
<tr>
<td>Crown Prosecution Service Guidelines</td>
<td>0.6</td>
</tr>
<tr>
<td>Self help under S.82</td>
<td>0.3</td>
</tr>
<tr>
<td>Eviction notices for tenants</td>
<td>0.3</td>
</tr>
</tbody>
</table>

The most popular methods of enforcement referred to in policies were prosecution, notices, informal methods and formal cautions.

A small number of respondents (37 in total) enclosed a copy of their enforcement policy for inspection. A comparison of these policies was made on the basis of identification of specific factors, namely whether the policy:

- was general or detailed in its overall approach;
- covered nuisance or air pollution or both;
- delineated the council's responsibilities;
• indicated the methods of investigation used;

• stated the type of enforcement action utilised;

• specified under which circumstances this action will be taken;

• was co-operative or confrontational in its approach;

• specified certain characteristics of the incident or the offender that should be taken into account;

• stressed the importance of prevention and education;

• stressed the importance of consistency;

• made reference to Guidance Notes issued by the Secretary of State;

• emphasised the requirement to make improvements to processes and use BATNEEC.

The results are presented in Table 7.4.
Table 7.4 Review of Enforcement Policies - their Content and Structure

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<thead>
<tr>
<th>Ref. no.</th>
<th>General</th>
<th>Detailed</th>
<th>Nuisance</th>
<th>Air poll.</th>
<th>Council's responsibility set out</th>
<th>Methods investigation set out</th>
<th>Type of action stated</th>
<th>When action taken</th>
<th>Co-operative</th>
<th>Confrontational</th>
<th>Characteristics of incident/offender</th>
<th>Prevention</th>
<th>Education</th>
<th>Consistency</th>
<th>Ref. to Guidance Notes</th>
<th>Ref. to BATNEEC or Improvements</th>
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**KEY:** ✓ - noise nuisance only  ✓ - use confrontation only when co-operation has failed  sc - scoring checklist
The results of the analysis of actual written enforcement policies reinforces the premise that a wide variety in their structure, form and content existed between local authorities. A little over half of the sample were considered to have a detailed format, whilst the remainder were general in nature.

The majority of policies related to both air pollution and statutory nuisances. However, in a number of cases the statutory nuisance policy was restricted to the control of noise nuisance alone. This was probably a result of the disproportionate amount of time spent by local authorities investigating noise nuisances, where in many instances the number of complaints associated with this type of nuisance far outweighed any other. Furthermore, many policies referring to all types of statutory nuisance placed a considerable amount of emphasis on the control of noise nuisances. Although the problem of noise was considerable for local authorities, it seems that less importance was placed on the control of other statutory nuisances, and the enforcement of the law relating to these incidents could have been neglected as a result.

In 17 of the policies the responsibilities of the council were clearly set out. Details of relevant legislation, the scope of control, under which conditions investigations must be carried out, etc. were included in this section. The actual methods of investigation (the process followed by investigators, time limits before notices are served, etc.) formed part of 19 policies.

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4 Extract from one local authority policy:
"In [name of council], the national trend is followed with 62% of the number of complaints received by the Environmental Health Services Division during 1992 being noise complaints. Domestic noise complaints accounted for 37% of the total number of complaints."
With few exceptions, the types of enforcement action considered by the council were stated in the policy. These included:

- informal action;
- warning letters;
- formal notices (abatement, enforcement, prohibition);
- formal cautions;
- prosecution,

and more rarely:

- injunctions;
- seizure (e.g. amplification equipment).

The majority of policies specified under what conditions different enforcement action would be pursued. For example, in many policies it stated that a formal caution would only be used when:

(i) there is evidence of the suspected offender's guilt sufficient to give a realistic prospect of conviction; and

(ii) the suspected offender admits guilt; and

(iii) the suspected offender understands the significance of a formal caution and gives informed consent to being cautioned.
Only one policy used a scoring checklist to determine the outcome of the decision making process. In this case, certain parameters relating to the incident and the offender were scored on a scale of 0-40. Examples of the parameters were severity of potential risk to health (none - score 0; low - score 5; fair - score 10; actual ill health - score 40), history of compliance, adequacy and commitment to safety policy, etc. Special circumstances of an individual case were taken into account by provision of an 'other factors' column scoring 0-30 as appropriate depending on severity and effect. The resultant score was used to recommend appropriate action in the form of an advisory letter (0-25), a warning letter (26-50), statutory notice (51-100) or consider prosecution, formal caution or prohibition notice (101+).

From the analysis of policies and consideration of questionnaire responses in the 'policies' section, it seems that the majority of local authorities approached enforcement in a co-operative manner. Only when co-operation was not producing the desired effect, was a more confrontational approach undertaken with utilisation of more formal enforcement measures. However, in a small proportion of cases no mention of co-operation was made. This occurred predominantly in the enforcement of statutory nuisances. The roots of this difference can be traced back to the actual legislation which places a duty on local authorities to serve an abatement notice when a statutory nuisance exists, or is likely to occur or recur. Conversely, no duty is imposed on the serving of enforcement notices for air pollution control, which may be served as appropriate. This duty was transposed into many of the enforcement policies dealing with statutory nuisances - once a nuisance was deemed to exist an abatement notice will be served without recourse to informal methods. However, a small proportion of

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1 EPA s.80(1)
2 EPA s.13(1)
policies used the term 'may be served' indicating that the duty was not being fully implemented.

Characteristics of the incident and the offender that were taken into account were stated in 28 of the policies. The most commonly occurring characteristics when deciding whether to prosecute or not were:

- the seriousness of the offence;
- previous history of parties concerned and attitude to the offence;
- likelihood of a defence being established (e.g. use of BATNEEC, etc.);
- availability of important witnesses and willingness to co-operate;
- willingness of offender to prevent recurrence;
- provable public benefit and importance of case (setting precedence etc.);
- whether other action would be more effective;
- explanation offered by offender;
- realistic prospect of conviction (quality of evidence);
- serious risk or actual damage to health/environment;
- failure to comply with a notice;
- blatant disregard for the law or reckless disregard for the environment.

Prevention and education featured strongly in some policies, but this important area of environmental control was ignored in others. The following extract from one of the policies indicates the endeavours made by some authorities in the field of prevention and education.
"Stages of enforcement:
1. Promotion - promotion of good environmental practice to achieve a climate of environmental awareness and co-operation from operators.
2. Prevention - the local authority will try to ensure that business does not unnecessarily expose itself to the possibility of formal action through lack of information or understanding. Enforcement action shall not come as a surprise to operators. The objective of this stage is to secure a positive relationship between enforcer and those being enforced.
3. Prosecution and formal notices - this stage shall only be contemplated normally if the local authority is satisfied it has done all it reasonably can in stages 1 and 2 to achieve efficient and effective compliance, or where:
   (i) there is a risk of serious pollution of the environment or harm to health;
   (ii) there is a blatant disregard of responsibilities under Environmental Protection Act legislation;
   (iii) the offence is of such gravity that other forms of action are inappropriate."

The consistency of enforcement action was frequently stated as being the objective of the policy. Other principles that were named objectives were those of proportionality and transparency. Unfortunately, few policies made reference to the Secretary of State's Guidance notes (for EPA Part I) which provide national guidance for the implementation of environmental legislation, or the need to press for improvements in processes to keep astride of the BATNEEC principle.

7.5 Perceptions and Attitudes of Enforcement Officers

Returning now to the responses gathered from the questionnaire, section 3 (Q13-18 inclusive) provided information on enforcement officers' attitudes to enforcement and sentencing guidelines, the objectives of enforcement, the relationship between regulator and regulated, the approach to enforcement and the provision of resources. All questions in this section were of the same format. Respondents were asked to indicate their agreement or
disagreement with a particular statement by circling an appropriate number from 1 (totally agree) to 5 (totally disagree). The results are presented below.

Figure 7.2 Attitudes of Enforcement Officers Towards the Introduction of Enforcement Guidelines for Regulatory Authorities

Q13 "National guidelines for environmental law enforcement should be introduced for all regulatory authorities to promote uniform enforcement."

The majority of respondents agreed that some form of national guidelines for enforcement should be introduced. However, most were not in total agreement indicating that perhaps they held some reservations concerning the type of guidelines, or how the guidelines would be implemented.
Q14 "Strict sentencing guidelines for the courts should be introduced.

A similar pattern of results was obtained from this question as question 13. Most respondents agreed that sentencing guidelines for courts should be introduced.
Figure 7.4 Attitudes of Enforcement Officers Towards the Purpose of Law Enforcement: Prevention Rather than Punishment

Q15 "The point of environmental law enforcement is to prevent future crimes rather than punish the offender."

In this case, most respondents neither agreed nor disagreed to the statement. This suggests that officers either felt enforcement has another role, or the purpose of enforcement is both for the prevention of future incidents and punishment of the offender. Although the majority of respondents expressed the 'neither nor' response, remaining answers tended to be more in agreement with the statement than disagreement.
Q16 "Development of a good relationship between the regulators and regulated is essential."

This question produced a marked response indicating total agreement with the statement for most officers. The results suggest that enforcement personnel regarded the development of a good relationship with the regulated community as extremely important.
Q17 "The most stringent enforcement possible should be taken in each case, regardless of circumstances."

A similar pattern to question 16 was observed for question 17, but in the opposite direction. Respondents felt very strongly that the most stringent action should not be taken in each case. These results endorse previous findings following analysis of enforcement policies. Local authorities normally utilised a co-operative approach in the first instance, only resorting to more stringent action if required.
Q18 "Making more resources available would increase the use of many enforcement measures."

A difference of opinion was evident between the responses from Legal officers and Environmental Health personnel. Most legal staff were in total agreement with the statement, and the numbers fell off sharply towards the disagreement end of the scale. Environmental Health officers, however, just agreed that more resources would increase the utilisation of enforcement measures. This may be explained by the fact that legal departments normally only deal with the more expensive aspects of enforcement (cautions, prosecutions, injunctions, etc.) and are therefore more limited in the action they are able to take. Environmental Health officers, on the other hand, have a wider range of enforcement methods at their disposal, some of which (e.g. informal action) are relatively inexpensive. On the whole, however, both types of respondents agreed to a certain extent with the statement.
Questions 19-24 in the questionnaire were concerned with the utilisation of different enforcement methods (the reader is directed to a copy of the questionnaire in Appendix II for the exact wording of these questions). Respondents were asked whether a particular enforcement methodology for air pollution control and statutory nuisances was employed by their council, and if so, to indicate how often each method was used on a scale of 1 (in all cases) to 5 (in very few cases).

The objectives of this section were:

- to provide an estimation of the extent of utilisation of the various methods;
- to compare the use of air pollution control and statutory nuisance methods;
- to assess the degree of consistency of use between local authorities;
- to ascertain the reasons for non-utilisation.

Responses elicited from legal departments were mainly in the 'don't know' category for many methods, due to their non-involvement in this aspect of the process. Therefore, the more meaningful responses from environmental health officers alone are illustrated overleaf.
Figure 7.8 Utilisation of Enforcement Methods for the Control of Air Pollution

1 - all cases; 2 - most cases; 3 - some cases; 4 - few cases; 5 - very few cases; 6 - no cases.
Figure 7.9 Utilisation of Enforcement Methods for the Control of Statutory Nuisances

1 - all cases; 2 - most cases; 3 - some cases; 4 - few cases; 5 - very few cases; 6 - no cases.
It can be seen from Fig. 7.8 relating to air pollution control, that informal action was the most commonly used enforcement measure, closely followed by use of warning letters. Results from the use of variation notices, powers of inspection, powers of entry and power to obtain information all showed that most respondents used them in all cases where there use was possible (category 1). The results indicated a reluctance by many authorities to use formal enforcement measures. Enforcement notices, prohibition notices, cautions and prosecutions all peaked in category 3 - use only in some cases. There was a decline in responses either side of category (giving a pyramid pattern). This indicated that although these methods were not used in all, or even the majority of cases, officers generally did not dismiss them entirely.

The results for other formal methods indicated a definite reluctance on the part of authorities to use them. Injunctions and the prosecution of company directors showed the majority of authorities used them in very few cases.

No definite trend was observed with the utilisation of revocation notices, powers of seizure and clean up after an incident.

The recovery of clean up expenses showed peaks at both extremes of the scale. The majority of responses were approximately equally split between use in all cases (category 1) and use in no cases (category 6).

Fig. 7.9 illustrates the results from the extent of utilisation of statutory nuisance control measures. The basic trends described above were also observed with these results for corresponding methods, with certain exceptions.
Similarities included:

- employment of informal methods and warning letters as the most commonly used types of action;
- powers of entry, powers of inspection and the power to obtain information were used in all cases where their use was possible according to the majority of respondents;
- peaks were again observed in the third category for cautions and prosecutions. However, a prosecution was probably more likely to be brought for statutory nuisances than air pollution control. A larger proportion of respondents opted for the 'most cases' response in the control of nuisances compared to air pollution;
- injunctions and the prosecution of company directors were rarely used;
- no particular pattern was observed with the use of powers of seizure.

However, it can be seen from the results that abatement notices were used quite readily (with the majority of respondents marking the category 2 box - used in most cases). This contrasted with the utilisation of enforcement notices for the control of air pollution, which were not used as frequently.

The power to carry out works for an abatement notice showed a similar level of response across the categories, i.e. there was quite a difference in its rate utilisation throughout the authorities. More responses were centrally located (in categories 3 and 4) than for the use of clean-up powers under EPA Part I.
Responses relating to the recovery of works expenses for statutory nuisances, showed that the majority of councils would pursue the recovery of these fees, unlike the scenario for the recovery of clean up expenses under EPA Part I.

Apart from certain methods such as informal action and warning letters, the results illustrated a wide spread of answers across the categories in many cases. This pointed to a wide variation in the approach to enforcement between different local authorities.

In questions 21 and 24, respondents were asked to state the reasons why a particular action was either not used at all, or used only in very few cases. The results can be found in Table 7.5. for air pollution and Table 7.6. for statutory nuisances.
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| Table 7.5 Reasons Given for Non-Utilisation of Air Pollution Control Enforcement Measures | 340 |
Table 7.6 Reasons Given for Non-Utilisation of Statutory Nuisance Enforcement Measures.

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<td>don't know</td>
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<tr>
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</tr>
<tr>
<td>not effective - used before</td>
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<tr>
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<tr>
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<tr>
<td>not considered it</td>
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</table>
The main reasons cited for non-utilisation of many air pollution control measures were that the method was not appropriate, or had not been needed so far.

Another reason that featured strongly with certain methods was a lack of resources. The methods where this reason was particularly noted were:

- clean up powers;
- recovery of clean up expenses;
- prosecution;
- prosecution of company directors;
- injunction.

An additional hurdle perceived to be connected with many of the methods was that the process of applying the method was too complicated. One or two respondents stated this to be the case for most of the methods listed.

Cautions and warning letters were found to be ineffective by certain respondents when used in previous cases.

A small number of respondents (one or two for each method listed below) stated that they were not aware of the existence of the specific method. The methods cited were:

- cautions;
- powers of inspection;
- powers of seizure;
- variation notices;
- clean up powers;
- recovery of clean up expenses;
- injunction.

This suggests that some local authorities were working to implement air pollution control legislation without the full armoury of control measures at their disposal.

Table 7.6 shows the reasons for non-utilisation of statutory nuisance enforcement measures. 'Not needed yet' and 'not appropriate' were again cited as the main reasons in many cases. However, a greater proportion of respondents placed more emphasis on the 'too complicated' and 'not enough resources' options. 'Too complicated' was the top reason for not undertaking prosecution and abatement notices, and the second most popular reason for avoiding powers of seizure, prosecution of company directors and the recovery of works expenses. It also featured highly for injunction, with 9 respondents citing this particular problem. The lack of resources was an obstacle for injunction, powers of seizure, works for abatement and the recovery of works expenses.

A few respondents found that formal caution, powers of entry, warning letters and informal action were ineffective when used in previous cases.

As with air pollution control, some respondents were not aware that certain methods existed, specifically with formal cautions, powers of seizure, powers of inspection and prosecution of company directors. More worryingly, two respondents expressly stated that prosecution of
company directors under Part III of the EPA was not possible, where in fact this clearly is not the case.

7.7 The Role of Specific Characteristics in the Decision Making Process

Respondents were asked (in question 26) whether information concerning specific characteristics of an incident and the regulated community were actively sought before deciding on the type of enforcement action to implement. This part of the questionnaire was constructed to provide an insight into the decision making processes employed by enforcement officers when undertaking enforcement action, and whether these processes were random in nature or followed a set pattern.

Answers were limited to 'in all cases', 'in some cases' and 'in no cases'. The degree of influence of other miscellaneous factors in the decision making process, such as the quality of evidence obtained and the amount of media attention, was also obtained (question 27). Finally, the five most important factors to be taken into account in this process were assessed (question 28). The results are displayed in Figure 7.10, Table 7.7 and Table 7.8.
Figure 7.10 Characteristics of Incidents and the Regulated Community:

Whether Evidence Relating to Each Characteristic is Sought in All, Some or No Cases
Figure 7.10 Characteristics of Incidents and the Regulated Community:

Whether Evidence Relating to Each Characteristic is Sought in All, Some or No Cases (continued)
<table>
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<th>Factor</th>
<th>Extremely influential</th>
<th>Quite influential</th>
<th>Neither influential nor uninfluential</th>
<th>Quite influential</th>
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<td>24.7</td>
<td>21.7</td>
<td>12.6</td>
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<tr>
<td>Public pressure</td>
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<td>38.8</td>
<td>20.9</td>
<td>7.5</td>
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<td>15.4</td>
<td>33.3</td>
<td>28.4</td>
<td>17.4</td>
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<td>32.4</td>
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<td>13.2</td>
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<td>30.4</td>
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<td>42.0</td>
<td>10.1</td>
<td>1.4</td>
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Table 7.8 Characteristics and Factors Considered to be the Most Important in the Decision Making Process

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<td>Stated in Questionnaire</td>
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<td>Freq.  %</td>
</tr>
<tr>
<td>Impact on local population</td>
<td>143  16.0</td>
<td>38  12.2</td>
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<tr>
<td>Duration &amp; frequency of the incident</td>
<td>107  11.9</td>
<td>24  7.7</td>
</tr>
<tr>
<td>Degree of negligence displayed</td>
<td>104  11.6</td>
<td>23  7.4</td>
</tr>
<tr>
<td>Quality of evidence obtained</td>
<td>103  11.5</td>
<td>50  16.0</td>
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<tr>
<td>Past history of compliance with the law</td>
<td>85  9.5</td>
<td>29  9.3</td>
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<tr>
<td>Accidental or deliberate incident</td>
<td>72  8.0</td>
<td>25  8.0</td>
</tr>
<tr>
<td>Whether prior warnings have been issued</td>
<td>59  6.6</td>
<td>16  5.1</td>
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<tr>
<td>Margin by which the law has been broken</td>
<td>47  5.2</td>
<td>15  4.8</td>
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<tr>
<td>Type, amount &amp; concentration of substance</td>
<td>39  4.4</td>
<td>8  2.6</td>
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<tr>
<td>Location (residential, rural, industrial)</td>
<td>25  2.8</td>
<td>2  0.6</td>
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<tr>
<td>Availability of council resources (funds, time, staff)</td>
<td>25  2.8</td>
<td>19  6.1</td>
</tr>
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<td>Degree of public acceptability</td>
<td>18  2.0</td>
<td>3  1.0</td>
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<tr>
<td>Success of a particular action in the past</td>
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<td>9  2.9</td>
</tr>
<tr>
<td>Public pressure</td>
<td>14  1.6</td>
<td>18  5.8</td>
</tr>
<tr>
<td>Effect on flora/fauna</td>
<td>9  1.0</td>
<td>2  0.6</td>
</tr>
<tr>
<td>Media attention</td>
<td>6  0.7</td>
<td>6  1.9</td>
</tr>
<tr>
<td>Levels of fines/penalties imposed by the courts</td>
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<td>10  3.2</td>
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<td>Cost of enforcement/clean-up for the authority</td>
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<td>1  0.3</td>
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<td>Effect on the amenity value of a site</td>
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<tr>
<td>Size and type of company</td>
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<td>0  0</td>
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<td>Type of offender (company or individual)</td>
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<td>Will it happen again</td>
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<td>3  1.0</td>
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<tr>
<td>Unreasonableness by offender</td>
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<td>0  0</td>
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<tr>
<td>Remedial action taken by offender</td>
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<td>1  0.3</td>
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<td>Views of Councillors</td>
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</tr>
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<td>Views of Chief Executive</td>
<td>1  0.1</td>
<td>0  0</td>
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<tr>
<td>Statutory obligation</td>
<td>1  0.1</td>
<td>0  0</td>
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<td>Political pressure</td>
<td>1  0.1</td>
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<td>A need to punish</td>
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<tr>
<td>Adherence with policy</td>
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<td>1  0.3</td>
</tr>
</tbody>
</table>
A distinction can be made between those characteristics that were usually considered in all cases, with those normally considered in just a few cases. Those considered in all cases, for the most part, were:

- impact on the population;
- duration and frequency of the incident;
- whether the incident was accidental or deliberate;
- the degree of negligence displayed;
- whether a prior warning was issued;
- the history of compliance;

and to a lesser extent:

- the location of the incident;
- the margin by which the law has been broken;
- the type amount and concentration of substance;
- the type of offender.

Characteristics considered mainly in just a few cases were:

- the effect on flora and fauna;
- the degree of public acceptability;
- the cost of enforcement/clean up;
- the effect on amenity value of a site.
Officers from both the legal and environmental health departments were largely in agreement, with the exception of the size and type of company. In this instance, a trend was observed towards the 'no cases' end of the scale with the responses from environmental health, and in the opposite direction for legal.

The quality of evidence obtained was deemed to be extremely influential in the decision making process in both departments. Other influential factors were the success of past action and the availability of council resources (for legal). Resources were neither influential nor uninfluential for environmental health officers (a statement not verified by the results from different parts of the questionnaire), in addition to public pressure and media attention for both departments. The levels of fines and penalties applied by the courts were stated as being uninfluential by both legal and environmental health.

The five most popular responses for the most important characteristics showed a slight variation between departments. Environmental Health officers chose:

- effect on the local population;
- duration and frequency;
- degree of negligence;
- quality of evidence;
- history of compliance;

whilst Legal staff were in favour of:
• quality of evidence;

• effect on the local population;

• history of compliance;

• whether the incident was accidental or deliberate;

• duration and frequency.

The fact that legal staff placed the quality of evidence as top of their list reflects the fact that these officers dealt with rather technical aspects of enforcement that have high evidential requirements, such as the procedures involved in bringing a prosecution. Apart from the order of characteristics, the lists were very similar, indicating that the priorities in both departments when investigating a case were the same.

7.8 The Interrelationship Between Variables

Further information was obtained from the questionnaire by assessing the interrelationship of variables. This was done by using a number of statistical tests, namely the Kruskal-Wallis One Way Analysis of Variance, the Mann-Whitney U Test and the Chi-Squared Test. The assumptions underlying these tests, the appropriateness of each test under different circumstances and their resultant choice in different cases was discussed in Chapter 6.

Three separate areas needed to be investigated in this part of the analysis. These were:

1. Whether the type of council affected the approach to enforcement.
2. Whether different types of respondent approached enforcement in a different manner and used different enforcement methods.

3. Whether the presence or absence of an enforcement policy (and the type of policy if an authority has one) affected the approach to enforcement.

Each of these areas provided information on the variety and level of consistency evident in the approach to enforcement by different councils and individual officers within those councils. The full results of the analysis can be found in Appendix 12, and are discussed in detail in the following sections.

7.8.1 Does the Type of Local Authority Affect the Approach to Enforcement?

The type of local authority was determined by a number of characteristics in this study, namely:

- the population size of the catchment area;
- whether the authority was English or Welsh;
- whether the authority was a District, Metropolitan Borough or London Borough council;
- the type of catchment area (rural or urban).

Measures of association were calculated between these variables and each of the variables in the following categories:

- the presence or absence of a policy, and the type of policy (6 variables for both legal and environmental health - the variables generated from questions 7 to 12 on the questionnaire);
• attitudes and perceptions of respondents (6 variables for both legal and environmental health - generated from questions 13 to 18 on the questionnaire);

• extent of utilisation of all the methods of enforcement for air pollution control (16 variables for environmental health only - generated from question 20, parts 1 through to 16 on the questionnaire. Data generated only from environmental health responses were used in the analysis - see section 7.6 for an explanation) and statutory nuisances (13 variables for environmental health only - generated from question 23, parts 1 through to 13 on the questionnaire);

• the factors taken into account when determining the choice of enforcement (21 variables for both legal and environmental health - generated from question 26 and 27, parts 1 through to 21 on the questionnaire).

The 5% significance level (p = 0.05) was used in all cases as the cut-off point, i.e. a 95% confidence level that an association between variables existed.

7.8.1.1 Results - Population Size of the Catchment Area

Associations were found at the (95% confidence level) between the population size and:

• the attitudes concerning the provision of sentencing guidelines for courts (legal only, no association found when responses from environmental health were tested);

• the form of the enforcement policy, i.e. written or verbal (legal only);

• the extent of use of variation notices for air pollution control;
- the extent of use of cautions for air pollution control;
- the effect of media attention on the choice of enforcement action (legal only).

Although associations were found for these variables, it must be made clear that for the majority of variables tested, no association was found. In this particular case, the variable of population size was tested against a total of 95 other variables. Therefore, in the majority of instances, no association was found at the 5% significance level, indicating that the population size of the authority's catchment area does not have a profound effect on the approach to enforcement. This in fact remained the case for all subsequent tests that are discussed below.

However, taking into account the complexities of the enforcement process and the diversity of methodologies available to the enforcer, it would be unlikely that one particular characteristic would drastically influence all enforcement methods, perceptions of the enforcer and factors that are taken into account in the decision making process. Alternatively, it would be far more likely that a particular characteristic of the respondent or council, would perhaps have an influence on only one or two particular methods of enforcement, or one aspect of the decision making process. As the results show, this was in fact found to be the case.

Once the existence of an association between variables had been established, further investigation of the results revealed the trend of association in each particular case.

Legal respondents from authorities with intermediate catchment populations (between 100,001-200,000) were more inclined to totally disagree with the idea of the introduction of sentencing guidelines for courts. In fact, approximately the same number of respondents in this category
totally disagreed as those that agreed with the proposal. This compared with respondents from other population bands, the majority of which agreed to the introduction of sentencing guidelines.

Enforcement policies were more likely to be in a written format for higher populated catchment areas. In addition, variation notices and cautions for the control of air pollution were more likely to be used in authorities with larger populations. Finally, the amount of media attention was determined to be extremely important by legal respondents from highly populated authorities, whilst considered to be not at all influential in the case of smaller populations.

Therefore, the population of the catchment areas of local authorities may have an effect on the enforcement process in certain cases.

7.8.1.2 Results - Whether the Authority is English or Welsh (Spatial Location)

This characteristic seemed to have very little influence on the forms of the responses. An association was found only between two variables. These related to the factors taken into account in the decision making process. Welsh environmental health respondents stated that information concerning the cost of cleaning up an incident and the size of the company was not normally sought, whereas the majority of their English counterparts maintained that it would be sought in some cases.
7.8.1.3 Results - the Type of Council

A more distinct association was observed between the type of local authority (District, Metropolitan Borough or London Borough Council) and the variables:

- the form of the enforcement policy, i.e. written or verbal (legal respondents only);
- the extent of use of enforcement notices for air pollution control;
- the extent of use of variation notices for air pollution control;
- the extent of use of informal methods for air pollution control;
- the extent of use of informal methods for statutory nuisances;
- the extent of use of the recovery of works fees for statutory nuisances;
- the effect of the duration of the incident on the choice of enforcement action (legal only);
- the effect of the size of the company on the choice of enforcement action (environmental health only);
- the effect of the quality of evidence on the choice of enforcement action (environmental health only).

100% of London Borough councils that had an enforcement policy, had a written policy. In comparison, nearly 80% of Metropolitan Boroughs had a written policy, whilst in District Councils the split was approximately 60% written and 40% verbal. This compared with an overall figure of 66% written, 30% verbal and 4% both (District Councils represented the much greater proportion of the total).
Enforcement and variation notices were more likely to be utilised by Metropolitan Borough Councils according to the results. A large proportion (over 60% in the case of variation notices) of these respondents stated they would use these methods of enforcement in 'all cases'. Informal action for the control of both air pollution and statutory nuisances showed a similar pattern. London Borough Councils exhibited the most reluctance in applying these methods. Again for the recovery of works fees, the results indicate that Metropolitan Borough Councils were more likely to undertake this action.

Metropolitan Borough Councils were much less likely to take into account the size of the company than the other two types of councils. District and Metropolitan Boroughs placed great emphasis on the quality of evidence being 'extremely influential', whilst London Borough councils thought this factor was balanced between 'extremely influential' and 'quite influential'.

In this section it can be seen that the results indicated a different approach by Metropolitan Borough Councils when compared to the other two types of council, in certain aspects of the enforcement process.

7.8.1.4 Results - the Catchment Area

In predominantly rural areas, the results showed that the following methods of enforcement were used to a lesser extent than in urban areas, or those regions described as approximately half rural and half urban:

- variation notices for the control of air pollution;
prosecution of company directors for the control of air pollution;

- carrying out works to fulfil an abatement notice;

- recovery of fees for these works.

Furthermore, whether the incident was accidental or deliberate, and the success of a particular action in the past, were less likely to be influential in rural areas, according to environmental health officers.

7.8.2 Does the Type of Respondent Affect the Approach to Enforcement?

The type of respondent was determined by a number of characteristics in this study, namely:

- whether their work was office or field based;

- whether they had any supervisory or managerial duties;

- their location in the Legal or Environmental Health Department.

Measures of association were calculated between these variables and the same variables used to investigate the effect of council type in section 7.9.1, namely:

- the presence or absence of a policy, and the type of policy (6 variables for both legal and environmental health);

- attitudes and perceptions of respondents (6 variables for both legal and environmental health);
• extent of utilisation of all the methods of enforcement for air pollution control (16 variables for environmental health only) and statutory nuisances (13 variables for environmental health only);

• the factors taken into account when determining the choice of enforcement (21 variables for both legal and environmental health).

7.8.2.1 Results - Respondent Office or Field Based

The under-representation of respondents placed in the 'predominantly field based' category (only 0.9% of the entire sample) unfortunately made this analysis unworkable. The sample size of respondents in this category was far too small to apply the research findings to the remaining population.

7.8.2.2 Results - Respondent Having Supervisory or Managerial Duties

An association between the presence of supervisory duties and two of the attitudinal questions was observed. Environmental Health supervisors/managers were more likely to agree that a good relationship between the regulated and regulator was essential, compared with non-supervisors. Conversely, non-supervisors were more likely to state that sentencing guidelines for the courts should be introduced, than supervisors.
7.8.2.3 Results - Location in the Legal or Environmental Health Department

As previously stated, major differences were evident in the completion of the questionnaire depending on the originating department of the respondent (see section 7.6). The results of this section indicate that distinct variations existed in the approach to enforcement between the two departments, as they evidently were involved in separate aspects of the enforcement process. Significantly different answers from Environmental Health and Legal respondents were obtained for 24 of the variables tested.

7.8.3 Does Having an Enforcement Policy and the Type of Policy Affect the Approach to Enforcement?

The type of policy was determined by a number of factors:

- policy area (air pollution, statutory nuisances or both);
- written or verbal form;
- amount of employee/committee discretion;
- how often the policy is applied;
- reference to any specific methods of enforcement in the policy.

Measures of association between these variables and extent of utilisation of all the methods of enforcement for air pollution control and statutory nuisances were carried out.
The actual presence of a policy increased the utilisation of the following methods, all relating to air pollution control only:

- revocation notices;
- powers of seizure;
- prosecution;
- prosecution of company directors.

Furthermore, the more rigid policies increased the use of the powers of inspection for air pollution control. Reference to specific methods of enforcement in a policy significantly increased utilisation of abatement notices for the control of statutory nuisances, and prosecution for the control of air pollution. It can thus be suggested that enforcement policies are likely to have an impact on the enforcement process in specific areas.

7.9 Additional Comments

The final section of the questionnaire was included to encourage additional comments by the respondents, and these were elicited in 83 cases. Some interesting results were obtained that provided an insight into the work of enforcement officers. Opinions on a variety of subjects such as national guidelines for officers and the appropriateness of fines and penalties were divulged. These are discussed below.
7.9.1 Each Case Judged on its Own Merits

Several respondents stressed the importance of judging each case on its own merits. Many comments stated that individual circumstances of a case should always be taken into account and a decision made only after careful consideration of these factors.

"When considering the type of enforcement action to be taken, each case should be judged on its merits. At the end of the day the aim should be compliance with the law not conviction for an offence. Prosecution should be a last resort where no other course of action has proved successful in gaining compliance with the law."

"To give a general answer to nuisance tends to be difficult as all cases vary and they're individual, as are the inspectors who enforce them."

"Enforcement is a complicated process and every case is different. It is simply not possible to have a set response to any situation, as the individual circumstances that prevail at the time of the decision may mean that variations are required."

"Impartiality and objectivity are desirable but individual circumstances cannot be ignored. Such a dogmatic approach only leads to failures in court and loss of credibility."

7.9.2 The Appropriateness of Legislation

A difference of opinion existed concerning the effectiveness and appropriateness of the legislation. One respondent questioned the appropriateness of including a best practicable means defence for situations that were prejudicial to health.

"Air pollution control matters are somewhat easier to deal with in terms of enforcement than statutory nuisances, which still fairly often have subjective and objective issues contained within the core issue. That said, I suspect it will remain the case that it is almost impossible to offer a much better legislative framework than presently exists."
"Our enforcement policy is more restricted by the poor quality of the legislation, with many parts of it being to all intents and purposes unenforceable. This is then compounded by the current unwritten government policy of encouraging enforcement authorities not to impede business."

"Particularly given that statutory nuisance is concerned not only with nuisances but also things prejudicial to health, is it right that a best practicable means defence should exist for business?"

7.9.3 The Amount of Work Relating to EPA Part I

The vast majority of complaints that needed investigation normally related to statutory nuisances, especially noise nuisance (see Chapter 4). Many local authorities had very little or no experience of the enforcement of provisions relating to air pollution control.

"In general, very few local authorities would have much experience in enforcement under Part I of EPA i.e. prosecutions, prohibition notices. We have more experience of dark smoke, odour control work than we do of Part I EPA."

"We have very little experience of pollution incidents from authorised processes, which all appear to have excellent operating records."

7.9.4 Informal Versus Formal Methods

The comments on this subject area served to reinforce the findings in previous sections of this chapter. Authorities normally took an informal approach in the first instance, backed up by more formal methods if this failed.
"As general comment, to my view and the general view of my unit (pollution control), is that prosecution is a last resort. We don't prosecute just for the sake of it but in fact to remedy environmental problems and prevent a recurrence. Rather, we would prefer co-operation from the perpetrator via negotiation. Only when this fails do we seek more formal methods. Having said all this, our workload in recent years has grown, and we are now finding there is less time to seek informal remedies to problems and therefore we are taking more formal action by necessity."

"Formal enforcement action is only considered when the more informal 'snotty letter' approach has failed. The exception is of course when there is a risk of serious harm, when a prohibition notice would be considered."

"Strict enforcement i.e. a tough line such as adopted by the NRA in recent years has brought benefits in terms of its deterrent effect, but it does not have the approachability of local authorities as at the moment. However, the disadvantage of a strict approach is the great increase on resources that litigation brings. Much time spent preparing cases is not being spread across a greater number of problems that go un-investigated or poorly investigated."

7.9.5 Uniformity, Consistency and Guidelines

Many respondents pointed out the importance of a consistent approach to enforcement. However, several people expressed reservations concerning the introduction of national guidelines for enforcement, fearing they would assume a rigid form and thus become unworkable.

"Enforcement of environmental and nuisance law can never be uniform without extra resources. The decision to prosecute, for example, in a particular case inevitably means that breaches of law which are encountered at other sites are less likely to result in prosecution until outstanding cases are completed, due to the resource implications."

"I believe that taking a common sense attitude towards enforcement is normally the best approach. Rigid guidelines can be an obstacle, and a too lax approach can lead to problems in the future. Law enforcement is a difficult subject, and one which needs more thought by the law makers."

"Policies are useful in providing uniformity in enforcement action. Ours are based on HSE guidance modified to LA use."
"Welcome stricter guidelines for enforcement subject to some recognition of differences in rural, urban and city areas."

"I'm opposed to national guidelines because in my experience such documents only help the defendant who's solicitors rely on trifling departures from the indicated procedures."

"I would totally agree that it is desirable for enforcement to be as consistent as possible across the country and not influenced by local factors such as political influences, personal perceptions and resources. However, national guidelines would have to allow a degree of flexibility to take account of legitimate local circumstances."

"Enforcement will often depend upon the field officers first impression of the sincerity of the complainant in statutory nuisance cases. The educated and articulate complainant will often persuade the enforcement officer to pursue a nuisance, where the inarticulate complainant cannot."

7.9.6 The Role of Legal Departments

The role played by Legal Departments in the enforcement process was adequately described in the following quote:

"The legal services section is a supervisory and support service to an independently managed environmental health section. The legal services section gives support:

1. in prosecutions;
2. by advising on wording of notices if the subject matter is exceptional or unusual;
3. by helping with legal procedures or legally based investigations e.g. Land Registry searches."

"Please note you will see no comment from a legal department. For this council we have none. Where legal support is required we employ solicitors on an ad hoc basis."
7.9.7 The Availability of Resources

Many respondents proclaimed their dissatisfaction with the amount of resources available to them. They stated that resource restrictions severely limited their capacity to carry out enforcement action as required.

"Not as many cases go to court that should because a 'win' is not guaranteed. It should be the duty of local authorities to take cases regardless of the predicted result in certain circumstances. Staff cutbacks etc. is the main reason why time cannot be allocated to taking many prosecutions."

"Balancing dealing with the immediate nuisance complaints with more long term pollution issues is a big problem. Resources tend to be used to deal with politically 'hot' issues. Monitoring costs and analytical costs are usually prohibitive leaving councils short of data in most cases. Green or 'customer friendly' authorities will have different approaches from totally market led authorities."

"We tend to 'fire-fight' rather than look at the subject area holistically, and because of lack of resources we suffer accordingly."

"Resources are a major concern and certainly in the specific area of pollution control. For instance, during the last three months we have had 328 complaints. This workload together with consultations on environmental management, land contamination, planning and Part I EPA means big problems!"

7.9.8 The Involvement of the Courts

A number of respondents were rather disillusioned by past experience of the judicial system. Low levels of fines imposed on offenders, and a lack of understanding by magistrates of the problems involved with environmental law enforcement, were cited as common grievances.
"Legislation is adequate, staff resources are a limiting factor and the punishments administered in magistrates courts are the subject of astonishment!"

"EHOs are considered by the courts to act like policemen without the same training."

"Planning law is recognised as a specialised field and appeals against enforcement notices are dealt with by a specialised Planning Inspectorate. Also, the rules of evidence are fairly relaxed. Is there a case for a specialised Environmental Inspectorate to be set up to deal with appeals against abatement notices etc. in place of the magistrates? Is environmental protection too important to be left to the vagaries of the court system which has to bend over backwards to protect the victims of council action without seeing the wider picture?"

"The two main problem areas are:

1. When prosecuting a case, because these types of cases come before the court so infrequently, the court is not familiar with the subject matter and is often uncertain how to punish the offender.

2. It would be useful to have a national register of previous convictions and formal cautions of offenders. The office of Fair Trading keeps a register but not all prosecuting authorities know of it or lodge information following a conviction."

"The main problem with environmental protection legislation is letting the courts, particularly magistrates, know that this is an important area of law and breaches can have a wide reaching effect. They have to get away from thinking in private nuisance terms and imposing useless penalties."

7.9.9 Training

Training was viewed by many to be essential, but rather lacking in some areas.

"Problems sometimes arise from the fact that environmental health officers do not appear to receive any formal training in enforcement e.g. techniques of interviewing, gathering relevant evidence etc. We occasionally run an internal seminar to try and correct this."
7.9.10 Complexity of the System

The complexity of many local authority procedures was viewed as a hindrance to the enforcement process by one respondent.

"Primitive decision making structure of council. Little delegated authority away from council committees, and committees often ignore officers recommendations. Separate authority needs to be obtained for different enforcement stages. How do I ever manage to get anything done!"

7.10 Discussion

As mentioned in the introduction, this section serves to provide an overview of the results outlined in this chapter. A more detailed discussion of the relevance of these findings in the context of this study's research aims, and against the background of information outlined in the literature review (Chapters 2 - 5), can be found in Chapter 11.

7.10.1 Enforcement Policies

Over 3/4 of environmental health departments had an enforcement policy of some description. This contrasted with just over 1/3 for legal departments. This was probably due to the fact that legal departments were often only consulted in the final stages of enforcement. An example being the consultative arrangements for prosecutions where legal staff pass their opinions on evidential requirements or legislative constraints. On the whole, many decisions relating to various other
methods of enforcement are made without the input from legal personnel. This being the case, it is highly likely that legal staff were not aware of enforcement policies used in environmental health departments.

The type of policy varied widely between local authorities. The predominant type was one that had a written format, was quite flexible with a substantial amount of employee/committee discretion, was applied in most cases, and made reference to specific methods of enforcement. These methods were most frequently prosecution, notices, informal methods and cautions. As the majority of policies specifically mentioned these methods, this suggested that guidance was required in their utilisation. This was probably because they were either used the most frequently, or that problems often arose regarding the decision making process involved in choosing them as appropriate methods. One of the most disappointing aspects of the policies was that 43% neglected to mention certain crucial aspects of pollution control, namely prevention and education.

Detailed examination was carried out of written copies of policies that were enclosed with the questionnaire. The results revealed that a wide variety in their structure, form and content existed between the different authorities. Approximately half were very general in their nature (of a similar format to HMIP's policy - see Chapter 5), whilst the other half were found to be quite detailed. Out of the 37 policies enclosed for examination, however, only one had a detailed scoring checklist of a similar format to the NRA's policy (see Chapter 5). This large variation in policy type inevitably lead to inconsistencies in applying enforcement action across the local authorities. The significance of consistency within the local authority was, however, recognised in many cases. Over 50% of the policies studied made some reference to the importance of consistent enforcement.
A number of the policies gave disproportionate coverage to one particular aspect of local authorities' work. A good example was the detailed sections on the control of noise nuisance, a characteristic that cropped up quite regularly. In fact, some policies were entirely dedicated to resolving this problem alone. In many ways, the local authorities' actions may have been unavoidably diverted towards getting to grips with noise nuisance in the light of the huge escalation in the number of complaints during the 1990s (see Chapter 4). This does, however, leave an assumption that local authorities' other duties may have been neglected as a result of this diversion of resources into controlling this statutory nuisance.

The outstanding feature of the vast majority of policies was the promotion of a co-operative stance towards enforcement. Only when a co-operative approach had been tried and had failed, did the policy advocate that a more confrontational approach was adopted. Rarely, and only in relation to statutory nuisances, was there no mention of co-operation. This was probably related to the statutory duty to serve an abatement notice when an authority is satisfied that a nuisance exists, or is likely to occur or recur. However, a small proportion of policies used the term 'may be served' in relation to abatement notices once it had been established that a statutory nuisance existed, indicating that the duty set out in the legislation was not being fully implemented.
7.10.2 Perceptions and Attitudes of Enforcement Officers

7.10.2.1 National Enforcement Guidelines

The majority of respondents agreed that national guidelines for enforcement should be introduced. However, most were not in total agreement indicating that perhaps they held some reservations concerning the type of guidelines, or how the guidelines would be implemented.

7.10.2.2 Sentencing Guidelines

Most respondents agreed that sentencing guidelines for courts should be introduced, although strong agreement was again not evident.

7.10.2.3 The Role of Enforcement: Prevention Rather than Punishment?

In this case, most respondents fell into the category of 'neither agreement nor disagreement' with the statement. This suggested that officers either felt enforcement had another role, or the purpose of enforcement was both for the prevention of future incidents and punishment of the offender. Although the majority of respondents expressed the 'neither nor' response, answers from remaining respondents tended to be more in agreement with the statement than disagreement. The trend therefore was for respondents to err on the side of favouring prevention rather than punishment as the role of enforcement, if only by a small margin. These findings do not seem to correspond to the message conveyed to regulatory officials in enforcement policies, where little or no mention of prevention was made in the majority of cases.
7.10.2.4 The Importance of a Good Relationship Between Regulators and Regulated

The majority of respondents were in complete agreement that a good relationship was essential. This confirmed previous findings where the building of a favourable relationship was thought to encourage compliance amongst the majority of the regulated community. Such good relations were often viewed as paramount against a background of resource limitations. Restricted resources could then be effectively targeted against recalcitrant offenders, once compliance of the majority with the regulations had been earned through establishing a good working relationship.

7.10.2.5 Taking Stringent Enforcement Action

Strong disagreement with the premise that the most stringent action possible should be taken in each case, was observed. These results endorse the findings following analysis of enforcement policies. Local authorities normally utilised a co-operative approach in the first instance, only resorting to more stringent action if it was required.

7.10.2.6 The Relationship Between Resources and Enforcement Action

Respondents were generally in agreement that making more resources available would increase enforcement. This points to the fact that many enforcing authorities were under-resourced. Legal respondents agreed with more vigour to the statement than their environmental health counterparts. One probable reason for this was that legal staff dealt with the more expensive aspects of enforcement (prosecution and injunction, etc.) and therefore would probably be more acutely
aware of the resource implications of undertaking these actions. Environmental Health officials, on the other hand, dealt with a wide range of enforcement actions, including some relatively inexpensive ones.

7.10.3 Enforcement Methods Used

All the methods listed were used to some extent or another. The majority of local authorities utilised informal action and warning letters as their main types of enforcement action. This was the same for the control of both statutory nuisances and air pollution. Therefore it can be concluded that less stringent methods of enforcement were used in most cases, i.e. a reliance on co-operative strategies rather than confrontational ones.

In the main, the use of notices to control air pollution (enforcement and prohibition notices) was only carried in some cases where their use was possible. This contrasted with the use of abatement notices to control statutory nuisances, which peaked in the 'most cases' column. However, as the legislation clearly states that an abatement notice must be served when a statutory nuisance exists, in theory all responses should have fallen into column 1 (in all cases) for this question. The fact that a spread over responses from columns 1 to 5 occurred, indicated that the legislation was not being properly implemented.

There was also a relative reluctance to utilise cautions and prosecution to enforce both air pollution and statutory nuisance legislation - the majority of responses peaked in category 3, but with a prosecution for statutory nuisances being more likely than one for air pollution.
A large spread responses were noted for certain methods such as the power of seizure, remedial action/works carried out for abatement, and the recovery of expenses following clean up for air pollution. This indicated that many aspects of enforcement were not consistent between local authorities.

Authorities were very reluctant to undertake prosecution of company directors and injunction in both the control of statutory nuisances and air pollution.

The most common reasons for non-utilisation of particular methods were that they had not yet been needed or the method was not appropriate. Lack of resources also featured strongly with certain methods (clean up powers/works for abatement, recovery of clean up/works expenses, prosecution, prosecution of company directors, powers of seizure and injunction).

Another commonly cited reason was that the method was too complicated. This reason particularly singled out for injunction, prosecution, prosecution of company directors, powers of seizure and recovery of works expenses.

Certain methods were considered as ineffective when used in the past, including formal cautions, powers of entry, warning letters and informal action.

Some respondents were not even aware that certain methods existed, specifically with:

- cautions;
- powers of inspection;
• powers of seizure;
• variation notices;
• clean up powers;
• recovery of clean up expenses;
• prosecution of company directors;
• injunction.

More worryingly, two respondents expressly stated that prosecution of company directors under Part III of the EPA was not possible, where in fact this clearly is not the case.

This section of the results showed that a large proportion of the array of enforcement methods available to local authorities were not being utilised. Apart from the method not being appropriate, according to the respondents, under-utilisation was also the result of resource restrictions, the method being too complicated to implement, or a lack of knowledge or understanding of the legislation on the part of enforcement officials.

7.10.4 The Role of Specific Characteristics in the Decision Making Process

This part of the questionnaire was used to determine how various characteristics influenced the decision making process. It was confirmed that each of the characteristics of an incident and other factors listed in the questionnaire influenced the enforcement outcome to a greater or lesser extent.

The most important characteristics of an incident were found to be:
impact on the population;

duration and frequency of the incident;

whether the incident was accidental or deliberate;

the degree of negligence displayed;

whether a prior warning was issued;

the history of compliance;

Of lesser importance were:

the location of the incident;

the margin by which the law has been broken;

the type amount and concentration of substance;

the type of offender.

Characteristics considered to be of little importance were:

the effect on flora and fauna;

the size and type of the company;

the degree of public acceptability;

the cost of enforcement/clean up;

the effect on amenity value of a site.
Other factors that affect the choice of enforcement action (generated from question 27 on the questionnaire) were placed in the following order of importance by respondents:

Legal Respondents:  
1. Quality of evidence  
2. Availability of resources  
3. Success of a past action  
4. Public pressure  
5. Media attention  
6. Levels of fines/penalties

Environmental Health Respondents:  
1. Quality of evidence  
2. Success of a past action  
3. Availability of resources  
4. Public pressure  
5. Media attention  
6. Levels of fines/penalties

The overall 5 most important characteristics and factors according to environmental health officials, were considered to be (most important first):

- Impact on local population;
- Duration and frequency of the incident;
- Degree of negligence displayed;
- Quality of evidence obtained;
- Past history of compliance with the law.

The least important were stated as being (least important first):

- Type of offender (company or individual);
- Size and type of company;
• Effect on the amenity value of a site;
• Cost of enforcement/clean up for the authority;
• Levels of fines/penalties imposed by the courts.

7.10.5 The Effect of Different Council Types, Respondent Types and Enforcement Policies on the Approach to Enforcement

7.10.5.1 Council Type

In relation to the population size of the catchment area, it was found that:

Respondents from councils with intermediate catchment populations (100,001-200,000), were more inclined to disagree with the introduction of sentencing guidelines for courts.

Enforcement policies were more likely to be of a written format for councils with higher populated catchment areas.

Variation notices and cautions were more likely to be used for authorities with larger populations.

The amount of media attention was determined to be extremely important by legal respondents from highly populated authorities, whilst considered to be not at all influential in the case of smaller populated authorities.
Significant differences existed between District Councils, Metropolitan Borough Councils and London Borough Councils. These differences related to the form of enforcement policies, and extent of utilisation of certain enforcement methods. Metropolitan Borough Councils and London Borough Councils were more likely to have a written enforcement policy than the District Councils. Furthermore, Metropolitan Borough Councils were more likely to use enforcement and variation notices and the recovery of works fees. Also, they were far less likely to take into account the size of the company when making enforcement decisions. Again, these results pointed to inconsistencies in the enforcement process between local authorities. Metropolitan Boroughs exhibited a different approach in certain aspects of the process, compared with the other two types of council.

Councils in rural areas used the following methods of enforcement to a lesser extent than their urban counterparts:

- variation notices for the control of air pollution;
- prosecution of company directors for the control of air pollution;
- carrying out works to fulfil an abatement notice;
- recovery of fees for these works.

7.10.5.2 Respondent Type

Environmental Health supervisors/managers were more likely to agree that a good relationship between the regulated and regulator was essential, compared with non-supervisors. Conversely,
non-supervisors were more likely to state that sentencing guidelines for the courts should be introduced, than supervisors.

Distinct approaches to enforcement were found to exist between the two department of Environmental Health and Legal. This was to be expected considering their very different roles in the enforcement process.

7.10.5.3 Enforcement Policies

In the sphere of air pollution control, having a policy increased the utilisation of the following methods of enforcement:

- revocation notices;
- powers of seizure;
- prosecution;
- prosecution of company directors.

The type of policy also had an impact to a certain extent on the enforcement approach. It was found that more rigid policies increased the use of the powers of inspection for air pollution control. Reference to specific methods of enforcement in a policy significantly increased utilisation of abatement notices for the control of statutory nuisances, and prosecution for the control of air pollution.
Additional comments made by respondents were a good indication of some of the problems or concerns affecting enforcement officials. The most important points raised included:

1. That each case should be judged on its own merits, and the particular circumstances of a case should be taken into account before an enforcement decision was made.

2. Reservations expressed about the content of the legislation.

3. That the majority of respondents approached enforcement using a co-operative stance. Informal methods were used in the first instance, followed by more stringent action if required.

4. That enforcement should be consistent.

5. Reservations were expressed concerning the introduction of overly strict national guidelines for enforcement practices.

6. That legal services (if present) provided their expertise in a supportive capacity to environmental health.

7. A good deal of dissatisfaction was noted regarding the levels of allocated resources, and that restricted finances severely limited the officials' capacity to carry out enforcement work.
8. Disillusionment with the courts was stated, especially relating to the low levels of fines imposed, and the lack of understanding by magistrates of the specific problems encountered in environmental law enforcement.

9. That training was essential but inadequate in certain areas.

10. Many local authority procedures were viewed by respondents as being excessively complex, and a hindrance to the enforcement process.

7.10.7 Summary

This chapter has provided information relating to the strategies and methods of enforcement of environmental law evident in local authorities in England and Wales. It has been revealed that certain methodologies (more often informal ones) are utilised to a greater extent than certain other methods. A co-operative approach is favoured by councils, only resorting to the use of more coercive methods once this approach fails.

A wide variety in the type of enforcement policy is evident between councils. It is clear that inconsistencies in the application of specific enforcement methods do exist, and lack of resources in some cases presents problems for the enforcer. Further discussion of these findings can be found in Chapter 11.
CHAPTER 8
RESULTS OF STRUCTURED INTERVIEWS
NRA AND HMIP PERSONNEL

8.1 Introduction

Structured interviews with NRA and HMIP employees were carried out to investigate the methodologies and strategies employed by these agencies in the enforcement of environmental law. The purpose of this part of the study was comparable to that involved with the collection of data on local authorities and consequently the primary research aims that were satisfied were very similar. These aims were:

1. To assess the approach to enforcement by the NRA and HMIP (co-operation versus confrontation).

2. To determine the extent of utilisation of enforcement methods by the NRA and HMIP, and the reasons for non-utilisation.

3. To measure the relative importance of influential factors in the strategic decision making process.

4. To investigate the extent of utilisation of enforcement policies within the NRA and HMIP and evaluate their level of effectiveness.
5. To determine the level of consistency in the approach to enforcement within the NRA and HMIP.

Utilisation of structured interviews, rather than a postal questionnaire as in the case of local authorities, was determined to be the most viable option of data collection after consideration of the population size (see below). However, comparisons could still be made between all three types of regulatory authorities as data relating to very similar aspects of the enforcement process were collected in each case. The form of the structured interviews can be found in Appendix 11.

8.2 Response Rate

Each of the regional offices of the NRA and HMIP throughout England and Wales were approached for an interview. The NRA had eight regional offices and information was received from four of the regions giving a response rate of 50%. HMIP had seven regional offices and interviews were granted for three of these regions, producing a response rate of 43%. Limited resources, in particular inadequate time available to take part in the survey, was cited in all cases of non-participation.

A variation in the method of data collection was unavoidably encountered. Some respondents indicated a desire for the interview to be carried out face to face, whilst others expressed a desire for a more convenient telephone interview. One respondent, on receipt of the questions sent out in advance to all respondents, returned written answers. Slight variations in the form of answers were thus produced, with more detailed replies being obtained from face to face interviews.
8.3 Sample Characteristics

Interviews were carried out with managerial staff in the NRA. Their duties involved a wide range of field and office based work, including taking samples, gathering evidence for court cases, education (of the regulated community and other interest groups) and other duties relating to water quality. Each officer had been employed with the NRA for a number of years, and many also had prior experience in the water industry.

Two of the three HMIP interviewees were Area Managers and the remaining interviewee was a Pollution Inspector. The Managers' duties included managing and leading the team, ensuring consistency and adherence to procedures and administration. The pollution inspector had more contact with the regulated community, and less responsibility for administration. Each officer had been employed with HMIP for a number of years.

The decision making process for enforcement action varied slightly between NRA regional offices. In one case, the respondent stated that decisions were made by a 'prosecution panel', comprising of three Environmental Quality Managers, a Water Quality Manager, the Principal and Senior pollution officers and a representative from the legal department. Each member of the panel then used his experience of similar cases in order to come to a decision. In other regions, a 'chain of command' was described, with each officer making his recommendations before the case was passed on to a more senior officer who took into account the recommendations to arrive at his own decision. The ultimate decision was then taken by the legal department on whether to pursue a case in the courts, dependant on the quality of evidence available.
A similar system for the decision making process was used in all IMP regions. Enforcement and prohibition notices were dealt with by inspectors; revocation and variation notices by the Area Manager; and prosecution referred on to the Regional Head and legal department.

8.4 Attitudes and Perceptions

The NRA respondents were asked what they thought was the main aim of enforcement, for example prevention of future offences or punishment of the offender. In many cases 'both' was the reply, but with more emphasis placed on the preventative aspect. One respondent stated that the main aim was:

"To convince polluters and the public that we do mean business, and that we use the powers the law gives us. We often attempt to reach a solution without going to court. We would rather money went into pollution prevention."

Another respondent drew attention to the fact that there were two types of deterrent effect. These were to deter the actual offender from repeating their actions, and also to deter other prospective offenders who have seen the publicity of the case. It is thus very difficult to measure how much pollution is prevented by a court case. However, where other methods of enforcement are available and suitable, then legal action is not undertaken:

".....where possible obviously we don't want to take legal action. It ties up someone who's out there and could be preventing other pollution because they've got to spend a day in court and there's perhaps a week's paperwork prior to that one day in court. But there comes a time when a farmer or industrialist will not do anything and the last resort is prosecution."
Punishment - yes. If someone has broken the law then they should be punished but we have to bear in mind, to some extent, intent and negligence. It's very rare that we have a deliberate incident. It's mostly accidents and negligence."

Another aim of enforcement described by one respondent was the recovery of costs by third parties. When the NRA had successfully prosecuted a case it sometimes became easier for those affected by the incident to claim damages from the defendant in settlements out of court. Otherwise, a civil action would have to be successfully pursued by third parties before costs could be claimed.

HMIP respondents all stated that the main aim of enforcement was a deterrence effect to provide protection for the environment.

The NRA described their relationship with the regulated community as "mostly very good" and viewed this relationship as being "very important". Overall, the NRA thought they were respected by the industrial community and the general public as a whole, although a small percentage of people were recalcitrant and viewed regulation by the NRA as interference.

"Mostly people appreciate what you're doing. There are a small percentage who resent what we are doing and resent being told what to do. Generally this small percentage keeps cropping up again and again. Initially you may get a grumble when they realise they have to spend some money, but usually people appreciate what we're trying to do and get on with it. There is just a small minority who think they're above the law. They do not see it as pollution, but as an affront to them and their business."

A good working relationship was described as "taking you three quarters of the way to preventing future pollution." The importance of advising and talking with the regulated community to overcome problems together was stressed.
"...if we don't have a good working relationship with industry, they won't willingly put in sufficient plant to treat the effluent. They won't tell us when they have a spillage, and they all have spillages, be it vandals breaking in on the site or whatever. If industry don't tell us then the pollution goes unreported and unnoticed, and the damage may be that much greater. It may be three hours later before the public notices it and reports it."

One respondent raised the problem of cost recovery for each incident. It was stated that in certain cases this was detrimental to the relationship between the NRA and other organisations, such as local authorities, with whom it often worked. For example, if a local authority had a pollution incident relating to a sewer, and was then charged for the NRA's time and materials employed in cleaning up the pollution, the authority would probably be more reluctant to assist the NRA in future incidents.

HMIP respondents viewed their relationship between themselves and the regulated community as "excellent" and also "improving all the time". It was stated that industry was now more willing than ever to comply with the regulations.

"Industry is now displaying positive thinking - as seen in their reports. HMIP in its approach can be quite slow because of the legislative stages. There is a pretty good relationship between us. Industry is now turning up to conferences etc. and are showing a willingness to comply rather than being forced all the time."

The importance of still retaining an 'arms-length' type of regulation was pointed out.

"I disagree with having too close a working relationship, but a stand off can be a total disaster and can be very time consuming. Better to have a reasonable relationship."
Lack of investment in infrastructure, and ignorance of both the regulations and what was actually happening on site, were considered to be the main reasons for non-compliance by NRA respondents. It was stated that many operators didn't realise the potential consequences of their actions, or inaction, resulting in one-off accidents.

"A drain isn't just a hole that goes into hyperspace. People are often very ignorant about what goes on.......they think once down a drain that's it, it's off their site and they've got rid of it. [This is the] cause of 80% of pollution incidents."

Other operators were perceived to be ignorant of particular aspects of legislation. However, they were mostly keen and eager to comply with the legal requirements once they were aware they existed.

Similarly, incompetence, poor training, ignorance, lack of maintenance and poor communication between departments of large companies were cited as the main reasons for non-compliance by HMIP respondents. It was stated that it was rare for a company to carry out an act as a deliberate avoidance of the legislation.

All respondents, apart from one, stated that they were restricted in some way by the amount of resources available to them. Lack of manpower for pollution prevention and inspection was cited as a major problem, but utilisation of information from members of the public and co-operation from the regulated community assisted the NRA in their work.

"We try to recruit members of the public and industrialists to be our eyes and ears out there. Hopefully we have 56 million people out there reporting incidents and it's not just down to the few hundred that work for the NRA. If we go to a site that needs some remedial measures undertaking we try to get the polluter to help with those remedial measures. If he
doesn't, then he obviously gets a bigger bill. If it takes us twice as long then our bill will be twice as much."

One HMIP respondent thought the available resources were probably adequate, but others stated that they were not. Small to middle sized sites were sometimes neglected as a result, and inspection targets were often not met.

NRA respondents felt that, on the whole, penalties applied by the courts were not appropriate, and did not always reflect the severity of an incident. One respondent stated that penalties were slowly improving and approaching a level of appropriateness, in comparison to several years ago when fines of £25 were the norm. Another respondent pointed out the wide variety in the levels of fines applied by different courts.

"In one case the magistrates were three old ladies and we didn't expect much when we saw them. But, the chairperson concentrated on the salient features of the case and gave the firm a large fine - much bigger than the NRA had hoped for. This was much better because the firm were well known to us. Other magistrates have dismissed a case on a minor technicality, so there is no telling, it just depends on the magistrates."

The importance of mitigating factors was also discussed. It was stated that certain factors relating to the incident should be taken into account, and the appropriate fine applied after consideration of these factors.

"......the magistrates of course are looking at the whole picture. They're not just taking the offence into consideration, but they're looking at the means that person has to pay the penalty and looking at the chances of recurrence. The other thing that comes up is that someone has tried their darndest to stop the pollution occurring and if we still prosecute and have a big fine they say 'well why spend all this money trying to prevent this pollution if I'm going to get fined anyway'. This should be recognised and the fine reduced as a result."
One respondent stated unequivocally that the introduction of sentencing guidelines for the courts would be a good idea. Others thought it was *probably* a good idea. The variety of mitigating factors was thought to be a problem for the introduction of guidelines by one respondent.

In contrast to the NRA, HMIP personnel thought that appropriate penalties *had* been applied by the courts. They were considered to be "*quite hefty along with the costs*", and were especially significant for smaller companies. Additionally, it was stated that larger companies also had damage to their reputation as further deterrent. However, it was made clear that each respondent had only been involved in a very small number of prosecutions and thus would not have the experience of a large number of fines for comparison, unlike NRA officers.

Sentencing guidelines for the courts were considered to be impractical to implement by one HMIP respondent, and it would be better left to the magistrates to use their discretion. Another respondent stated they would probably be a good idea for rural magistrates, whilst the remaining respondent was unable to comment as no prosecutions had been taken during his time in the job.

**8.5 Enforcement Policies**

Copies of the NRA's and HMIP's policies can be found in Appendices 8 and 9, and commentary on these policies can be found in Chapter 5.
The NRA enforcement policy was used to decide the category of every incident, according to one respondent. However, others stated that it was followed in just the majority of cases. The policy was mainly used for general guidance, and respondents were pleased that an element of subjectivity existed within the policy.

"No matter what you put down, people can interpret it in different ways e.g. the closure of an abstraction makes an incident a category 1 even if it only affects one person i.e. their well for drinking water. I can think of incidents which are much more serious than this yet go into category 2. Some are very subjective e.g. reduced amenity. What is an amenity? Footpath at the side of a river, fishing, canoeing? but this can also be beneficial as it gives more leeway. We do follow the policy as best we can but there is some subjectivity which we like to see."

All respondents considered the policy to assist in their decision making, and thought it not too restrictive. Guidance on other methods of enforcement apart from prosecutions, cautions and warning letters was not included in the policy because these methods were dealt with in other NRA documents. Furthermore, revocation of consents was used so infrequently by the NRA that it was felt it would probably not be beneficial to include guidance on this particular method in the policy. The decision to take remedial action was carried out on a case to case basis, using previous experience to determine how much remedial work was needed. One respondent thought that "too much guidance can cramp your style".

HMIP respondents used their policy in each case and found it to be of assistance in the decision making process. There was resistance in all cases for the proposal to introduce more specific guidance, similar to that contained in the NRA's policy. Respondents felt the current guidance was adequate, and there were limitations associated with more detailed guidance.

"It would be difficult to state the guidelines in the right way to prevent misinterpretation."
There was also reluctance to work with guidelines which they would have to follow, stating that discretion was needed in each case.

Three main methods of formal enforcement were used by HMIP. These were enforcement notices, prohibition notices and prosecution. Guidelines on the use of prosecution were included in the policy, whilst guidance on the use of other methods was provided by training courses. The respondents felt it would not be particularly helpful to include guidance on other methods in their policy.

A variety of responses were given when the respondents were asked if the NRA was made more accountable to the public due to the existence of the policy. Two respondents thought it didn't really make much difference. "The public aren't really interested in this sort of thing, they are just interested in results." One respondent stated that the NRA was accountable to the public because of the existence of general public access legislation. The fourth respondent thought the policy did make the NRA more accountable and also produced a uniform approach across all regions. "However, the prosecution record in itself is a poor way of demonstrating our effectiveness."

Differences of opinion also existed concerning the availability of the policy to the general public. Two respondents stated a copy of the policy would be available on request. Another had been told by higher management not to give out such documents, or discuss them in depth with members of the general public. The fourth respondent considered the document to be of an internal nature and therefore not available. Some interviewees thought that a publicly available policy would do little to enhance relations between the NRA and the regulated community. Others felt that the knowledge of the existence of such policies would
allay fears relating to inconsistent enforcement action and the resultant economic
disadvantages in particular areas.

"People know there are national guidelines and policies. They appreciate the fact that they will not be disadvantaged by the whims of the local officer because he is controlled by head office. So, in theory anyway, because of such documents, a paper mill discharging effluent here in [name of county] should have the same constraints as a paper mill discharging in [name of county]. One of the main things about this is consistency throughout the region and the country. They're after the most profit, so with more stringent discharge conditions some could be disadvantaged. If we have guidelines and policies, they are happy that we are consistent."

Two HMIP respondents did not think that they were made more accountable to the public because of the policy, nor had it really enhanced relations between the regulators and regulated and increased compliance as a result.

"......we are more accountable due to the existence of the registers. Since 1989 we have had press officers to give frequent statements. There are benefits of keeping people informed. If [the policy] has [increased compliance], it has only played a small part. In general terms the policy can be seen as quite weak. However, if someone doesn't comply with an enforcement notice we will automatically prosecute."

8.6 Utilisation of Methods of Enforcement

Respondents were asked whether the NRA or HMIP used particular methods of enforcement, and if so the extent of their utilisation. Each method is discussed in turn below.
8.6.1 Variation of Consents

This method of enforcement was used 'sometimes' or 'often' according to all the NRA respondents. The importance of using stepped consents with interim variations to improve the system was pointed out by one respondent.

"We offer the company an olive branch and try to get them to come up with a scheme of work over 12-18 months. The consent offered now is then automatically tightened up every 6 months with no further discussion. If we gave a consent which was tight now, they wouldn't in any way be able to meet the conditions. This way, we are giving them a chance to get their house in order, time to raise money and budget for the works that are needed. If in 18 months the discharge is still bad then prosecution is the only answer. This is quite a good method of getting a seriously bad discharge put right."

One HMIP respondent said this method was used, whereas the remaining two others did not consider it to be an enforcement measure.

8.6.2 Revocation of Consents.

This method was not really considered to be an enforcement measure by NRA respondents as such. They stated that removal of the consent to discharge was not possible if it was reasonable for the operators to have one. No specific mention of this fact is made in the legislation (see 4.4.12.1). However, an appeal to the Secretary of State may be made against the decision to revoke a consent, and the reasonableness of the actions of the regulator would probably be taken into account by him.
Revocation was normally carried out by the NRA only when the company had ceased operating and a consent was no longer required.

HMIP respondents stated that they did not use the method.

8.6.3 Enforcement Notices

This method of enforcement was used in all HMIP regions and was considered to be the "favoured option" in one of them.

At the time of the interviews, this method was not available for use by the NRA. However, the Environment Agency is now able to use enforcement notices for the control of water pollution.

8.6.4 Prohibition Notices

Prohibition notices were utilised 'rarely' to 'often' depending on the NRA region. In certain cases they were issued to prevent discharges until a consent had been granted. HMIP respondents stated that they were used either 'not at all' or 'rarely'.

8.6.5 Powers of Entry, Examination and Seizure

These powers were used 'sometimes' or 'rarely' according to NRA respondents. The problems of giving 7 days notice before acquiring entry onto residential premises was mentioned. The
respondent stated that this provision made the power virtually useless, as the problem would probably have disappeared after this length of time.

A wide variation in their utilisation existed between HMIP regions, being used frequently in one region, rarely in another and not at all in a third.

However, in the course of the regulators' duties, it was apparent that in the majority of cases they would be invited onto property, and would therefore not have to rely on the more formal entry procedures.

8.6.6 Preventative Measures (when pollution is imminent)

Preventative measures were used when appropriate according to NRA personnel. This method was not included in the HMIP questionnaire, as it was not expressly set out in the legislation as a possible method of enforcement.

The NRA made further comments that proactive visits to prevent pollution were undertaken in certain cases, and advice given to operators. This was considered to be successful approximately 80% of the time, providing the steps involved little or no expense.

8.6.7 Removal of Polluting Matter and Recovery of Costs

This method of enforcement was used 'rarely' to 'often' depending on the NRA region. One respondent stated that the emphasis was placed on the polluter for them to take remedial action. If they refused then the NRA would carry out the work and recharge the polluter.
“Cost recovery is now one of the most important things. It raises revenue for the NRA and pays for time and materials. It also brings it home to the polluter that he hasn't been fined but it's cost him X amount of money. When taking remedial action we will claim back for our time, materials and put on a cost as well. A serious oil spill from a company can cost that company hundreds of pounds. If we have to bring a private company in to deal with it (which we do on occasions) this can cost several thousand pounds........ you're not taking them to court, but merely giving them a bill for the pollution they've caused. We think it does work.”

None of the HMIP respondents said they had employed their ability to take remedial action and recover the costs.

8.6.8 Restoration of the Affected Area

Again a variation in responses from the NRA was observed. Some respondents stated the measure was used frequently, others sometimes and one respondent said it was used only rarely. The most common type of restoration was restocking after a major fish kill. This was recharged whenever possible, but in certain cases the origin of pollution could not be retraced to a specific person.

Again this measure was not set out in the legislation for use by HMIP, and the question was therefore excluded from the questionnaire.
8.6.9 Prosecution

One NRA respondent stated that this method was used in approximately 20-25% of cases. "We don't hesitate to prosecute if it's possible." An HMIP respondent estimated the utilisation of prosecution at one every 2 or 3 years per regional office.

8.6.10 Prosecution of Company Directors

This method was utilised 'rarely' in all NRA regions, and had yet to be utilised by HMIP.

8.6.11 Injunctions

In only one of the NRA regions had injunctions been used at the time of the questionnaire. Procedural difficulties were cited as one of the major disadvantages of this method. The HMIP regions in question had not yet used this method.

8.6.12 Informal Methods

Informal methods such as verbal contact and warning letters were used 'often' in all regions of the NRA and HMIP.

8.6.13 Increased Monitoring

Increased monitoring was utilised 'often' in three of the NRA regions, and 'sometimes' in one area. In certain cases this method was used to determine if a problem occurred on a regular
basis, or if it was an isolated incident. One respondent stated that difficulties justifying increased monitoring could occur:

"A charge is made for monitoring of a plant in their consent. When increased monitoring takes place it is not being paid for."

HMIP used this method in some cases as an alternative to serving a notice. This occurred mostly when difficulties in serving a notice could arise.

8.6.14 Taking Formal Samples

These samples were taken 'often' in all regions of the NRA. The formal sampling procedure was not a legislative requirement for HMIP, and was therefore omitted from the questionnaire.

8.6.15 Formal Warning Letters

This method was used 'often' or 'sometimes' in NRA regions, specifically in cases where formal samples had been taken but it was not appropriate to prosecute for a particular reason. Letters were used in two out of the three HMIP regional offices surveyed.

8.6.16 Formal Cautions

These were also used 'often' or 'sometimes' by the NRA. One respondent stated that this method was used slightly more than prosecutions. Failure by the recipient to accept a caution would result in prosecution. HMIP did not utilise this method of enforcement.
8.7 Reasons for Non-Utilisation of Methods

None of the methods were described as ineffective by the NRA respondents. However, the procedure for utilising injunctions, prosecution, prohibition, revocation and variation notices was considered cumbersome or slow. One respondent stated that an appeal to the Secretary of State concerning a variation notice had been pending a decision for four years. In addition, formal sampling was described as "onerous" and slight discrepancies in procedure could lead to a case being lost. Resource restrictions were cited in one reply as inhibiting the use of prosecutions.

None of HMIP's respondents considered any of the methods to be ineffective. Prosecution was cited as being too complicated a method in certain cases, with the problems of convincing a jury or the bench of the seriousness of the case. It was stated that resource restrictions could become an issue when deciding whether to pursue a case in the Crown Court in order to provide access to higher fines.

All respondents denied that their preventative and remedial powers were not fully utilised, and felt this was "unjustified criticism". NRA preventative measures in the form of the Regulations relating to farm slurry and the production of pollution prevention literature were discussed. However, no mention was made of the extent of use of 'hands on' prevention powers when a particular pollution incident is imminent, nor their use of remedial action.

HMIP respondents felt that there was "no need to use these measures" and "in the majority of cases the company sorts out any remedial action itself".
8.8 Characteristics Affecting the Choice of Enforcement

The choice of enforcement action was determined to a large extent by the circumstances of the incident and the characteristics of the offender, as indicated by an NRA interviewee:

"With category 1 incidents we have no choice - probable prosecution if legally possible. With a small discharge there will be a visit to the site and a conversation followed up by a letter. Incidents in between - we have to decide on the day whether to take official samples. This depends on different things e.g. whether the polluter is known to you. If they have done it before then we go for the official sample. If its his first time and an accident then maybe we'll let him off. It all depends on the circumstances you find at a particular incident. A small incident isn't worth the trouble of taking it to court because you know the magistrate will throw it out. Usually is sufficient to have a discussion followed by a letter - this usually works. We can take official samples without a view to prosecution to 'put the wind up' somebody and make them realise it's serious."

The amount of media attention or public pressure associated with a case could sometimes affect the outcome of NRA proceedings. In cases where a choice of enforcement action was available (Category 2 incidents), then an excess of public complaints may "just tip the balance" in favour of prosecution.

One HMIP respondent stated that public pressure or media attention would not affect the outcome of enforcement action, whilst another respondent correctly stated that this was one of the questions set out in the policy, and should therefore be taken into account. The third respondent said that media attention would be more likely to affect the ability of the regulatory agency to act. In prior cases, resources had to be diverted away from pollution prevention in order to deal with media enquiries.
8.9 Availability of Information

Respondents were asked whether they thought the provisions relating to the public availability of information were sufficient. The response from the NRA was "yes" in each case, although some criticism was levelled at the form of the public register.

"It can sometimes be a bit off-putting for someone to come in and look at a register. People like Friends of the Earth come to see it and take away lots of information at a time. Maybe it could be simplified so anyone could walk in off the street without making an appointment and use a simple computer package so there doesn't have to be someone there to operate it."

One HMIP respondent suggested that the registers would be more convenient for viewing by members of the public if each company held a copy of its register. This would then enhance the link between the company and the local community. Another respondent proposed that information relating to improvement programmes implemented by HMIP should be included on the register.

The majority of people consulting the register were said to be sales people researching new markets for pollution abatement equipment, environmental consultants, green organisations and students.
8.10 Other Methods of Pollution Control

Respondents were asked how successful schemes such as the designation of nitrate sensitive areas had been in controlling water pollution. Unfortunately, the interviewees had no personal knowledge of these schemes and so could not comment.

In the majority of NRA cases it was agreed that a scheme similar to that for nitrate sensitive areas, where compensation would be granted for expenditure on pollution abatement equipment in other industrial sectors, would increase compliance.

"Absolutely - you would get thing done much, much quicker. It is only the money generally that holds people back. Any serious money that is to be spent on equipment takes a lot of convincing."

However, one respondent thought that comparison was not practicable as abatement equipment should be considered as part of the process. Another respondent agreed that the system seemed unjust whereby a farmer could obtain a grant but an industrialist could not. Other discrepancies in the system pointed out by this respondent were:

1. Where effluent from the sewage works of a water company was related back to 'look-up' tables and was allowed to fail a certain number of times, whereas effluent from a privately owned sewage works was not.

2. When a water company that owned a sewage works serving less than 250 people with no industrial inputs, was given a 'descriptive consent' with no numerical constraints. Again, an individual owning such a works was unable to obtain this type of consent.
A difference of opinion on the provision of compensation or grants for industry was discovered with HMIP respondents. One interviewee agreed that "more money for technology would increase compliance", whilst others thought that the 'polluter pays' was a good principle, and industry should foot the bill.

8.11 The Future

Increased powers of entry, the removal of the formal sampling requirement (sch. 24 and s. 110 EA 1995) and the power to serve notices (s. 90B WRA 1991) were cited by NRA respondents as welcome improvements to the system introduced by the Environment Act. However, one foreseeable problem was the introduction of cost-benefit analysis which, it was thought, could be detrimental to prosecutions.

Certain NRA respondents were critical of industry self-monitoring techniques employed by HMIP.

"HMIP are self-monitoring and the public are sceptical of this. On the cost-benefit side of things, whenever HMIP takes a sample it must be sent off to private labs for checking. The NRA does its own monitoring and analysis which is much more beneficial."

In the same way, HMIP respondents were critical of the approach of the NRA to enforcement and the methods of enforcement at their disposal.

"HMIP have chemical engineers, etc. on its staff and as such have a more process based approach. The NRA have more people to inspect. Will HMIP inspectors have their job de-skilled as a result? For example, having to use
a checkbox rather than being able to use more discretion and their experience of being inspectors as they do now."

"The number of prosecutions the NRA and HMIP take are about the same in proportion to the number of premises registered. The NRA has no intermediate tool between prosecution and the 'rude letter' - it needs to introduce some form of notice system in order to take positive action."

"The purpose of HMIP is to prevent pollution in the first place rather than prosecute after the event. The NRA just seem to be interested in the 'end of pipe', and prosecute after an incident."

8.12 Discussion

This section provides an overview of the findings outlined in this chapter. The results are discussed fully in Chapter 11 in the context of the research aims, the findings from the literature review and results from other parts of the empirical research undertaken for this study.

8.12.1 The Aim of Enforcement

NRA respondents thought the aim of enforcement was both for punishment of the offender and to prevent pollution, with more importance being placed on the preventative aspect. HMIP respondents all stated the main aim of enforcement was the deterrent effect.
8.12.2 Working Relationships with the Regulated Community

Both regulators considered they had a very good working relationship with the regulated community. The importance of such a good relationship to encourage compliance with the legislation was also stressed.

8.12.3 Main Reasons for Non-Compliance

The main reasons for non-compliance were considered to be:

- lack of investment in infrastructure;
- ignorance of the legislation;
- ignorance of working practices on site;
- poor communication between departments;
- not realising the consequences of their action or inaction;
- inadequate training;
- lack of maintenance.

It was stated that a company very rarely set out to deliberately flout the regulations, and most were keen and eager to comply with the legislation once they were aware it existed.

8.12.4 Resource Implications

A lack of resources was cited as being restrictive by the respondents in the majority of cases. Lack of manpower was a particular problem, inevitably leading to some areas of their work
being neglected (the regulation of small to middle-sized companies being cited as an example by one HMIP respondent). This made a willingness to co-operate by the regulated community all the more important for their work. NRA respondents also pointed out that assistance from the public in reporting incidents was particularly helpful in this respect.

8.12.5 Levels of Penalties

A divergence of opinion existed between HMIP to the NRA, concerning their views on the levels of penalties applied by the courts. NRA respondents thought the levels of fines were too low and often did not reflect the severity of the incident. HMIP, on the other hand, thought the penalties applied by the courts were appropriate.

This probably related to the numbers of prosecutions brought by the respective organisations. The NRA took far more prosecutions than HMIP and therefore would probably have witnessed fines being applied over a large range of levels. Furthermore, HMIP only prosecuted in a small number of cases where the incident was especially noteworthy, and thus probably attracted fines at a higher level. In addition, the offender in many NRA prosecutions would be a small business (e.g. a farmer) whilst many IPC defendants would be large companies - a factor that would be taken into account by the courts in deciding the level of the penalty.

Comparison of average fines for IPC and water pollution offences does in fact show a large difference. For example, during the year 1994-5, fines for IPC offences averaged £9,100, whilst those for water pollution offences averaged only £3,122 (see section 2.14 and the NRA's Annual Report and Accounts 1994/5 (1995)).
On the whole, NRA respondents thought the introduction of sentencing guidelines for the courts would be a good idea, whilst HMIP respondents were less convinced.

8.12.6 Enforcement Policies

All NRA respondents supported the form of their enforcement policy and stated that it assisted them in their decision making. They considered that the balance between guidelines set out in the policy, and the amount of discretion they could use was pitched at the correct level. Guidance on the use of other methods of enforcement apart from prosecutions, cautions and warning letters was either set out in alternative documents, or the method was used so infrequently that guidelines were not required.

HMIP found their policy document to be adequate and of assistance in their decision making. There was a reluctance to adopt a more detailed policy of a format similar to that of the NRA, as they considered that this would restrict their discretionary input. Guidance on the use of methods other than prosecution (which was set out in their policy document) was provided by training courses. It was felt that it would not be particularly helpful to include guidance on the use of these methods in their policy.

Differences of opinion existed between NRA respondents when asked whether the policy made them more accountable to the public, and whether the document was available to the general public. HMIP respondents did not think their policy made them more accountable. Neither did they think it had enhanced relations between themselves and the regulated community.
8.12.7 Methods of Enforcement

Table 8.1 summarised the responses obtained from this part of the questionnaire.

Table 8.1 Use of Enforcement Measures by HMIP and the NRA

<table>
<thead>
<tr>
<th>Method</th>
<th>NRA Use</th>
<th>Extent of Use</th>
<th>HMIP Use</th>
<th>Extent of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variation consents/auths.</td>
<td>Yes</td>
<td>Sometimes/often</td>
<td>Yes</td>
<td>Rarely</td>
</tr>
<tr>
<td>Revocation consents/auths.</td>
<td>Yes</td>
<td>Rarely</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Enforcement notices</td>
<td>-</td>
<td></td>
<td>Yes</td>
<td>Often</td>
</tr>
<tr>
<td>Prohibition notices</td>
<td>Yes</td>
<td>Rarely/often</td>
<td>Yes</td>
<td>Rarely</td>
</tr>
<tr>
<td>Powers entry, examination &amp; seizure</td>
<td>Yes</td>
<td>Rarely/sometimes</td>
<td>Yes</td>
<td>Not at all to often</td>
</tr>
<tr>
<td>Preventative measures (with an imminent pollution incident)</td>
<td>Yes</td>
<td>When appropriate</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Removal polluting matter/Taking steps to remedy harm</td>
<td>Yes</td>
<td>Rarely to often</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Recovery of expenses from remedial action</td>
<td>Yes</td>
<td>Sometimes</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Restoration of an area &amp; recovery of expenses</td>
<td>Yes</td>
<td>Rarely to often</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Prosecution</td>
<td>Yes</td>
<td>In 20-25% of cases</td>
<td>Yes</td>
<td>One every 2-3 years per regional office</td>
</tr>
<tr>
<td>Prosecution of company directors</td>
<td>Yes</td>
<td>Rarely</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Injunction</td>
<td>Yes</td>
<td>Very rarely</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Informal Methods</td>
<td>Yes</td>
<td>Often</td>
<td>Yes</td>
<td>Often</td>
</tr>
<tr>
<td>Increased monitoring</td>
<td>Yes</td>
<td>Sometimes/often</td>
<td>Yes</td>
<td>Sometimes</td>
</tr>
<tr>
<td>Taking formal (tripartite) samples</td>
<td>Yes</td>
<td>Often</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Formal warning letters</td>
<td>Yes</td>
<td>Sometimes/often</td>
<td>Yes</td>
<td>Not at all to sometimes</td>
</tr>
<tr>
<td>Formal cautions</td>
<td>Yes</td>
<td>Sometimes/often</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

From the above table, it can be seen that the NRA and HMIP favoured different methods for enforcement of legislation. A heavy reliance on informal methods was found in each case. In
addition, a large variation in the extent of use of particular methods was found between the regional offices, within each organisation. Examples include remedial action, restoration of an area, and prohibition notices within the NRA; and formal warning letters and powers of entry, examination and seizure within HMIP. The NRA utilised the full range of enforcement action at their disposal to some extent, whereas a number of methods at their disposal were not used at all by HMIP.

8.12.8 Reasons for Non-Utilisation of Methods

The NRA considered the procedure for using certain methods too cumbersome and slow, including:

- injunction;
- prosecution;
- prohibition notices;
- revocation notices;
- variation notices.

Formal sampling was considered as being too onerous and requiring exact attention to detail. Furthermore, the numbers of prosecutions were limited due to resource restrictions.

This problem was also cited by HMIP respondents. It was stated that the level of available resources could become an issue when deciding whether to pursue a case in the Crown Court. Prosecution was also considered to be too complicated a method in certain cases, with the problems of convincing the bench of the seriousness of the case.
All respondents denied that their preventative and remedial powers were not fully utilised. However, this conflicts somewhat with the findings presented in Table 8.1. Indeed, HMIP went on to state that there was no need to use these measures as the company itself normally took the necessary action.

8.12.9 Characteristics Affecting the Choice of Enforcement

Characteristics of the incident and the offender were cited as being considered when deciding which action to take. In addition, media attention and public pressure also played a role to some extent.

8.12.10 Access to Information

A certain amount of criticism was levelled at the public registers from both the NRA and HMIP. Proposals were made to improve the system, including:

- that it should be simplified;
- it should be more readily available (for example, in electronic form);
- the relevant part should be kept for viewing at each respective company;
- information relating to improvement programmes should be kept on the register.
8.12.11 Other Methods of Pollution Control

The respondents had little knowledge of special schemes such as the designation of NSAs, and so were unable to comment on their effectiveness. It was stated that the extension of grants to other industrial sectors would probably increase compliance, although certain respondents were against this proposal in the light of the 'polluter pays principle'.

8.12.12 The Future

The NRA and HMIP both had reservations about their merger to form the Environment Agency.

Probable difficulties cited by the NRA included:

- the application of cost-benefit analysis;
- utilisation of industry self-monitoring techniques by HMIP.

HMIP concerns included:

- a reduction in their level of discretion employed in decision making;
- standardisation of the methods of enforcement available to the two regulators;
- the level of emphasis placed by the NRA on prosecution rather than prevention.
This chapter completes the presentation of research findings relating to the methods and strategies employed by regulatory agencies in the enforcement of environmental law.

The main aim of enforcement was considered to be deterrence. The majority of offenders were considered as 'organisationally incompetent' rather than 'amoral calculators' (see section 2.7.3).

Their respective enforcement policies were found by both the NRA and HMIP to be of assistance in their work, and all respondents found them to be pitched at the correct level of discretionary input. This was quite surprising considering the considerable differences between the form and content of each policy (see Chapter 5).

Information relating to the utilisation of specific enforcement methods revealed that a wide variation existed in the extent of the use of these methods between regional offices and also between the two agencies. However, informal methods were by far the most common enforcement measure in all cases. Certain methods were not used to their full extent due to resource restrictions or the method was too complicated, cumbersome or slow.

A more detailed discussion of these findings can be found in Chapter 11.

The findings of the next stage of the research - an assessment of the level of consistency of enforcement as perceived by the regulated community - are presented in Chapter 9.
CHAPTER 9
RESULTS OF MAIL SURVEY 2
REGULATED COMMUNITY QUESTIONNAIRE

9.1 Introduction

Mailed questionnaires were sent to members of the regulated community to ascertain their opinion on the level of consistency of enforcement action carried out by the NRA and HMIP. Local authorities were not included in this study for reasons explained in Chapter 6. The primary research aim satisfied by this part of the study was:

- to determine the level of consistency in the approach to enforcement within and between regulatory agencies.

The questionnaire determined what enforcement action had been experienced by the respondent, or respondent's company, and the number of times this had occurred. The respondent was then asked his opinion on the consistency of action within their company, in comparison to other companies, and the consistency of penalties applied by the courts. Respondents reporting inconsistencies were asked to substantiate their claims by giving details of specific cases and incidents.

It was recognised that this questionnaire measured perceptions of the regulated community regarding the consistency of enforcement action by the regulators. Actual measures of consistency would be impossible without more time and resources at the investigator's
disposal than this particular study allowed. However, the importance of the regulated community's perceptions should not be underestimated. A good working relationship between regulator and regulated is regarded by many as essential for effective enforcement of legislation (see Chapter 2). If the regulated community perceive they have received more stringent enforcement than their competitors, then this could place that relationship in jeopardy.

The purpose of the questionnaire was not only to ascertain consistency within a particular agency, but also to compare consistency of action between the NRA and HMIP. This information was used to determine if there was varying degrees of consistency between the two authorities, taking into account the contrasting forms of HMIP's and the NRA's enforcement policies. It was then determined how the policy type may affect consistency of enforcement action.

A copy of the questionnaire can be found in Appendix 11.

9.2 Response Rate

The total response rate for the survey was 38%.

9.3 Sample Characteristics

A number of sample characteristics were determined from the questionnaire to give an indication of the type of respondents. These were:
• regulation by the NRA or HMIP;
• whether the respondent belonged to the farming sector, industrial sector or 'other';
• the type of industry, where appropriate;
• the size of the farm, where appropriate;
• the number of employees in the company (to give an indication of the size of the company).

The results are illustrated below.

Figure 9.1 Regulation by the NRA or HMIP

There was an approximately even split of respondents between those regulated by the NRA (51.9%) and those regulated by HMIP (48.1%).
The majority of respondents considered themselves to form part of the industrial sector (75.2%), whilst those belonging to the farming community and 'other' formed 15% and 9.8% of the respondents respectively. Table 9.1 below provides more detail on the percentage of respondents from specific industries.

Table 9.1 Percentage of Respondents from Specific Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percent Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>chemical</td>
<td>27.8</td>
</tr>
<tr>
<td>farming</td>
<td>15.0</td>
</tr>
<tr>
<td>waste</td>
<td>8.3</td>
</tr>
<tr>
<td>food and drink</td>
<td>6.8</td>
</tr>
<tr>
<td>mineral</td>
<td>6.0</td>
</tr>
<tr>
<td>construction</td>
<td>3.8</td>
</tr>
<tr>
<td>fuel</td>
<td>3.0</td>
</tr>
<tr>
<td>metal</td>
<td>3.0</td>
</tr>
<tr>
<td>power generation</td>
<td>3.0</td>
</tr>
<tr>
<td>transport</td>
<td>3.0</td>
</tr>
<tr>
<td>paper production</td>
<td>1.5</td>
</tr>
<tr>
<td>motor supplier</td>
<td>1.5</td>
</tr>
<tr>
<td>printing</td>
<td>1.5</td>
</tr>
<tr>
<td>water and sewage undertaker</td>
<td>1.5</td>
</tr>
<tr>
<td>local authority</td>
<td>0.8</td>
</tr>
<tr>
<td>education</td>
<td>0.8</td>
</tr>
<tr>
<td>warehousing and distribution</td>
<td>0.8</td>
</tr>
<tr>
<td>unknown</td>
<td>12.0</td>
</tr>
</tbody>
</table>
The majority of farms were in the size range 101-300 hectares. Of the remaining respondents, 35% worked on farms that were 100 hectares or lower, and only 15% of respondents were involved with farms over 300 hectares in size.

The majority of respondents came from larger firms, with 63% of respondents working for firms with over 100 employees.
### 9.4 The Application of Enforcement Action

Respondents were asked whether their firm had experienced any of the various enforcement measures imposed by the NRA or HMIP. The results are set out in Table 9.2 below.

<table>
<thead>
<tr>
<th>Enforcement Action</th>
<th>YES - NRA (%)</th>
<th>YES - HMIP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal warning</td>
<td>29.0</td>
<td>23.4</td>
</tr>
<tr>
<td>Warning letter</td>
<td>30.4</td>
<td>28.1</td>
</tr>
<tr>
<td>Increased monitoring</td>
<td>24.6</td>
<td>21.9</td>
</tr>
<tr>
<td>Tripartite sample by NRA</td>
<td>40.6</td>
<td>-</td>
</tr>
<tr>
<td>Formal caution</td>
<td>31.9</td>
<td>0</td>
</tr>
<tr>
<td>Request to prevent pollution</td>
<td>29.0</td>
<td>-</td>
</tr>
<tr>
<td>Request to remove pollutant</td>
<td>18.8</td>
<td>1.6</td>
</tr>
<tr>
<td>Request to restore affected area</td>
<td>11.6</td>
<td>3.1</td>
</tr>
<tr>
<td>Repayment for works carried out</td>
<td>21.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Prosecution</td>
<td>69.6</td>
<td>17.2</td>
</tr>
<tr>
<td>Injunction</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Variation of consent</td>
<td>10.1</td>
<td>50.0</td>
</tr>
<tr>
<td>Revocation of consent</td>
<td>1.4</td>
<td>0</td>
</tr>
<tr>
<td>Enforcement notice</td>
<td>-</td>
<td>79.7</td>
</tr>
<tr>
<td>Prohibition notice</td>
<td>0</td>
<td>7.8</td>
</tr>
</tbody>
</table>

It can be seen from Table 9.2 that HMIP and the NRA prefer to use different methods of enforcement. Percentages of respondents that had received verbal warnings, warning letters
or increased monitoring was approximately the same for both authorities. However, the NRA were more likely to use prosecution, request that the polluter removes the pollution, ask that they restore the affected area and repay for any preventative or remedial action carried out by them. HMIP were more likely to vary consents than the NRA, and use more prohibition notices. One of their main methods of enforcement was the enforcement notice and 79.7% of respondents had received at least one of these. Both authorities demonstrated a reluctance to use injunctions.

The total number of actions taken against each respondent was calculated. This was then cross-tabulated with other variables to determine whether different circumstances affected the amount of enforcement action applied (see Chapter 6 for a discussion of the choice of statistical tests). Total actions was cross-tabulated with:

- the enforcing body (NRA or HMIP), to determine whether one authority was likely to use more action than another;
- the respondent's sector (farming, industrial or 'other'), to determine whether one sector attracted more enforcement action than another;
- the size of the farm (where applicable), to determine whether larger or smaller farms were more likely to attract enforcement action;
- the number of employees, to determine whether larger or smaller companies were more likely to attract enforcement action.

The results can be found in Table 9.3.
Table 9.3 Comparison of Numbers of Enforcement Measures with Each Authority.

Respondent's Sector, Size of Farm and Number of Employees

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRA or HMIP sector</td>
<td>Mann-Whitney U</td>
<td>0.2833</td>
</tr>
<tr>
<td>size of farm</td>
<td>Kruskal-Wallis 1-way ANOVA</td>
<td>0.1625</td>
</tr>
<tr>
<td>number of employees</td>
<td>Kruskal-Wallis 1-way ANOVA</td>
<td>0.0421</td>
</tr>
</tbody>
</table>

From the above table it can be seen that the only value to the 5% significance level is for the number of employees. It may be concluded that a relationship does not exist between the number of enforcement measures taken and either the type of authority, the respondent's sector or the size of farm. Upon further investigation into the effect of the number of employees on the number of enforcement action taken, no particularly striking pattern emerged. Companies having employees numbering from 10-20, 51-100 and 300+ experienced more enforcement action than other groups.

9.5 Measure of Consistency

Respondents were asked to assess the authorities' level of consistency in two ways. Firstly, their consistency in the treatment of different incidents in the respondent's company or farm, and secondly their level of consistency when dealing with the respondent's company or farm compared with other similar companies/farms. In addition, their opinion of the consistency of penalties applied by the courts was sought. The results can be found in Table 9.4.
The results indicated that respondents viewed the consistency of the NRA and HMIP in a similar manner, and in fact there was found to be no statistically significant difference between the two sets of results obtained for the NRA and HMIP (to a 5% significance level - see Table 9.5).

From Table 9.4, it can be seen that approximately 50% of respondents considered the authorities to be consistent in their treatment of different incidents within the company. However, only 30% of respondents reported this was the case in the authorities' treatment of other companies compared to their own. Reports of inconsistencies in dealing with incidents within the company was at a level of 15.8% for the NRA rising to 26.7% for HMIP. Furthermore, these figures increased to 28.1% and 35.0% respectively when the respondent's company was compared to other similar companies.

<table>
<thead>
<tr>
<th>Percentage of Respondents</th>
<th>Yes</th>
<th>No</th>
<th>Don't Know</th>
<th>No similar incidents to compare</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consistency within firms/farms</td>
<td>49.1</td>
<td>15.8</td>
<td>3.5</td>
<td>31.6</td>
<td>-</td>
</tr>
<tr>
<td>consistency between firms/farms</td>
<td>29.8</td>
<td>28.1</td>
<td>26.3</td>
<td>15.8</td>
<td>-</td>
</tr>
<tr>
<td>HMIP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>consistency within firms</td>
<td>53.3</td>
<td>26.7</td>
<td>1.7</td>
<td>16.7</td>
<td>-</td>
</tr>
<tr>
<td>consistency between firms</td>
<td>30.0</td>
<td>35.0</td>
<td>23.3</td>
<td>11.7</td>
<td>-</td>
</tr>
<tr>
<td>Courts</td>
<td>13.7</td>
<td>5.1</td>
<td>5.1</td>
<td>-</td>
<td>50.4</td>
</tr>
</tbody>
</table>
Many respondents found the question on the consistency of penalties applied by the courts to be inapplicable. This was because many respondents had been subject to enforcement measures that did not involve the judicial system, and many others had been prosecuted only once, thus making a comparison of penalties impossible. However, certain respondents were able to reply to this question. 13.7% of the total number of respondents stated that they believed the penalties to be consistent, whilst 5.1% thought they were inconsistent.

The measures of consistency were cross-tabulated with a number of other variables to determine whether these variables affected the response in any way. The results can be found in Table 9.5.

**Table 9.5 Comparison of Consistency with Type of Authority, Sector, Size of Farm, Number of Employees and Amount of Enforcement Action**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Test</th>
<th>Consistency within company</th>
<th>Consistency between companies</th>
<th>Consistency in courts</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRA or HMIP</td>
<td>chi-squared</td>
<td>0.18604</td>
<td>0.82243</td>
<td>-</td>
</tr>
<tr>
<td>sector</td>
<td>chi-squared</td>
<td>0.27059</td>
<td>0.00044</td>
<td>0.01041</td>
</tr>
<tr>
<td>size of farm</td>
<td>Kruskal-Wallis 1-way ANOVA</td>
<td>0.1455</td>
<td>0.4789</td>
<td>0.8987</td>
</tr>
<tr>
<td>no. employees</td>
<td>Kruskal-Wallis 1-way ANOVA</td>
<td>0.0842</td>
<td>0.7625</td>
<td>0.7522</td>
</tr>
<tr>
<td>amount of enforcement action</td>
<td>Kruskal-Wallis 1-way ANOVA</td>
<td>0.0010</td>
<td>0.0124</td>
<td>0.0606</td>
</tr>
</tbody>
</table>

Significant results indicating a relationship between the variables are highlighted in bold in Table 9.5. These were levels of consistency and sector, and also between consistency and the...
amount of enforcement action taken. Further investigation revealed no particular pattern of results relating to the respondent's sector. However, as respondents experienced more enforcement action, more reports of inconsistency were made. It therefore seems that the regulated community experienced more inconsistencies with the more enforcement action that was carried out against them. Figures 9.5 and 9.6 illustrate these results.

Figure 9.5 Levels of Consistency Within the Company Reported by Respondents

Experiencing Differing Amounts of Enforcement

Consistent
It can be seen from Figures 9.5 and 9.6 that as the number of enforcement measures experienced by companies increased, the percentage of respondents ticking the 'yes' box on the questionnaire (i.e. stating that the regulators were consistent) decreased. So, for example, in the question relating to consistency within the company (Figure 9.5), over 50% of respondents experiencing 1-5 enforcement measures thought action had been consistent. However, with respondents that had experienced 21 enforcement measures or over, just over 20% thought the action was consistent and nearly 80% thought it was inconsistent. A similar pattern was observed looking at respondents' opinions of consistency between companies.
9.6 Additional Comments by Respondents

A large number of respondents made additional comments in the space provided in the questionnaire. A selection of these comments are included in this section.

9.6.1 Individual Inspectors

A common theme throughout the questionnaires was the inconsistencies encountered with different inspectors. It seemed that some inspectors made every effort to encourage compliance through discussion with the regulated community and offering helpful advice. In other cases, however, companies complained that this was not the case and certain inspectors were extremely unhelpful and took a very hard-lined approach.

"[name of company] has various sites around the country and there is a big inconsistency in the inspectors. Some are very approachable and helpful, while others are the exact opposite. The unhelpful ones are a hindrance to our business activities."

"A fair amount of discretion is given to HMIP inspectors - we have had a fair-minded inspector, but have heard of those who haven’t."

"The approach of HMIP has depended to a large extent on the inspector involved: our first inspector took an excessively hard-lined approach, whereas our current inspector is much more practical."

"I feel the NRA has not been consistent in their prosecution or visits; it all depends on who call to see me and how they feel."

"The inconsistent and obvious personal vagaries in the inspectors attitude finally became too much and a decision was taken to cease trading in 1995. It was plainly obvious that it was this inspectors mission to manufacture a situation which would eventually lead to prosecution."
9.6.2 Consistency

A number of respondents expressed doubt concerning the consistency of both the NRA's and HMIP's actions.

"The playing field does not appear to be level - negotiate the best deal you can get!"

"There does appear to be inconsistencies between regions and within regions from inspector to inspector. The inconsistency of approach has not made open discussion of problems very easy."

"Although I do not think my company has been particularly victimised, there is still not a common standard and level playing field across the pollution inspectorate."

"There is no reason to believe that we have been treated differently from our competitors. HMIP has, if you like, been consistent in its inconsistency."

9.6.3 Monitoring Requirements

Comments were made on the appropriateness of monitoring requirements within HMIP, and also their variation between different regions for similar processes.

"HMIP are pragmatic and practical on the inspector level. However, centrally they are far less flexible. The HMIP monitoring programme is farcical."

"Specific monitoring requirements are different in the North of England than those in South Wales."
9.6.4 Agencies' Approach

Criticism was levelled at the NRA for taking a tougher line on pollution incidents than HMIP. Many respondents felt that the NRA sought mechanical compliance rather than seeking solutions to problems.

"We believe that the NRA has become a lot tougher in recent years but believe that this policy is being equally applied."

"NRA treatment of incidents appears consistent - and rigorous - within itself, but is not consistent with the stated policy of being "reasonable and considerate" to farmers who are being conscientious in their own situation and practical difficulties. It would appear, though they have not admitted it, that NRA policy is now to bring a prosecution whenever they have the evidence, regardless of circumstances."

"The NRA should suggest that farms who pollute spend money to improve their system. If they will not or do not then at this stage they should be prosecuted, rather than making them spend thousands on fines and still expect them to find money for improvements."

"HMIP are very fair and work with the chemical industry to make improvements under an agreed timetable. They do not go straight to court as did the NRA and it will now be interesting to see what the agency does."

However, in spite of this criticism, one respondent thought that the action taken on his/her company had produced the desired results and ensured continuing compliance with the legislation.

"Of the two prosecutions, the circumstances should not have happened, we learnt the lesson. Management's knowledge and expertise was strengthened and it has been made abundantly clear by the management that sub-standard practices leading to environmental pollution is not acceptable."
9.6.5 Provision of Grants

One respondent considered that it should not be the responsibility of companies to pay for pollution abatement equipment, but should come instead from grants.

"Desires of the public have given the impetus to increase the demands of a better environment and to this end enforcement and fines have increased beyond the means of the average small farms and firms. It seems only right...that the people who have made these demands and changes should pay for the infrastructure needed to meet these high standards, i.e. through grants."

9.6.6 Public Pressure

The contribution made by public pressure to the choice of enforcement action was noted by one respondent.

"HMIP have shown a tendency to bow to public emotion and have ignored fact which has contradicted the public's view."

9.6.7 Interaction of Organisations

In certain cases, problems were encountered when more than one organisation was involved in particular processes.

"HMIP took particular exception that they had not been consulted by the planning authority, and used this to exact extreme conditions (not required elsewhere) in authorisation, and subsequently made plant commissioning especially arduous including an unnecessary prohibition notice. All this took place in a background of old plants constantly exceeding their authorisations. Considerable disparity has occurred between plants under HMIP and EHOs."
9.6.8 Size and Profile of Company

It was noted by many respondents that the type of enforcement action applied depended upon the size and public profile of a company. Some commentators indicated that large firms with a high profile were singled out for more stringent action to set an example to others, whilst different respondents stated that the larger firms were treated much more leniently than their smaller counterparts.

"By all accounts in the technical press, the powerful power generating companies have been treated very leniently on SO₂ emissions compared with us as a small chemical manufacturer."

"As a large co-operative farm we appear to have been used to set an example to others if we pollute. Having an NRA officer living only 2 miles downstream meant very thorough monitoring of the stream with every possible likelihood of pollution."

"I have searched the public records for authorisations of major competitors and found that with different areas the improvement items and monitoring regimes are less than our own. It would appear that [smaller companies] get a less stringent regime as they seem a small fish in a big sea."

"It would appear that [the regulators] are more proactive with smaller sized companies - much more so than with the large multinationals."

"We have been singled out because of our size and high profile."

9.6.9 Courts

The general feeling from respondents was that there was insufficient information relating to the levels of penalties applied in the courts. Furthermore, a lack of knowledge of environmental issues by the magistrates was cited.
“The magistrates do not understand what goes on in the country”.

“There is no database to show what fines have been applied in the magistrates' courts etc. to get comparative figures for pollution.”

“The current court regime places environmental decisions with magistrates, who in many cases do not have the necessary understanding of environmental issues. An environmental background for magistrates would be useful.”

9.6.10 Communication

The key to compliance with the legislation was found by one respondent to be effective communication with the regulators.

“From experience it is apparent that as long as you maintain good communication channels open and try not to hide anything, then a good working relationship will exist. A simple phone call for clarification on any subject makes for sound business sense.”

9.7 Discussion

It was found that the NRA and HMIP preferred to use different methods of enforcement. Respondents viewed the level of consistency of the NRA and HMIP in a similar manner. Approximately 50% of respondents thought their actions within their firm/farm was consistent. However, this figure fell to only around 30% who thought the regulators' actions were consistent between themselves and other firms/farms. There was a more marked difference between the NRA and HMIP on figures for inconsistency, with HMIP considered to be more inconsistent than the NRA.
13.7% of respondents considered penalties applied by the courts to be consistent, whilst 5.1% thought they were inconsistent (the remainder of the sample could not answer the question as they had not experienced enough enforcement action).

As respondents experienced more enforcement action, more reports of inconsistency by the regulatory authorities were made.

Additional comments elicited from the respondents raised the following points:

- inconsistencies were encountered between individual regulatory staff - from the very helpful to the extremely unhelpful;
- general doubts relating to the consistency of both HMIP's and the NRA's actions;
- the large variation in monitoring requirements set out by HMIP;
- the NRA was a tougher regulator than HMIP - in many cases seeking mechanical compliance rather than finding solutions to problems;
- that grants should be available for pollution abatement equipment;
- disagreement with the idea that regulators should take account of public opinion;
- better communication between regulators was needed;
- that enforcement action largely depended on the size and public profile of the company (although whether small or large firms apparently ended up with the better deal depended upon the size of the respondent's own company!);
- more information was needed relating to the levels of penalties applied by the courts;
- a lack of environmental knowledge on the part of the magistrates was noted;
- the key to compliance was effective communication with the regulators.
The findings of this aspect of the research will be discussed in full in Chapter 11. The final stage of the empirical research - an investigation into the consistency of sentencing by the courts - is presented in Chapter 10.
CHAPTER 10
CONSISTENCY OF PENALTIES APPLIED BY THE COURTS

10.1 Introduction

Analysis of case reports was carried out to investigate the consistency of court sentencing. The primary research aim satisfied in this part of the study, was aim number 6 as outlined in Chapter 6, namely:

- To examine the consistency of the levels of penalties applied by the courts.

Case reviews from the ENDS Report were analysed for this section of the research. This methodology was considered to be the most appropriate form of data collection for this part of the research (see Chapter 6 for further details).

Some 109 cases were analysed in this study (the total reported in ENDS between the years 1993-1995 that had been prosecuted under either EPA 1990 Parts I or III, or the WRA 1991). Analysis was carried out by using a checklist of factors that were mentioned in the case reports. These factors (41 separate factors in total) related to a number of characteristics. A full list of these factors can be found in Appendix 11.

Similar cases were then grouped according to the appearance of the same factors in the report, and comparisons of the levels of fines applied between these similar cases was carried out.
10.2 Results of the Analysis

Table 10.1 below shows the split of cases reported in ENDS relating to the various legislation, between the years 1993-5.

Table 10.1 Cases Reported Between 1993-95

<table>
<thead>
<tr>
<th>Legislation</th>
<th>Year</th>
<th>Number of Cases Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>WRA 1991</td>
<td>1993</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>42</td>
</tr>
<tr>
<td>EPA 1990 Part I</td>
<td>1993</td>
<td>2 (1 IPC, 1 LAAPC)</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>8 (6 IPC, 2 LAAPC)</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>6 (all IPC)</td>
</tr>
<tr>
<td>EPA 1990 Part III</td>
<td>1993</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1994</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1995</td>
<td>0</td>
</tr>
</tbody>
</table>

It can be seen that no cases were reported that had been prosecuted under EPA Part III. The majority of those reported had been prosecuted under the WRA 1991, with a limited number of reports of those prosecuted under the EPA Part I. This result was expected, taking into consideration the differences between the number of prosecutions undertaken by HMIP, the NRA and local authorities (see Chapter 4 for details).

As a result of these findings, it was considered that the most viable sample for comparison of similar cases would be those cases prosecuted under the WRA 1991.

Comparisons were made within each year group, as it has been noted that fines have been generally increasing on an annual basis throughout the 1990s (see Chapter 2). Comparison
within year groups, and not over all three years, therefore prevented the introduction of errors by limiting any increase in the annual levels of fines that may have taken place.

Data were entered on a spreadsheet, and it was noted that the most commonly occurring factors were:

- that the incident was described as serious;
- that the incident was described as significant;
- that harm to fish or invertebrates, or both, had taken place.

It was therefore decided to select cases for comparison that had one or more of these three factors in common. Tables 10.2, 10.3 and 10.4 contain details of each case for comparison, each one spanning a different year. All the cases outlined in the tables were tried in the magistrates' court.
<table>
<thead>
<tr>
<th>No.</th>
<th>Defendant</th>
<th>Source of Discovery</th>
<th>Description of Incident</th>
<th>Previous Convictions</th>
<th>Plea</th>
<th>Fine (£)</th>
<th>Costs (£)</th>
<th>ENDS Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chemical manufacturer</td>
<td>Public</td>
<td>Oily solvents discharged polluting 3 km river. NRA threatened to ask for a shut-down of plant unless pollution halted. Eventually traced to leaking catch-pit.</td>
<td>Guilty</td>
<td>12,000</td>
<td>2,107</td>
<td></td>
<td>219: 43</td>
</tr>
<tr>
<td>2</td>
<td>Asphalt supplier &amp; contractor</td>
<td></td>
<td>30,000 litres of oil escaped from ruptured pipe. Claimed system had vibration problem. Extensive pollution coating birds and causing subsequent death.</td>
<td>Not guilty</td>
<td>16,000</td>
<td>5,810</td>
<td>2,905</td>
<td>219: 44</td>
</tr>
<tr>
<td>3</td>
<td>Chemical producer</td>
<td></td>
<td>Discharge of 4 million gallons of fire-fighting water (containing toxic chemicals) following a blaze at works. Blaze caused by incorrect storage. Substantial fish/invertebrate kill. Site had no bunding/emergency containment facilities. Court considered previous punishment under H &amp; S legis. was sufficient (£100,000) - absolute discharge.</td>
<td>Guilty</td>
<td>0</td>
<td>15,503</td>
<td></td>
<td>222: 48</td>
</tr>
<tr>
<td>4</td>
<td>Solvent recoverer</td>
<td></td>
<td>Spills when loading and unloading. High levels of solvent in river. Fish kills. Numerous other prosecutions relating to water and waste offences.</td>
<td>Several</td>
<td>Guilty</td>
<td>3,000</td>
<td>(1,000 for each of 3 counts)</td>
<td>224: 44</td>
</tr>
<tr>
<td>5</td>
<td>Water co.</td>
<td></td>
<td>Chemical leak from treatment works. 1,000 fish killed, substantial invertebrate kill. Claimed was result of a lightning strike causing power surge. Emergency procedures deemed inadequate. Hazard of chemical leak previously pointed out but no action taken.</td>
<td>Guilty</td>
<td>3,000</td>
<td>2,448</td>
<td></td>
<td>224: 46</td>
</tr>
<tr>
<td>6</td>
<td>Metal processing co.</td>
<td>NRA</td>
<td>Overflowing settlement tank. Business warned to take action - nothing done some days later. Discharge of 'grey list' substances (copper and lead). Agreed plan to overhaul site drainage.</td>
<td>Guilty</td>
<td>10,000</td>
<td>600</td>
<td></td>
<td>225: 44</td>
</tr>
<tr>
<td>7</td>
<td>Water co.</td>
<td>Public</td>
<td>Failure automated device at sewage pumping station. Repeatedly rejected warnings. Flooding of private property. Police called in to block off areas. Large scale disruption over the weekend.</td>
<td>Several</td>
<td>Guilty</td>
<td>10,000</td>
<td>719</td>
<td>226: 44</td>
</tr>
<tr>
<td>8</td>
<td>Chemical co.</td>
<td>Public</td>
<td>Serious detergent pollution incident. Killed 300 fish. NRA took remedial action. No explanation for incident offered.</td>
<td>Guilty</td>
<td>5,000</td>
<td>1,033</td>
<td></td>
<td>227: 46</td>
</tr>
</tbody>
</table>
Table 10.3 Comparison of ENDS Cases Prosecuted Under the WRA - 1994

<table>
<thead>
<tr>
<th>No.</th>
<th>Defendant</th>
<th>Source of Discovery</th>
<th>Description of Incident</th>
<th>Previous Convictions</th>
<th>Plea</th>
<th>Fine (£)</th>
<th>Costs (£)</th>
<th>ENDS Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Water co.</td>
<td>Public</td>
<td>Fault in chlorination system resulted in spillage of chlorine. Fish kill. Claimed spill happened under unforeseen circumstances. However, took them 3 days to locate and correct leaking pipe.</td>
<td>Several</td>
<td>Guilty</td>
<td>5,000</td>
<td>899</td>
<td>231:47</td>
</tr>
<tr>
<td>10</td>
<td>Water co.</td>
<td>Public</td>
<td>500 cubic metres sewage sludge spilled. Fish kill. Blamed contractors who used a coupling unsuitable for use under pressure.</td>
<td>Several</td>
<td>Guilty</td>
<td>7,500</td>
<td>440</td>
<td>231:48</td>
</tr>
<tr>
<td>11</td>
<td>Landfill owner</td>
<td></td>
<td>Long-standing source of PCBs, cadmium and other red list substances. Leaking from landfill. Site closed in 1974. V, poor after-care provision. Clean up estimated at £2 million. Former owner is pensioner with no apparent means of paying.</td>
<td>Not guilty</td>
<td>£250 per charge = £750</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2 Agric. contractors &amp; Haulage co.</td>
<td></td>
<td>8,000 litres of ammonium hydroxide fertiliser leached into Class 1 salmon river. Killed 50,000 fish over 14 miles of river. Tanker standing on sloping ground and inadequately supported - overturned whilst being filled with fertiliser. Fertiliser escaped from outlets in tank that should have been sealed. Judge said fines reflected ability to pay and not seriousness of offence.</td>
<td>Guilty</td>
<td>Haulage co: Contractor 1: 3,000</td>
<td>5,000</td>
<td>500</td>
<td>233:44</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Contractor 2: 1,000</td>
<td>2,000</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Contractor 2: 500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>13</td>
<td>Food co.</td>
<td>Public</td>
<td>Blocked drain with no alarm system. Effluent from refrigerant cleaning system into river. Threatened public water supply. 6,000 fish died.</td>
<td>Several</td>
<td>Guilty</td>
<td>15,000</td>
<td>1,600</td>
<td>234:46</td>
</tr>
<tr>
<td>14</td>
<td>Engineering co.</td>
<td></td>
<td>Spillage copper cyanide ('grey list' substance). Stream roped off to protect public. Numerous dead fish and invertebrates. Since installed bungs to prevent recurrence, but no staff training programme to alert them of env. hazards.</td>
<td>Guilty</td>
<td>15,000</td>
<td>985</td>
<td>235:43</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Gas co.</td>
<td></td>
<td>Spillage of 10 tons lime slurry. 5,000 fish died and number of crayfish (protected species). Prompt action by NRA saved trout fishery. Company carried out extensive clean up. Also reviewed operations and changed procedures.</td>
<td>One</td>
<td>Guilty</td>
<td>12,000</td>
<td>1,100</td>
<td>237:43</td>
</tr>
<tr>
<td>16</td>
<td>Waste disposal co.</td>
<td></td>
<td>Pollution of river with ferric chloride. Escape from leaking hose. Killed 50 fish, include. trout and eels. Left rust-coloured deposits on bed of river.</td>
<td>Guilty</td>
<td>12,000</td>
<td>1,027</td>
<td>238:41</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Dairy co.</td>
<td></td>
<td>Caustic soda leaked from tank after tap left open by employee. Chemical seeped through a crack in bund wall. Severe damage to Class 1 salmon river - 11,000 fish killed and many invertebrates. Company - worst prosecution record in food sector. Judge accepted claim that company had taken all reasonable steps to prevent the pollution.</td>
<td>Several</td>
<td>Guilty</td>
<td>2,000</td>
<td>238:41</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Water co.</td>
<td>Water co.</td>
<td>Sludge spill. Pump failure compounded by error of judgement on part of staff. River badly affected. Remedial action by NRA and water co. for next 24 hours. Fish kills.</td>
<td>Several</td>
<td>Guilty</td>
<td>3,000</td>
<td>1,292</td>
<td>239:37</td>
</tr>
<tr>
<td>19</td>
<td>Water co.</td>
<td></td>
<td>Pollution of a bathing beach from storm sewage overflow at height holiday season. Company did not inform NRA, as set out in its consent.</td>
<td>Several</td>
<td>Guilty</td>
<td>20,000</td>
<td>2,264</td>
<td>239:37</td>
</tr>
</tbody>
</table>

439
<table>
<thead>
<tr>
<th>No.</th>
<th>Defendant</th>
<th>Source of Discovery</th>
<th>Description of Incident</th>
<th>Previous Convictions</th>
<th>Plea</th>
<th>Fine (£)</th>
<th>Costs (£)</th>
<th>ENDS Ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Food co.</td>
<td>Public</td>
<td>Unconsented outfall from air conditioning system. Water discharging chlorine, bromine and algicides when system over-flowed. Unquantified fish and invertebrates killed over 1.5 km. In mitigation, defendants claimed stream was of poor quality - a point contested by the NRA.</td>
<td>One</td>
<td>Guilty</td>
<td>15,000</td>
<td>3,237</td>
<td>243:46</td>
</tr>
<tr>
<td>21</td>
<td>Chemical co.</td>
<td>Public</td>
<td>Spill of oil into brook after failure of pumping system. Discoloured water for 8 km and coated ducks in oil. 15,000 litres of oil discharged after failure of staff to notice spill.</td>
<td>Guilty</td>
<td></td>
<td>10,000</td>
<td>730</td>
<td>244:46</td>
</tr>
<tr>
<td>22</td>
<td>Water co.</td>
<td>Public</td>
<td>Pollution of river with sewage. Failure at pumping station caused 10m high fountain of sewage to erupt, spreading sewage around garden of nearby house and into river.</td>
<td>Several</td>
<td>Guilty</td>
<td>1,500</td>
<td>710</td>
<td>245:45</td>
</tr>
<tr>
<td>23</td>
<td>Water co.</td>
<td>Public</td>
<td>Discharge of sewage sludge into nature reserve and SSSI. Operator opened the wrong valve. Coating of the water course with sludge up to 1 m thick. Killed most of invertebrate life. Clean up paid for by water company.</td>
<td>Several</td>
<td>Guilty</td>
<td>12,000</td>
<td>650</td>
<td>245:45</td>
</tr>
<tr>
<td>24</td>
<td>Water co.</td>
<td></td>
<td>Discharge of raw sewage killing fish. Sewer blocked by tree roots.</td>
<td>Several</td>
<td>Guilty</td>
<td>6,000</td>
<td>8,587</td>
<td>245:45</td>
</tr>
<tr>
<td>25</td>
<td>Petrol retailer</td>
<td></td>
<td>Petrol leak which forced temporary closure of service station. Petrol vapours present at potentially explosive levels. Soil around site heavily contaminated. Benzene, toluene, ethyl benzene and xylene found in groundwater samples.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Printing co.</td>
<td></td>
<td>Solvent spill. 22 litres of toluene into brook via two surface water drains - only one of which had an oil interceptor. Killed over 4,000 fish.</td>
<td>Guilty</td>
<td></td>
<td>2,500</td>
<td>904</td>
<td>247:45</td>
</tr>
<tr>
<td>27</td>
<td>Chemical</td>
<td>Neighbours</td>
<td>Ethylene diamine spilled. Employees hosed down the spill contrary to express advice in safety sheet. Killed 300 trout, 1,000 eels and numerous other smaller fish and invertebrates.</td>
<td>Guilty</td>
<td></td>
<td>6,000</td>
<td>1,260</td>
<td>250:46</td>
</tr>
<tr>
<td>28</td>
<td>Electroplating</td>
<td></td>
<td>Discharge of cyanide-containing effluent to sewer. Knocked out sewage works and forced closure of water supply on Thames. Public warning to keep away from poisoned fish. Massive fish kill - 1,000s of trout and coarse fish died. Company couldn't explain how discharge had occurred.</td>
<td>Guilty</td>
<td></td>
<td>7,500</td>
<td>1,928</td>
<td>251:42</td>
</tr>
<tr>
<td>29</td>
<td>Food co.</td>
<td></td>
<td>Ammonia spillage. Occurred after employee failed to follow guidelines when repairing refrigeration unit. 150 fish killed</td>
<td>Guilty</td>
<td></td>
<td>5,000</td>
<td>260</td>
<td>251:43</td>
</tr>
</tbody>
</table>
10.3 Discussion of Results

It can be seen from Tables 10.1 to 10.3 that although the majority of cases that have been described have comparable fines, quite a significant number of cases attracted fines that were considerably below average for such serious offences. These cases have been shaded in the tables. The highest fine applied was £20,000 - the maximum available for such offences in magistrates' courts. One offender was given an absolute discharge, and the average fine for the cases described was £7,242.

The unique nature of each individual case obviously made detailed comparison between cases difficult. However, it was apparent from the results that even when a number of different mitigating factors may have been taken into account, sentencing in the courts for environmental offences was far from consistent.

Another important point that came to light in the analysis was the severe reduction in the levels of fines applied when the defendant's ability to pay was limited (see cases 11 and 12). No mention was made of the magistrate invoking other sentencing options (such as community service orders, for example - see Chapter 4 for further details) in such cases. It therefore appears that the range of sentencing options available are being under-utilised by the courts.
CHAPTER 11

DISCUSSION

11.1 Introduction

This research has been based on a number research aims outlined in Chapter 6. These were formulated after a review of existing literature on the subject area. The research aims were:

1. To assess the approach to enforcement by regulatory agencies (co-operation versus confrontation).

2. To determine the extent and rate of utilisation of enforcement methods by the regulatory authorities, and the reasons for non-utilisation.

3. To determine which factors influence the strategic decision making process, and to measure the relative importance of each factor.

4. To investigate the types of enforcement policies prevalent in regulatory agencies and evaluate their varying levels of effectiveness.

5. To determine the level of consistency in the approach to enforcement within and between regulatory agencies.

6. To examine the consistency of the levels of penalties applied by the courts.
7. To suggest improvements to the system where required.

Each of the results chapters (7 to 10) outlined the findings of each section of the empirical research. These findings will now be discussed in the context of the primary research aims and information presented from the literature review.

### 11.2 Research Aim 1: To assess the approach to enforcement by regulatory agencies (co-operation versus confrontation)

The three major studies carried out in the field of environmental law enforcement in the 1970s and 1980s (Richardson et al., 1982; Hawkins, 1984 and Hutter, 1988) all pointed to the fact that regulatory authorities depended largely upon the co-operative approach to enforcement, with recourse to more stringent or confrontational methodologies only being undertaken on very rare occasions. Emphasis was placed on conciliation, persuasion and compromise rather than other coercive mechanisms. Certain water authorities surveyed had not taken any prosecutions for several years preceding the time when the research was carried out. In other cases, recourse to more stringent action would only be taken when all other methods of persuasion had failed.

A large amount of discretionary input on the part of the regulators in the decision making process relating to the choice of enforcement, was also noted. The broad range of discretion and autonomy stemmed from the form of environmental legislation encompassing general standards and prescriptions for interpretation, rather than a set of precisely defined rules. Each case was judged on its merits, taking account of the varying economic, social and technical circumstances.
This co-operative approach was adopted by the regulatory authorities for a number of reasons, including:

- a lack of resources;
- environmental offences traditionally being viewed as not truly criminal in nature;
- a recourse to more stringent action being viewed as a failure by the regulators;
- the economic impact of strict regulation on businesses (perhaps forcing certain companies to close);
- strict enforcement leading to the breakdown of a good relationship between regulator and regulated;
- the low levels of fines applied by the courts once a prosecution had been taken;
- the regulated community not 'deserving' strict enforcement (and therefore punishment) as a result of accidental incidents;
- the regulators' role being one of an educator and advisor, rather than to punish the offender (Hutter (1988) found that only 19% of respondents thought the main role of prosecution was to punish the offender, whilst 53% considered it to be to change offenders attitudes and deter future offenders).

Research has indicated, however, that the co-operative approach is not the most effective. Brittan (1984) found little deterrent effect existed amongst the regulated community, and many authors have found that a stricter approach can increase levels of compliance (Hutter, 1988; Gray and Scholz, 1993; Harrison, 1995).
In this research, it was found that a similar, co-operative approach by the regulators under investigation was employed in the first instance. The one major difference was that although regulators always utilised co-operative approach initially, they would often (or sometimes depending on the regulator) take more stringent action if the co-operative approach failed to work. The utilisation of more stringent enforcement methods was much more apparent for certain regulators than for others. The NRA had a much higher level of the utilisation of formal methods of enforcement than HMIP. The extent of the utilisation of formal methods by local authorities varied widely, with certain authorities being very co-operative in their approach and others adopting a conciliatory style of enforcement.

Most of the regulators surveyed considered that their main role was one of prevention rather than punishment, and that a good relationship between themselves and the regulated community was essential. This was probably why a conciliatory approach to enforcement was adopted in the first instance.

NRA and HMIP respondents all cited the main reasons for non-compliance to be ignorance of legislation and working practices, lack of investment and maintenance, inadequate training, poor communication between departments and businesses not realising the consequences of their action or inaction. The offenders were there viewed on the whole as incompetent rather than purposeful polluters, explaining to a certain extent why the accommodative approach to enforcement was often initially employed.
11.3 Research Aim 2: To determine the extent and rate of utilisation of enforcement methods by the regulatory authorities, and the reasons for non-utilisation.

A wide array of enforcement methods were at the disposal of the regulatory bodies under consideration. These various methods, and the constraints on their utilisation, were discussed in Chapter 4. No previous research had been carried out on the extent and rate of utilisation of many of these enforcement methods, nor the reasons for non- or under-utilisation. Richardson et al. (1982), Hawkins (1984) and Hutter (1988), did however carry out limited research on the numbers of prosecutions taken by the different authorities researched by them (water authorities and environmental health officials). The percentage of incidents that resulted in a prosecution, according to these authors, varied from less than 1% to 5% (see 2.7.3).

All the methods listed in the local authority questionnaire were used to some extent or another. However, a heavy reliance on co-operative methods was indicated (informal action and warning letters), reinforcing the earlier findings that this was the preferred type of approach. Intermediate methods chosen included notices, whilst the prosecution of company directors and injunction were used very sparingly. Reasons why certain methods were not utilised were resource limitations and procedural complexity.

Some of the responses from local authorities indicated that the legislation was not being properly implemented (e.g. in relation to their duty to serve abatement notices), was misunderstood (e.g. in relation to the option to prosecute company directors under Part III of the EPA), or that knowledge relating to the legislation was incomplete (certain respondents
stating they did not even know certain methods of enforcement existed). This suggested that
the training and expertise of many enforcement officials was somewhat lacking.

All the methods at the NRA's disposal were used to some extent or another. However, certain
methods of enforcement were not used by HMIP, as stated by the respondents interviewed.
These were remedial action, revocation of consents, prosecution of company directors,
injunction and formal cautions. Again a heavy reliance by both regulators was made on the
more informal and less stringent methods of enforcement. However, the NRA opted to utilise
formal methodologies much more frequently than HMIP. It can therefore be concluded that
although the NRA's approach was mainly informal in the first instance, on the whole it
adopted a more stringent approach to enforcement than HMIP. The regulated community
questionnaire also indicated that HMIP and the NRA preferred to use different methods of
enforcement.

Certain methods that were not readily used were considered too cumbersome and slow (e.g.
injunction, prosecution, prohibition notices, revocation notices and variation notices). The
formal 'tripartite' sampling procedure was considered to be too onerous by NRA staff.
Resource restrictions were also implicated in the limited utilisation of certain methods by
both types of respondents.
11.4 Research Aim 3: To determine which factors influence the strategic decision making process, and to measure the relative importance of each factor.

A review of the available literature revealed a number of factors that influenced enforcement decisions. These factors were outlined in Chapter 3. They were divided into four broad categories, namely:

- characteristics and effects of the incident;
- characteristics of the offender;
- characteristics of the enforcing body/enforcement officer;
- external influences.

The question relating to factors affecting enforcement was posed in general terms to NRA and HMIP respondents, taking into account the discussion-type format for this part of the empirical data collection. Characteristics of the incident and the offender were cited as being considered when deciding which action to take. Furthermore, it was agreed that the level of media attention and public pressure also played a role in the decision making process.

More detail was elicited from local authority respondents, due to the format of their questionnaire. The factors outlined as having an influence over the decision making process in the literature review, were confirmed in this survey. Some factors were cited as being more influential than others. The overall five most important characteristics and factors were considered to be (most important first):

- Impact on local population;
• Duration and frequency of the incident;
• Degree of negligence displayed;
• Quality of evidence obtained;
• Past history of compliance with the law.

The least important were stated as being (least important first):

• Type of offender (company or individual);
• Size and type of company;
• Effect on the amenity value of a site;
• Cost of enforcement/clean up for the authority;
• Levels of fines/penalties imposed by the courts.

This information provided an insight into the processes employed during the regulators' decision making, which factors were mainly taken into account in the decision making process, and also indicated how the balance of different characteristics could influence the outcome.

11.5 Aim 4: To investigate the types of enforcement policies prevalent in regulatory agencies and evaluate their varying levels of effectiveness.

Information relating to the number and types of enforcement policies present throughout local authorities had not previously been collated. An overview of the enforcement policies of the NRA and HMIP, in addition to the one published by the Environment Agency, was provided in Chapter 5. These policies were analysed and assigned 'types'. The NRA's policy
was the most detailed and least co-operative of the three (Type 1), HMIP's was the most
general and most co-operative (Type 3) and the Environment Agency's fell somewhere
between the two (Type 2).

When asked whether the policy was of assistance to them in their work, both NRA and
HMIP officials stated that it was. HMIP were reluctant to adopt a more detailed policy of a
similar format to the NRA's. This was because they considered it would be too restrictive to
their work, and severely limit their discretionary input in the decision making process.
However, NRA respondents stated that they were happy with their policy's format, found it
helpful in their decision making, and still left room for discretionary input.

It was evident that enforcement policies, if followed by regulatory personnel, were able to
control the utilisation of enforcement methods and made a significant contribution to the
working practices of regulatory officials if their format was in sufficient detail. The
performances of the different regulatory agencies under investigation in this study were
outlined in Chapter 4. As the most notable area of improvement out of all the three areas of
legislation under investigation was to river quality, it may be concluded that the NRA was
the most effective regulator. It should be noted that river quality has declined since the
formation of the Environment Agency.

As previous research has indicated, a more stringent approach to enforcement increases the
level of compliance. It has already been noted that the NRA was much more likely to utilise
more formal enforcement measures than HMIP. Furthermore, their policy also reinforced this
approach, with the choice of enforcement methodology closely related to definitive
parameters set out in the document. The NRA was therefore considered to be a more
confrontational regulator than HMIP, and one that was not afraid to utilise strict methods of enforcement when required. Taking into account the improvement in the environmental condition of our rivers during its reign, it can be concluded that this type of enforcement approach was very successful. Other initiatives enforced by the NRA should also be considered in the context of environmental improvements (for example the introduction of preventative regulations such as those relating to oil and farm slurry). It was noted by respondents that such measures made a significant contribution to the reduction in pollution incidents.

The local authority questionnaire provided original information relating to the extent and form of enforcement policies throughout these regulatory bodies. It was found that over 3/4 of environmental health respondents had a policy of some description in their authority. However, the type of policy varied widely in their structure, form and content. The majority were quite flexible in nature, with a substantial amount of employee/committee discretion. Promotion of a co-operative approach was at the forefront of many of the policies, with recourse to more confrontational methods only after the accommodative stance had failed. Disproportionate coverage was given to certain problems, for example noise nuisance, reflecting the large increase in the numbers of complaints in recent years relating to this area of environmental control.

Further analysis of the local authority results indicated that the type of enforcement policy directly affected the level of utilisation of certain enforcement methods.

The majority of local authority respondents agreed that the introduction of some form of national guidelines for enforcement should be introduced. However, it was noted that each
case had to be judged on its own merits, and reservations were expressed concerning the introduction of overly strict national guidelines for enforcement practices.

11.6 Aim 5: To determine the level of consistency in the approach to enforcement within and between regulatory agencies.

The importance of uniform implementation of legislation has been discussed in Chapter 2, and is required to:

- ensure fair enforcement amongst the regulated community;
- encourage the ideal of a 'level playing field' for industrial competitors;
- preserve the integrity of the regulatory authorities;
- foster a better working relationship between the regulators and the regulated.

From the results relating to utilisation of enforcement measures obtained from the local authority questionnaire and the NRA and HMIP interviews, it can be seen that these regulators were anything but consistent.

Large variations existed between local authorities in their utilisation of certain methods. The type of council, its catchment area (urban or rural) and the type of enforcement policy utilised by these regulators, influenced their employment of certain methods. These variations were, however, expected considering the nature of local authorities and the fact that each one is a separate entity with differing levels of funding, different policies and varying internal procedures.
It was anticipated, however, that the NRA and HMIP would have been more consistent, taking into account the respondents were from different regions of the same organisation. This was not, in fact, the case, and variations in their utilisation of enforcement measures between regional offices existed. This was quite surprising, especially in the case of the NRA, who's actions were governed by a detailed enforcement policy. The form of the policy, if applied in each case and followed rigorously, would have inevitably ensured a high level of consistency as a result. However, some NRA respondents said they did not use the policy in all cases, thus providing an explanation for the discrepancy.

Previous assessments of regulatory bodies by Richardson et al. (1982), Hawkins (1984) and Hutter (1988), indicated that the regulatory bodies they investigated were also far from consistent in their enforcement practices.

The introduction of an independent body to make decisions in relation to the type of enforcement action that should be taken in individual cases, could address these inconsistencies. Such a body could have similar powers as the Crown Prosecution Service, whereby decisions whether to undertake certain enforcement (such as prosecution) would rest wholly with them. This specialist body would regulate enforcement action solely for environmental offences and could work within a code of practice to ensure high levels of consistency. However, whether the regulatory agencies would support the formation of such an independent body remains debatable.

The second part of the data collection undertaken to satisfy this particular research aim, was the regulated community questionnaire. Only 50% of respondents thought that the NRA's/HMIP's actions were consistent, when considering multiple enforcement action that
had taken place within their organisation. This figure fell to only 30% for enforcement action taken within their organisation, compared to that taken externally. HMIP was generally considered to be more inconsistent than the NRA. As more action was experienced by the respondents, more reports of inconsistencies of enforcement were made.

Other general opinions expressed by the regulated community included:

- inconsistencies were encountered between individual regulatory staff;
- a large variation in monitoring requirements was set out by HMIP;
- the NRA was a tougher regulator than HMIP;
- the key to compliance was effective communication with the regulators.

11.7 Aim 6: To examine the consistency of the levels of penalties applied by the courts.

Prior to this study, no investigation of the consistency of court sentencing for environmental offences had been carried out.

Analysis of similar cases prosecuted under the WRA 1991 illustrated that the level of penalties applied by the courts was not consistent. Furthermore, the range of sentencing options available (see Chapter 4) were not fully utilised by the courts.

Local authority respondents agreed that sentencing guidelines for the courts should be introduced. Disillusionment with the courts in general was stated, especially the low levels of fines imposed. The lack of understanding by magistrates of the specific problems encountered in environmental law enforcement, was also cited.
NRA respondents also thought the levels of fines applied were too low, and often did not reflect the severity of the incident. HMIP, on the other hand, thought the penalties applied by the courts were appropriate. This probably related to the fact that IPC offences generally attracted a larger fine than those offences prosecuted under the WRA 1991. NRA respondents thought the introduction of sentencing guidelines for the courts would be a good idea, whilst HMIP respondents were less convinced.

The regulated community felt that more information was needed relating to the levels of penalties applied by the courts. Furthermore, a lack of environmental knowledge on the part of the magistrates was noted.

11.8 Research Aim 7: To suggest improvements to the system where required.

Research has found that an increase in the use of more stringent methods of enforcement increases compliance. The first recommendation for improvements to the system would therefore be for regulatory authorities to increase their utilisation of more stringent and formal methods of enforcement. It is not suggested that formal methodologies need to be used in every case, as this would probably prejudice co-operation and trivialise the offence. However, an increase in the rate of utilisation of these methods would be useful in certain cases. Of course, further resource provision would also be needed to support this approach. Amongst the most notable comments made by regulators, was the fact that enforcement activity was severely constrained by limited resources. Additional funding would therefore be required. It seem that central government is not willing to divert additional funds to environmental regulatory bodies (the Environment Agency is having to reduce staff numbers
due to constrained resources), so the funding could come from other novel sources. An example would be the diverting of fines from environmental offences into a fund to address the problem.

Although the majority of regulators considered their main role to be one of prevention rather than punishment, the preventative aspect of environmental control was obvious by its absence in many aspects of the enforcement process.

Education of the regulated community can be viewed as paramount to ensuring their compliance with the legislation. The majority of regulators stated that many pollution incidents resulted from ignorance of working practices, plant lay-out, the regulations themselves or lack of training. Very few incidents could be attributed to wilful polluters.

Preventative regulations introduced under the WRA 1991 (the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 SI 1991/324 (amended by the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) (Amendment) Regulations 1996 SI 1996/2004 and SI 1997/547)), were deemed a great success by NRA respondents in preventing several types of commonly occurring incidents. The regulations required relatively cheap and easy alterations to storage facilities and working practices to be carried out.

In order to reduce the numbers of pollution incidents, the preventative aspect of enforcement must be improved. Education of the regulated community, and improved communication between themselves and the regulators must be achieved. This could be done by:
1. Running training sessions and seminars to explain the complexities of the regulatory system, and what is actually required from the regulated community.

2. Producing information booklets with clear explanations of how to overcome the most commonly encountered problems.

3. Each regulator setting up a help desk/action-line, to be the first port of call for enquiries, which could then be routed to the appropriate department. (It was noted from certain respondents that the regulated community often encountered problems in locating the correct person to deal with their queries).

4. Addressing the special problems encountered by SMEs, and producing information specifically aimed at these businesses.

5. Making more information available electronically, and therefore easier to access for many businesses.

The preventative aspect of enforcement could also be enhanced through the introduction of regulations similar to the Silage, Slurry and Agricultural Fuel Oil Regulations.

Quite a large number of enforcement methods were used very sparingly by enforcing authorities, or not at all. This means that the full arsenal of enforcement methods available to regulators were not being utilised, thus reducing the regulators effectiveness. One of the reasons cited was a lack of resources, but other included procedural complexity, that the methods were too cumbersome or slow, or no knowledge of the existence of the method.
Furthermore, legislation was not being properly implemented in certain cases, or its meaning was misunderstood.

A review of the procedures involved in taking particular action therefore needs to be undertaken, and the procedures simplified where possible. This has already been done in respect of one method, when the requirements for tripartite sampling was removed by amendments made in the Environment Act 1995. Furthermore, regulatory officials (especially from local authorities where the problems were discovered) need to be trained in the use of different methods, and the meaning of legislative provisions.

The use of enforcement policies by regulatory officials has implications for the levels of consistency in enforcement action. Consistent action is important to ensure a level playing field, preserve the integrity of the regulatory authorities and promote good relations between the regulator and the regulated which in turn encourages co-operation. A more general, outline enforcement policy with little specificity, will undoubtedly lead to a large discretionary input on the part of the regulator, and therefore more inconsistent action. On the other hand, a policy that is very specific in nature, will involve less discretionary input and produce more consistent action.

In a comparison between NRA and HMIP action, it was therefore expected that the NRA (with its more detailed enforcement policy) would have employed more consistent action than HMIP. However, no real differences between the two were apparent on examination of HMIP and NRA responses and the regulated community questionnaire. This, however, may be explained by the fact that NRA respondents said they did not use the policy in all cases. This was probably due to the fact that their enforcement policy was not published as a public
document, and therefore was not freely available. Certain respondents considered it as internal guidance only. The requirement to abide by it in all cases was therefore probably not as rigorously applied as it would have been with a widely available, published document.

It may be assumed, however, that a more detailed policy, if followed in each case, would produce more consistent enforcement action.

Large inconsistencies in their employment of enforcement action between local authorities was also noted. Some authorities had enforcement policies, whilst others did not, but their format varied enormously from one authority to another.

A uniform, detailed and publicly available policy should therefore be introduced for all local authorities, and should be used in each case that presents itself. This would standardise actions undertaken by local authorities, make their decision making procedures much more accountable, and inform the regulated community of the exact consequences of their actions. Research findings of this study relating to the relative importance of different factors in deciding an appropriate enforcement action could be fed into the structure of the policy. The policy could therefore be formulated around the methodologies and decision making procedures already employed by the local authorities.

Any enforcement policy should be subject to revision and variation in response to changes in legislation, internal and external pressures, and where experience indicates any deficiencies in its format. Furthermore, decision making by regulatory authorities should be subject to external checks and made accountable to an independent body. This could be addressed by regulatory authorities being required to explain on the public register any deviations from
their policy, and to explain why enforcement action has not been taken in particular cases contrary to guidance. In addition, an independent 'inspectors inspectorate' could be set up in a monitoring capacity.

Some reservations were expressed regarding the introduction of overly restrictive guidelines by regulators that did not have such a policy. However, the NRA (who did have quite detailed guidance on the utilisation of enforcement methods at the time of the research), found the policy to be of assistance in their decision making, and did not feel that it was too restrictive or onerous.

Since the amalgamation of the NRA and HMIP into the Environment Agency, a new policy has been published to guide enforcement practices. The policy contains far less procedural detail than the old NRA policy. Consideration by the Environment Agency should be given to adopting a more detailed policy to aid regulators in their decision making process and inform the regulated community of the exact consequences of their actions.

Finally, the inconsistencies in the levels of penalties applied by the courts should be addressed. Detailed sentencing guidelines should be introduced, in addition to some form of environmental training for magistrates, so they have a better understanding of environmental concepts. Increased exploitation of alternative sentencing options (e.g. community service, or requiring a company to rectify the consequences of their pollution as part of their probation), etc. should be encouraged. These alternative sentencing options would be especially useful when the defendant has no means of paying a suitable fine.
The levels of fines relating to environmental offences have increased over recent years. However, the average fine form the cases reviewed in this research was still only just over £7,000 - less than half the maximum allowable fine of £20,000 in the magistrates' court for these offences. Furthermore, the cases being reviewed were those considered to be 'serious' in the reports, and much lower fines were applied to other, less serious, cases. The overall average fine for water pollution offences was therefore substantially lower than the figure mentioned above. The levels of fines being applied thus need to be increased even further to convey the correct deterrent message to the regulated community. This problem would be addressed by the introduction of sentencing guidelines.
CHAPTER 12

CONCLUSIONS AND RECOMMENDATIONS

12.1 Introduction

It can be seen from the research that not 'typical' or 'average' firm exists, and it is therefore a challenge to introduce regimes, structures and institutions able to cope with the subtleties and complexities of organisational practice. Regulators must shift between the roles of strict policeman, regulator and educator depending on the circumstances of the case. The correct balance between protection of the environment and consideration to the pressures placed on businesses should ideally be achieved.

This study has served to provide an insight into the enforcement of environmental law in England and Wales. Findings from the research are outlined below, in addition to proposals that would improve the system and recommendations for further study.

12.2 Research Findings

The main findings from this research were as follows:

1. Regulatory agencies, on the whole, adopted a co-operative approach in the first instance, followed by more stringent action if required. Certain authorities (the NRA and some local authorities) were more readily inclined to adopt more stringent measures than others (HMIP and the majority of local authorities).
2. Most regulatory bodies did not use the full array of enforcement methods at their disposal. Reasons for non- or under-utilisation were determined to be a lack of resources, procedural complexity or a lack of knowledge or understanding of the regulations.

3. A large array of factors relating to the incident affects the decision making process. Some of these factors were considered to be more important than other in making enforcement decisions.

4. Not all local authorities had an enforcement policy. Of those that did, a wide variation in the type of enforcement policies existed between the different local authorities. A measure of the effectiveness of the different policies employed by the NRA and HMIP was inconclusive due to the non-application of the policy in some cases.

5. Regulators were found to be inconsistent in their enforcement practices. Inconsistencies were found both between different authorities, and within regional offices of the same authority.

6. The levels of penalties applied by the courts were also found to be inconsistent.

12.3 Proposals for Improvements

Improvements to the system may be made by:

1. Making more resources available to the regulators.

2. Regulators to increase their use of more formal methods of enforcement.
3. Procedures involved in utilising certain enforcement methods should be reviewed and simplified.

4. There should be improved training for regulatory officials.

5. A uniform, detailed and publicly available policy should be introduced for use throughout local authorities. This should be used in all cases to produce consistent enforcement action.

6. A system for monitoring and checking regulatory bodies' working practices should be introduced.

7. The Environment Agency should consider revising their enforcement policy to make it more detailed.

8. The levels of fines applied by the courts should be increased, and the level of consistency improved, by the introduction of sentencing guidelines.

9. Provision should be made for magistrates to receive some environmental training to provide them with a better understanding of the concepts involved in environmental cases.

10. The use of alternative sentencing options should be promoted.

12.4 Recommendations for Further Study

The following recommendations for further study were made:

1. Investigation of the practices employed by the Environment Agency. Although the Environment Agency is enforcing the same legislation covered in this research (with certain amendments), it would be useful to ascertain whether enforcement practices have changed.
2. The NRA and HMIP structured questionnaire utilised in this study were designed to be general in nature in order to encourage discussion of the issues. However, as a result of this type of approach, exact numbers relating to the utilisation of the different methods of enforcement available to them were not obtained. A more detailed study could be carried out at the different regional offices of the Environment Agency through examination of their records. This would give comparable levels of the rate of utilisation of different enforcement measures between each regional office, and thus a measure of the consistency of use of these actions.

3. The importance of input into the enforcement process by citizens and NGOs has been noted. This research concentrated on the regulators, the regulated community and the consistency of sentencing. The role of the public and NGOs in the enforcement process needs to be examined in detail.

4. Detailed investigation of the problems encountered by the regulated community needs to be carried out. The exact reasons for compliance and non-compliance needs to be ascertained from them, and proposals made to remedy any problems. Their needs and requirements must be addressed by taking appropriate action, which ultimately will lead to improved levels of compliance and the raising of environmental standards.
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