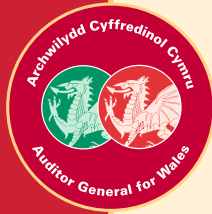




ENVIRONMENT AGENCY WALES: REGULATION OF WASTE MANAGEMENT

Report prepared for the Auditor General for Wales by the National Audit Office Wales



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28 October 2004

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Report by Auditor General for Wales, presented to the National Assembly on 28 October 2004

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Individual photographs courtesy of the Environment Agency



Executive Summary

Introduction

- 1 Each year, some 26 million tonnes of waste are produced in Wales, the majority of which is produced by industry and the agriculture, mining and quarrying sector. Uncontrolled management of waste can present a risk to both the environment and human health; it must therefore be managed appropriately. Other than re-use and recycling, generally perceived to be the most desirable forms of management, the main options are incineration and landfill. Both these methods also create potential risks to the environment and health and tend to be unpopular with the public.
- 2 Given the risks associated with waste and its management, there is a role for government in regulating the way that waste is managed. Responsibility for the regulation of waste management is complex and shared between a number of bodies, including local authorities. The majority of waste policy is driven from the European Union, with Directives implemented in the United Kingdom mainly by the Department for Environment Food and Rural Affairs (Defra). Waste management is a devolved function of the Welsh Assembly Government (the Assembly) which, in addition to its powers to make secondary legislation, has a duty to produce a National Waste Strategy for Wales (*Wise About Waste*), published June 2002.
- 3 The lead on the regulation of waste management in Wales is taken by Environment Agency Wales, part of the Environment Agency (the Agency)¹. The Agency is a non-departmental body sponsored by Defra tasked with a range of regulatory responsibilities to ensure that waste management activities do not harm the environment or human health. In recognition of the Assembly's devolved functions, Environment Agency Wales is an Assembly-Sponsored Public Body as well as being accountable to Defra. In addition to its other functions, Environment Agency Wales therefore has specific devolved responsibilities, including contributing to the objectives of the Wales Waste Strategy and promoting sustainable development.
- 4 This report focuses on the activities of Environment Agency Wales in regulating waste management, within the context of the Assembly's waste strategy.

Waste in Wales

- 5 Waste has been identified by the Assembly as being Wales' biggest environmental problem. Currently, Wales has a high dependency on landfill for the management of its municipal waste and faces a problem of rapidly diminishing capacity at available landfill sites. As a result of its reliance on disposing to landfill, Wales sits towards the bottom of the European municipal waste recycling table. However, the Assembly's ten-year waste strategy sets some challenging targets which, if achieved, will take Wales to being a model for sustainable development. For example, substantial investment channelled through local authorities has seen municipal recycling levels increase from eight per cent in 2001-02 to a forecast 15 per cent in 2003-04, in line with the strategy, although there remains much progress to be made if the strategy's target of 40 per cent by 2009-10 is to be met.
- 6 The Assembly's lack of primary legislative powers limits its ability to implement policies in relation to waste management. In one instance, the regulation of sites presenting a high risk of environmental pollution by industry, the Assembly has lost powers. And the Assembly has chosen to issue relatively little secondary legislation that differs from the equivalent legislation in England, as there would be major risks involved in establishing a different regulatory framework for waste management in Wales from that in England.
- 7 New waste and environmental legislation emanating from the European Union is likely significantly to increase the burden on policy makers, implementers and regulators over the next few years. The legislation seeks to encourage the sustainable management of waste but there is an associated risk that organisations and individuals will increasingly resort to illegal waste activities in order to avoid the costs of regulatory compliance.

¹ In this report we use "Agency" for both the Environment Agency and the Environment Agency Wales, except when specific Wales-only functions of the latter are referred to in which case the name is given in full.

- 8 The effective regulation of waste management by the Agency and the fulfilling of the Assembly's waste strategy objectives, is dependent to a large degree on the ability of the planning system to provide sites for the safe disposal of waste. The Assembly has estimated that over 500 new waste management facilities are required to achieve the Wales Waste Strategy targets, but gaining planning permission for new sites is often difficult as waste facilities are unpopular with the public. The Assembly set up three Regional Waste Groups, covering the whole of Wales, to develop Regional Waste Plans with the aim of informing local authorities' policies for the use of their land over the next 10 to 15 years. The Regional Waste Plans identify the need for future facilities across the region but do not advise on suitable options for locations for potential facilities; this is primarily a matter for local authorities to address in their local development plans. The Assembly will therefore need to continue to work closely with local authorities to ensure that this is done in order that it might discharge its Waste Framework Directive responsibility to "ensure that there is an adequate network of waste management facilities".
- 10 The Agency charges fees to operators for processing licence applications and for undertaking subsequent compliance work. Currently, however, the Agency is not recovering through fees the full costs that it incurs, particularly in respect of dealing with waste management licence applications. Part of the reason for the excess of expenditure is the high cost of processing applications for contentious sites. Environment Agency Wales is funding the shortfall (£230,000 in 2002-03) attributable to its work in Wales from its overall grant-in-aid provided by the Assembly. Defra is currently reviewing with the Agency and the Assembly arrangements concerning the Agency's ability to charge and the level of charges.
- 11 The Agency has statutory responsibility to safeguard human health in the exercise of its regulatory activities, a role it carries out in partnership with other organisations. In recent years, therefore, it has taken a more proactive role in researching the effects of waste and environmental management on health. For the waste management sites regulated under Pollution Prevention and Control (PPC), the Agency is required to consult with Local Health Boards in deciding whether to approve an application. For sites regulated through waste management licensing, the Agency is not required to consult on a site-by-site basis. However, we found widespread uncertainty from industry and other external stakeholders, about the extent of the Agency's responsibilities in relation to health issues.

Environment Agency Wales' permitting and compliance activities

- 9 All major waste management sites must have the relevant licence or permit. Environment Agency Wales devotes the majority of its waste regulation resources to activities related to administering licences and permits: processing applications, monitoring compliance with the conditions under which they are granted, and taking action when environmental crime is committed. In carrying out these activities, the Agency uses a risk-based approach, targeting resources and applying effort where it judges it is most needed. In August 2004, Defra suspended a major review of the waste permitting system in England and Wales in order to concentrate on ensuring the timely implementation of a European Directive relating to electrical and electronic equipment.

Other regulatory functions undertaken by Environment Agency Wales

- 12 In addition to its licensing and permitting activities, the Agency carries out a range of regulatory tasks on other activities which present risk to the environment. In most cases it is not possible to charge a fee for these regulatory functions which must therefore be funded through grant in aid.

- 13 One of these functions is tackling illegal waste activity, such as fly-tipping, where responsibility is shared between the Agency and local authorities. Under the terms of a protocol signed in 1998 (and currently under review), smaller scale fly tipping is dealt with by local authorities, while the Agency focuses its resources on tackling the "big, bad or nasty" - those larger scale incidents which pose a serious threat to the environment, those involving organised criminals and those involving certain types of hazardous waste. The Agency estimated that illegal waste activities in England and Wales cost some £100 million - £150 million a year to investigate and clear up.
- 14 Illegal waste activity incidents reported to the Agency have increased by more than 80 per cent since 2001. It is likely that illegal waste activity incidents will increase in the future with the advent of tighter legislation leading to increased costs of legitimate waste management and increasing landfill tax. Defra has developed a Fly-Tipping Strategy which includes proposals aimed at increasing the Agency's and local authorities' powers to tackle fly-tipping. As part of the Strategy, a national database ("Flycapture") has been set up to collect better data on illegal waste activities, although not all local authorities in Wales are yet using the database, despite it being a legal requirement under the Anti-Social Behaviour Act 2003. The Assembly is also in the early stages of developing a strategy to tackle fly-tipping in Wales. However, it is unlikely that even when these strategies have been implemented the proposed new measures alone will significantly reduce the problem.
- 15 Wales also faces increasing problems with the management of hazardous waste (waste that poses a significant risk to the environment and human health). Following the recent implementation of European legislation, more types of waste are now classified as hazardous and controls over its disposal are much tighter. For example, it is now no longer possible to dispose of most solid hazardous waste in the same landfill as non-hazardous waste. The result is that there are currently no commercially-available landfill sites in Wales licensed to dispose of hazardous waste and therefore a greater risk of its illegal dumping. Furthermore, more hazardous waste will need to be transported further for disposal, significantly increasing the Agency's regulatory activities.
- The Agency acknowledged that it faces the risk of having insufficient resources to deal with illegal disposal.
- 16 There are currently 3,724 sites in Wales which are registered with Environment Agency Wales as exempt from needing a waste management licence. In some cases these sites pose a threat to the environment and human health. The Agency is subject to a legal requirement to carry out appropriate periodic inspections of exempt activities. However, because the Agency, with one exception, does not receive any fees or charges from exempt activities, it focuses its efforts on higher risk activities and in responding to particular incidents of concern; not all sites are therefore routinely visited and the system is open to abuse by operators not wanting to pay for a licence or landfill tax. Since 1998 Defra has been reviewing the exemptions system with the aim of making regulation more proportionate to environmental risk and reducing the levels of abuse; Defra is working towards bringing in new regulations in this area in April 2005.
- 17 The Agency takes enforcement action against those involved in illegal waste activities or breaching permit conditions. However, the fines imposed by the courts are frequently insufficient to act as a deterrent for carrying out environmental crime. Environment Agency Wales funds enforcement action through grant-in-aid and seeks to recover the costs of the action it takes. In 2002-03, Environment Agency Wales was awarded 73 per cent of its successful case costs.
- 18 The Assembly has provided ring-fenced pockets of funding to enable the Environment Agency Wales and its partners to tackle specific issues. These include £40,000 a year since 2002 to inspect, and take enforcement action where appropriate on, exempt sites and £130,000 contributed to the Pride in our Communities project to raise the profile of fly tipping and take community-based action to tackle it in South-west Wales. Initiatives such as these can be used by the Agency as pilot programmes for subsequent dissemination throughout its regions.

The Big Picture

Waste is a growing problem. Wales produces over 26 million tonnes of waste each year. The current heavy reliance on landfill for the majority of its waste disposal needs is not sustainable in the medium term. Moreover, the signs are that additional waste management facilities - new landfill sites, incinerators or recycling facilities - will not materialise in time to alleviate the problems associated with increasing volumes of waste.

In today's world there is ever greater attention being paid to environmental concerns, particularly those associated with waste management. Waste has been identified by the Assembly as Wales' biggest environmental problem. It is therefore good that Wales is increasing its hitherto low levels of recycling and reducing the high dependence on landfill, but much greater efforts than those now in place are needed to change the attitudes of those who produce waste at work and at home and significantly reduce the volume of recyclable waste that continues to be consigned to landfill.

The shortfall in landfill capacity, tighter regulations and increased landfill tax all mean that Wales faces increasing risks in relation to the illegal disposal of waste. Fly tipping and illegal dumping continue to grow at an alarming rate. There are also particular problems for Wales as regards its ability to manage the proper disposal of hazardous waste where much tighter control is needed. The efforts currently being applied to the oversight and regulation of licensed waste management facilities do not address these illegal activities.

The nature of waste means that the administrative framework for the regulation of its management is complex, with a number of players. Within this framework, Environment Agency Wales has a key role in supporting the Assembly in its work with those in the front line of waste management - local authorities, commerce and industry. It is therefore essential that the Agency, in partnership with other stakeholders, targets its limited resources as rigorously as possible to minimise the risks that waste management can pose to the environment and human health.



Recommendations

- 1** The Assembly issue direction to ensure local authorities' unitary development plans are modified where authorities have failed to identify potential sites for waste management activities;
- 2** Defra, the Assembly and the Agency pursue the recommendations of the charging review, in relation to the recovery of the full costs of waste management licence applications from charge payers;
- 3** The Agency improve its communication to industry and other stakeholders over its roles and responsibilities in relation to health issues;
- 4** The Assembly ensure that all local authorities use the *Flycapture* system as soon as possible to enable all-Wales data to be collected on the number and type of fly-tipping and illegal dumping incidents;
- 5** The Assembly, within the context of its current policy, and with the support of Environment Agency Wales, the Welsh Local Government Association and input from the waste management industry, should consider the management of hazardous waste to supplement the Wales Waste Strategy;
- 6** The Agency, the Assembly and the Welsh branches of the Magistrates Association develop the *Costing the Earth* toolkit and promote it in a Wales context to raise the awareness amongst Welsh judiciary and magistracy of environmental crimes.



1 Waste in Wales

Wales' current dependency on landfill to dispose of its waste may not be sustainable

1.1 Each year, some 26 million tonnes of waste is generated in Wales (**Figure 1**), the majority of which is from the industrial, agricultural and mining sectors. Uncontrolled management of waste can present risks to both the environment and human health. The Welsh Assembly Government (the Assembly) has identified waste as Wales' biggest environmental problem, while concerns over the effects of waste management activities on health have been exemplified by high profile issues such as the Nantygwyddon landfill site investigation.

1.2 Given the risks that waste can present, it is important that it is managed appropriately, whether by re-use, recycling (including composting), incineration or landfill. Within the types of waste set out in Figure 1, municipal waste (including household waste) has been accorded the highest priority by the Assembly, one of whose twelve sustainable development headline indicators is the generation, treatment and disposal of municipal waste. It is also a category for which reliable data is available, in terms of both quantity and quality. Wales currently has a very high dependency on landfill for disposing of its municipal waste, with 87 per cent of its municipal waste in 2002-03 disposed of in this way, compared with 82 per cent for the United Kingdom as a whole (although this represents a decrease for Wales since 1996-97 when the level was 96 per cent). For comparison, Denmark, the country with the lowest proportion of municipal waste sent to landfill, disposes of 10 per cent of its waste in this way (**Figure 2**). Wales also sits towards the bottom of the European municipal waste recycling table, with a recycling rate of 9 per cent (13 per cent including composting), which is below most other countries in Europe where countries such as Germany and Holland recycle or compost nearly half of their waste.

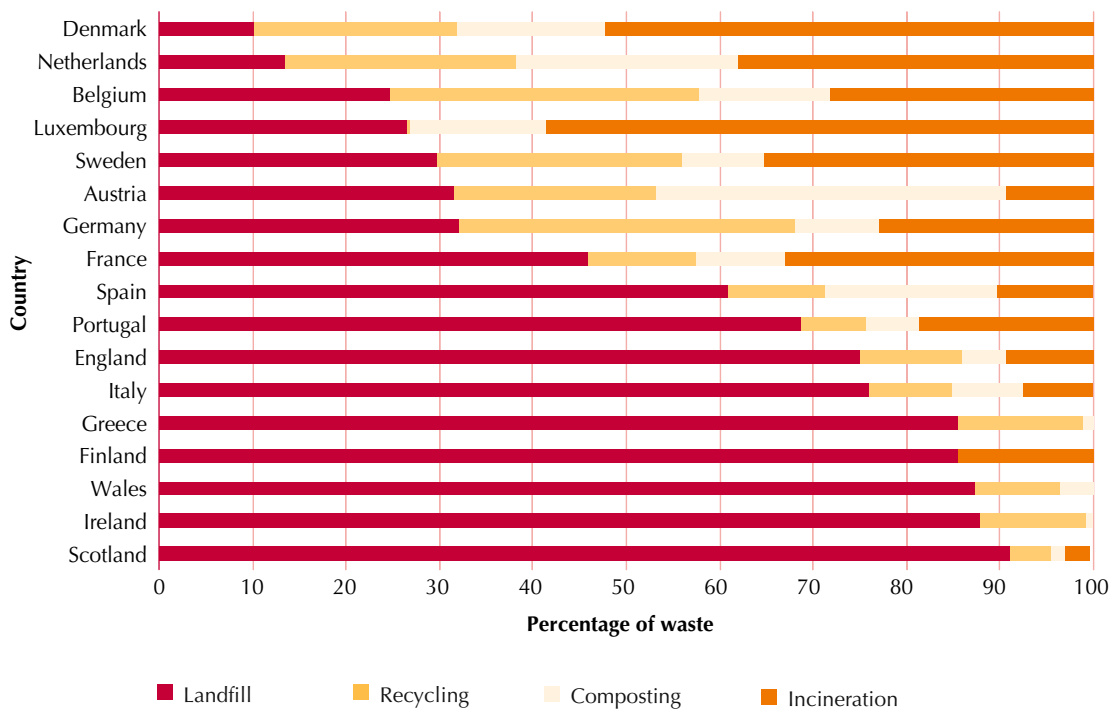
1 Waste produced in Wales	
Waste Stream	Quantity produced (thousand tonnes)
1. Agricultural	6,075
2. Mines and quarries	6,000
3. Construction and demolition	5,018
4. Industrial	4,989
5. Municipal	1,788
6. Commercial	1,141
7. Sewage sludge	405
8. Special/hazardous	275
9. Healthcare	43
TOTAL	25,734

Source: 1, 2, 7 & 9 - Wales Waste Strategy; 4 & 6 - Environment Agency Strategic Waste Management Assessment 2000; 5 - Municipal Waste management Survey 2002-03; 3 - ODPM survey of arisings and use of construction and demolition waste 2001; 8 - Environment Agency Hazardous Waste Interrogator 2002.



2 Treatment and disposal of municipal waste in the European Union

Figures range from 1998 to 2002, based on the most up to date data from each country



Source: Eurostat

1.3 Although recycling is generally perceived to be one of the most desirable ways of managing waste, as with the main methods of management, incineration and landfill, it involves risks to the environment and health. **Figure 3** sets out the benefits and risks associated with each of these methods.

1.4 Wales' current dependence on landfill (Figure 2) may not be sustainable in the face of diminishing landfill capacity. A recent survey by the Environment Agency Wales found that capacity - "void space" - at licensed landfill sites in Wales decreased by 23 per cent between 2001 and 2004, from



3 Pros and Cons of options for managing waste

Waste reduction and reuse

Reducing the quantity of waste produced; and using materials or products again



Pros

Reduction in use of raw materials

Reduces energy consumption

Reduces costs

Reduces the need for less environmental friendly disposal options

Cons

Recycling/composting

The reprocessing of wastes, either into the same material or a different material



Pros

Reduces waste sent to landfill

Less squandering of natural resources

Reductions in greenhouse gas emissions

Cons

Lack of markets for recycled goods

Lack of regulatory standards

Large scale composting releases bioaerosols which, if unmanaged, have the potential to harm human health

Incineration

The burning of waste at high temperatures to reduce its volume or its toxicity



Pros

Incineration with energy recovery makes use of waste as a resource to produce electricity and heat

Reduces the need for landfill

Long life

Cons

Creates residual ash (can contain dioxins heavy metals and other pollutants) which need disposing

Creates flue gases which must be treated to remove potentially harmful chemicals and particles

Poor public perception

Difficult to gain planning permission

Landfill

Licensed facilities where waste is permanently deposited for disposal



Pros

Cheap

Generates electricity from landfill gases

The ability to reclaim land e.g. redundant quarries

Cons

Generation of pollutants (liquid leachate and methane) need managing

Space for landfilling is running out

Poor public perception

Noise, odious, smoke, dust, litter and pests

Difficult to gain planning permission

Source: National Audit Office and Environment Agency

43 million cubic metres to 33 million cubic metres (for reference, the capacity of the Millennium Stadium is some 1.5 million cubic metres). We estimate that, on current trends and assuming a best case scenario, existing capacity will be exhausted before 2010. The problem is critical in South West Wales where void space has reduced to 5.3 million cubic metres. Capacity at one of the largest landfill sites in the area, Pwllfawatkyn, near Swansea, which accepts waste from all over South Wales and from Bristol, is expected to be filled by August 2005. Commercial decisions by operators to restrict waste inputs to this site and another in Swansea, led to demonstrations by skip-hire operators - who therefore had to find alternative sites - in May 2004. The problem is exacerbated by the fact that the nearby Crymlyn Burrows Materials Recovery and Energy Centre - which would take some of this waste - is not yet operational due to technical problems.

There are a number of players involved in waste management in Wales

1.5 Given that the management of waste can involve a variety of risks, there is a role for government in regulating waste management activities. The consequences of poor waste management and their impact on the environment and health do not respect borders with the result that responsibility for regulation is complex and shared between a number of parties. Waste management legislation is driven by numerous European Directives which are transposed into United Kingdom primary legislation, mainly through the Department for the Environment, Food and Rural Affairs (Defra) and the Department for Trade and Industry (DTI). The overarching direction of United Kingdom waste legislation is provided through the European Waste Framework Directive. Twelve other waste-related Directives are implemented in the United Kingdom by Defra and the DTI through more than 80 Statutory Instruments. Although there are a number of bodies involved, the lead on the regulation of waste management in Wales is taken by Environment Agency Wales in its capacity as "competent authority" for many provisions of the Framework Directive on Waste and other Directives.

The Assembly's waste strategy aims to promote sustainable waste management, but its powers are limited

1.6 The Assembly published its strategy for waste management, *Wise about Waste*, in June 2002. The strategy replaced the England and Wales Waste Strategy 2000 in respect of Wales and signalled the Assembly taking responsibility within the devolution settlement for waste management in Wales. The Strategy - "a challenging but realistic programme of change for the next ten years" - has two primary objectives:

- to make Wales a model for sustainable waste management by adopting and implementing a sustainable, integrated approach to waste production, management and regulation (including litter and fly-tipping) which minimises the production of waste and its impact on the environment, maximises the use of unavoidable waste as a resource, and minimises where practicable, the use of energy from waste and landfill; and
- to comply with the requirements of relevant European Union (EU) waste Directives and United Kingdom legislation.



Powers and responsibilities in relation to waste management policy development and implementation

The **European Union** sets waste management policy through Directives which must be transposed into Member States' domestic legislation within a set period of time. Member States have a degree of freedom on how Directives will be implemented but are bound by the results that they must achieve. The overarching European Union policy on waste management is contained in the Framework Directive on Waste 75/442/EEC. This established a general framework of controls for waste management, requiring Member States to make appropriate plans for the management of waste; to ensure that there is an adequate network of waste management facilities; to ensure that waste management facilities are permitted and regularly monitored; and that information on the generation and disposal of waste is regularly reported to the European Commission. In the United Kingdom, the Directive has been implemented through a variety of instruments including the Environment Protection Act (1990) and the Waste Management Licensing Regulations (1994). Other important waste-related EU Directives include Waste Oils, Hazardous Waste, Polychlorinated Biphenyls, Groundwater, Packaging and Packaging Waste, Waste Shipments (i.e. the international movement of waste), Integrated Pollution Prevention and Control, the Reporting of Waste Statistics, Ozone Depleting Substances, Waste Incineration, Landfill, End of Life Vehicles, and most recently, Waste Electrical and Electronic Equipment.

The **Department for Environment, Food and Rural Affairs (Defra)** sets the waste policy framework for the United Kingdom; it is responsible for the transposition of most EU Directives relating to waste into UK legislation and leads on environmental issues with the Commission on behalf of the UK Government. Defra is also responsible for overseeing the UK's compliance with EU environmental legislation. Defra is the main sponsor of the Environment Agency and provides, through grant-in-aid, a proportion of its funding.

The **Department for Trade and Industry (DTI)** is responsible for the transposition of EU Directives or aspects of Directives with 'single-market' credentials. The DTI's influence on waste policy is particularly noticeable in respect of Producer Responsibility proposals and legislation. DTI leads on the transposition of the Producer Responsibility aspects of the Waste Electrical and Electronic Equipment Directive and the End-of-Life Vehicles Directive on behalf of the UK Government.

Central Government departments such as DTI and Defra also have an important role in carrying out Regulatory Impact Assessments on new legislation which frequently feeds into the style and substance of regulation.

The **National Assembly for Wales** has the powers to make secondary legislation - Statutory Instruments, including Regulations and Orders - under Acts of the UK Parliament for which it has been given responsibility. Although it does not have direct tax raising powers, it can set fees and charges where it has competence, such as the fee for a consignment note under the Special Waste Regulations 1996. The Assembly is able to give detailed scrutiny to draft legislation, has a duty to produce a National Waste Strategy for Wales and provides policy and guidance on waste planning issues. The Assembly also hears appeals with respect to decisions of Environment Agency Wales involving the granting or otherwise of waste management licences, permits and registrations.

Local authorities have statutory responsibilities in relation to the collection, recovery, recycling and disposal of municipal waste. They also have responsibility for local policy on litter, smaller fly-tipping incidents and abandoned cars. As planning authorities, local authorities are also responsible for producing Unitary Development Plans which set out the land use policies and requirements for waste treatment and disposal facilities in their area and for determining planning applications such as those for waste management facilities.

The **Environment Agency** was established by the Environment Act 1995 and became fully operational on 1 April 1996, taking over the responsibilities of the National Rivers Authority, Her Majesty's Inspectorate of Pollution, the 83 waste regulation authorities and several smaller units of the former Department of the Environment. The Agency's activities range from providing assistance in the development of Government policy and regulating major industries in England and Wales, through to day-to-day monitoring and clean up operations at a local level. The Agency works in the following areas: Air Quality, Conservation, Fisheries, Flood Defence, Land Quality, Navigation, Process Industry Regulation, Recreation, Waste, Water Quality and Water Resources. The Agency also has responsibility in relation to the collection and dissemination of environmental information, assessing the environmental impacts of pollution, and promoting an understanding of methods for environmental protection and management. The Agency is expected to play a central part in delivering the environmental priorities of Central Government and the Welsh Assembly Government, through its various functions and its role as environmental regulator, an environmental operator, a monitor of the state of the environment, an adviser on the development of environmental policy and a promoter of scientific research in support of these roles.



- 1.7 The Assembly has set a number of targets (**see Appendix 1**) in order to achieve these primary objectives and identified actions for a number of stakeholders, primarily local authorities and waste producers; the key target is to achieve at least 40 per cent of municipal waste recycled/composted by 2009-10. If Wales were achieving these targets now, it would sit at the top of the European recycling league, not towards the bottom.
- 1.8 In addition to the normal funding streams, since 2001-02, the Assembly has invested more than £80 million specifically to reach these targets. Over £60 million of this has gone to local authorities to fund the reduction, re-use and recycling of waste and accounts for the increase in municipal waste recycling and composting from eight per cent in 2001-02 to the current rate of 13 per cent. The Assembly told us that early returns from local authorities indicated that the 2003-04 recycling target of 15 per cent across Wales as a whole was on course to be achieved. The remainder of the Assembly



funding has gone to other projects and contracts such as those overseen by the Waste and Resources Action Programme (WRAP) which seeks to create markets for recycled materials and products; the Wales Environment Trust; the Keep Wales Tidy organisation; Waste Awareness Wales, a partnership between the Assembly Government, Keep Wales Tidy and the Welsh Local Government Association; and aiding the disposal of fridges.

Landfill Tax: A fiscal measure not available to the Assembly

The landfill tax was introduced in October 1996, as a tax on disposal of waste to landfill. The objective of the tax is to encourage waste minimisation and diversion away from landfill. The tax, collected and administered by HM Customs & Excise, applies to all waste disposed of at a licensed landfill site, unless specifically exempt and has two levels relating to "inactive" and "active" wastes.

Until its revision in April 2003, the Landfill Tax Credit Scheme allowed tax revenue to be recycled through "Environmental Bodies" for spending on approved projects. Registered Environmental Bodies in Wales received some £19 million since the Scheme was introduced in 1996.

Since April 2003 however, landfill tax has been redistributed by the Treasury to the Assembly at an amount calculated through the Barnett Formula. In 2004-05, this will be £5.4 million. This money has been invested by the Assembly in projects relating to the Wales Waste Strategy (paragraph 1.8).



- 1.9 Although waste management is a devolved function, the Assembly's lack of primary legislative and fiscal powers limits its ability to implement policies in relation to waste management. The main policy instruments needed to deliver sustainable waste management - such as fiscal measures like the landfill tax (see Box) - are controlled by the United Kingdom Government in Westminster. The Assembly acknowledges in the Wales Waste Strategy that "it does not control some of the crucial levers required to make a fundamental change in the way waste is managed in Wales" and "for a number of the Assembly Government's aspirations to be delivered, action has to be taken in conjunction with the UK Government". And in giving evidence to the Richard Commission, established to make recommendations in respect of the powers and electoral arrangements of the Assembly, Environment Agency Wales commented that "powers can reside with Westminster or Cardiff" and the choice of where it resides "sometimes appears arbitrary". The anomalous position that the Assembly finds itself in is illustrated by **Case Study A**.

A Erosion of Assembly powers - Pollution Prevention and Control



From 1990, the regulation of sites presenting a high risk of environmental pollution by industry took place under the Integrated Pollution Control (IPC) system. On devolution in 1999, powers in relation to IPC were transferred to the Assembly.

Following European Directive 96/61, IPC was superseded by Pollution Prevention and Control (PPC) through the PPC Act 1999 which took effect in 2000. PPC is similar to its predecessor but covers installations rather than processes; encompasses a wider range of industries; and considers a wider range of environmental impacts with more focus on risk avoidance. All new installations which previously would have fallen under IPC regulation now require a PPC permit. However, existing IPC authorisations will be

replaced in stages by PPC permits until October 2007 (except where installations substantially change, in which case they will be required to apply for a PPC permit sooner).

Under the PPC Act 1999, powers for PPC were devolved to Northern Ireland and Scotland, but not to Wales. This means that in Wales the Assembly has powers in relation to the regime by which certain industries are regulated (those regulated under IPC) and Defra has powers in relation to others (the newest and biggest installations regulated under PPC, such as the Crymlyn Burrows Materials Recovery and Energy Centre). Unless a transfer of functions order is forthcoming, this situation will continue until all industries have been transferred to PPC when Defra will have full control. The Assembly and Defra are considering such an order for later this year.

An example that the effect of the move to the PPC regime has had on the Assembly's powers is the regulation of landfill sites. Until the application of PPC, all landfill sites were regulated through the Waste Management Licensing regime under which the Assembly has certain powers. For example, the Assembly decides appeals from decisions made by the Agency on licensing matters; however, for sites regulated under PPC, appeals are required to be submitted to the Secretary of State of Environment, Food and Rural Affairs. Landfill sites are moving towards regulation through the PPC system and will therefore fall outside the control of the Assembly.

1.10 The Assembly may issue secondary legislation through Regulations and Orders, and provides guidance on how the regulations should work through Circulars and Statutory Guidance - an example is at **Case Study B**. Since devolution, the Assembly has issued extensive policy and guidance in relation to waste management but relatively little secondary legislation that differs from the equivalent legislation in England. It recognises that there would be major risks involved if it were to seek to move towards establishing a different regulatory framework for waste management for Wales. For example, regulations in Wales which were more relaxed than in England might encourage more waste to be transported into Wales for deposition, while regulations which were tougher than in England and consequently costlier to implement, could drive the waste management industry out of Wales. Substantial changes in charging regimes applying to waste management licence holders could have adverse implications for business in Wales because of the relative preponderance of small and medium sized enterprises and the agricultural sector in its

economy. And there are many waste management issues where the political boundary is irrelevant, as exemplified in **Case Study C**.

B Powers of the Assembly - The Landfill Allowance Scheme

The Waste and Emissions Trading Act 2003, implementing in the UK Article 5 of the European Landfill Directive, provides the necessary legal framework to set up landfill allowance and trading schemes in the UK. The aim of these schemes is to reduce significantly the amount of biodegradable municipal waste (BMW) sent to landfill.

The scheme started in Wales on 1 October 2004 six months ahead of England and is significantly different in a number of aspects.

There will be no trading in Wales; instead, each local authority is allocated tonnage allowances, which set a limit on the amount of BMW which may be landfilled each year and which will reduce progressively until 2010. Environment Agency Wales will monitor compliance with the scheme and will require local authorities and landfill operators to keep records in relation to BMW in each year of the landfill allowance scheme and to provide returns on a regular basis.

C Illegal clinical waste disposal in North Wales

In February 2003, Eurocare Environmental Services Ltd was successfully prosecuted by the Agency for a number of related offences across England and Wales. The company had contracts with a number of NHS Trusts and consortia to collect and dispose of clinical waste. In dealing with waste from all over the UK, they made use of facilities in Scotland, England and in Wrexham. One of the incidents for which Eurocare was prosecuted was the regular emptying of a 4,000 litre tank of fluid separated from clinical waste, including blood and other body fluids, into a septic tank which was in turn discharged into a tributary of the river Dee, part of the public water supply. This discharge was a serious breach of their IPC authorisation. The catchment of the River Dee straddles both England and Wales. The case was very complex, but if there had been separate regulations in England and Wales, the complexity - and hence length - of the case may have been even greater.

New legislation and regulation will increase the burden on key bodies

1.11 Forthcoming legislation is likely to lead to additional work for policy makers, implementers and regulators, adding to the existing waste management challenges. Over the next five years up to six new waste-related European Directives will have to be implemented in the United Kingdom. These include changes in the regulations for the disposal of waste in landfills; reducing the amount of waste from, and increasing the recycling of, electrical and electronic equipment, and end-of-life vehicles; and changes in the regulation of agricultural holdings (see **Appendix 2**).



1.12 The Agency works with Government to ensure that the impact of legislation on industry and regulators is properly determined and is not unnecessarily onerous. It is expected, though, that the regulatory burden will increase significantly. For example, the extension of waste management controls to agricultural waste is planned to take effect from mid 2005, and will impact on 29,000 agricultural holdings in Wales. Defra has assessed the average cost to the industry in complying with the regulations as between £164 and £403 a year for each farmer. The Agency will also be faced with the additional costs of implementing the regulations, including the registration of exemptions and associated inspections and enforcement.



1.13 Although the new legislation seeks to aid the sustainable management of waste and is required to implement European Directives, there is widespread concern at the potential impact on the environment through the growth of the illegal waste industry. The risk is that, in order to avoid the costs associated with regulatory compliance and avoidance of the annually increasing landfill tax, unlawful dumping of waste and illegal waste activities (particularly hazardous waste) might significantly increase, placing an even bigger burden on environmental regulators. Given these factors, it is essential that all regulatory activities are as efficient and well-focused as possible.

Scope and methodology

- 1.14 This report focuses on the roles and responsibilities of Environment Agency Wales in regulating waste management. Environment Agency Wales plays a supporting, yet vitally important role in meeting the objectives and targets of the Wales Waste Strategy. This supporting role includes regulating or monitoring those with direct responsibility for meeting the Assembly's targets - the waste management industry and local authorities; offering advice and guidance to those it regulates; and collating and reporting waste data. Environment Agency Wales's contribution to delivering the Strategy is set out in **Appendix 3**.
- 1.15 Against this the background - a complex regulatory framework, challenging objectives and the complication of new legislation - Part 2 of this report considers the activities that Environment Agency Wales currently undertakes in the regulation of waste management; Part 3 of the report considers the extent to which these activities address some of the key waste problems in Wales. This report follows on from earlier work carried out on behalf of the Comptroller and Auditor General which considered the Agency's regulation of waste management in England². The key findings of that report, together with the subsequent conclusions and recommendations of the Committee of Public Accounts and the Government's response, are at **Appendix 4**.
- 1.16 To gain the evidence for our examination, we interviewed senior Environment Agency staff on a number of strategic issues at national, regional and area level. We also visited a number of sites in Wales regulated by Environment Agency Wales to assess the range of work carried out and the issues faced by the waste management industry. These visits included licensed landfill sites, treatment centres for hazardous waste, metal recycling plants, sites used for land-spreading, civic amenity sites, composting sites and hot-spots for illegal activity. We carried out an extensive review of the Agency's resources priority planning process and corporate planning and performance management systems. We also reviewed the application of the Agency's risk management framework and systems for the regulation of hazardous waste and illegal waste activities. We also consulted with the relevant Assembly officials, a team set up by the Assembly located in the Environment Agency Wales to oversee the development and implementation of the Wales Waste Strategy, as well as Keep Wales Tidy, Welsh Environmental Services Association, Welsh Local Government Association and the Audit Commission.

KEY POINTS ON PART ONE

- Waste and its disposal, unless properly managed, can pose a threat to the environment and to human health.
- Wales manages its waste unsustainably and sits towards the bottom of the European recycling table for municipal waste. Its current dependence on landfill may not be sustainable as landfill capacity becomes increasingly scarce.
- The European Union, Defra, the Assembly, local authorities and the Environment Agency all have a role in setting waste policy for Wales.
- Investment in waste management by the Assembly through the Wales Waste Strategy aims to take Wales to a position where it can be a model for sustainable waste management.
- The Assembly has limited power in relation to waste management due to a lack of fiscal and primary legislative powers and, in one case, has lost powers since devolution (although it expects to retrieve them). The Assembly has powers to make secondary legislation, but little has been issued, partly because of concerns over cross-border disparities.
- Upcoming European and United Kingdom legislation and regulation and increasing fiscal measures are likely to increase significantly the burden on policy implementers, regulators and business. Although designed to bring about more sustainable waste management, there is a risk that new legislation could result in an increase in illegal waste activities.

² *Protecting the Public from Waste, report by the Comptroller and Auditor General, HC156 Session 2002-03, 18 December 2002.*

Environment Agency Wales' permitting and compliance activities

2

2.1 Environment Agency Wales works within a complex system of accountability, an intricate legal framework and in collaboration with a number of other public bodies. This section of the report sets out the roles and responsibilities of Environment Agency Wales and how it carries out its duties.

Environment Agency Wales has responsibility for regulating waste management in Wales

2.2 The Environment Agency (the Agency) is a non-departmental body sponsored by Defra and the Welsh Assembly Government to provide technical and regulatory support to Government on waste management issues. It has responsibility for regulating the treating, keeping, movement and the disposal and recovery of waste through a system of licensing, permitting, registration, compliance monitoring and enforcement. Its aim is to ensure that waste management activities do not cause harm to the environment, human health or serious detriment to local amenities. The Agency advises planning authorities on the likely impact of proposed waste facilities and produces technical guidance for industry. It is notified in advance of the spreading of wastes on agricultural land and movements of hazardous waste through consignment notes and cross border movements of waste into and out of the UK. It is also responsible for registering waste carriers and brokers and producers of packaging, and monitoring compliance. The Agency also has a role in providing accurate data so that others may take evidence-based decisions.

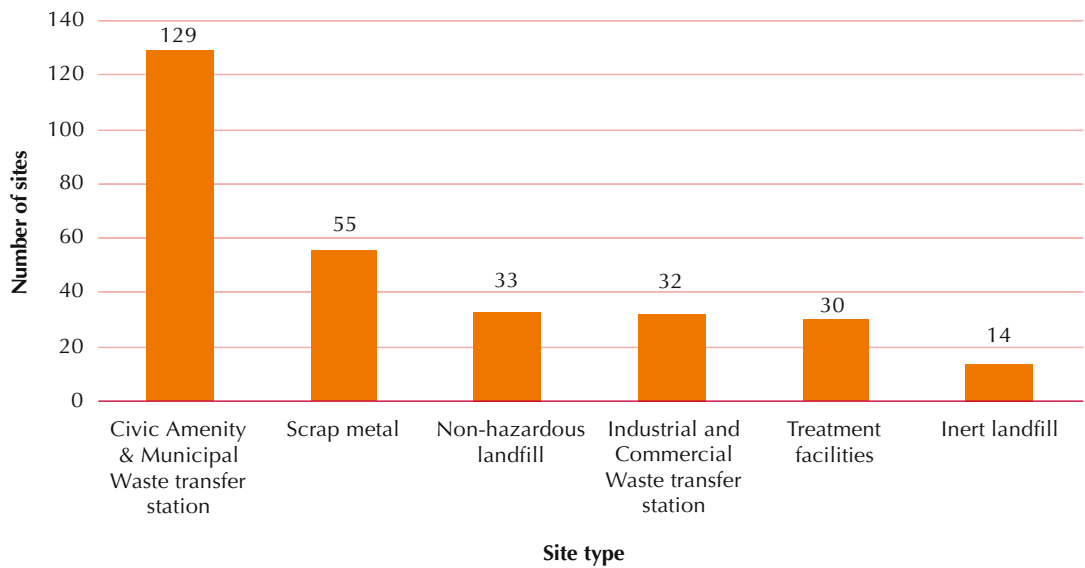
2.3 All major waste management sites must have a waste management licence or a PPC permit; as at 31 March 2003, there were 615 licensed/permited sites in Wales, of which 293 were actively accepting waste (see **Figure 4** for a detailed breakdown of operational site types). Four sites, the Crymlyn Burrows Materials Recovery and Energy Centre, Llanddulas landfill site, Bryn

In order to fulfil its waste management remit, the Agency carries out seven basic activities:

- 1 Working with and providing advice to the UK and Welsh Assembly Governments and other stakeholders to shape policy and develop better regulation and to stakeholders on regulatory requirements and on best practice.
- 2 Research and collection of data on waste management to provide information to those responsible for developing waste management policies and strategies.
- 3 Licensing and permitting activities, including waste management licences, PPC permits, registered exemptions, movements of special/hazardous waste and the import and export of waste; registration of waste carriers and brokers, PCB (polychlorinated biphenyls) holders and obligated packaging producer responsibility companies. In the case of PPC, the Agency has a role in advising on waste reduction.
- 4 Compliance assessment of permitted and registered activities to make sure waste is recovered or disposed of in ways that do not cause harm to human health, pollution of the environment or serious detriment to local amenities, and that licence conditions are adhered to.
- 5 When the conditions of a licence, registration, permit or other authorization are breached, the Agency takes enforcement action and undertakes prosecution actions if necessary.
- 6 Investigating and stopping illegal activities which are unlicensed and taking appropriate action against perpetrators.
- 7 Waste planning, reporting and performance monitoring to allocate resources and measure performance against key performance indicators.



4 Types of operational licensed and permitted waste management sites in Wales



Source: Environment Agency

Posteg landfill site and Rhas Las landfill site are regulated through PPC permits (see Case Study A) and one (Sterile Technologies Group, Wrexham) through its predecessor, IPC. There are also 3,724 sites in Wales that are registered as exempt from requiring a waste management licence. In 2002-03, Agency staff carried out 6,112 inspections to monitor compliance with licence conditions and waste legislation across Wales and 405 inspections of exempt activities. Waste legislation provides for penalties for breaches of licence conditions, operating unlicensed waste facilities and causing pollution or harm to human health. This is examined in Part 3. **Figure 5** sets out how the Agency undertakes its regulatory functions, enforcement of permits/licences and the investigation of illegal activities and the prosecution of offenders.



2.4 In January 2003, Defra began a review of the waste permitting system in England and Wales which was in response to the emerging recommendations of the Modernising Regulation Steering Group legislative review and Agency calls for a simpler permitting system in order to accommodate existing and forthcoming European legislation in a single regime and to improve its efficiency and effectiveness. The review had also been recommended by the Committee of Public Accounts.³ Primary objectives included delivering a risk-based regulatory regime where the application process, the controls imposed and the standards of operation required were proportionate to the risks posed by waste management activities - for example, for the exemptions system (see paragraph 3.19). Other objectives included delivering a permitting regime that minimised administrative burden; the establishment of a single permit to deliver the requirements of different relevant directives and domestic regulation; and determining clear boundaries between the roles of the Agency, local authorities, and other bodies. In August 2004, Defra Ministers decided to suspend the review in order to concentrate on ensuring the timely implementation of the Waste Electrical and Electronic Equipment (WEEE) Directive. Discussions

³ Protecting the public from waste, 25th report 2002-03, recommendation 1.

5 The Environment Agency regulates waste management through a system of licences, inspections and enforcement

Setting out what should be done

Advice and guidance - The Agency offers advice to waste producers and PPC permit holders on waste minimisation and visits hazardous waste producers to advise on waste prevention, handling, storage and record keeping.

Regulations - The Agency plays an important role in shaping regulations with Defra and the Assembly.

Licensing and permitting - The Agency determines applications for waste management licences and PPC permits which enable waste operators to treat, store or dispose of waste on a permitted site. Licence conditions are set to prevent or minimise the threats the activity poses to the environment and human health. The Agency has the right to grant or refuse applications and is required to consult with local authorities and, for waste management licences, the Health and Safety Executive prior to consent.

Registration - The Agency processes applications for waste operators to register lower risk activities which are exempt from waste management licensing.

Compliance monitoring

Inspections - The Government is required to ensure that licensed sites are subject to appropriate periodic inspections. The Agency carries out these inspections to make sure that waste is recycled, recovered or disposed of in ways that do not harm health or the environment. The Agency uses its Operator and Pollution Risk Appraisal (OPRA) system to allocate its inspection resources according to the relative risks posed by licensed sites.

Self reporting by waste management operators - The Agency processes data reported by waste management operators including information on types and quantities of waste received, recovered, treated or transferred, waste deposited at landfill sites, waste management capacity at sites and amounts of hazardous waste produced. These are used to determine waste strategies and policies at the regional and national level.

Surveillance and investigation - The Agency undertakes surveillance work to gain intelligence where illegal activity is thought to be taking place. The Agency's Environmental Crime Service has been set up to adopt an intelligence-led approach to compliance monitoring to provide information to Agency officers, to gather intelligence internally and externally, analyse patterns and trends in environmental crime and provide a contact point for officers.

Taking action

Enforcement - The Agency uses enforcement action to ensure that preventative or remedial action is taken to protect the environment or secure compliance with regulatory systems. The need for enforcement generally originates from an incident, unlicensed activity, intelligence information or breach of a licensed condition. The powers available to the Agency include enforcement notices and works notices, prohibition notices, suspension or revocation of environmental licences, variation of licence conditions, injunctions and the carrying out of remedial works. The Agency's enforcement policy is based on firm but fair regulation.

Prosecutions - Where a criminal offence has been committed, in addition to any other enforcement action, the Agency will consider issuing a warning, administering a caution or instituting a prosecution. Where the Agency has carried out prosecution work, it will seek to recover the full costs incurred

Source: National Audit Office and Environment Agency

are continuing between Defra, the Assembly and the Agency on how best to take forward the review's wider objective of a more effective risk-based permitting regime encompassing not only waste but all other environmental issues regulated through licensing and permitting.

Environment Agency Wales is an Assembly Sponsored Public Body

2.5 In recognition of the importance of co-ordinating activities across borders (and because it was established prior to devolution), the Environment Agency has responsibilities across England and Wales⁴. The Agency's functions in Wales are handled by Environment Agency Wales (the Agency also has seven regions in England). However, in recognition of the Assembly's devolved functions, Environment Agency Wales⁵, as well as being part of the corporate England and Wales Agency and hence accountable to Defra, is also an Assembly-Sponsored Public Body; it receives grant in aid funding from the Assembly to which it is accountable for its activities and expenditure in Wales. The Assembly has the following role in relation to Environment Agency Wales:

- setting the policy framework for devolved activities;
- agreeing overall priorities and objectives through the corporate planning process;
- allocating resources and agreeing charging regimes;
- monitoring performance;
- determining some appeals from licensing and regulation of carriers;
- issuing general guidance or specific directions; and
- appointing a board member to the Agency.

2.6 The Agency's operational regions are based on river catchment areas - the area of land bounded by a watershed (the dividing line between two adjacent river systems, such as a ridge) draining into a river. This has resulted in some discrepancies between Wales' political boundary and Agency's regional boundary (**Figure 6**). For example, a large part of mid Wales (the River Severn catchment) is managed by the Agency's Midlands Region; and parts of England - in Herefordshire (the River Wye catchment) and Cheshire (the River Dee catchment) - are managed by Environment Agency Wales. However, Environment Agency Wales reports, plans and produces data to match the political boundary and uses this for all its dealings with the Assembly and the public. This requires care in handling data and close cooperation between the Agency's Midlands region and Environment Agency Wales.

Environment Agency Wales has specific devolved responsibilities

2.7 The Wales Waste Strategy sets out how the Assembly expects Environment Agency Wales to contribute to the delivery of its objectives for waste (see Appendix 3). It also looks to Environment Agency Wales to contribute to the Assembly's statutory responsibility to promote sustainable development in all its functions - for example, by advising the Assembly on the environmental dimensions of broader policy areas such as transport, energy, economic development and spatial planning. Guidance from the Assembly on how the Agency should meet its statutory responsibility to contribute to sustainable development reflects the greater emphasis it places on this issue.

⁴ The equivalent organisation in Scotland is the Scottish Environment Protection Agency (SEPA).

⁵ In this report we use "Agency" for both the Environment Agency and the Environment Agency Wales, except when specific Wales-only functions of the latter are referred to in which case the name is given in full.

The Wales Spatial Plan

Spatial planning is the consideration of what should happen where. It investigates the interaction of different policies in particular places as well as the role of places in a wider context. It goes beyond traditional land-use planning and sets out a strategic framework to guide future development and policy interventions, whether or not subject to land use planning control.

- 2.8 The Wales Spatial Plan, due to be published in Autumn 2004, also impacts on Environment Agency Wales' waste regulation activities. The Plan will consider how to plan the future location of human activities to contribute best to meeting environmental, social and economic aims. The planning system has a vital role in the management of waste at a national, regional and local level as gaining planning permission can be a problem. In Wales, the need for an effective planning system is a key factor in achieving sustainable waste management and for the Assembly to achieve its Wales Waste Strategy objective to develop an integrated approach to waste production, management and regulation. The Assembly acknowledged to us that more than 500 new waste management facilities of varying sizes and functions will be required by 2010 to reach the targets set in the Wales Waste Strategy.
- 2.9 At a national level, the Spatial Plan should seek to set out the opportunities for the management of waste, providing the strategic context for future demand for waste sites. At a lower level, three Regional Waste Groups (North, South East and South West) consisting of local authorities, the Agency, the Assembly Government, Countryside Council for Wales, Cylch, the Welsh Development Agency and the waste management industry, were set up to develop Regional Waste Plans. These Plans, published between October 2003 and March 2004, provide an assessment of current and future waste arisings. They were designed to provide a land use framework to facilitate planning and controlling the development of facilities to manage waste in Wales in a regional context and are currently being revised to deal specifically with hazardous waste and the location of waste management facilities of regional or national importance.

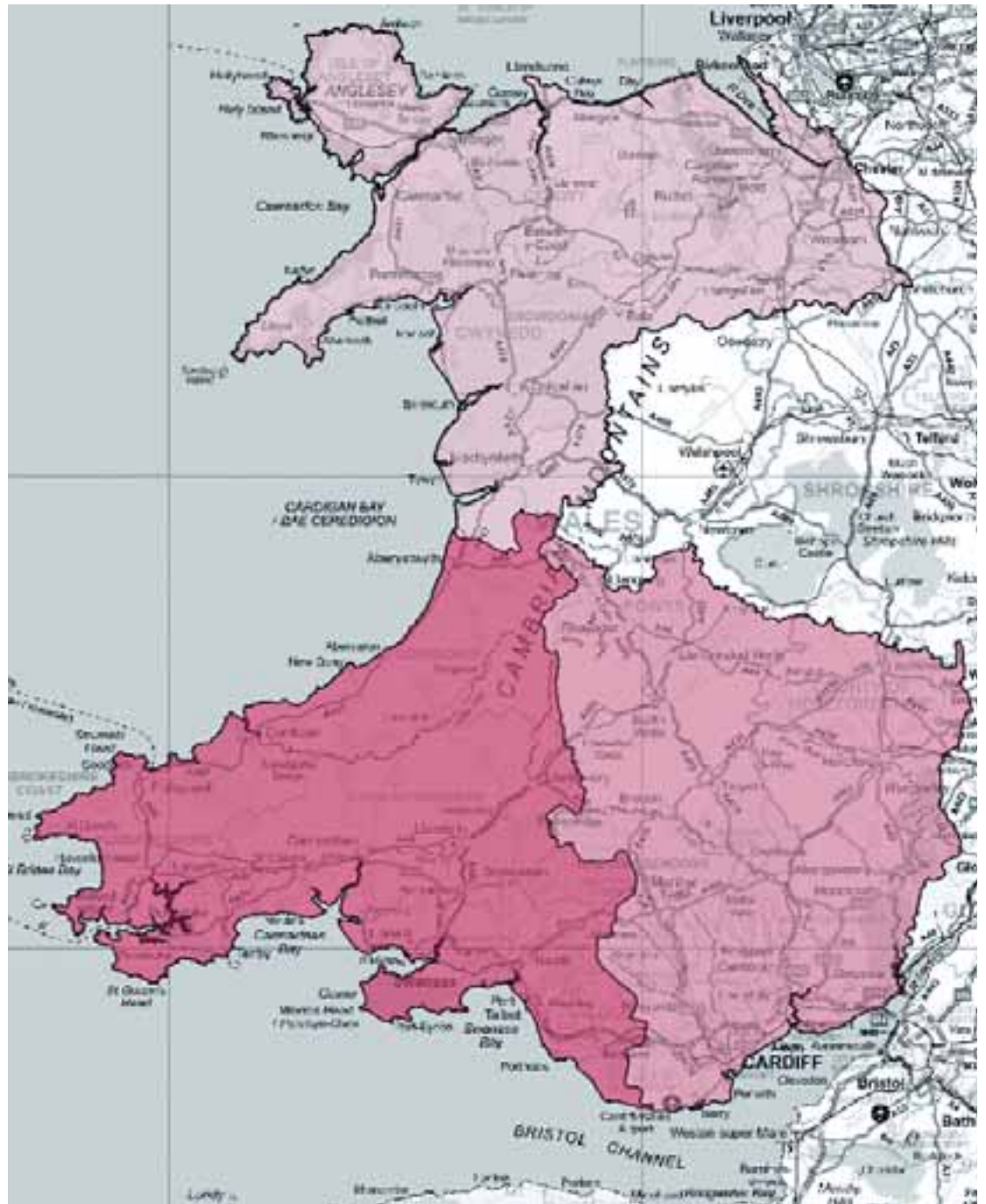
- 2.10 Regional Waste Plans should therefore inform local authority Unitary Development Plans which set out a local authority's policies and proposals for the development and use of land in their area over 10 to 15 years⁶. All three Regional Waste Plans identify the need for future waste facilities across the region, but do not advise on suitable options for locations for potential facilities. In part, this is due to the lack of up-to-date information regarding existing waste management capacity and the Agency's lack of legal powers to require operators to provide this information on anything but a voluntary basis. Clear guidance on the preparation of Unitary Development Plans has been provided by the Assembly and it is a requirement of Unitary Development Plans that they should include an indication of where future waste facilities might be located; the Assembly will therefore need to continue to work closely with local authorities to ensure that this is done in order that it might discharge its Framework Directive on Waste responsibility to "ensure that there is an adequate network of waste management facilities".




Environment Agency Wales is funded by the Assembly and through income from fees and charges

- 2.11 Environment Agency Wales is funded through grant-in-aid from the Assembly, fees and charges placed on industry and levies raised on local authorities to fund flood defence activities (from 2005-06, flood defences will be funded by block grant from the Assembly). In 2002-03, Environment Agency Wales funding for waste regulation totalled £8.9 million; of this, £4.5 million was in the form of grant-in-aid, with the remainder made up from fees and charges levied on industry and local authorities, as shown in **Figure 7 on page 22**. For comparison, the size of the waste management sector in Wales is around £240 million.

⁶ Guidance from the Assembly in 2001 was that these Plans should be prepared as soon as possible. Currently only one authority, Denbighshire, has adopted its Plan; the remaining 21 authorities plan to do so before the end of 2006.

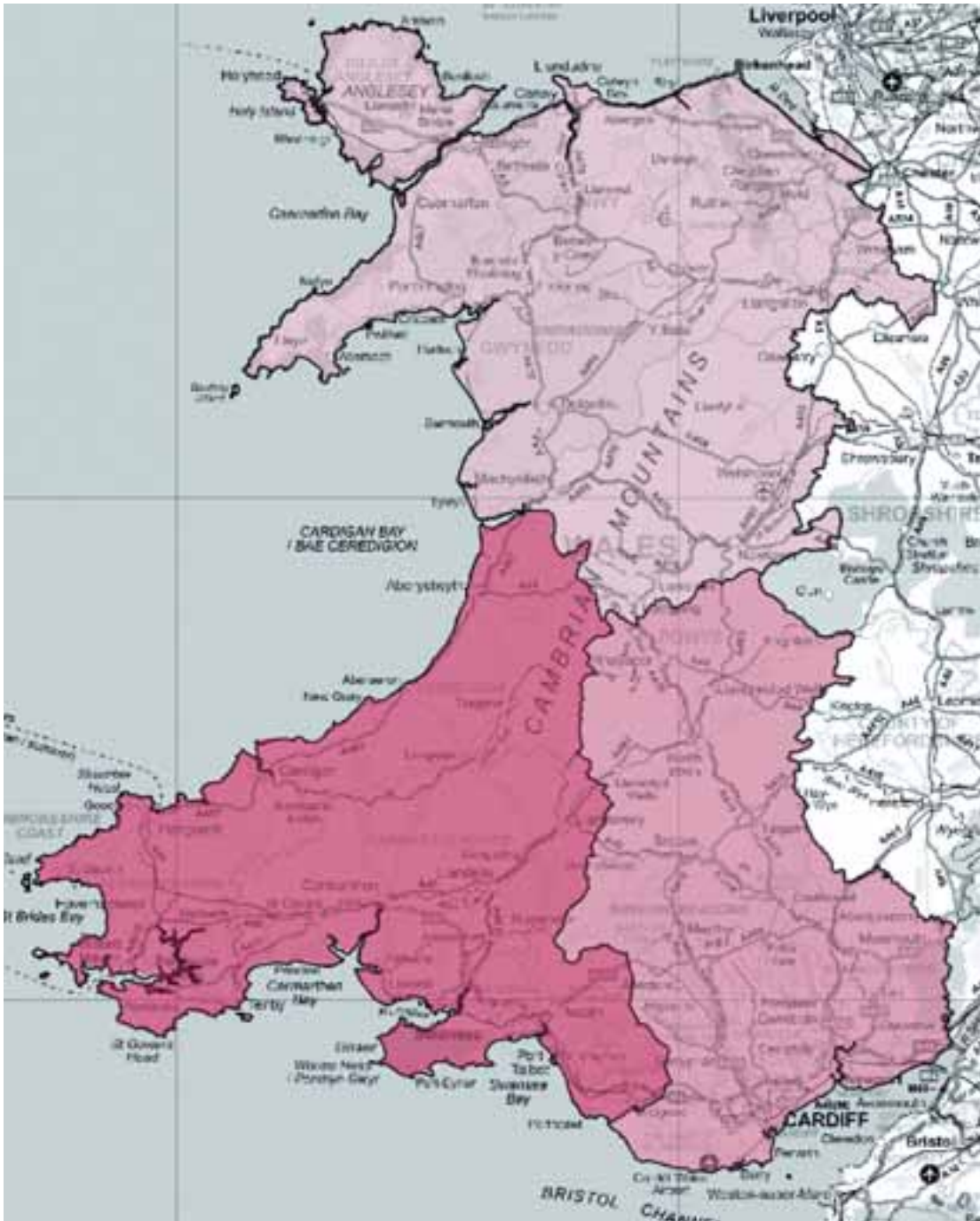
Operational Area Boundaries



-  Northern Area
-  South West Area
-  South East Area

Source: Environment Agency Wales

Public Face Area Boundaries



7 Environment Agency Wales income from charging fees 2002-03 (allocated from England and Wales accounts for waste charges)

Charging scheme	Note	Fee income 2002-03 (£000)
Waste management licences		
■ Licensed sites	Application charge and subsistence charge to cover licence determination and all compliance assessment	3,340
■ Exempt sites	Fee is charged to register exemptions of scrap metal dealers and vehicle dismantlers; plus annual inspection fee	422
■ Special waste consignments	Movements of special waste must be accompanied by a coded pre-consignment note paid for by the consignee	335
■ Registered carriers and brokers	Fee is charged to register a person as a carrier of controlled waste and for registration of brokers of controlled waste	33
Producer responsibility	Charges are made to businesses or compliance schemes for registration under the Producer Responsibility Obligations (Packaging Waste) Regulations 1997	117
Transfrontier shipments of waste	Fee is charged for application for a certificate to ship waste into or out of the UK. A fixed charge is also levied per shipment to be made over a specified period of time	86
IPC waste-related processes	Application charge and subsistence charge to cover compliance assessment activities	13
PPC waste management sites	Application charge and subsistence charge to cover compliance assessment activities	12
Total		4,358

Source: Environment Agency Wales



2.12 The Assembly provides additional funding to Environment Agency Wales directly to carry out certain Wales-specific activities. Some of these funds are provided for projects in relation to the Wales Waste Strategy, while others have been for specific Welsh environmental protection projects, such as overseeing the restoration of the abandoned Abernant landfill site. **Figure 8** details the amount of and purposes for this funding in the last two years.

8 Additional funds from the Assembly to the Environment Agency Wales for specific waste management projects

Activity	Funding (£000)
2002-03	
Overseeing the restoration of Abernant landfill	200
Inspecting landspreading	75
Supporting Welsh industry to achieve targets set in the Wales Waste Strategy	70
Increased monitoring	125
Mobile Monitoring Facility (Air quality)	55
Data analysis for Wales Waste Strategy	40
Total for 2002-03	565
2003-04	
Wales Waste Strategy	440
PPC permitting for waste sites	75
Fly tipped, abandoned drummed waste	50
Total for 2003-04	565

Source: Environment Agency Wales

The majority of Environment Agency Wales' resources for waste management is dedicated to permitting and compliance activities

2.13 Based on our analysis of the Agency's planning and performance management process, we found that Environment Agency Wales committed some 96 full-time equivalent staff directly to waste management work in 2002-03, representing 35 per cent of its total Environmental Protection resource. Of these 96 staff, Environment Agency Wales allocates 64 to licensing, permitting and compliance assessment activities.

2.14 Since the great majority of Environment Agency Wales' resources are devoted to licensing-related activities, in the remainder of this part of the report we consider how it plans this work; the charging regime; and its role in relation to health risk assessment. In carrying out these activities the Agency's staff utilise a range of skills and expertise.



The Agency has teams dedicated to processing and issuing licences, permits and registrations. The majority of compliance monitoring activities and enforcement action is undertaken by the Agency's environment management teams, made up of staff who carry out a range of tasks including pollution incident response, waste site inspections, pollution prevention and similar work in all aspects of environmental enforcement work. Over the last few years these staff have undertaken specialist training in relation to the enforcement role of their job, including dealing with aggressive operators. The Agency also employs specialist teams to carry out criminal intelligence and enforcement work against persistent environmental criminals. These teams have been created by integrating the skills of former local authority waste regulation officers and fisheries bailiffs. The teams include staff with police and armed forces experience.

For licensed activities, the Agency uses a risk based approach to resource planning and regulation

2.15 The Agency aims to carry out its regulatory functions in a way which is proportionate to the health and environmental risks posed by waste management operations. The Wales Waste Strategy states that the Agency should base their "supervision of waste management on a risk based approach". Under the Agency's licensing and permitting regime, therefore, a greater proportion of its effort is assigned to the higher risk sites. Risk assessment criteria are applied by the Agency through its Operator and Pollution Risk Appraisal (OPRA) for waste system which focuses and applies regulatory effort where it is most needed. Under the system, the Agency allocates a score to a site based on the risk that the site poses to people and the environment and how that risk is managed by the site operator. The score is used by the Agency to determine the frequency of inspections to the site. The Agency uses a robust planning tool for allocating its resources; this approach has the flexibility to allow for changes to the nature of the site, amounts of waste managed and other factors.

2.16 From April 2003, the Agency has extended its use of OPRA scores so that they are a component in determining waste management licensing subsistence charges. This means that sites with a high OPRA score which pose a higher risk to the environment have a higher level of charge, reflecting the cost of extra inspections. Likewise, lower risk sites pay lower charges.

Environment Agency Wales does not recover its full costs through licence fees and charges

2.17 Waste management operators pay a fee on application for a licence and a separate annual subsistence charge in respect of any financial year during which a licence is in force. Fees are also payable where the operator wishes to modify, transfer or surrender the licence. The levels of the fees - which are reviewed annually - are predominantly determined by the type of activity and the types and quantities of waste authorised by the licence. The purpose of subsistence charges is to meet the cost to the Agency of fulfilling its statutory duty to supervise licensed activities. As a result, the OPRA score is also reflected in the level of subsistence charge. The Agency reviews the charging scheme annually. If proposals for change are identified, they are subject to formal public consultation. Then they require the approval of Secretary of State for the Environment, Food and the Rural Affairs in consultation with the Assembly, and the consent of the Treasury.

2.18 Currently, however, the Agency is not recovering through fees the full costs it incurs in processing waste management licence applications, and is effectively using grant-in-aid to fund the balance. The share of this overall subsidy attributable to the Environment Agency in Wales for 2002-03 was £230,000, met through Assembly grant-in-aid. The use of grant-in-aid to subsidise licence application fees limits the funding available to the Agency for other areas of waste regulation and tackling illegal waste activities (see Part 3).

- 2.19 The work involved in licensing and permitting contentious sites is particularly resource intensive for the Agency and the costs can far outweigh the charges levied. For example, the PPC application fee for the Crymlyn Burrows Materials Recovery and Energy Centre in 2002 was £22,100 under the interim PPC charging scheme. Today, because PPC application charges are based on the Environmental Protection OPRA scheme, the charge would be £48,735. However, the actual cost of processing the application was £275,000 due to the need for extended consultations, including with the public.
- 2.20 Defra and the Environment Agency have recently undertaken a strategic review to take stock of the Agency's existing charging schemes with the aim of developing a common basis and approach to charging that could be applied to current and future charging schemes. One of the recommendations of the review was that the full costs of waste management licence applications should be recovered from charge-payers and that this proposal should be progressed through the consultation on 2005-06 charges. The review also identified the need for a further stage of work which would examine where the boundary between funding by grant-in-aid and by charges should be drawn. The next stage of the review will assess whether certain activities currently funded by grant-in-aid (such as the development of new regulatory regimes, enforcement against illegal activities and dealing with contentious licences) should be funded by charges.

The Agency needs to communicate more clearly its role in health risk assessment

- 2.21 The Agency has built up a great deal of expertise in determining risks to the environment from licensed waste management activities. In recent years the Agency has also taken a more proactive role in understanding the science and carrying out research into the effects of waste and other environmental factors on health. It has also been proactive in calling for the development of more health-based

environmental quality standards. The Agency has a key role to play in health protection because it has statutory responsibilities to safeguard human health in the exercise of its regulatory functions, a role it carries out in partnership with Government, other agencies and local authorities.

- 2.22 For all waste management sites regulated under the PPC regime, applicants are required to carry out a health risk assessment which is then submitted to the Agency as a part of the application. The Agency is required to consult with Local Health Boards (LHBs) in determining whether to approve the application. Where LHBs or the Agency consider health to be of particular concern, they can require the applicant to carry out a more comprehensive health impact assessment - see **Case Study D**.

D

Environment Agency Wales's requirement for a health impact assessment in determining a PPC Permit



In the case of the application for a PPC permit granted in May 2002 for the controversial Crymlyn Burrows Materials Recovery and Energy Centre, Environment Agency Wales exercised its powers to require the applicant to carry out a health impact assessment in support of their application. This was reviewed by what was then the Iechyd Morgannwg Health Authority. As the site was of particular concern to local residents, a second opinion was sought from the Centre for Research into the Environment and Health, based at the University of Birmingham. The Agency reviewed the findings of these health impact assessments and, once satisfied that the processes and activities from the site did not pose a threat to public health, granted the permit.

2.23 Under the waste management licensing regime, a similar approach is taken with the exception that the Agency is not required to consult with health professionals on a site-specific basis. The Agency has developed national regulatory policy positions on the likely effects of waste management activities based upon scientific evidence, taking advice from the Department of Health and the Health and Safety Executive. (In the case of composting, the Agency will not permit any new composting process where the boundary of the facility is within 250 metres of a workplace or boundary of a dwelling, unless the application is accompanied by a site-specific risk assessment, based on clear, independent scientific evidence which shows that the bioaerosol levels are, and can be maintained, at appropriate levels).



2.24 In relation to planning the location of waste management sites which are in close proximity to local communities, the Agency plays a limited role, although it is a statutory consultee in the planning process. Decisions on where waste management sites are located rest with local authorities who have the option of carrying out a health impact assessment but, while the use of such assessments is increasing, at present there is no statutory duty to employ them. However, The Welsh Assembly Government is considering including human health as a material consideration in the planning process.

2.25 Even though the Agency has increased its work in the area of health assessment, in the course of our examination we found widespread uncertainty from industry and other stakeholders about the Agency's responsibilities for health issues. The Agency therefore needs to improve public understanding and communicate more clearly its roles and responsibilities in relation to health impact assessments to industry and other stakeholders, especially in the light of recent high profile incidents such as the Nantgywyddon investigation (see Case Study E).

E Nantgywyddon landfill site



This site in the Rhondda was closed by the owners, Rhondda Cynon Taff County Borough Council, in December 2001 following the findings from an independent investigation initiated by the National

Assembly for Wales into the health, environmental and planning issues relating to the operation of the site. The site, situated on a mountain top above the village of Gelli in the Rhondda, was the subject of local concerns over odours and other emissions since the mid 1990s. The independent investigation recommended that household waste disposal should cease, and the site should be capped, fitted with a landfill gas management system and landscaped to manage drainage from the site. The report also recommended specific health studies be carried out. Following on from this investigation, the Agency for Toxic Substances and Disease Registry (ATSDR) of the USA was commissioned by the Wales Centre for Health to review the health issues concerning the site. The ATSDR concluded that there was little to link the site with local incidences of death and deformities but that it had contributed to short-term publicly reported health problems.

KEY POINTS ON PART TWO

- The Environment Agency is a non-departmental body, sponsored by Defra and is responsible for the regulation of waste management in England and Wales. Environment Agency Wales is an Assembly-sponsored public body and has responsibility for the regulation of waste management in Wales. It therefore has specific responsibilities to the Assembly which differ from other Agency regions, including a specific contribution towards meeting the objectives of the Wales Waste Strategy.
- The Assembly has estimated that 500 new waste facilities are needed to deliver the Wales Waste Strategy targets, but Regional Waste Plans have failed to identify potential sites and only one local authority has adopted its Unitary Development Plan.
- The Agency uses a robust planning tool for allocating its resources; this approach has the flexibility to allow for changes to the nature of waste sites, the amounts of waste managed, the standard of site management and other factors.
- Environment Agency Wales commits a third of its environmental protection resource on waste management, the majority of which is dedicated to permitting, registration and compliance assessment work.
- Environment Agency Wales does not recover from applicants the full costs of processing applications for waste management licences. The share of the overall Agency deficit attributable to Environment Agency Wales in 2002-03 was £230,000; this shortfall was met by Assembly grant-in-aid. Part of the problem is the time and cost associated with dealing with sites where there is a significant level of public concern.
- The Agency has a statutory duty to protect human health. As part of the determination process for a PPC permit, the Agency must consult Local Health Boards. However, there is some uncertainty from industry and other stakeholders about the Agency's responsibilities for health issues.

We recommend that:

- the Assembly issue direction to ensure local authorities' unitary development plans are modified where authorities have failed to identify potential sites for waste management activities;
- Defra, the Assembly and the Agency pursue the recommendation of the charging review, in relation to the recovery of the full costs of waste management licence applications from charge payers; and
- the Agency improve its communication to industry and other stakeholders over its roles and responsibilities in relation to health issues.

3 Other regulatory functions undertaken by Environment Agency Wales

3.1 Although the bulk of the Agency's resources are directed at permitting and compliance, it has a number of other regulatory functions. This part of our report examines the constraints to managing issues outside its fee earning activities, the impact of some of those issues and the measures taken by Environment Agency Wales and the Assembly to mitigate their effect on the environment and human health.

Environment Agency Wales is constrained in the resources it can apply to non-fee earning activities

3.2 To fulfil its functions as a regulator, the Agency carries out a wide range of activities in relation to waste management. In allocating its resources, the highest priority is necessarily given to functions for which it is statutorily responsible and to specific services paid for by applicants; these considerations take precedence over activities which are unfunded and where, in some cases, the underlying risk to the environment may be higher. There are therefore certain important areas of waste management which can be of relatively high risk to the environment but which have relatively low levels of resourcing available to the Agency. The problem is exacerbated when Environment Agency Wales has to subsidise its licensing and permitting activities with Assembly grant-in-aid (see paragraph 2.18).

3.3 In the remainder of this part of the report we examine four important areas that fall outside its fee earning activities:

- fly-tipping and illegal dumping;
- problems with the regulation and management of hazardous waste;
- waste management activities registered as exempt; and
- enforcement action taken by the Environment Agency Wales.

We conclude by considering initiatives being undertaken by Environment Agency Wales and the Assembly designed to manage these issues better.

3.4 Environment Agency Wales has assessed that, for 2004-05, its Area operational staff plan to spend approximately 16 per cent of their time dealing with illegal activities, seven per cent on enforcement activities, and five per cent on grant-in-aid funded exempt activities. The resource allocated to hazardous waste is more difficult to assess, because it is bound up in several activities - for example, routine inspections of licensed sites and those permitted under PPC.



Wales faces the risk of a serious and growing illegal waste activity problem

3.5 Fly-tipping, such as household waste deposited in a lay-by, through to the large scale illegal dumping of waste in illegal landfill sites operating without a licence, are two of the most visible forms of illegal waste activity. In the past, there has been confusion over where responsibility lay for dealing with individual instances. In 1998, therefore, the Agency and the Local Government Association signed a voluntary agreement which outlines which organisation responds to which incidents. The Assembly's Wales Waste Strategy requires the Agency to collaborate closely with local authorities to combat fly-tipping; to reflect Wales-specific priorities, therefore,

the Welsh Local Government Association and the Environment Agency Wales agreed an addendum to the protocol in 2003, modifying it in respect of issues surrounding clinical waste, drummed waste, tyres, animal carcasses and beach waste. Under the protocol, the Agency is responsible for illegal waste dumping, which the Agency defines as being "big, bad, or nasty" (see Case Study F). Local authorities' primary responsibility is for fly-tipping - its prevention and enforcement, as well as clear up on public land. The protocol is currently being reviewed further to clarify the roles and responsibilities.

- 3.6 Illegal waste activity is a problem for a number of reasons. It can cause pollution to the environment and harm wildlife and animals; it gives rise to significant clean up costs; it takes business away from the legitimate waste management industry and it degrades the amenity of an area, spoiling people's enjoyment of their environment. The Agency has estimated that fly-tipping and illegal dumping in the whole of the

England and Wales⁷ currently costs local authorities, private landowners and itself between £100 million and £150 million a year to investigate and clear up.



F Fly tipping: The big, the bad and the nasty



The joint protocol between Environment Agency Wales and the Welsh Local Government Association includes a response matrix used to determine who will respond to an incident. The matrix is based on the Agency's risk-based approach to waste management. The Agency itself has no specific statutory duty to take any action in respect to fly-tipping. However, a principal aim of the Agency to protect or enhance the environment whilst discharging its functions and it has powers to take action when an incident could cause serious pollution of the environment or harm to human health.

The Agency is therefore focusing on dealing with the "big, bad and nasty" incidents: those large scale incidents with a serious threat to human health or the environment, those involving organized criminals and those involving certain types of hazardous waste.

Illegal dumping at Radyr Sidings, Cardiff

An example of the effective partnership working of the agreement is the response to an episode of continued illegal dumping at a site owned by Railtrack at Radyr Sidings, Cardiff. Following complaints from local residents, Cardiff County Council Pollution Control Officers investigated the fly-tipping incidents at the site and found more than 4,000 tonnes (about 400 lorry-loads) of household, industrial, commercial and construction and demolition waste. Environment Agency Wales became involved because of the presence of hazardous materials, such as oil and asbestos. During the clean-up operation, the Council found correspondence indicating that the waste originated from a local company. This allowed Environment Agency Wales and the Council to target their intelligence operations. Following surveillance and aerial photographs taken by Environment Agency Wales, prosecution action was taken; the owner of the company received a 12 month conditional discharge and the Council was awarded £150 towards its costs of nearly ten times that amount. Railtrack was responsible for clear-up costs of about £200,000.

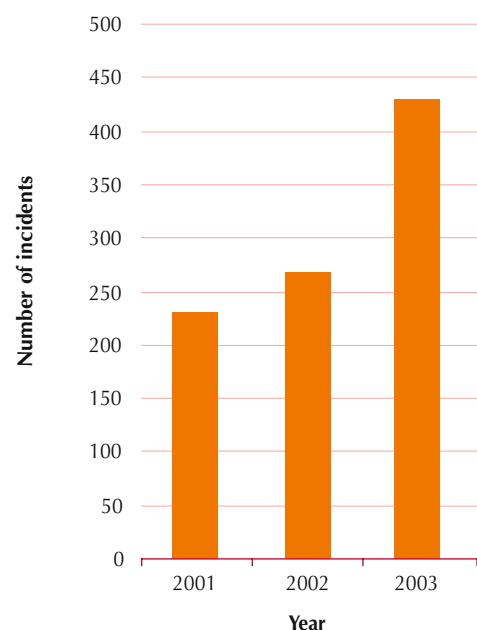
⁷ Wales-only figures have not been estimated.

3.7 The problem was recognised by the Welsh Affairs Committee in their report, *Toxic Waste Disposal in Wales*, published in 1990⁸, which referred to fly-tipping⁹ as "a fact of life in Wales". Since then, the situation has continued to deteriorate, despite an increase in licensed waste facilities and civic amenity sites. Environment Agency Wales' monitoring shows that reported incidents of fly-tipping and illegal dumping have increased by more than 80 per cent since 2001 (Figure 9). However, these figures only include fly-tipping and illegal dumping incidents that have been dealt with by Environment Agency Wales and do not include a much larger number of smaller incidents reported to local authorities. With the implementation of the new *Flycapture* system (see paragraph 3.11), data from all Welsh local authorities and Environment Agency Wales will be available for the first time.

3.8 The Agency, the Assembly and industry are all concerned that illegal waste activity will escalate in the near future with the advent of new, tighter waste legislation and increasing landfill tax, together with higher levels of waste generation and a decrease in the availability of some facilities. The new legislation and fiscal measures are designed to promote more sustainable waste management practices, but the risk is that they are also likely to lead to rogue waste producers seeking to avoid the higher costs involved and rogue waste management operators undercutting legitimate waste management companies. **Case Study G** provides an example from the dumping of tyres.

3.9 The Waste Duty of Care system is an important tool in preventing illegal waste activity. The system applies to anyone who produces, imports, carries, keeps, treats or disposes of controlled waste and requires that they ensure that the waste they produce or manage is handled safely and in accordance with the law. They are responsible for ensuring the safe and proper disposal or recovery of waste produced, even after it has been passed on to another party such as a waste contractor, scrap metal merchant, local authority or skip-hire company. The Waste Duty of Care system was intended to be almost entirely self-regulating and self-monitoring, but the Agency and local authorities have the power to inspect waste

9 Illegal waste activity incidents reported to Environment Agency Wales 2001-03



Source: Environment Agency Wales

carriers and brokers, require production of authority ("waste transfer note"), search the vehicle and carry out tests on any waste samples. However, according to a survey carried out by the Agency in 2003, 83 per cent of small and medium enterprises in Wales which produce waste had not heard of the Waste Duty of Care system; the figure for the United Kingdom as a whole was 76 per cent. In March 2004, the Assembly sought to raise awareness of the Waste Duty of Care system by producing a leaflet for local authorities to distribute to businesses in their area. Defra are currently reviewing the Waste Duty of Care system with the objective of identifying how it can help implement recent changes in European waste law and otherwise be improved.

3.10 In addition to the protocol between the Environment Agency Wales and the Welsh Local Government Association, Defra has consulted on a strategy to combat fly-tipping and illegal dumping. The Strategy seeks to bring about more flexible and effective enforcement of fly tipping and illegal waste activity. At present, enforcement action in relation to the duty of care system is only possible through court action where

⁸ Welsh Affairs Committee, *First report of 1989-90, Toxic Waste Disposal in Wales*. HC 34-I.

⁹ The Report makes reference to fly-tipping but includes illegal waste management practices that would now be dealt with by the Agency.

G The dumping of tyres



The ever increasing number of cars on the road brings with it an increase in the number of tyres and the need to dispose of used tyres in ways that do not harm the environment. Fifty million tyres a year - amounting to 134,000 a day - are discarded in the UK. Although the majority of used tyres are reused for various purposes, the rest have historically been disposed of in landfill sites. In 1990, in *Toxic Waste Disposal* in Wales, the Welsh Affairs Committee reported that "during the course of our enquiry a major fire occurred at a tyre dump at Heyope near Knighton [in Powys]. We were astonished to learn both that ten million tyres had been dumped there, and that the tyres had been dumped quite legally".

Nearly fifteen years later, the fire at the dump in Knighton is still smouldering. Polluting leachate from the site continues to discharge from the site and at one time contaminated drinking water supplies by polluting the River Teme. This is now controlled through interceptors and settlement tanks. However, the land is still severely contaminated and continues to be monitored by the Agency.

The European Union banned whole tyres from being landfilled from 2003 and shredded tyres from 2006. This is designed to encourage recycling and reuse, but the rising cost of disposing of tyres legally is also causing a massive increase in illegal dumping (and hence an increased risk of fire). The Agency told us that about half of the tyres disposed of in Wales each year, just "disappear", with a significant amount dumped illegally. In 2003, 400 tyres were illegally dumped at car parks and lay-bys near Blaenau Ffestiniog, some of which were near the entrance to a waste-water treatment works.

The problem is exacerbated by the fact than many local authority civic amenity sites in Wales have ceased accepting waste tyres. The Agency, local authorities and land-owners are also finding it increasingly difficult to clear up illegal waste tyre dumps as the recovery of the costs for doing so are very rarely covered by the costs imposed by the courts on illegal dumpers.



penalties involve a crime. Measures proposed under the Strategy include giving the Agency and local authorities the power to issue fixed penalty notices on failure to produce valid waste transfer notes or proof of being a registered waste carrier. The other measures under consultation include increasing the maximum fine for those convicted of repeat offences and more robust powers for clearing waste from land. These measures have been developed in to a Clean Neighbourhoods consultation which closed in September 2004.

- 3.11 The proposed Strategy builds on measures recently put in place through the Anti-Social Behaviour Act 2003. These measures include extending the powers of local authorities to inspect vehicles suspected of being used for fly-tipping and illegal dumping; requiring local authorities to submit data on fly-tipping to compile monthly statistics; and the setting up in April 2004 of a national database -

"Flycapture" - to collect statistics on fly-tipping (the Wales Waste Strategy stated that the Agency should monitor, record and report the number and type of fly-tipping incidents). Currently only 18 of the 22 local authorities in Wales have registered with *Flycapture* and 14 are inputting data, even though they are legally required to do so. It is important for all local authorities to collect and input their data to assist the Welsh Assembly Government with policy decisions, benchmark the impact of this crime with that of their neighbours and, in partnership with the Agency, identify hotspots and focus their resources. The Assembly is also in the early stages of developing a strategy to tackle fly-tipping in Wales. Until these Strategies' measures are fully implemented, the problem of fly-tipping and illegal dumping will remain and it is very unlikely that these new measures by themselves will significantly reduce the problem.

New legislation may cause problems with the management of hazardous waste

- 3.12 Against the background of increasing illegal waste activity, there are likely to be particular problems in Wales with the illegal deposition of hazardous waste - waste that poses a significant risk to the environment and human health¹⁰. The framework within which hazardous waste must be managed is in the process of being significantly changed. The implementation of the Landfill Directive has changed the criteria which have to be fulfilled for hazardous waste to be accepted for disposal. Changes in classification have increased by around 200 the types of waste that are now categorised as hazardous. And new European Directives such as the End of Life Vehicles (ELV) Directive and the Waste Electrical and Electronic Equipment (WEEE) Directive require hazardous components to be removed and, where possible, recovered before the equipment is disposed of.
- 3.13 Under the Landfill Directive, since July 2004, it is not possible to dispose of hazardous waste in the same landfill as non-hazardous waste. Previously, co-disposal of hazardous and non-hazardous waste was very common in Wales, with 27 out of the 83 landfills in Wales licensed to receive both categories (some of these were licensed to accept asbestos only). The European Union required through the Landfill Directive that, by July 2002, landfill sites decide whether they would accept hazardous, non-hazardous or inert waste. In Wales, no commercially operating landfill site decided to accept only hazardous waste, meaning that it is no longer legally possible for producers of most hazardous waste to dispose of it in commercial landfills in Wales. There are, however, some hazardous waste transfer and treatment facilities in Wales and some industrial concerns have made their own in house disposal arrangements.
- 3.14 Without adequate sites for management and in view of the increasing cost to industry of managing hazardous waste, there is a high risk of a significant increase in the illegal dumping of hazardous waste. The amount of transported waste now defined as hazardous will also increase significantly, and will travel greater distances across Wales to recovery and disposal sites in England. This is contrary to the "proximity principle" in the Assembly's waste strategy, that "waste should be recovered or disposed of as close as possible to where it has been produced in order to reduce the environmental impact of transporting it and to ensure that those producing the waste take responsibility as far as possible for dealing with it". An increase in the types of wastes classified as hazardous will inevitably lead to more being transported and will add to the Agency's administration of regulating hazardous waste movements. The Agency acknowledged that it faces the risk of having insufficient resources to deal with illegal disposal.
- 3.15 The potential problems in regard to hazardous waste were highlighted by the Welsh Affairs Select Committee in their 1990 report on Toxic Waste Disposal in Wales (paragraph 3.7). The Committee recommended that the Welsh Office "draw up a long term plan for the disposal of industrial waste in Wales ... [and that] such a plan must take into account the possibility that the European Commission may effectively rule out co-disposal as an option". Such a plan was never prepared, although the date when the banning of co-disposal would take effect has been known since 1999. The Wales Waste Strategy seeks to address some of these issues by promoting waste minimisation to industrial and commercial waste producers; implementation of PPC which has a requirement on those producers regulated to minimise waste; and the promotion of clean technology. It also requires the Agency to provide advice on waste minimisation to businesses producing hazardous waste. These measures will have only a marginal effect on the immediate need for a more integrated network of facilities to manage hazardous waste.

¹⁰ Hazardous wastes are defined under European Law as those substances having one or more of fourteen properties listed in the Hazardous Waste Directive, which include being explosive, flammable, carcinogenic or infectious.

3.16 The Assembly told us that delays by the European Commission in finalising the waste acceptance criteria, which specify the treatment required before hazardous waste can be disposed of, had created uncertainty for the waste management industry in responding to the changes introduced by the Landfill Directive. Defra are leading the development of the relevant regulations and Waste Acceptance Criteria (which are not devolved) with the support of the Assembly and the Agency to ensure that there will be fully compatible regimes across England and Wales. Representatives of the waste management industry told us that, in addition to uncertainties about the size of the market for hazardous waste facilities, the industry was reluctant to invest in new hazardous waste management capacity until the regulatory framework had been finalised; that was why no landfill site in Wales had been designated to accept hazardous waste only. Such an approach by industry was flagged in 2002 by the House of Commons Select Committee on Environment, Food and Rural Affairs which reported *"in cases such as this, which require radical changes in the practices of an important industry, any new items of European Legislation should not be agreed until all the practical implications of implementation are well-understood"*¹¹.

3.17 Other waste management methods especially applicable to hazardous wastes include incineration, transfer, treatment and extensive waste minimisation. However, the difficulties in gaining planning permission for these types of sites, often because of opposition from local residents, is a major stumbling block in finding a sustainable method of dealing with hazardous waste. The alteration of a recent application to build an incinerator in Wrexham to deal with non-hazardous waste in the locality is an example of the problems in gaining planning permission for waste sites: in the face of local opposition the operator withdrew their original application and reapplied for a waste gasifier which uses potentially cleaner technology (although the plant will have to operate to the same emissions standards as an incinerator). Gaining planning permission for a hazardous waste site would therefore be likely to be even more difficult. The Regional Waste Plans (paragraph 2.9) are now being revised specifically to deal, amongst other things, with hazardous waste issues.

However, the implications of having no dedicated hazardous waste landfill sites have therefore yet to be fully assessed.

3.18 The provision of facilities to handle hazardous waste is primarily a commercial matter for waste producers and the waste management industry, although there will also be an increasing burden on local authorities when they are required to collect separately household hazardous waste (such as pesticides and fluorescent tubes). However, in view of the importance of the issue, Governments in England and Wales¹² worked extremely closely with the Agency in the lead up to the ban on co-disposal in July 2004, to ensure that hazardous waste continued to be managed safely, despite the significant reduction in available landfill capacity for that waste stream. For example, in Wales Environment Agency Wales and the Assembly liaised extensively with the major industry players to raise awareness of the changes and encouraged companies to audit their waste management practice, both through the establishment of a Hazardous Waste sub group of the Wales Waste Forum and liaison with the Hazardous Waste Forum in England. These and other efforts will continue at least through 2005, given the further changes introduced by the Landfill Directive in July 2005 and the increase in the types of waste classified as hazardous. The particular issue in Wales - insufficient facilities - will need particular attention. To that end, under the European Objective One programme, the Assembly has drawn up a specification for a hazardous waste facility in Wales against which organisations will be invited to submit proposals for delivery.



¹¹ Select Committee on Environment Food and Rural Affairs, Eighth Report of 2001-02, HC 919.

¹² In theory, implementation of the Landfill Directive is not an Assembly responsibility as it is being carried out under PPC, not a devolved function (see Case Study A).

Some exempt sites pose a significant risk to the environment, but regulation of sites is very limited

3.19 Under England and Wales legislation, there are some 45 activities which do not require a full waste management licence, of which some 30 have to be registered by the Agency as being exempt. Information on exempt activities is provided by the operator to the Agency and is held on a public register. The Agency is subject to a legal requirement under the Waste Management Licensing Regulations 1994, to carry out appropriate periodic inspections of exempt activities. There are currently 3,724 sites in Wales registered with Environment Agency Wales as being exempt (more than ten times the number of licensed sites). These are activities which in general pose a low risk to the environment and therefore require less vigorous regulatory control. Examples of higher risk exempt activities include scrap metal yards, landspreading waste, use of waste for land reclamation and small scale composting. The Agency does not receive any fees or charges from exempt activities, except for metal recycling and vehicle dismantling sites. Compliance monitoring visits are therefore generally funded through grant-in-aid. The Agency focuses its effort on the higher risk activities and in responding to particular incidents of concern; compliance assessment visits are not routinely made to all exempt sites.

3.20 The exemption system is susceptible to abuse by operators not wanting to pay licence charges or landfill tax. The Comptroller and Auditor General's report, *Protecting the Public from Waste*, cited several examples of abuse, such as the dumping of waste on land under the pretence that it was being used for construction of roads. There are also certain exempt activities where the degree of regulatory control is not proportionate to their environmental and health risk and there are sites where the degree of regulation does not match the environmental risk associated with it. The Agency told us that the exemption for land spreading - the spreading of certain wastes on land for agricultural benefit or ecological improvement - was particularly susceptible to abuse. The problem is that the spreading activity only has to be notified to the Agency before it is done (which could, for example, be the night before) so the Agency often does not have adequate time, or the resources, to check whether the landspreading genuinely confers agricultural benefit or ecological improvement. In the case of abattoir waste spread on land, no health impact assessments are made to determine the presence of *E.coli*: or other potentially harmful bacteria. Examples of sites hosting activities which were exempt from waste management licensing but which posed a significant threat to the environment are given in **Case Studies H and I**.

H Land-spreading chicken feathers



In August 2002, a farmer in Bynea near Llanelli registered an exemption from waste management licensing to land-spread chicken feathers from a poultry factory in Abergavenny, with the stated aim of enhancing the quality of the land for agricultural benefit. Attached to the registration received by Environment Agency Wales was a report from a leading agricultural and land-based industry consultancy, stating that the feathers contained a valuable source of nitrogen. The mechanism for the recycling of the nitrogen was for ploughing and spreading of the feathers beginning in March 2003. The feathers would then decompose and release the beneficial nutrients.

In February 2003, Environment Agency Wales was able to investigate the site as a result of £75,000 in extra funding received by Environment Agency Wales from the Assembly to look at land-spreading activities. Without this funding, it is unlikely that the site would have been visited at all. Environment Agency Wales found that activities had already commenced on the site but that poultry feathers

had been buried on the site in pits up to 30 feet deep rather than spread across the five fields as had been notified in the original operators' exemption submission. The burial of the feathers was considered to breach the exemption due to breaches of application techniques and tonnage and that the operation was, in the opinion of Environment Agency Wales, a disposal activity rather than a beneficial activity. Overloading soil with nitrogen can result in increased risks to surface water and groundwater from the leaching of nitrates.

The activity was stopped following discussion with the operator and no further action was taken. Further spreading of feathers on agricultural land was prevented by the implementation of the Animal By-Products Regulation in October 2003.

Large scale illegal waste activity and enforcement



In 1999, Environment Agency Wales received complaints from neighbours about the waste management activities on a private site and started monitoring it. Surveillance found that the site was being used for the illegal landfilling and disposal of waste by burning and that the owners of site were operating an illegal waste carrying business.

In March 1999, the site owner applied for an exemption for the site, to use construction and demolition waste for the construction of a hardcore car park, piggery and greenhouse. In November 1999,

Environment Agency Wales staff visited the site again and found that tipping was commonplace in a void space on the site and no construction using the waste was taking place. The filling of the void space bore no relation to the work the owner was entitled to do under the exemption and the Agency defined activity on the site as landfilling. One corner of the site, the most inaccessible place for surveillance, was being used to transfer waste to different parts of the site for burning and burying and was therefore a separate and straightforward licensable activity.

In January 2000, further surveillance was carried out on the site which identified skip-hire companies who took waste to the site. No action was taken against them as they agreed to be used as witnesses. Continuing surveillance found that a haulage contractor used in the construction of a local supermarket was depositing its waste at the site and was consequently fined £4,000 for using an unlicensed carrier. The site owner, who was not registered as a waste carrier, was prosecuted for the unlicensed transfer of waste from the supermarket and was fined £250. Costs incurred by Environment Agency Wales were £4,443, of which the court awarded £1,522.

Over the following year, illegal waste activities continued at the site. The majority of the waste came from a skip hire company which paid £73,500 for the deposition of 15,227 tonnes of waste between April 1999 and October 2000.

In October 2002, Environment Agency Wales prosecuted the site owner, together with a limited company and other members of the family. In all, Environment Agency Wales estimated that the owner had avoided costs of £400,000 including non-payment of licence fees, monitoring of the site, maintenance, working plane, risk assessments, financial provision to cover default of licence and £15,000 in landfill tax.

After a two week trial in Cardiff Crown Court the family and members of the limited company were found guilty on 18 charges and fined a total of £830. The Agency claimed costs of £25,000 but were awarded nothing.

Following the court case, continued surveillance by Environment Agency Wales found that the site had become worse with large fires and more landfilling. In May 2003, the Agency carried out a raid on the site with the police to take evidence. A total of eight vehicles and equipment used at the site were seized. The raid also found hazardous waste in the form of bonded asbestos. The raid led to a number of prosecutions of carriers and others who brought waste into the site, resulting in fines and, for the more serious offenders, Community Service Orders. In September 2004 the case of the site owners was committed to the Crown Court .

3.21 In 2003 Defra consulted on amending the Waste Management Licensing Regulations in relation to certain exemptions: land treatment, land reclamation, storage of building waste, composting, spreading sewage waste and waste recovery at sewage treatment works. The aim of the review was to amend the existing regime to ensure that the degree of regulation is proportionate to the environmental and health risks. This review should result in those higher risk exemptions being brought under more vigorous regulatory control and operators required to pay a fee for those exemptions reviewed. Since this review had started in 1998, both the Comptroller and Auditor General and the Committee of Public Accounts recommended that the review of exemptions be completed. Defra is working towards the new regulations coming into force in April 2005. The Agency will have to develop the practical regulatory aspects of

this regime once they are known. Stage 2 of the joint Defra/Agency review of charging (paragraph 2.20) will also consider the extent to which those exemptions outside the scope of the new regulation should be subject to charging.

Enforcement action over illegal activities is limited to the highest risk sites and costs are not recovered

3.22 One of the functions of the Agency in regulating waste management and preventing harm to health or the environment from occurring or continuing is to take effective enforcement action against those who breach the regulations. The *Agency's Enforcement and Prosecution Policy* states that the Agency will maintain

firm but fair regulation upholding the principles of proportionality, consistency, transparency and targeting. The Agency takes enforcement action against:

- operators breaching their permit or licence conditions; and
- illegal waste activity operators operating without a licence or permit.

This is an issue of growing importance. The Agency told us that there was increasing evidence of organised criminal activity moving into waste crime, as potential profits increase, but with implications across several regulatory and administrative boundaries (such as theft and tax evasion).

- 3.23 The report by the Comptroller and Auditor General, *Protecting the Public from Waste* (2003), looked in detail at the Agency's enforcement activities. It found that the Agency had become increasingly active in prosecuting waste offences although it was concerned at the low level of fines imposed by the courts. The report also pointed to some areas for improvement for the Agency, such as the need to take effective action against unlicensed sites; the time taken to bring cases to court; and the urgency in dealing with sites with persistent problems. The subsequent Committee of Public Accounts recommendations and associated Government response - which sets out the action the Agency and others are taking to implement the Committee's recommendations - are at Appendix 4. For example, Environment Agency Wales has special enforcement teams which assist with investigations into more complex cases. And the Agency has now implemented its compliance classification scheme to capture and enforce persistent breaches of licence conditions, with the aim of leading to firmer enforcement action against poorly managed sites.
- 3.24 In the Welsh context, in 2002-03, Environment Agency Wales served 56 enforcement notices. A total of 50 formal cautions were made and 76 prosecutions for waste offences were carried out, leading to fines totalling £194,030. Recent research carried out on behalf of Defra found that, since 1999, Environment Agency Wales has had the highest number of environmental prosecutions (including all other areas of environmental protection) of all the Agency's regions. Since 2001-02, the Assembly Government has given Environment Agency

Wales specific additional funding to take forward cases involving illegal waste activities. In 2002-03, of those cases which reached court, Environment Agency Wales' costs were £253,373, funded through grant-in-aid. During the course of proceedings the Agency seeks to recover these costs; in 2002-03, Environment Agency Wales was awarded only £185,209 (73 per cent) of its successful case costs. The Agency also incurs costs of investigating cases that never get to court. **Case Study I** is an example where the considerable costs incurred by Environment Agency Wales have not been recovered.

- 3.25 In May 2004, the House of Commons Select Committee on Environmental Audit published a report on *Environmental Crime and the Courts*¹³ and concluded that "*the general level at which fines are imposed neither reflects the gravity of environmental crime, nor deters or punishes adequately those who commit them. This is clearly unsatisfactory*". They also expressed their particular concern that "*a minority of commercial bodies deliberately flout environmental regulations in order to increase profits or avoid costs, in the knowledge that, if they are caught, their punishments will be slight*". Fines are also low for those companies who do not register exempt activities. Those operators who are found by the Agency to be carrying out an exempt activity which is not registered are liable to a maximum fine of £10 by statute. Amendments to the Waste Management Licensing regulations will raise the maximum fine to £1,000 for those activities included in the exemptions review and to £500 for all other exemptions. The Environmental Audit Sub-committee on environmental crime was complimentary about the Agency's efforts to address environmental offenders and was interested in the Agency's proposals for the creation of alternative sentences to deal, in particular, with corporate offenders. These included Corporate Rehabilitation Orders, Remediation Orders, Corporate Bonds and Adverse Publicity Orders.
- 3.26 In order to increase the awareness of environmental issues and crime, in 2002 the Magistrates Association, with the aid of the Agency, launched a toolkit, *Costing the Earth*, which is designed to help the magistracy deal with environmental cases and increase understanding of the effects of environmental pollution on the environment and society and the related legislation and case-law. However, since the scheme was launched, the Agency

13 *Select Committee on Environmental Audit, Sixth Report of 2003-04, HC126.*

reports that levels of fines have remained low. Magistrates awareness training is offered by Environment Agency Wales and provision will continue, where accepted.

The Assembly has taken steps to address some of these issues but needs to do more if the future problems are to be avoided

3.27 The Assembly's waste strategy recognises the need to tackle the full range of waste issues. In recognition of the Environment Agency Wales' limited resources, the Assembly has provided it with ring-fenced pockets of funding to carry out certain projects and to tackle certain issues (see Figure 8). **Case Studies J and K** are examples of successful initiatives on fly-tipping and exemptions respectively, that have benefited from Assembly funding. These sorts of Assembly-funded projects offer the Agency scope to use them as pilot programmes which, subject to resources being made available, can subsequently be disseminated throughout other Agency regions.

K

Ring-fenced money from the Assembly for investigating exempt sites

The Environment Agency Wales has been given an additional £40,000 a year since 2002 by the Assembly to inspect, and take enforcement action where appropriate on, the disposal of waste via exemptions. The funding was used to target 500 inspections of exempt sites a year. The concern was that inappropriate waste would be disposed of via exemptions, in particular those relating to the use of inert waste as hardstanding, base materials for improvement to farm tracks.

In 2004-05, as well as carrying out inspections, the Environment Agency Wales also intends to quality-assure the existing database of exempt sites to inform which sites to visit.

Targeting the inspection of exempt sites has enabled Environment Agency Wales to take more effective enforcement action where necessary.

J

Tackling fly tipping - Pride in our Communities



In 2002, the South West Wales Area Environment Group (a group of representatives of local authorities, industry, conservation interests and the public that provides advice to the Agency) identified fly tipping as an issue of serious concern to a wide range of organisations and people. The Group suggested that Environment Agency Wales should develop and progress a project, with the ultimate aim of reducing fly-tipping across South West Wales. The resulting *Pride in our Communities* project is a joint venture between local authorities, Environment Agency Wales, Keep Wales Tidy, the Countryside Council for Wales, Forest Enterprise, Dyfed Powys Police and South Wales Police with the aim of securing a substantial long-term reduction in fly-tipping within communities in South West Wales.

The three year project, which started in April 2003, seeks to reduce the problem of fly-tipping by encouraging communities to take ownership of local problems through education and awareness initiatives, small business awareness campaigns, community involvement and awareness and enforcement action.

Total dedicated funding for the project over the three years has totalled £345,000 with contributions from the Assembly (£130,000); Environment Agency Wales (£30,000); Carmarthenshire County Council (£60,000); Pembrokeshire County Council (£60,000); Neath Port Talbot County Borough Council (£20,000); and Countryside Council for Wales (£45,000).

Community involvement is the main theme running through the project and has been aided by a publicity campaign in partnership with the *South Wales Evening Post*. The paper has advertised that "War has been declared on illegal rubbish" and encourages readers to look out for incidents of fly-tipping and report them.

An important feature of the project is the use of reconnaissance flights across South West Wales to pinpoint problem areas for fly-tipping and illegal waste disposal sites. The use of light aircraft has enabled Environment Agency Wales to identify sites that might otherwise have remained undiscovered. In the three days in March 2003 over which the flights took place, 102 sites were identified including 21 categorised as high priority for investigation.

During the first year, the project was piloted within Neath Port Talbot County Borough Council. Results from the first six months of the project included seven large scale clean-up events place involving 26 volunteers and six youth offenders cleaning up 22 tonnes of waste. The project has funded a Fly Tipping Project Officer, employed through Keep Wales Tidy and located with Neath Port Talbot County Borough Council. This officer has the remit of working with communities to develop locally based solutions to the problems of fly-tipping.

KEY POINTS ON PART THREE

on constraints to applying resources to non-fee earning activities:

- There are some activities which present a relatively high risk to the environment but for which the Environment Agency Wales receives no direct income and therefore is able to apply relatively few resources.

on the growing problem of fly-tipping:

- In England and Wales, fly-tipping and illegal dumping currently costs the tax payer and private landowners between £100 million and £150 million a year. Incidents of fly-tipping and illegal dumping dealt with by the Agency in Wales have increased by more than 80 per cent since 2001. However, all-Wales figures on the number and type of fly-tipping and illegal dumping incidents will not be available until all local authorities are using the Flycapture system. There is a risk that an increase in fly-tipping and illegal dumping incidents will occur as rogue waste management operators seek to avoid the consequences of new, tighter legislation and increasing landfill tax.

on the management of hazardous waste:

- New legislation banning the co-disposal of hazardous waste with non-hazardous waste and changes in the definition of hazardous waste will significantly change the way that hazardous waste is managed. Since the banning of co-disposal in July 2004, there are currently no commercially-available hazardous waste landfill sites in Wales.
- The waste management industry is reluctant to invest in new facilities in relation to hazardous waste because the relevant regulations have yet to be finalised and the size of the potential market for hazardous waste facilities is uncertain.
- The lack of hazardous waste management facilities and an increase in the amount produced and increased costs may result in a significant increase in the illegal management of hazardous waste.

on the exemptions system:

- The exemptions system allows for a lower level of regulation for sites which pose a low risk to the environment. However, the Agency is concerned about the widespread abuse of the system and the disproportionately low level of regulation that can be afforded to many exempt sites.
- Defra is currently consulting on amending the exemptions system to ensure the degree of regulation is proportionate to environmental risk. This review has been ongoing since 1998. These new regulations are expected to be in place by April 2005.

on the Environment Agency Wales' enforcement action:

- The Environment Agency Wales has been successful in carrying out waste management prosecutions, with only one being unsuccessful in 2002-03. However, the Agency were only awarded 73 per cent of its costs in bringing cases to court in that year.
- Fines for illegal waste activity are generally low and do not act as a sufficient deterrent to cease unlawful practices. The Agency has put forward proposals for the application of alternative sentences such as Community Service Orders.

on action taken by the Assembly to address waste problems in Wales:

- The Assembly has provided the Environment Agency Wales with funds to carry out specific activities to tackle the problems of waste management in Wales. The *Pride in our communities* project has succeeded in raising the profile of fly-tipping and implementing a program designed at the community taking ownership of local problems.

KEY POINTS ON PART 3 *continued***WE RECOMMEND THAT:**

- the Assembly ensure that all local authorities use the *Flycapture* system as soon as possible to enable all-Wales data to be collected on the number and type of fly-tipping and illegal dumping incidents;
- the Assembly, within the context of its current policy, and with the support of Environment Agency Wales, the Welsh Local Government Association and input from the waste management industry, should consider the management of hazardous waste to supplement the Wales Waste Strategy;
- the Agency, the Assembly and the Welsh branches of the Magistrates Association develop the *Costing the Earth* toolkit and promote it in a Wales context to raise the awareness amongst Welsh judiciary and magistracy of environmental crimes.

1 Appendix

Wales Waste Strategy targets

UK targets are where Wales must meet targets set for the UK in EC Directives. Primary Wales-specific targets are where the Assembly and its partners (e.g. local government) have a direct influence over their outcome. Secondary Wales-specific targets are where the Assembly's influence is less.

Source	Target	Target date
UK	Landfilling of no more than 75% of the biodegradable municipal waste (BMW) produced in 1995.	2010
UK	Landfilling of no more than 50% of the BMW produced in 1995.	2013
UK	Landfilling of no more than 35% of the BMW produced in 1995.	2020
UK	Recover 59% of packaging waste.	2002
UK	Recycle at least 19% of packaging waste.	2002
UK	Re-use and recover a minimum of 85% end of life vehicles by an average weight per vehicle and year. Re-use and recycle a minimum of 80% end of life vehicles by an average weight per vehicle and year.	1 January 2006
UK	Re-use and recover a minimum of 95% end of life vehicles by an average weight per vehicle and year. Re-use and recycle a minimum of 85% end of life vehicles by an average weight per vehicle and year.	1 January 2015
Wales primary	Public bodies to reduce their own waste arisings to at least 5% of 1998 arisings.	2005
Wales primary	Public bodies to reduce their own waste arisings to at least 10% of 1998 arisings.	2010
Wales primary	Local authorities to achieve at least 15% recycling/composting of municipal waste with a minimum of 5% composting and 5% recycling.	2003/04
Wales primary	Local authorities to achieve at least 25% recycling/composting of municipal waste with a minimum of 10% composting and 10% recycling.	2006/07
Wales primary	Local authorities to achieve at least 40% recycling/composting of municipal waste with a minimum of 15% composting and 15% recycling.	2009/10
Wales primary	All civic amenity sites to have facilities to receive and store, prior to disposal, bonded asbestos sheets. All sites should also have facilities for receiving and storing, prior to recycling, oils, paints, solvents and fluorescent light bulbs.	2003/04
Wales secondary	Waste arisings per household should be no greater than those in 1997/98.	2009/10
Wales secondary	Waste arisings per person should be less than 300kg per annum.	2020
Wales secondary	Businesses to achieve a reduction in waste produced equivalent to at least 5% of the 1998 arisings figure.	2005
Wales secondary	Businesses to achieve a reduction in waste produced equivalent to at least 10% of the 1998 arisings figure.	2010

Source	Target	Target date
Wales secondary	Reduce the amount of industrial and commercial waste sent to landfill to less than 85% of that landfilled in 1998.	2005
Wales secondary	Reduce the amount of industrial and commercial waste sent to landfill to less than 80% of that landfilled in 1998.	2010
Wales secondary	Reduce the amount of hazardous waste generated by at least 20% compared with 2000.	2010
Wales secondary	Reduce the amount of biodegradable industrial and commercial waste sent to landfill to 85% of that landfilled in 1998.	2005
Wales secondary	Reduce the amount of biodegradable industrial and commercial waste sent to landfill to 80% of that landfilled in 1998.	2010
Wales secondary	Re-use or recycle at least 75% of construction and demolition waste produced.	2005
Wales secondary	Re-use or recycle at least 85% of construction and demolition waste produced.	2010

2 Appendix

New and upcoming legislation and regulation in relation to waste management

New legislation	Background	Main Requirement	Timetable
Landfill Directive	The Landfill Directive is designed to regulate and classify landfill sites across Europe. It applies to landfills over a certain size and will ban certain waste (e.g. tyres and clinical waste) from being landfilled. All landfill sites will have to satisfy the technical requirements of the Integrated Pollution Prevention and Control (IPPC) Directive and will need to be re-permitted.	Reduce biodegradable municipal waste (BMW) sent to landfill to 75% of 1995 levels	2010
		Reduce BMW sent to landfill to 50% of 1995 levels	2013
		Reduce BMW sent to landfill to 35% of 1995 levels	2020
Waste Electrical and Electronic Equipment (WEEE) Directive	<p>This Directive aims to reduce the amount of waste arising from electrical and electronic equipment.</p> <p>Producers will have responsibility for dealing with products at the end of their life, ensuring specific amounts are collected each year with a set proportion recycled. Products will have to be designed for reuse and recyclability, encouraging producers to use materials easily recycled and re-used.</p>	Recovery targets of 80%, 75% or 70% (depending on category of WEEE)	End 2006
End of Life Vehicles (ELV) Directive	This Directive aims to prevent waste from end-of-life vehicles and promote the reuse and recycling of end of life vehicles and their components.	Recycle 85% of all ELVs	January 2006
		Recycle 95% of all ELVs Further targets will be set beyond 2015	January 2015
Agricultural, mines and quarries waste regulations	<p>To implement the EC Waste Framework Directive, specifically for agriculture these regulations will require that agricultural waste will have to be disposed of, or recycled in ways that protect the environment and human health. Farmers will have to:</p> <ul style="list-style-type: none"> ■ Send or take their waste for disposal off-farm at licensed sites; ■ Register a licensing exemption with the Agency to recycle waste on-farm; or ■ Apply to the Agency for a Licence to continue on-farm disposal. <p>Uncontrolled burying and burning of agricultural waste on farms will be prohibited.</p>	Better alignment of risk and regulation	Awaiting consultation and Regulations, suggested implementation from during 2005
Amendments to The Waste Management Licensing Regulations 1994 (amended)	To ensure that the UK complies with the European Waste Framework Directive, Defra proposes to amend the system for a number of the waste management licensing exemptions, identified within The Waste Management Licensing Regulations 1994 (amended).	Better alignment of risk and regulation.	Consultation undertaken, awaiting regulations

New legislation	Background	Main Requirement	Timetable
Hazardous Waste Regulations	<p>The main requirements are:</p> <ul style="list-style-type: none"> ■ the alignment of the definition of hazardous waste with the revised European Hazardous Waste List; ■ a streamlining of the notification process; ■ a better audit trail to promote improved management to reduce the administrative burden on the waste industry and the Agency; <p>a shift in the burden of responsibility onto the producer.</p>		Consultation currently being undertaken
Packaging Directive	Higher targets for recovery and recycling of packaging waste to be regulated by the Environment Agency. Also clear rules for the export of packaging waste to third countries with the aim of preventing the dumping of waste in other parts of the world.	60 % overall recovery and 55 % overall recycling of packaging waste, including material specific targets	Compliance with amended Directive by 18 August 2005. Targets to be reached by 31 December 2008.
Batteries Directive	This Directive will supersede the Batteries and Accumulators Directive (1991) and will require member states to set up schemes to ensure all batteries and accumulators are recycled and not landfilled or incinerated. The Directive will also set minimum standards for treatment of spent batteries.	Collect and recycle: 75% consumer batteries; 95% industrial batteries. No less than 55% of all materials recovered from the collection of spent batteries will be recycled.	Likely post 2005
Bio-waste Directive	This Directive will establish rules on the safe use, recovery, recycling and disposal of biowaste to encourage composting and reduce potential soil contamination. The Directive will focus on Biodegradable Municipal Waste (BMW).	Not yet known	Not yet known

3 Appendix

Environment Agency Wales contribution to the delivery of the Wales Waste Strategy

Environment Agency Wales is an Assembly Sponsored Public Body that forms part of the Environment Agency for England and Wales. The main task of Environment Agency Wales in relation to waste is to licence and regulate waste management activities (including transportation) to ensure that they do not cause pollution of the environment or harm to human health. The Agency also has a wider advisory and information gathering role as part of its overarching duty to contribute to the achievement of sustainable development.

The Assembly Government requires the Agency to make its contribution to the delivery of the Wales Waste Strategy by:

- operating in a fair, consistent and transparent way;
- basing the supervision of waste management facilities on a risk based approach;
- taking firm but proportionate action against those who break the law, paying most attention to those who cause, or who may cause, most harm to the environment or human health or detriment to the local amenities, and to those likely to profiteer most from illegal waste activity;
- setting up a new scheme for classifying non-compliance with the permit conditions for activities regulated by the Agency;
- making its monitoring and inspection results more publicly available;
- enhancing its response to complaints and communications with local residents;
- collaborating closely with local authorities to combat fly-tipping in accordance with the soon to be agreed joint Local Government/Environment Agency Protocol on Fly-Tipping;
- monitoring, recording and reporting the number and type of fly-tipping incidents;
- monitoring and identifying the sites where it has identified illegal operations taking place, and the action required to be taken;
- providing information on wastes and their management, including types (including the amount that is biodegradable), quantities, sources (i.e. producers by industry type), geographical origin (to local authority level) and trends (on a three year basis), to all organisations and bodies who need the information (especially the new regional waste groups and local authorities for the preparation of their Unitary Development Plans);
- providing advice on sustainable waste management to the Assembly Government, regional waste groups, local authorities, waste producers, waste management companies and others;
- carrying out monitoring of the importation of transfrontier shipments of waste arriving at ports in Wales for recovery in the UK;
- focussing advice on waste minimisation to businesses producing and handling packaging,
- and producing hazardous and biodegradable wastes, and working in partnership with other organisations such as Envirowise, WDA, local authorities, Arena Network, Groundwork Wales, and other service providers to promote waste minimisation messages more widely;
- providing advice and guidance relevant to the needs of Wales.

Appendix 4

Report by the Comptroller and Auditor General - Protecting the public from waste - Main findings and recommendations; The Committee for Public Accounts recommendations and Government Response

Theme	C&AG finding	C&AG recommendation	PAC recommendation	Government response (summarised)
<p>Agency roles and responsibilities</p>		<p>The Environment Agency and the Department need to consult with the Local Government Association and other interested parties to agree a system for monitoring fly-tipping nationally which is both economic and reliable.</p>	<p>The Agency and the Department need to consult with the Local Government Association and other interested parties to develop common reporting conventions and systems for monitoring the frequency, type and significance of fly-tipping incidents nationwide. The Agency should also work with the Department and local authorities to develop plans to combat the increase in fly-tipping predicted by the Agency in the next few years.</p>	<p>The Department made available £2.4 million in July 2003 to the Agency to develop a web-based fly tipping reporting system for Agency and local authority use. The system will develop common reporting conventions and rely on a subdivision of fly tipping responsibilities that will be agreed between the Agency and local authorities in the form of a protocol.</p> <p>A clause has been included in the Anti-Social Behaviour Bill currently before Parliament to give the Secretary of State for Environment the power to issue statutory directions to the Agency and local authorities regarding fly tipping. It will, if successful, specify the types and categories of fly tipped waste with which each should deal, and require them to use the above database to provide information to Defra on the types and numbers of fly tipping incidents they deal with. This will allow for national and local data on fly tipping to be compiled from 2004 onwards.</p> <p>The Agency has presented further proposals to combat fly tipping to the Department. Funding for these projects will, however, need to be considered as part of the spending review process.</p>

Theme	C&AG finding	C&AG recommendation	PAC recommendation	Government response (summarised)
<p>Inspection</p>	<p>The Agency could make better use of the resources it uses to inspect waste operators, improve the effectiveness of regulation, and reduce unnecessary regulatory burdens, by carrying out fewer but more comprehensive and in-depth inspections.</p>	<p>In licensing and inspecting operators, the Agency and the Department should increase the reliance placed by the Agency on operators' own management systems and controls for waste management, where operators' systems are of a suitable standard. Reducing the large number of routine inspections of well run sites could release resources to help meet the new demands on the Agency's waste regulation staff and the costs of carrying out more detailed reviews of problem sites. To achieve this change the Agency needs to:</p> <ul style="list-style-type: none"> ■ examine operators' own internal management systems for ensuring compliance with licences and waste legislation; ■ strengthen the training of its staff to improve their inspection and audit of operators' management systems; ■ monitor the outcomes of routine inspections, for example, in detecting licence breaches and pollution incidents; ■ review the impact of its planned increase in the number of in-depth inspections; ■ address with the Department the frequency of inspection for certain closed and non-operational sites. 	<p>The Agency should carry out fewer routine inspections, substituting more in depth inspection of sites posing the greatest risk. In assessing the relative risks of sites, the Agency should consider the adequacy of the operator's own compliance regimes.</p>	<p>The OPRA system is already used to target inspection effort to where it is most needed. The Agency intends to revise the proportion of in depth inspections upwards again for 2004/5 through its annual risk based allocation of resources. The service level and overall 'mix' of in-depth versus routine inspections will be reviewed annually through this mechanism. The Agency is developing its generic risk based approach to compliance assessment at both industry sector and individual site level. This includes development of an OPRA methodology, a compliance assessment planning framework, and a compliance classification scheme. This generic and risk based framework will help the Agency to move to less frequent but more in depth inspections and a more proportionate approach across the different regimes. The Agency is currently assessing how and when operator environmental management systems can be taken into account in the operation of all environment protection regimes - including those for waste. The Agency can only rely on robust operator management systems that deliver consistent compliance with permit conditions. Where these exist, Agency inspection can focus on the identification of inadequate or failing operator systems or processes for subsequent audit and review. The Department's revised guidance in WMP4 will require the Agency to maintain a wide range of supervision activities appropriate to the nature of the activities and the risks they pose. The revised guidance also promotes greater emphasis on checking operators' management systems.</p>

Theme	C&AG finding	C&AG recommendation	PAC recommendation	Government response (summarised)
<p>Enforcement</p>	<p>The Agency needs to deal more effectively with operators that persistently fail to comply with their licences.</p>	<p>There should be an increase in the incentives for companies to comply with their licences and waste legislation. For example, the Agency should:</p> <ul style="list-style-type: none"> ■ articulate more clearly what enforcement action will be taken in response to breaches of different types, and especially repeat breaches, to promote consistency in treatment and reinforce deterrence; ■ take prompt and appropriate enforcement action when a compliance failure is found, particularly where there is repeated disregard of the requirements of good waste management. 	<p>The Agency should be transparent with operators and the general public about the enforcement action it will take in response to different types of licence breaches and offences.</p>	<p>The Agency has a full Enforcement and Prosecution Policy available to regulated businesses, the public and others. The Agency is complementing and enhancing this approach through the development of a "compliance classification scheme". This will provide a consistent and transparent Agency response to permit breaches and offences across all environment protection regimes. The way in which a breach is classified and reflects the importance of it in terms of risk or harm to people or the environment. It provides a consistent means of escalating action if there are multiple permit breaches at a site.</p>
	<p>The Agency should address the deficiencies in its management information systems on environmental incidents and prosecutions so that it can, for example, routinely monitor, based on reliable data:</p> <ul style="list-style-type: none"> ■ types of waste incidents and offences at licensed waste sites; ■ trends in the environmental impact of waste incidents; ■ the quality and timeliness of prosecution files submitted to legal teams; ■ the operations of the newly formed dedicated enforcement teams; ■ the effectiveness of the Agency's response to the more serious incidents. 	<p>The Department should consider whether the introduction of spot fines for less serious breaches of licence conditions and minor offences should be recommended, to allow the Agency to take action where offences are not serious enough to warrant the cost of a full prosecution. Where an operator is convicted for deliberately or persistently breaching licence conditions or environmental legislation, the Agency should consider revoking or suspending all the operator's existing waste licences. Judicious use of the threat of revocation or suspension might enable the Agency to secure improvements in the operators' management practices, and if necessary to bring about a change of operator.</p>	<p>As part of the strategy being developed on fly tipping, the Department is considering the whole issue of fines. This includes the overall level of fines provided for in legislation, the potential scope and role of fixed penalty notices, whether fine receipts could be retained by enforcing bodies, and whether a sliding scale of fines could be introduced for repeat offences. The waste permitting review will also consider whether any additional enforcement measures, including fixed penalty notices, would be needed to effectively enforce the new regime that is being developed. The Department endorses targeting repeated offenders with appropriate enforcement action. The Agency may revoke a licence entirely or revoke some or all of the activities authorised in the licence. Entire licence revocation is undertaken with caution where it would limit the Agency's subsequent control of the environmental impact at a particular site. Similar caution will also be exercised by the Agency where revoking all of an operator's licences might have serious implications for secure delivery of local or national waste strategies. The Agency is preparing a common "compliance classification scheme" for launch in 2004/5. This will provide for consistent and transparent Agency responses to permit breaches and offences reflecting risk or harm to people or the environment and a consistent means of escalating action in cases of recurrent breaches at a site.</p>	

Theme	C&AG finding	C&AG recommendation	PAC recommendation	Government response (summarised)
<p>Exemptions</p>	<p>The Department recognises that controls over sites exempt from the requirement to be licensed need to be changed, for example to bring some currently exempt types of site within the scope of licensing, and to exempt others that are currently licensed, but it has taken too long for the Department to complete a review of these controls.</p>	<p>The Department should complete the review of exemptions, including the provision of a charging mechanism, so that the Agency can provide more active regulation of those sites that need it. Pending the completion of the review, the Agency should increase the work carried out to detect illegal waste disposal.</p>	<p>The Department's review of exemptions, waste licensing, and guidance to the Agency, which started in 1998, should now be completed promptly and a system of regular review of the waste regime put in place to maintain its effectiveness.</p>	<p>[Defra] will ensure that the current review of exemptions will be completed promptly and that revised regulations will be laid at the earliest opportunity. To this end, the Department published draft amending regulations for consultation on 27 June 2003. The closing date for responses is 19 September 2003. This should allow for the final regulations to be laid before Parliament by the end of 2003.</p> <p>The Department began a review of waste permitting in January 2003. A key objective of the review is to design a regime that will be sufficiently flexible to allow future changes to both activities subject to a permit and exemptions to be made promptly and effectively.</p>
			<p>The Agency should review the risks inherent in exempt sites, and implement a programme of inspection of the riskiest sites, particularly when illegal waste disposal at exempt sites has been reported to the Agency. It should encourage members of the public to report problems at all waste sites, for example through a special telephone line.</p>	<p>The current waste permitting review will include full re-examination of the principles and procedures for allowing exemptions to ensure that the regulatory controls and Agency compliance checks reflect the risks posed. The review will also consider making recommendations that will feed into a separate Departmental review of the Agency's charging regime.</p>

Theme	C&AG finding	C&AG recommendation	PAC recommendation	Government response (summarised)
Licensing	The Agency needs to look for ways of reducing the time taken to deal with licence applications. Taxpayers may end up paying for dealing with problems caused by abandoned waste sites, particularly landfill sites, because operators' financial provisions are either insufficient or unavailable.	As part of the proposed improvements to its system for processing licence applications, the Agency should develop improved targets which recognise the risk and complexity of different types of waste site, further improve the quality of its guidance to applicants and increase the use of standard licences for low risk waste sites.	The Agency's target for processing licence applications within four months of receipt may not be achievable in complex or controversial cases, but the Agency should deal with more straightforward applications within this timescale. To better assess its performance the Agency should set separate targets for processing different types of applications.	An objective of the waste permitting review is to provide a tiered approach to permitting based on the degree of regulation needed to control the risks posed by waste sites. The determination period targets for each type or tier of permitting should also reflect the risks posed and the Agency input required to control them. Pending the outcome of the permitting review the Agency will continue to streamline licensing where possible under the current regime.
		The Agency should introduce a formal periodic review of licences for fitness for purpose and compliance with current standards of waste management. The Agency should collate the results of such licence reviews centrally to monitor the quality of the population of licences.	The Agency should review its relationship with planning authorities, clarifying for the public the extent to which it will, when considering applications for waste licences, take into account factors also considered by planning authorities, such as the proximity of proposed waste sites to housing.	The relationship between local authority development control planning and Agency permitting is already covered in planning guidance on waste management issued by the Office of the Deputy Prime Minister ('PPG10'). ODPM intend to review this guidance and consult on changes. The Agency will engage fully in this review and would support the preparation of a plain English explanation for the public and others on this important but inevitably complex regulatory interface. Defra's waste permitting review will also re-assess the current requirement for full planning permission to be issued before a licence can be issued.
		The Agency should improve the standard of the information retained on its licensing files after licences have been granted, in particular the reasons for decisions and the authorisation of decisions, both to protect the Agency in the event of judicial review and to assist staff using the files in the future. The improved standards of documentation for issuing licences under the Landfill Regulations should also apply to other waste licences.	The Department should consult with the Agency and the Food Standards Agency on the need for research into the potential for fungal spores from licensed composting sites to contaminate nearby crops.	The Department has commissioned a review of the health and environmental impacts of different waste management and disposal options, including composting. Subject to the outcome of that report, the Department agree to consult the Environment Agency and the Food Standards Agency regarding the need for research into the contamination of crops by fungal spores from regulated composting operations.

Theme	C&AG finding	C&AG recommendation	PAC recommendation	Government response (summarised)
<p>Abandoned sites and financial provision</p>	<p>Taxpayers may end up paying for dealing with problems caused by abandoned waste sites, particularly landfill sites, because operators' financial provisions are either insufficient or unavailable.</p>	<p>As part of the proposed improvements to its system for processing licence applications, the Agency should develop improved targets which recognise the risk and complexity of different types of waste site, further improve the quality of its guidance to applicants and increase the use of standard licences for low risk waste sites.</p> <p>In conjunction with the Department, the Department of Trade and Industry, and the industry, the Agency should establish what changes in the law should be proposed to achieve a more secure system of financial provision for waste sites where, for example, operators go into liquidation or disclaim the waste licence.</p>	<p>The Department should discuss with the Department of Trade and Industry whether the Agency should be given preferential creditor status so that if an operator becomes bankrupt, funds remain available for future maintenance of closed waste sites.</p>	<p>Making debts owed to the Environment Agency preferential would not guarantee that funds would actually be available for future maintenance of closed waste sites. In many insolvencies there are no, or insufficient, assets to enable any payment to be made to preferential creditors. In the case of non-landfill sites, the Agency has already introduced new financial provision arrangements with effect from July 2003. These are based on widespread and standard financial checks for businesses and do not depend on any secured sum which could be at risk in the case of insolvency. In the case of landfill sites, the Department is developing an options paper in discussion with the Agency, industry and other government departments. The aim of the paper is to identify and consider all the options for resolving the difficulties with respect to financial provision for landfill sites as required by the Landfill Directive. The paper will be completed by September 2003 and will identify the best way forward.</p>

Appendix 5

Glossary

Biodegradable Municipal Waste (BMW)	Waste under the responsibility of a local authority capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, and paper and paperboard.
Civic Amenity Site	Sites provided by the local authority for the public to drop off household and municipal solid waste.
Clinical waste	Healthcare waste such as blood, tissue, needles, soiled dressings, drugs etc which is infectious or could cause harm in some other way.
Commercial waste	Waste arising from premises used for trade, business, recreation or entertainment, excluding municipal and industrial waste.
Composting	A process where biodegradable material (such as garden and kitchen waste) is converted, in the presence of oxygen from the air into a more stable, granular material, which if applied to land, enriches the nutrient content.
Construction and demolition waste	Waste arising from the construction, repair, maintenance and demolition of buildings and structures. Consists of concrete, brick, hardcore, subsoil, timber, metal and plastics.
Defra	Department for Environment, Food and Rural Affairs.
Exemption	A waste management operation registered, but not licensed, with the Environment Agency.
Fly-tipping	Commonly is used to describe larger amounts of waste left on land than litter. It is usually a pre-meditated act rather than the thoughtless act of littering.
Hazardous waste	Defined by EU legislation as the most harmful wastes to people and the environment and is any waste on the European Hazardous Waste List. Termed as "special waste" by the Environmental Protection Regulations 1996.
Household waste	Domestic waste from household collections, waste from services such as street sweepings, bulky waste collection, litter collection, garden waste collection, waste from civic amenity sites and wastes collection for recycling through kerbside and bring or drop-off schemes.
Illegal waste activity	The unlicensed deposition of waste (e.g. fly-tipping or illegal dumping) or the breach of licence conditions.
Incineration	The burning of waste at high temperatures to reduce its volume or its toxicity. Some Municipal Solid Waste incinerators recover heat and/or power.
Industrial waste	Waste from any factory or industrial process (excluding mines and quarries).
Inert waste	Chemically inert, non-combustible, non-biodegradable and non-polluting waste.
Integrated Pollution Control (IPC)	A system used to ensure best available cost not entailing excessive costs are used to prevent or reduce emissions from the most polluting industrial processes. IPC has been superseded by Pollution Prevention and Control (PPC).
Landfill	Licensed facilities where waste is permanently deposited for disposal.
Landspreading	Recovering waste by spreading on land primarily for agricultural benefit, for example, sewage sludge and waste from the paper pulp industry.

Land reclamation	Modifying a land area into a desired state.
Land use planning	The development planning system that regulates the development and use of land in the public interest.
Leaching	The process by which soluble matter is dissolved in groundwater and carried downward and radially through the soil.
Litter	Small pieces of rubbish that have been left lying on the ground in public places.
Municipal solid waste (MSW)	Household waste and other waste such as from parks and gardens, beaches, and any other waste for which a local authority takes responsibility.
OPRA	Operational Pollution Risk Assessment
Producer Responsibility	Scheme which requires businesses involved in the manufacture, distribution and sale of particular goods to take more responsibility for the disposal and recovery of those goods at the end of their life.
Pollution Prevention and Control (PPC)	The successor to Integrated Pollution Control (IPC) with wider coverage, covering whole industrial installations rather than processes.
Polychlorinated Biphenyl (PCB)	An industrial chemicals, valuable for its fire-resistant qualities. It constitutes an environmental hazard because of its persistent toxicity.
Recycling	The reprocessing of waste, either in to the same or different material. Commonly applied to non-hazardous waste such as cardboard, paper, glass, plastics and metals.
Reduction	Reducing the quantity of waste produced from a process.
Re-use	Using materials or products again for the same or a different purpose without material reprocessing (e.g. the re-use of glass milk bottles).
River catchment	The area of land bounded by watersheds draining into a river.
Special waste	Up until recently, the term use in the UK to describe hazardous waste.
Remediation	The treatment or clean up of a contaminated area.
Sustainable Development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
TFS	Transfrontier Shipment.
Unitary Development Plans	Plans which set out the land use policies and requirements for local authorities.
Waste management industry	The businesses involved in the collection and management of waste.
Waste Management Licensing	Licensing system administered by the Environment Agency to ensure that waste management activities are carried out in a way that do not harm the environment and human health.
Watershed	The dividing line between two adjacent river systems, such as a ridge.