

Consultation on site waste management plans for the construction industry

April 2007

www.defra.gov.uk

Department for Environment, Food and Rural Affairs
Nobel House
17 Smith Square
London SW1P 3JR
Telephone 020 7238 6000
Website: www.defra.gov.uk

© Crown copyright 2007

Copyright in the typographical arrangement and design rests with the Crown.

This publication (excluding the royal arms and departmental logos) may be re-used free of charge in any format or medium provided that it is re-used accurately and not used in a misleading context. The material must be acknowledged as crown copyright and the title of the publication specified.

Information about this publication and further copies are available from:

Defra
Waste Management Division (SWMP)
Zone 6/F7Ashdown House
123, Victoria Street
London
SW1E 6DE

Tel: 020 7082 8770

Email: sitewaste@defra.gsi.gov.uk

This document is also available on the Defra website.

Published by the Department for Environment, Food and Rural Affairs

Ministerial Foreword

The increasing number of construction projects up and down the country are indicative of a healthy, growing economy. But all this comes at a price.

The UK's construction output is the second largest in the EU. The industry uses a tremendous amount of raw materials, much of which ends up as waste. Each year, 400 million tonnes of solid materials are used in the UK construction industry, but only two-thirds is added to the building stock. The rest is sent directly to landfill.

We are also concerned about the small but increasing amount of construction waste that is illegally dumped or fly-tipped. Rising levels of waste crime are stopping us from achieving a sustainable construction sector, and rising numbers of fly-tips around the country, many of which are made up of construction and demolition waste, adversely affects the quality of life in many communities. The temptation for a minority to act outside the law may increase as regulations tighten, traditional waste disposal facilities reduce in number while costs of legitimate waste management go up. Companies may find themselves inadvertently becoming involved in waste crime. There is a greater need for people and businesses to protect themselves.

This Government is tackling waste crime through a number of different ways. Our Waste Crime Strategy aims to ensure better prevention, detection and enforcement of waste crime. We are also doing what we can to ensure that waste producers and others handling waste take more responsibility for having their waste legally managed. It is no longer acceptable to simply assume that the person or company taking your waste away is reputable and will take it to the right place, as we know that many are not. We want to close down the market for these illegal operators by helping waste producers to make sure they know where their waste is going and that their waste management contractors are dealing with the waste in a responsible way.

About one fifth of all fly-tipped waste is construction and demolition waste. About one third of the bigger and nastier incidents dealt with by the Environment Agency involve construction and demolition waste. There is also anecdotal evidence of more and more organised gangs being involved in fly-tipping this type of waste, particularly in the South East of England. To help tackle this specific problem, the Government included powers in the Clean Neighbourhoods and Environment Act 2005 to make regulations requiring those responsible for construction projects above a specified value to prepare plans to manage their waste before work begins on site and to implement them during the work. Site waste management plans should also help the construction industry to get maximum value out of its waste before considering disposal and to make better use of resources. Site waste management plans will also allow the sector to demonstrate compliance with existing waste regulatory controls. This consultation is on the draft regulations that will make the requirement a reality.

Much of the construction industry is already reaping the benefits of other Government initiatives that are designed to improve resource efficiency and drive down the amount of and cost of disposal of waste at landfill sites. This new measure is designed to complement those initiatives and to help those who have not yet raised their game to compete on a level playing field.

Regulation is not, and should not be viewed as, the only solution to promoting compliance and changing behaviour. This consultation not only seeks your views on site waste management plans, but also on how the construction industry can improve its awareness of its responsibilities and be encouraged to behave accordingly.

I look forward to receiving your comments.



Ben Bradshaw MP
Minister for Local Environment, Marine and Animal Welfare

Contents

Part 1 – Summary of proposals	1
1.1 What is being consulted on?	1
1.2 How can I contribute?	1
1.3 How to respond to this consultation	2
1.4 What is a SWMP?	2
1.5 Why are SWMPs necessary?	5
1.6 Why should SWMPs be made a statutory requirement?	6
1.7 Will the proposals be taken forward?	7
1.8 When are the comments required by?	7
Part 2 – Background	8
2.1 The context	8
2.2 The solution	9
2.3 Attitudes to waste	10
Part 3 – Statutory site waste management plans – discussion of key criteria	10
3.1 Which construction projects should require a SWMP?	10
3.2 Determining the minimum value	12
3.3 Level of detail	12
3.4 Responsibility for writing and implementing a SWMP	16
3.5 How should SWMPs be monitored or regulated?	17
3.6 Offences and penalties	18
Part 4 – Publicising and reviewing the scheme	19
4.1 Existing awareness	19
4.2 Publicising the scheme	19
4.3 Reviewing the scheme	20
Part 5 – Regulatory impact assessment	20
5.1 Summary of key findings	20
Part 6 – Consultation and next steps	21
Part 7 – Summary of questions asked	21

Annex A – Draft regulations	24
Annex B – Regulatory impact assessment	33
Annex C – Confidentiality and complaints	53
Annex D – List of consultees	54

Part 1. Summary of Proposals

1.1 What is being consulted on?

This consultation paper invites views on proposals to make site waste management plans (SWMP) a legal requirement for construction and demolition projects in England. A similar consultation is expected to be published in Wales later this year. The regulations would require appropriate persons to prepare and implement a SWMP for works involving construction, demolition or excavation above a specified value. Construction includes all forms of building, civil engineering, refurbishment and maintenance work.

The Government is seeking views on its proposed approach to implementing SWMPs and invites comments on its assessment of the likely benefits and costs. Further details of what we are proposing are included in the draft regulations and the partial Regulatory Impact Assessment (RIA) that are attached to this paper.

The consultation builds on proposals that were considered by an informal working group whose membership included other government departments, local authorities, the Environment Agency, and construction and demolition industry organisations. A workshop was held in London in September 2005 followed, in November, by two further workshops in Wales. These initial discussions suggested some industry support for a statutory SWMP requirement with proportionate regulation to ensure a level playing field. Strong industry support was also expressed during a more recent series of seminars that were arranged by Envirowise between December 2006 and February 2007.

This formal consultation will be supported by further stakeholder workshops that will run during the consultation period.

1.2 How can I contribute?

There are several detailed questions in the consultation package and the Government would appreciate responses to them. These questions relate to the following three key issues on which your comments and views would be particularly welcome:

Q1. Do we need regulations for SWMPs or should the existing voluntary approach continue, perhaps with greater promotion?

Q2. If you agree that regulation is necessary or desirable, what should be the minimum criteria above which a construction project will require a SWMP?

Q3. What level of detail should be required in a SWMP?

Q4. How should the requirements in a SWMP further improve the level of resource efficiency in the construction industry?

1.3 How to respond to this consultation

The commencement date of this consultation is Monday, 2 April, 2007 and it will close on Monday, 9 July, 2007. Written responses to inform the Government on these proposals should be sent to:

SWMP Consultation
Defra
6/F7 Ashdown House
123 Victoria Street
London SW1E 6DE

Tel. No.: 020 7082 8770
Fax: 020 7082 8764
E-mail: sitewaste@defra.gsi.gov.uk

When responding please state whether you are responding as an individual or representing the views of an organisation. If responding on behalf of an organisation, please make it clear who the organisation represents, and where applicable, how the views of members were assembled.

1.4 What is a SWMP?

A SWMP is simply a plan that details the amount and type of waste that will be produced on a construction site and how it will be reused, recycled or disposed of. The plan is then updated during the construction process to record how the waste is managed and to confirm the disposal of any materials that cannot be reused or recycled at a legitimate site.

SWMPs aim to improve resource efficiency within the construction industry in order to reduce the amount of waste produced and recover as much as possible of the remainder. They will achieve this in two ways: firstly, by requiring those responsible for projects to forecast how much of each type of waste they will produce and to record how much will be reused or recycled; and secondly, by building on the savings in material and disposal costs already secured, to promote the opportunities of preventing or minimising waste at source, i.e. through resource efficient design and construction methods.

SWMPs will also help to prevent rising levels of waste crime and reduce fly-tipping. Those responsible for implementing the plans will need to make sure they know the intended destination of waste removed from the site, that their waste is being managed by legitimate registered waste carriers and, as far as is possible, that their waste is managed responsibly

and in line with waste management controls. This should help to close down the market for illegal operators who might otherwise be involved in fly-tipping construction and demolition waste.

SWMPs should simplify the administrative burden on the construction sector by providing a mechanism for ensuring compliance with all existing legal requirements. This single plan will hold all the documentary evidence needed to comply with the duty of care, hazardous waste, waste carrier and waste broker controls. The process of writing and implementing a SWMP will formalise a number of project management tasks that should already be carried out, but will shift the focus of this work towards achieving resource efficiency.

The construction companies that are most likely to notice an additional administrative burden are those whose paper trail for waste transactions is less well managed. SWMPs will provide the stimulus to improve record management resulting in a clear audit trail of regulatory compliance. This should secure longer term administrative savings both to the company through more efficient operating methods and any regulator checking the paperwork.

The partial Regulatory Impact Assessment outlines further details of the potential costs and benefits that might be associated with this proposal. The table below however summarises the costs and benefits of implementing SWMPs, based on data collected by the Buildings Research Establishment. It is on the basis of this table that one of the proposals made in this consultation document is that the minimum qualifying value should be set at £250,000.

Survey of projects voluntarily adopting SWMPs - costs and benefits

Project value (band)	Assumed average project value	Estimated cost of writing and implementing a SWMP	Estimated benefit from writing and implementing a SWMP
< £100,000	£70,000	£350	£210
> £100,000	£150,000	£500	£450
> £200,000	£250,000	£750	£750
> £300,000	£400,000	£1,000	£1,200
> £500,000	£1,600,000	£1,600	£4,800
Weighted average	£1,300,000	£1,400	£3,900

Source: Building Research Establishment survey for the Code for Sustainable Homes

Q5. Will SWMPs reduce the administrative burden or increase it? What might the cost of implementing SWMPs be and how would this affect your existing levels of paperwork?

The plans will also help the sector to demonstrate, for instance, to local planning authorities, that they are complying with principles of sustainable construction. The Planning Policy Statement PPS10 promotes SWMPs by stating that 'proposed new development should be supported by site waste management plans of the type encouraged by the code of practice published by the DTI' (the forerunner to this legislative proposal). This policy is being taken forward in Supplementary Planning Guidance in various local authorities, for example in East Sussex.

SWMPs support a wide range of strategies and reviews that promote resource efficiency and waste minimisation. For example, the Code for Sustainable Homes (CSH) advocates SWMPs as one of five elements for which minimum standards are set if a home is to meet Code standards.

The Waste Strategy Review (England) 2006 consultation cited both the CSH and SWMPs as key policy instruments for improving construction resource efficiency. Responses, as well as suggesting practical methods for minimising waste, supported the development of SWMPs as a statutory requirement.

SWMPs are also central to the delivery of Government's waste crime strategy. The strategy aims to combat the problem of fly-tipping through a range of measures that encourage a pro-active approach to prevention. Development and delivery of the waste crime strategy should lead to a significant improvement in the quality of our public space and the quality of people's lives. SWMPs should help to close the market for illegal waste operatives by helping to ensure that those in charge of construction projects only pass their waste onto legitimate waste contractors and ensure, as far as possible, that the waste reaches its intended destination. They should also assist in providing an audit trail of what happens to the waste which in turn should help to investigate and tackle any suspected waste crime incidents.

Defra is undertaking a separate review of the existing regulatory controls on the waste duty of care, waste carriers and waste brokers, to establish how and whether these regimes might be improved. This review is not discussed in this consultation paper, but can be accessed via <http://www.defra.gov.uk/corporate/consult/waste-controls/index.htm>.

Finally, SWMPs should help to reduce the level of accidents in the construction industry. There is a well established link between the safer storage of materials on site and a reduction in reported accidents. SWMPs will encourage waste segregation and suitable storage that not only allow materials to be more easily recovered, but will in turn result in a more ordered, safer working environment.

1.5 Why are SWMPs necessary?

In England and Wales, the construction sector uses some 400 million tones of materials each year and generates an estimated 109 million tonnes of waste. It is estimated¹ that 13% of all materials delivered to site go into skips without ever being used. The potential for greater resource efficiency is therefore considerable.

Construction and demolition waste currently accounts for about one-fifth of all reported fly-tipping incidents and about a third of the more serious incidents dealt with by the Environment Agency. Fly-tipping and other forms of waste crime are rising and impacts on the environment, the amenity of local areas and sometimes human health are increasing. As the rewards involved in illegal activity become more lucrative, there is growing evidence from Environment Agency case files of greater involvement by organised criminals, especially in the major cities like Greater London where there is a specific issue with construction and demolition waste. Illegal activity undermines and undercuts legitimate business and these are all reasons why tackling waste crime in all its forms is a high priority for the Government.

We know from speaking to industry groups during the development of these draft regulations that offenders typically fall into two categories. Sub-contractors working for a principal contractor on significant projects and smaller, self-employed builders. One of the key changes that SWMPs will bring is that responsibility for ensuring compliance with legal requirements will be placed at the top of the chain, i.e. with the client and the principal contractor. They will be responsible for ensuring that all the sub-contractors employed on a site are aware of and comply with important waste management controls. SWMPs will also help to protect clients and principal contractors from becoming inadvertently involved in illegal activity. As a result of the minimum qualifying value, smaller builders responsible for projects under £250,000 in value will not be subject to these new regulations, but they will continue to be subject to the duty of care and the review mentioned above will put forward proposals to help minimise further illegal activity from this group.

We also know from independent research² that lack of awareness of environmental legal requirements is one of the key issues that leads to a lack of compliance. SWMPs should help to overcome this issue. Plans will also support one of the key aims of the Government's waste crime strategy to prevent fly-tipping from happening in the first place, rather than spending public money on expensive enforcement and clear-up.

¹Source: CIRIA compliance website

² "Fly-tipping: Causes, Incentives and Solutions", Webb et al, UCL, 31 May 2006 and "An evidence based evaluation of how best to secure compliance with health and safety law", Wright, Antonelli, A., Doyle, J.N., Bendig, M, and Genna, R (2005) - HSE research report 334

It is worth bearing in mind the current cost of clear-up alone from current levels of fly-tipping. Data from Flycapture in 2005-2006 (the national fly-tipping database) show that local authorities and the Environment Agency are currently spending £50 million a year in clearance costs alone. In Wales the cost of clean-up is £2 million each year. Once the clearance costs to private landowners and the enforcement costs associated with investigating and prosecuting offenders are included, the real costs could be as high as £100 million a year.

1.6 Why should SWMPs be made a statutory requirement?

In July 2004, SWMPs were first introduced to the construction industry as a voluntary code of practice. The voluntary code has been reasonably widely adopted but case studies and research suggests that this has been predominantly by top-end companies valued by turnover (see 4.1 Existing Awareness). The knowledge that the Government intended to regulate in this area (powers were included in the 2005 Clean Neighbourhoods and Environment Act) has also driven the up-take of the voluntary requirement. But there appears to be a lot of smaller sized companies that have not yet been engaged. The voluntary code is currently little more than a check-list that reminds people to check certain issues. Whether or not that person makes those checks or changes anything as a result is for that person to decide.

Q6. It has been suggested that more active promotion or expansion of the voluntary scheme might achieve the same objectives as regulation and the Government would be interested to receive views on this suggestion. In particular, how great might the take-up be? How could the Government target the smaller companies? Would greater take-up of a voluntary scheme lead to real changes within the industry?

Defra believes, based on its informal consultations, that the key advantages of making SWMPs a statutory requirement are: to tighten controls to eliminate fly-tipping; to allow companies to monitor their waste arisings and seize opportunities to minimise or recycle; and to ensure a level playing field with legitimate waste operatives and savings from improved resource efficiency.

So SWMPs are not just about writing a plan. They will provide an opportunity for the construction industry to change its attitude to waste so that it becomes an important issue to tackle that can result in real cost savings. They will also help to push the issue up the management chain and ensure that senior management takes waste management seriously.

The greatest savings are likely to be secured by those projects that seek to minimise waste at the design stage and then use their SWMP to consider any residual waste as a resource that might be used again.

Unnecessary waste can also be avoided by providing appropriate materials storage and avoiding extended storage periods through just-in-time delivery schedules.

SWMPs will strengthen the existing duty of care and waste carrier registration regimes by requiring a full paper trail of all waste transfers and reconciling this against what was planned. This will raise the profile of waste planning and ensure that any waste produced on a construction site is dealt with responsibly.

By requiring construction projects to set targets for the reuse and recycling of waste produced on site, SWMPs will highlight the opportunity for minimising waste before this process even begins.

This proposal to make SWMPs a statutory requirement builds upon the existing voluntary code of practice, the experience of those who have already adopted SWMPs and the range of initiatives aimed at improving resource efficiency and waste minimisation within the construction industry.

As well as eliminating fly-tipping and providing a level playing field, SWMPs will help companies to achieve administrative savings by helping them to comply with other requirements including now supplementary planning guidance and sustainable construction objectives.

1.7 Will the proposals be taken forward?

The Government and, assuming a consultation follows in Wales, Welsh Assembly Government will consider the responses received to this consultation and will use them to further develop the proposals. All comments in relation to the proposals, the draft regulations and the partial Regulatory Impact Assessment are welcome. Depending on the consultation outcome, regulations could come into force in April 2008.

1.8 When are comments required by?

Comments are required by Monday, 9 July, 2007.

2. Background

This document outlines the options in England for introducing site waste management plans as a statutory requirement for construction and demolition projects. A consultation on similar regulations for Wales is likely to be published later this year. The background to this proposal, and the more effective approach to resource management that should precede it, are outlined in more detail in this chapter.

Further details on the regulatory impact of this proposal and how it relates to other Government work to address waste management, waste crime and fly-tipping of construction waste are given in the partial Regulatory Impact Assessment (RIA).

2.1 The context

Tackling rising levels of waste crime and waste fly-tipping is a high priority for the Government. We have a manifesto commitment to introduce further measures to tackle fly-tipping and other forms of environmental crime. This commitment is also part of Defra's waste and fly-tipping strategies and its Local Environmental Quality Action Plan, DCLG's Cleaner, Greener, Safer agenda and the Home Office's Respect Agenda.

We know from our growing evidence base that there are many and varied causes of fly-tipping and waste crime and that different measures are needed to tackle these. Household waste is the largest type of waste that is fly-tipped, and the majority of the measures included in the Clean Neighbourhoods and Environment Act 2005 are intended to target this group of offenders and the small-scale fly tipping done by them.

The second highest type of waste fly-tipped is commercial and industrial waste and the separate review of controls on the duty of care, waste carriers and waste brokers is intended to help deal with this aspect, along with some of the other policy initiatives being considered as part of the waste strategy.

Excluding household waste, construction and demolition waste is the third most significant type of waste that is fly-tipped and proposals for statutory SWMPs have been developed over the last few years as a way of helping to deal with issues in this area.

Following consultation, the Government took powers in section 54 of the Clean Neighbourhoods and Environment Act 2005 to make regulations introducing SWMPs as a statutory requirement. This consultation attaches a copy of draft regulations made under that section and invites comments on them.

As well as tackling fly-tipping, this measure aims as an additional benefit to improve resource efficiency within the construction sector. Although the sector makes a significant contribution to the economy it is estimated that some 13 percent of construction materials each year are delivered to sites, but never used, instead being consigned to landfill. This impacts both on the profitability of the sector and its reputation in terms of sustainability.

SWMPs will therefore target two key issues; the level of resource efficiency within the construction industry and the responsible management of any waste that is produced. Whilst the statutory requirement will focus on actions to reuse or recycle waste produced on site, non-statutory guidance will highlight the opportunities presented for improving resource efficiency before site waste planning begins.

The SWMP process also allows construction projects to review their performance against projected waste targets. Methods that successfully reduced waste can then be applied to future projects, allowing cost savings to increase over time.

The partial RIA explores these issues in further detail, considering other Government controls and initiatives to improve waste management, reduce waste crime and target fly-tipping.

Q7. How can we be sure that SWMPs meet the joint objectives of encouraging better resource efficiency and reducing waste crime? Have we got the level of intervention right, or should we do more or less?

Q8. It is estimated that each year some 13 percent of materials delivered to construction sites are disposed of as waste. Comments are welcome on the likely composition of this waste, why it is produced, its value and the extent to which it is recoverable.

2.2 The solution

The proposed draft regulations suggest the following SWMP procedure becomes part of the routine planning and execution of projects.

At the design conception and planning stage, companies will be encouraged to consider the waste that their project is expected to produce and to adapt the design and material specifications to address this. For example, waste-efficient approaches such as adapting designs to standard material sizes, e.g. plasterboard, or specifying the return of reusable packaging materials to suppliers will be encouraged.

They will then need to determine which types of waste will be produced on site and for waste each type, whether, how and how much of the total quantity might be reused or recycled. This will include demolition and excavation waste.

In compliance with the legal duty and before work begins on site, the client or the main construction company will need to sign up and commit the construction project to the principles of the waste duty of care regime, i.e. to take full responsibility for the waste they produce up to its ultimate recovery or disposal. This will ensure that waste is properly managed and will close down the market for any illegal operators. Although not a statutory requirement, tying contractors to their waste duties and actively implementing the plan will secure buy-in. During the tendering process, we suggest that waste management requirements set out in the SWMP should be incorporated into contracts, ideally with payment tied to achieving these objectives. We are also recommending that when contractors are brought on to site, their responsibilities under the SWMP should be explained and passed on to subcontractors appropriately.

The SWMP will need to be kept up to date with actual quantities of waste arising, for example, by recording information included on waste transfer notes against expected waste quantities. SWMPs may be subject to inspection by regulatory bodies so it will be important that the Plan reflects the true picture.

Savings made and lessons learned from the SWMP process should help to improve the resource efficiency of construction companies in planning future projects.

2.3 Attitudes to waste

SWMPs are one of a number of measures that will help the construction industry to improve its performance on waste and encourage a more efficient use of materials. By minimising waste wherever possible and then considering it as an opportunity and not an inevitable cost, the construction sector will benefit financially and the impact on the environment will be reduced.

3. Statutory Site Waste Management Plans – discussion of key criteria

This chapter discusses the key criteria that will determine how widely SWMPs will apply, the level of detail to be recorded and how they should be monitored.

3.1 Which Construction Projects should require a SWMP?

This section considers which criteria should be used to determine whether a project should require a SWMP and what should be the minimum value.

To begin with a suitable definition of 'construction' is needed. Section 54 of the Clean Neighbourhoods and Environment Act 2005 refers to plans for

the management and disposal of waste created in the course of specified descriptions of works involving construction or demolition. In order to capture both these categories of work and the full range of construction activities that might generate waste, it is suggested that the definition from the Construction Design and Management Regulations 1994 might be adopted. This is set out in full in regulation 2 of the draft SWMP Regulations and includes all methods of construction, including civil engineering, modifications to existing constructions, site preparation, on-site pre-fabrication and work relating to utilities.

Q9. Does the proposed definition of construction (to which SWMPs would apply) capture the full range of construction work to which site waste management plans should apply? Should any of these activities be excluded or new ones included and, if so, why?

In order to deliver our objectives, the requirement to produce a SWMP will need to target construction projects that produce a significant quantity of waste. As the Plans will aim both to maximise the recovery of waste and to minimise waste crime, they should target both waste types that are recoverable and those that attract higher disposal costs such as hazardous or mixed hazardous wastes.

A straightforward solution might be to link the cost of a construction project to the likely quantity of waste produced. Assuming resource efficiency is more or less constant, a higher value construction project is likely produce a greater quantity of waste. However, there could be a discrepancy with demolition projects.

The value of some demolition projects is estimated on the basis that materials recovered from the site become the property of the demolition contractor; in effect a payment in kind. Such contracts could be of minimal or even zero value, and might not reflect the true quantity of waste arising. That said, by treating recovered materials as revenue, such projects are already demonstrating a high level of waste recovery so might not warrant further measures to enhance this.

An alternative measure that might better capture the quantity of waste arising could be the volume or floor area of a construction or building to be demolished. This approach would avoid the problem of accommodating inflation and regional variations in costs, although it might pose problems in terms of consistency in calculating and verifying such an estimate, and determining whether a standard approach might be needed.

It might be preferable to opt for a single measure, i.e. project value, that avoids any ambiguity in the estimation process. The estimate should be made when the work is first commissioned and should comprise the full cost of materials and labour to be employed

Demolition projects that fall below the minimum value for reasons stated above would not be expected to implement a SWMP.

Q10. What is the most practicable criteria for deciding whether a construction project requires a SWMP? What alternatives are there?

3.2 Determining the minimum value

As noted above, SWMPs need to apply to all projects that produce waste that might otherwise be recovered. They should also be proportionate to the size of a project to ensure that they do not overburden the construction industry. All construction work carries a risk of poor resource efficiency, but this does not mean that the requirement should apply to all projects, right down to minor domestic work.

The DTI voluntary code of practice adopted a minimum value of £200 000. Although this captures only 30% of all projects carried out in a given year, it affects 90% of all projects by value, so those most likely to create a significant amount of waste. This covers the majority of major waste producers without imposing a significant regulatory burden on smaller projects. However, it does not take account of the cost of compliance relative to the benefits.

Chapter four of the partial RIA compares the relative cost and benefits of writing and implementing SWMPs for a sample of companies that have already adopted them. It concludes that the breakeven point where benefits begin to exceed costs is an average project value of £250 000.

To cater for higher value projects for which a greater level of waste planning and recording requirements might apply, a second minima of £500 000 project value is proposed. Above this value a project would need to produce and implement a more detailed SWMP (see Level of Detail below).

Q11. In your view, what is the minimum value above which a Site Waste Management Plan should apply? Should further information be required for higher value projects, and if so, from what value?

Q12. Is there a risk that a construction project might be broken into smaller projects to avoid the SWMP requirement? If so, how might this be addressed?

3.3 Level of Detail

The amount of detail required in a SWMP needs to broadly reflect the value of that project and, by extension, the amount of waste and opportunities to reuse that resource.

It was suggested during our informal consultation process that it could be useful for some sort of provisional SWMP to be submitted with an application for planning permission for a project, as this would help to raise the

awareness of the requirement for SWMPs and embed the principles of a SWMP into the project from the outset. The Government considered whether this could be put as a requirement into the regulations. However, it would be difficult to do this without also making it a criminal offence if someone failed to comply with the requirement. If we did this, planning officers might then need to take prosecutions which could involve significant costs and they would need to be trained specifically in these requirements. We have therefore decided not to make it a legal requirement, but we will issue guidance when the regulations are implemented which advises clients and companies to begin thinking about the SWMP as early in the project planning as possible.

DCLG consulted last year on what documentation would be required as part of a planning application before it would be validated by a local planning authority. It was suggested in that consultation that submission of a SWMP would not be a national requirement but should be included on the supplementary local list of information required by the local planning authority before they would validate an application. Final decisions on what information should be submitted with a planning application have not yet been made.

Looking at the options for the level of detail required, these might vary between a simple tick-box recognition of waste minimisation principles through to a detailed proforma with site-specific waste reduction targets. Although the tick box approach is unlikely to engender serious engagement in the waste planning process, setting specific performance targets might place too much of a burden on the industry and result in limited success. Setting performance targets might also make resource demands on the regulator in establishing appropriate targets.

It seems that what is needed is a level of detail that makes the principal contractor consider all waste types, the options for recovering them and a clear audit trail that demonstrates where all waste taken off site is recovered or disposed of. It is therefore suggested that before work begins on site, for all projects over £250,000 a SWMP is prepared which includes the following information:

- the identity of:
 - the person who drafted the Plan;
 - the person in charge of the project; and
 - the contractor used (if there is more than one contractor, the principal contractor);
- a description of the works proposed including the:
 - location of the site; and
 - the estimated value of the project;

- a description of the waste type that will be produced in the course of the project;
- an estimate of the volume of each different waste produced;
- the waste management action proposed for each waste type ie reuse, recycling, recovery or disposal; and
- a declaration that the person in charge of the project and the principal contractor will take all reasonable steps to ensure that waste management controls eg the duty of care, will be observed.

Once work begins, we propose that certain levels of monitoring and recording will be required for projects that are over £250,000 and less than £500,000 in value. The person in charge or the contractor would need to record:

- the identity of the waste management contractor removing the waste;
 - the types of waste removed; and
 - the site that the contractor is taking the waste to.
- Within one month of the work being completed he must add to the plan—
 - confirmation that the site waste management plan has been monitored on a regular basis to ensure that work is progressing according to the plan and that the plan was updated in accordance with this regulation; and
 - a description of any lessons learnt from any differences in circumstances between the first draft of the site waste management plan and actual performance.

For projects over £500,000, some of which might last for several years, we are proposing that more details of what actually happens are required and the Plan itself is regularly reviewed. The person in charge or the contractor would need to record:

- When any waste is removed from the construction site—
 - the identity of the waste management contractor removing the waste;
 - a copy of, or reference to, the waste carrier registration of the carrier; and
 - a copy of, or reference to, the waste transfer note.
- As often as necessary to ensure that the plan accurately reflects the progress of the project, and in any event not less than every six months, he must—

- assess the plan;
- record the types and quantities of waste produced;
- record the types and quantities of waste that have been—
 - re-used on-site,
 - re-used off-site;
 - recycled for use on-site;
 - recycled for use off-site;
 - sent to recycling facility;
 - sent to waste management licence exempt site; or
 - sent to landfill site for disposal; and
- produce a further plan, if it is necessary to do so, making changes necessary to reflect the progress of the project.

- Within one month of the work being completed he must add to the plan—
 - confirmation that the site waste management plan has been monitored on a regular basis to ensure that work is progressing according to the plan and that the plan was updated in accordance with this regulation;
 - a description of any lessons learnt from any differences in circumstances between the first draft of the site waste management plan and actual performance.
 - a comparison of the estimated quantities of each waste type against the actual quantities of each waste type;
 - where relevant, drawing on any lessons learnt, an action plan to address these for the next project; and
 - an estimate of the cost savings that have been achieved by completing and implementing a site waste management plan.

Any efforts to improve resource efficiency and minimise waste during the design phase of a construction project should be described in the site waste management plan. This would simply be a statement that confirmed whether alternative, more resource efficient methods had been adopted, and if desired the degree of cost savings. This would allow the source of any cost-savings to be more easily traced as the plan would encompass the entire design-build process.

Q13. Comments are invited on the level of detail we are proposing is included and recorded on the SWMP?

Q14. What other information would it be helpful to record? Is any of the information unnecessary?

Q15. Do you agree that the cost:benefit analysis for writing and implementing a SWMP in the partial Regulatory Assessment is accurate, or do you have any further information or suggestions that might compliment or challenge the analysis?

3.4 Responsibility for writing and implementing a SWMP

To achieve the objectives of this proposal, a specific individual needs to be responsible for both writing and implementing a SWMP and therefore accountable for the activities described in it. This needs to be someone with the knowledge, competence and authority to develop a comprehensive Plan, communicated to those carrying out the work and update it as progress is made. It needs to be a competent person who is in control of planning what is going to happen and can execute those plans with sufficient authority to ensure that contractors comply with their respective roles.

In cases where the client and the principal contractor are different people or organisations, the draft regulations are proposing to make them equally responsible for compliance with the regulations. So the client would not be able to discharge any of his responsibilities to the principal contractor and the principal contractor would also be responsible for what happens on site. The definitions of client and principal contractor are based on Construction, Design and Management Regulations (CDM) 1994, which have worked well since those regulations came into force.³

We are proposing that the principal contractor's key role will be during the construction phase. This does not mean that the principal contractor has to manage the work of contractors in detail – that is the contractor's own responsibility. They will have to make sure that they themselves are competent to address any waste management issues that might arise during management of the construction phase; satisfy themselves that the contractors that they engage are competent and adequately resourced; and ensure that the construction phase is properly planned, managed and monitored, with adequately resourced, competent site management appropriate to the scale and complexity of the waste recovery and management operation envisaged.

The principal contractor will be responsible for preparing and implementing the SWMP once work has begun on site and after it has been completed. It will be the responsibility of the principal contractor to delegate individual responsibilities for waste management tasks to contractors/sub-contractors within the terms of their contract.

The person who drafts and implements a SWMP will be ultimately responsible for ensuring compliance with its content. We are suggesting therefore

that they should ensure that any contracts and subcontracts make explicit reference to relevant waste management duties described in the SWMP. The person responsible for drafting the SWMP will initially be held accountable for any waste management offences identified by way of the SWMP, but the Plan should clearly attribute responsibility for any actions concerning waste to a specific contractor or subcontractor.

Q16. Who is best placed to write and implement a SWMP? Would this identify an appropriate person in the management structure of all construction projects?

Q17. Is it reasonable to hold the person drafting and implementing the SWMP responsible for someone else's actions?

3.5 How should SWMPs be monitored or regulated?

Although construction companies will clearly benefit from adopting the SWMP approach to waste planning, there needs to be a regulatory regime in place to ensure compliance at the outset. To reflect the fact that SWMP information requirements will be related to the cost of a project, the degree of regulatory intervention and enforcement should be similarly scaled.

Whether companies comply is likely to be influenced by the additional cost of so doing and the longer term savings to be made. The delay between incurring the cost of developing waste minimisation principles or investing in new recycling methods and realising the cost savings in the longer term could present a barrier to compliance although the SWMP in itself does not impose a specific recycling target.

Alternatives to regulation such as maintaining the status quo with SWMPs as a voluntary code of practice or publicising savings achieved through best practice are less likely to achieve a level playing field, although the latter might be considered as a complimentary mechanism for improving awareness.

In line with the recommendations of the Hampton Review 'Reducing Administrative burdens: effective inspection and enforcement', the regulation of SWMPs should, as far as possible, tie in with existing regulatory checks. The level of scrutiny should also be proportionate to the amount of information available and only increased if irregularities are identified.

We are proposing that powers will be awarded to both local authorities and the Environment Agency to check SWMPs and, where necessary, to take enforcement action. The Environment Agency, in common with its role in targeting waste crime, will be able to investigate more serious cases of waste offences. These might initially have been identified by the local authority.

³ **Principal Contractors** The role of Principal Contractor (PC), introduced when CDM came into force, was built on the longstanding role of main or managing contractor and did not, therefore, require any substantial changes in industry practice. Because of this, as a role, it has worked fairly well since CDM came into force, and we have not identified any need to change it significantly. Source: CDM Consultation 2005.

The power to inspect SWMPs will be just that, a power – not a duty. This means that local authorities and the Environment Agency would have full autonomy in determining the level of resource they wish to allocate to regulating SWMPs. Defra believes that a high level of compliance with the SWMP regime will result in less fly-tipping, so the cost savings in clearing and investigating illegal waste disposal could be offset against the additional cost of inspecting the Plans.

Q18. Should SWMPs be formally regulated and, if so, on what basis and by whom?

Q19. What level of checks is reasonable in order to improve compliance?

3.6 Offences and Penalties

Offences

It is proposed that there will be a range of offences based around the failure to keep or implement a SWMP, or to assist an inspector in providing evidence relating to the SWMP. Penalties will be applied in order to discourage any repeat offence and should be scaled appropriately to reflect the value of the construction project as a proportionate disincentive.

We are proposing that it will be an offence to:

1. Fail to make or keep a SWMP (or one which fails to meet the minimum criteria)
2. Fail to produce a SWMP upon request by an authorised officer of the Environment Agency or local authority.
3. Make a false statement in a SWMP
4. Fail to assist an authorised officer of the Environment Agency or local authority in requesting supporting evidence or documentation
5. Fail to comply with, or implement the terms of a SWMP
6. Forge a SWMP

Penalties

The penalties proposed in the draft regulations are designed to act as a deterrent that is proportionate to the value of the construction project. It is proposed that persons guilty of any offence under the regulations are liable:

- on summary conviction, to a fine not exceeding the statutory maximum (currently £5,000) or to imprisonment for three months, or to both; or

- on conviction on indictment, to imprisonment for two years or to a fine, or both.

It is further proposed that the option of a Fixed Penalty Notice is available for the offence of failing to produce a SWMP if requested to do so by an enforcing officer at the time of a site visit. We are proposing the amount of the Fixed Penalty Notice is set at £300, in line with similar offences in the duty of care and waste carrier regimes.

Q20. Is the proposed range of offences appropriate for encouraging maximum compliance with SWMPs, or should other offences be considered?

Q21. Comments are welcome on the penalties suggested for these offences.

4. Publicising and reviewing the scheme

This chapter outlines proposals for how statutory site waste management plans will be publicised and reviewed and seeks views on these proposals.

4.1 Existing awareness

Since DTI launched their voluntary code of practice, awareness of SWMPs, particularly amongst larger construction companies, has been promising.

Between December 2005 and March 2006 Envirowise organised a series of 15 SWMP familiarisation workshops attended by almost 500 delegates. A subsequent telephone survey indicated that 74 out of 100 delegates had since implemented SWMPs. A further series of workshops was held between January and March 2007.

A study⁴ commissioned by the Waste Resources and Action Programme (WRAP) in 2006 found that 42% of the 420 top construction companies surveyed were either aware of the voluntary code or using their own SWMPs.

Q22. Although voluntary uptake of SWMPs amongst larger companies has been reasonable, given the potential efficiency gains it is surprising that uptake has not been higher. Are there any barriers that might explain this?

4.2 Publicising the scheme

This consultation document will act as a core awareness-raising tool for SWMPs.

⁴ Adoption of DTI Site Waste Management Plans, Databuild Ltd, research completed 10 March 2006.

It is proposed that regional workshops will be held during the consultation period in order to familiarise the construction sector with the SWMP process.

Non-statutory guidance will be issued when the SWMP regulations come into force to explain the requirements and the wider resource efficiency planning process in practical terms.

Trade associations, industry groups and regulators will also be able to publicise SWMPs through communications with their members and customers. In addition, local authorities can work with local businesses and through national and regional networks to promote the benefits of SWMPs.

Q23. Are there any other ways to encourage awareness of SWMPs and how they should be used?

4.3 Reviewing the scheme

In order to monitor whether this measure is achieving its objectives, Defra will carry out a survey to assess how widely SWMPs are being prepared, the degree of compliance with these plans and the savings achieved. The survey should question both the regulator and the regulated in order to assess the real costs and benefits achieved. This should be carried out no earlier than 2 years from the implementation date.

5. Regulatory Impact Assessment

A partial Regulatory Impact Assessment (RIA) accompanying this proposal is attached at annex B.

The main benefits of SWMPs are promoting better resource efficiency and waste management within the construction sector, resulting in significant cost savings, and a reduced impact on the environment in terms of both legally and illegally deposited waste. Costs and benefits are discussed in further detail in the partial RIA.

5.1 Summary of key findings

The RIA compares two approaches: no change, where SWMPs continue as a voluntary code of practice enhanced by training; or a statutory requirement. The legal option is divided into a range of sub-options from light touch tick-box reporting to performance target based plans. Given the need to maintain a proportionate level of reporting and regulation, a moderate level of reporting is suggested with self-imposed targets.

The cost of writing and implementing a SWMP is then considered, and this

is expected to vary depending on whether a construction company already records much of this information. Recent research for the Code for Sustainable Homes by the Building Research Establishment (BRE) suggests that the cost is typically 1% of total project costs.

A range of minimum criteria above which a SWMP would be required are then discussed. Looking at the value of a construction project (materials and labour) BRE research identified a cost:benefit break-even point for implementing a SWMP for projects valued at £250,000. If value rather than building volume is adopted as the criteria, a £250,000 minimum value is suggested, with more detailed reporting above £500,000.

Given that research into construction waste arisings and specifically the voluntary SWMP is relatively limited, comments are invited on any missing data or evidence that might further our understanding of these issues. Following the consultation it would be our intention to update the RIA in all sections as appropriate.

Q24. Do you have any comments on the broad content of the partial RIA which accompanies this consultation?

6. Consultation and next steps

This consultation document is published on the Defra website:

<http://www.defra.gov.uk/corporate/consult/construction-sitewaste/index.htm>

A list of consultees is provided at annex D.

The Government will consider the responses received to this consultation and will use them to further develop the proposals. All comments in relation to the proposals and the partial Regulatory Impact Assessment are welcome.

We will aim to publish a summary of consultation responses by Monday 10 September, 2007.

7. Summary of questions asked

Q1. Do we need regulations for SWMPs or should the existing voluntary approach continue, perhaps with greater promotion?

Q2. If you agree that regulation is necessary or desirable, what should be the minimum criteria above which a construction project will require a SWMP?

Q3. What level of detail should be required in a SWMP?

Q4. How should the requirements in a SWMP further improve the level of resource efficiency in the construction industry?

Q5. Will SWMPs reduce the administrative burden or increase it? What might the cost of implementing SWMPs be and how would this affect your existing levels of paperwork?

Q6. It has been suggested that more active promotion or expansion of the voluntary scheme might achieve the same objectives as regulation and the Government would be interested to receive views on this suggestion. In particular, how great might the take-up be? How could the Government target the smaller companies? Would greater take-up of a voluntary scheme lead to real changes within the industry?

Q7. How can we be sure that SWMPs meet the joint objectives of encouraging better resource efficiency and reducing waste crime? Have we got the level of intervention right, or should we do more or less?

Q8. It is estimated that each year some 13 percent of materials delivered to construction sites are disposed of as waste. Comments are welcome on the likely composition of this waste, why it is produced, its value and the extent to which it is recoverable.

Q9. Does the proposed definition of construction (to which SWMPs would apply) capture the full range of construction work to which site waste management plans should apply? Should any of these activities be excluded or new ones included and, if so, why?

Q10. What is the most practicable criteria for deciding whether a construction project requires a SWMP? What alternatives are there?

Q11. In your view, what is the minimum value above which a Site Waste Management Plan should apply? Should further information be required for higher value projects, and if so, from what value?

Q12. Is there a risk that a construction project might be broken into smaller projects to avoid the SWMP requirement? If so, how might this be addressed?

Q13. Comments are invited on the level of detail we are proposing is included and recorded on the SWMP?

Q14. What other information would it be helpful to record? Is any of the information unnecessary?

Q15. Do you agree that the cost-benefit analysis for writing and implementing a SWMP in the partial Regulatory Assessment is accurate, or do you have any further information or suggestions that might compliment or challenge the analysis?

Q16. Who is best placed to write and implement a SWMP? Would this identify an appropriate person in the management structure of all construction projects?

Q17. Is it reasonable to hold the person drafting and implementing the SWMP responsible for someone else's actions?

Q18. Should SWMPs be formally regulated and, if so, on what basis and by whom?

Q19. What level of checks is reasonable in order to improve compliance?

Q20. Is the proposed range of offences appropriate for encouraging maximum compliance with SWMPs, or should other offences be considered?

Q21. Comments are welcome on the penalties suggested for these offences.

Q22. Although voluntary uptake of SWMPs amongst larger companies has been reasonable, given the potential efficiency gains it is surprising that uptake has not been higher. Are there any barriers that might explain this?

Q23. Are there any other ways to encourage awareness of SWMPs and how they should be used?

Q24. Do you have any comments on the broad content of the partial RIA which accompanies this consultation?

Annex A – Draft regulations

STATUTORY INSTRUMENTS

2008 No.

ENVIRONMENTAL PROTECTION, ENGLAND

The Site Waste Management Plans Regulations 2008

Made	***
Laid before Parliament	***
Coming into force	6th April 2008

The Secretary of State, in exercise of the powers conferred by section 54 of the Clean Neighbourhoods and Environment Act 2005⁽⁵⁾, makes the following Regulation:

Citation, application and commencement

1. These Regulations may be cited as the Site Waste Management Plans Regulations 2008; they apply in England and come into force on 6th April 2008.

Meaning of “construction work” and associated terms

2. In these Regulations—

“construction work” means the carrying out of any building, civil engineering or engineering construction work and includes—

- (a) the construction, alteration, conversion, fitting out, commissioning, renovation, repair, upkeep, redecoration or other maintenance including cleaning, de-commissioning, demolition or dismantling of a structure;
- (b) the preparation for an intended structure, including site clearance, exploration and investigation (but not site survey) and the clearance or preparation of the site or structure for use or occupation at its conclusion;
- (c) the assembly on site of prefabricated elements to form a structure or the disassembly of pre-fabricated elements which, immediately before such disassembly, formed a structure;
- (d) the removal of a structure or part of a structure or of any product or waste resulting from demolition or dismantling of a structure or from disassembly of pre-fabricated elements which, immediately before such disassembly, formed a structure; and
- (e) the installation, commissioning, maintenance, repair or removal of mechanical, electrical, gas, water, sewage, compressed air, hydraulic, telecommunications, computer or similar services, but does not include the exploration for or extraction of mineral resources or activities preparatory to this carried out at a place where such exploration or extraction is carried out;

“construction project” means the process from construction design and planning through to completion of the construction work, and “project” means a construction project.

Preparation of a site waste management plan

3. (1) Any person who intends to carry out a construction project on one site with an estimated value greater than £250,000 must produce a site waste management plan before work begins.
- (2) For the purpose of this regulation the value is the total value of materials and labour for the project.
- (3) If such a project is started without a site waste management plan, the person in charge of the project and the principal contractor are both guilty of an offence.

Requirements for a site waste management plan

4. (1) A site waste management plan must identify—
 - (a) the person who drafted it;
 - (b) the person in charge of the project; and
 - (c) if there is a contractor, that contractor (if there is more than one contractor, this must be the principal contractor).
- (2) It must describe the construction works proposed, including—
 - (a) the location of the site; and
 - (b) the estimated value of the project.
- (3) It must record any decision taken before the site waste management plan was drafted on the nature of the project, its design, construction method or materials employed in order to minimise the quantity of waste produced on site.
- (4) It must—
 - (a) describe each waste type that will be produced in the course of the project;
 - (b) estimate the volume of each different waste type that will be produced; and
 - (c) identify the waste management action proposed for each different waste type, including re-using, re-cycling, recovery and disposal.
- (5) It must contain a declaration that the person in charge of the project and the principal contractor will take all reasonable steps to ensure that—
 - (a) all waste from the site is dealt with in accordance with the waste duty of care in section 34 of the Environmental Protection Act 1990⁽⁶⁾ and the Environmental Protection (Duty of Care) Regulations 1991⁽⁷⁾; and
 - (b) materials will be handled efficiently and waste managed appropriately.

Projects without a contractor

5. In the case of a project that does not use a contractor, a duty placed on the principal contractor in these Regulations must be carried out by the person in charge of the project, and that person is guilty of an offence if he fails to do so.

Updating a site waste management plan for a project of £500,000 or less

6. (1) If the project has an estimated value of £500,000 or less, whenever waste is removed from the site the principal contractor must record on the site waste management plan—
 - (a) the identity of the waste management contractor removing the waste;
 - (b) the types of waste removed; and
 - (c) the site that the contractor is taking the waste to.
- (2) Within one month of the work being completed he must add to the plan—
 - (a) confirmation that the plan has been monitored on a regular basis to ensure that work is progressing according to the plan and that the plan was updated in accordance with this regulation; and

⁽⁵⁾ 2005 c. 16.

⁽⁶⁾ 1990 c. 43.

⁽⁷⁾ S. I. 1991/2839.

- (b) a description of any lessons learnt from any differences in circumstances between the first draft of the plan and actual performance.
- (3) Failure to comply with this regulation is an offence.

Updating a site waste management plan for a project worth more than £500,000

7. (1) If the project has an estimated value greater than £500,000 the principal contractor must update the site waste management plan in accordance with this regulation.
- (2) When any waste is removed he must record on the plan—
 - (a) the identity of the waste management contractor removing the waste;
 - (b) a copy of, or reference to, the waste carrier registration of the carrier; and
 - (c) a copy of, or reference to, the written description of the waste required by section 34 of the Environmental Protection Act 1990.
- (3) As often as necessary to ensure that the plan accurately reflects the progress of the project, and in any event not less than every six months, he must—
 - (a) review the plan;
 - (b) record the types and quantities of waste produced;
 - (c) record the types and quantities of waste that have been—
 - (i) re-used on-site;
 - (ii) re-used off-site;
 - (iii) recycled for use on-site;
 - (iv) recycled for use off-site;
 - (v) sent to recycling facility;
 - (vi) sent to waste management licence exempt site; or
 - (vii) sent to landfill site for disposal; and
 - (d) if necessary produce a further plan making changes to reflect the progress of the project.
- (4) Within one month of the work being completed he must add to the plan—
 - (a) confirmation that the plan has been monitored on a regular basis to ensure that work is progressing according to the plan and that the plan was updated in accordance with this regulation;
 - (b) a description of any lessons learnt from any differences in circumstances between the first draft of the plan and actual performance;
 - (c) a comparison of the estimated quantities of each waste type against the actual quantities of each waste type;
 - (d) where relevant, drawing on any lessons learnt, an action plan to address these for the next project; and
 - (e) an estimate of the cost savings that have been achieved by completing and implementing a site waste management plan.
- (5) Failure to comply with this regulation is an offence.

Availability of the plan

8. (1) The principal contractor must ensure that a site waste management plan is kept—
 - (a) at the site office, or
 - (b) if there is no site office, at the site.
- (2) He must ensure that every contractor knows where it is kept, and must make it available to any contractor carrying out work described in the plan.
- (3) Failure to comply with this regulation is an offence.

Keeping plans

9. (1) The principal contractor must keep the site waste management plan for two years after the completion of the project at his principal place of business or at the site of the project.
- (2) Failure to comply with this regulation is an offence.

Additional duties

10. Any person who is under an obligation to produce a site waste management plan commits an offence if he fails to comply with any obligation in Schedule 1.

Obstruction

11. Any person who—
 - (a) intentionally obstructs any person acting in the execution of these Regulations;
 - (b) without reasonable cause, fails to give to any person acting in the execution of these Regulations any assistance or information that that person may reasonably require of him for the performance of his functions under these Regulations;
 - (c) furnishes to any person acting in the execution of these Regulations any information that he knows to be false or misleading; or
 - (d) fails to produce a site waste management plan (including any information relating to it) when required to do so by any person acting in the execution of these Regulations, is guilty of an offence.

False statements

12. It is an offence to make a false or misleading statement in a site waste management plan.

Forgery

13. It is an offence to forge a site waste management plan.

Penalties

14. (1) A person guilty of any offence under these Regulations is liable—
 - (a) on summary conviction, to a fine not exceeding the statutory maximum or to imprisonment for three months, or to both; or
 - (b) on conviction on indictment, to imprisonment for two years or a fine, or both.
- (2) Where a body corporate is guilty of an offence under these Regulations, and that offence is proved to have been committed with the consent or connivance of, or to have been attributable to any neglect on the part of—
 - (a) any director, manager, secretary or other similar person of the body corporate; or
 - (b) any person who was purporting to act in any such capacity, he is guilty of the offence as well as the body corporate.
- (3) In this regulation, “director”, in relation to a body corporate whose affairs are managed by its members, means a member of the body corporate.

Enforcement

15. (1) The following (“the enforcing authorities”) must enforce these Regulations—
 - (a) the Environment Agency;
 - (b) in any local government area with a principal authority, that authority;
 - (c) any district or county council;
 - (d) in the City of London, the common council.

- (2) The enforcing authority may authorise in writing persons to enforce these Regulations, and those persons have the powers in Schedule 2.
- (3) An authorisation under section 108 of the Environment Act 1995⁽⁶⁾ is an authorisation for the purposes of these Regulations.

Fixed penalties

16. (1) Where a person authorised to enforce these Regulations has reason to believe that a person has failed to produce a site waste management plan as required under these Regulations he may give that person a notice offering him the opportunity of discharging any liability to conviction for that offence by payment of a fixed penalty.
- (2) Where a person is given a notice under this regulation in respect of an offence—
 - (a) no proceedings shall be instituted for that offence before the expiry of 28 days following the date of the notice; and
 - (b) he shall not be convicted of that offence if he pays the fixed penalty before the expiry of that period.
- (3) A notice under this regulation must give such particulars of the circumstances alleged to constitute the offence as are necessary for giving reasonable information of the offence and must state—
 - (a) the period during which, by virtue of paragraph (3), proceedings will not be taken for the offence;
 - (b) the amount of the fixed penalty;
 - (c) the name of the person to whom and the address at which the fixed penalty may be paid.
- (4) Without prejudice to payment by any other method, payment of the fixed penalty may be made by pre-paying and posting to that person at that address a letter containing the amount of penalty (in cash or otherwise).
- (5) Where a letter is sent in accordance with paragraph (4), payment shall be regarded as having been made at the time at which that letter would be delivered in the ordinary course of post.
- (6) The fixed penalty payable in pursuance of a notice under this regulation is £300; and as respects the sum received by or on behalf of the enforcing authorities, those sums shall be paid to the Secretary of State.
- (7) In any proceedings a certificate which—
 - (a) purports to be signed by or on behalf of the chief finance officer of the enforcing body; and
 - (b) states that payment of a fixed penalty was or was not received by a date specified in the certificate,
 is evidence of the facts stated.

Name
Parliamentary Under Secretary of State

Date Department for Environment, Food and Rural Affairs

SCHEDULE 1

Regulation 10

Additional duties

1. He must plan, design, manage and monitor the construction phase in a way which ensures that, so far as is reasonably practicable, it is carried out without consigning as waste any materials that could otherwise be re-used, recycled or recovered on-site or off-site.

2. He must draw up and communicate to contractors 'site rules' for activities on the construction site that promote compliance with the site waste management plan.
3. He must so far as is reasonably practicable, ensure co-ordination of the work, and co-operation among contractors at work during the construction phase.
4. He must give reasonable directions to any contractor so far as is necessary to enable the principal contractor to comply with these Regulations.
5. He must receive and monitor waste carrier registration details and waste transfer notes to ensure that waste removed from the site is transferred to the prescribed destination and is managed in accordance with the site waste management plan.
6. He must ensure that a copy of the site waste management plan is displayed in a readable condition in a position where it can be read by any worker engaged in the construction work.
7. He must ensure so far as is reasonably practicable that every worker carrying out the construction work is provided with—
 - (a) suitable site induction; and
 - (b) any further information and training which he needs for the particular work to be carried out within the terms of the site waste management plan.
8. He must review, revise and refine the site waste management plan as necessary.
9. He must in preparing, reviewing, revising and refining such a plan ensure that any changes in respective roles and responsibilities are clearly communicated to those affected.
10. He must make and maintain arrangements which will enable him and the workers engaged in the construction work to co-operate effectively in promoting and developing measures to ensure that any waste arising on site is managed within the terms of the site waste management plan and in checking the effectiveness of such measures.
11. He must take reasonable steps to ensure that sufficient site security measures are in place to prevent the illegal disposal of waste produced elsewhere.

SCHEDULE 2

Regulation 15

Powers of the enforcing authority

PART 1

Powers of entry

Powers of authorised person

1. (1) For the purposes of enforcing these Regulations an authorised person may—
 - (a) carry out any examination or investigation;
 - (b) direct that premises that he has powers to enter or anything in them, must be left undisturbed for so long as is reasonably necessary for the purpose of any examination or investigation;
 - (c) take measurements, photographs or recordings;
 - (d) require the production of records or extracts of records and inspect and take copies of such records or extracts;
 - (e) require any person to afford him facilities and assistance in relation to matters within the control or responsibility of that person;
 - (f) require any person to give any assistance or information that the authorised person may reasonably require of him (in the absence of any other person if requested by the person giving the information) and to sign a declaration of the truth of his answers.
- (2) It is an offence to fail to comply with a direction or requirement given under this paragraph.

⁽⁶⁾ 1995 c.25.

Power to enter premises

2. (1) An authorised person—
 - (a) may enter any premises for the purposes of ensuring that the provisions of these Regulations are being complied with; and
 - (b) must produce, if so required, a document showing his authority.
- (2) The power may be exercised—
 - (a) at all reasonable hours; or
 - (b) in an emergency, at any time and if need be by reasonable force.
- (3) An authorised person may take with him—
 - (a) a constable;
 - (b) any equipment or materials required for any purpose for which the power of entry is being exercised (except that he may only take with him heavy equipment under the authority of a warrant);
- (4) An authorised person entering unoccupied premises shall leave them as effectively secured against unauthorised entry as he found them.
- (5) Except in an emergency, admission to any premises used only as a private dwellinghouse shall not be demanded as of right unless seven days notice of the intended entry has been given to the occupier or apparent occupier, and the entry is in accordance with a warrant.
- (6) The reference to “premises” in relation to powers of entry includes any—
 - (a) place;
 - (b) vehicle or trailer;
 - (c) container;
 - (d) stall or moveable structure;
 - (e) ship or aircraft.

Warrants

3. (1) If a justice of the peace, on sworn information in writing, is satisfied—
 - (a) that there are reasonable grounds to enter any premises; and
 - (b) that any of the conditions in paragraph (2) are met,he may by warrant signed by him authorise an authorised person and any other person to enter the premises, if need be by reasonable force.
- (2) The conditions are—
 - (a) admission to the premises has been refused, or a refusal is expected, and in either case that notice to apply for a warrant has been given to the occupier;
 - (b) asking for admission, or the giving of such a notice, would defeat the object of the entry;
 - (c) entry is required urgently;
 - (d) the premises are unoccupied or the occupier is temporarily absent.
- (3) A warrant shall continue in force for one month.
- (4) Reference to a justice of the peace—
 - (a) in Scotland includes a sheriff; and
 - (b) in Northern Ireland is a reference to a lay magistrate.

Powers on entry of premises

4. (1) In addition to his general powers in paragraph 1, an authorised person who has entered any premises in accordance with these Regulations may (either himself or at his direction)—
 - (a) take samples;
 - (b) after consulting such persons as appear to him to be appropriate to ascertain what dangers may be involved, dismantle any thing that appears to cause pollution, or subject it to any process or test, but not so as to damage or destroy it unless this is necessary;
 - (c) take possession of and detain any thing for so long as may be necessary—
 - (i) in relation to the exercise of any other powers under these Regulations;
 - (ii) to ensure that it is not tampered with before its examination is complete; or
 - (iii) to ensure that it is available for use in any proceedings;
 - (d) carry out experimental borings;
 - (e) install, keep or maintain monitoring and other apparatus there.
- (2) An authorised person shall avoid destruction or damage to the premises or things within it unless that is necessary in the reasonable exercise of his powers.

PART 2

Notices

Information notices

5. (1) The enforcing authority may, by notice (an “information notice”) served on any person, require that person to furnish such information as is specified in the notice, in such form and within such period following service of the notice or at such time as is so specified.
- (2) It is an offence to fail to comply with an information notice.

Enforcement notices

6. If the enforcing authority is of the opinion that a person has contravened, is contravening or is likely to contravene the restriction in regulation 3, the enforcing authority may serve on him a notice (an “enforcement notice”).

Contents of an enforcement notice

7. (1) An enforcement notice shall—
 - (a) state that the enforcing authority is of that opinion;
 - (b) specify the matters constituting the contravention or the matters making it likely that the contravention will arise, as the case may be;
 - (c) specify the steps that must be taken to remedy the contravention or to remedy the matters making it likely that the contravention will arise, as the case may be; and
 - (d) specify the period within which those steps must be taken.
- (2) It is an offence to fail to comply with an enforcement notice.

Withdrawal of an enforcement notice

8. The enforcing authority may withdraw an enforcement notice at any time.

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations require any person intending to carry out a construction project with a value greater than £250,000 to prepare a waste management plan.

The plan must be updated in accordance with the Regulations, with different requirements depending on whether the value of project is greater than £500,000.

The Regulations are enforced by the Environment Agency and the local authority.

Breach of the Regulations is an offence punishable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum or to imprisonment for three months, or to both, or
- (b) on conviction on indictment, to imprisonment for two years or a fine, or both.

A full regulatory impact assessment of the effect that this instrument will have on the costs of business and the voluntary sector is available on the Defra website.

Annex B. Partial regulatory impact assessment

(1) Title of proposed measure

Regulations that require appropriate persons to prepare and implement a 'site waste management plan' (SWMP) for works involving construction⁹ or demolition. The enabling provision is chapter 3, section 54 of the Clean Neighbourhoods and Environment Act 2005.

Objective: To improve resource efficiency within the construction industry to minimise waste, and to encourage responsible waste management to reduce waste crime.

1. The process of preparing and implementing a SWMP should embed waste minimisation principles into the project design process and identify opportunities for reusing or recycling waste before it is produced on site.
2. For any residual waste that needs to be transported off site, responsible waste management will be secured as the 'appropriate person' charged with writing and implementing the SWMP will be ultimately responsible for its disposal or recovery at an authorised site. The proposed regulations for SWMPs will push responsibility for legitimate waste management up the hierarchy, placing these requirements at the client or principal contractor level.
3. Site waste management plans should simplify the administrative burden placed on those responsible for construction projects as they will provide a framework for bringing together a range of documentation required by existing legislation including the waste duty of care. This in turn will help with record keeping and audits. The process of writing and implementing a SWMP will formalise a number of project management tasks that should already be carried out, but will shift the focus of this work towards a resource efficiency perspective. This in turn should help clients and principal contractors to save money.
4. The environment will benefit, as better resource efficiency will mean materials being used more sparingly and effectively, less waste being sent to landfill sites and fewer incidents of construction and demolition waste being fly-tipped.
5. Assuming that the measure is introduced as a statutory requirement, the regulations could come into force in April 2008. We will assess how well this measure achieves its objectives by issuing a questionnaire no earlier than two years after the proposed regulations come into force. This will establish whether SWMPs are written as a matter of course for appropriate projects, the degree of compliance with such plans, the cost savings from improved resource efficiency and any reduction in fly-tipped construction and demolition waste.
6. The proposed regulations will apply in England although there is likely to be a consultation on regulations for Wales later this year.
7. Site waste management plans aim to promote sustainable development by addressing the three key components – the economy, the environment and society.
8. Poor resource efficiency and illegal waste disposal results in:
 - economic costs to the construction industry (material and disposal costs), local authorities (clearing and investigating fly-tipping) and areas affected by fly-tipping (discouraging inward investment);
 - economic costs to the waste management industry (illegal operators undercutting the legitimate industry);
 - the environmental cost of sending recoverable waste to landfill, and soil contamination from fly-tipping; and
 - the social costs in terms of loss of amenity and civic pride from fly-tipping.

⁹ Note: The term 'construction' is used throughout this document to mean construction, demolition and excavation work, all of which are sources of waste that might require a SWMP.

¹⁰ DTI publication: Site Waste Management Plans: Guidance for Construction Contractors and Clients – Voluntary Code of Practice. Date issued: 8 July 2004.

Background

Resource Efficiency

9. The construction industry is one of the biggest users of material resources, yet resource efficiency in this sector is relatively poor. At present, the sector uses about 420 million tonnes of materials per year, of which some 109 million tonnes is consigned as waste. This includes an estimated 13 percent of all materials delivered to building sites that are simply not used.
10. Since 2004, when DTI launched its SWMP voluntary code of practice¹⁰, a number of large construction companies have taken the lead in preparing and implementing SWMPs and have benefited from lower costs as a result. However, the voluntary take-up of SWMPs is not widespread and there is a perception that certain barriers may be preventing this (see below). The intention behind making SWMPs a statutory requirement is to accelerate the adoption of this measure and the receipt of benefits, and to help create a level playing field within the construction industry.

Waste crime, including fly-tipping

11. One of the current problems arising from poor resource efficiency and inconsistent approaches to managing waste is waste crime. The Government is developing and implementing measures to tackle this through the Waste Crime Strategy which forms part of the wider Respect and Cleaner, Safer, Greener agendas in England, as well as the revised Waste Strategy for England. In Wales, the Pride in Our Communities Strategy project enables local authorities, small and medium sized enterprises, Keep Wales Tidy and the local community to address fly-tipping problems.
12. Waste crime, including fly-tipping, is an antisocial activity which reduces the quality of life for people living in both rural and urban areas by adversely affecting amenity benefit and reducing civic pride. As well as the significant environmental and health risks posed by waste crime, it can cost innocent victims large amounts of money to clear-up fly-tipped waste.
13. The Government is keen to address this issue and, through its Waste Crime Strategy, aims to improve environmental quality and deal with all forms of waste crime, including fly-tipping. The strategy includes a range of measures that encourage a proactive approach to prevention.
14. Through recent amendments to legislation, the Government has provided local authorities and the Environment Agency with an increasingly comprehensive set of tools to effectively manage the local environment in line with public expectations. The emphasis is on prevention, rather than cure, which should result in significant cost savings and more efficient use of public money.
15. The Government is also aiming, as part of the Waste Crime Strategy, to develop different policies and measures to tackle different causes of waste crime, different types of offenders and issues with different types of waste. The revised Waste Strategy for England sets out in more detail the action being taken to tackle issues with household waste and with commercial and industrial waste.
16. There is also a significant issue with the amount of construction and demolition waste that is fly-tipped. Construction and demolition waste accounted for nearly 30% of all the fly-tipping incidents the Environment Agency dealt with in 2003. It also accounts for a fifth of all incidents reported to Flycapture, the national fly-tipping database.
17. Dealing with such a high volume of fly-tipped construction and demolition waste imposes considerable clear-up costs on private land owners and local authorities. The tax-payer also ultimately pays for investigation and prosecution costs, and the environmental costs associated with commercial and industrial waste being sent to landfill when it could otherwise be re-used, recycled or managed lawfully.

¹¹ Survey of Arisings and Use of Construction, Demolition and Excavation Waste as Aggregate in England in 2003, Office of the Deputy Prime Minister, 2003

¹² Survey of the Arisings and Use of Construction, Demolition and Excavation Waste, Quarry Waste and Dredging Waste in Wales in 2003, prepared for the Welsh Assemble Government by Smiths Gore, August 2003.

¹³ Fly-tipping on Agricultural Land in England and Wales, Final Draft R&D Technical Report, Marcus Hodges Environment Ltd and BDB Associates, May 2002

¹⁴ Flycapture is a national database which since April 2004 records monthly returns from local authorities and the Environment Agency of fly-tipping incidents with which they have dealt.

18. The table below gives an indication of the extent of construction waste arising and its potential use.

Extent of construction waste
Quantity of hard construction waste arising, uses for it
<p>A DCLG survey¹¹ recorded that 90 million tonnes (mt) of recoverable construction, demolition and excavation waste was produced in England in 2003. Of that total 45 mt was recycled as aggregate and fill, 16 mt was re-used for purposes subject to an exemption from waste management licensing, 13 mt was used to restore quarries, 9 mt went to landfill sites and 6 mt was used in landfill engineering and restoration. These statistics are based on surveys and therefore do not record illegally deposited construction waste.</p> <p>A similar survey¹² in Wales showed that total C,D&E arisings were 6 million tonnes (mt) in 2003, of which 2.68 mt was used as recycled aggregates and soil, 0.64 mt for landfill engineering and restoration, 2.12 mt used at registered exempt sites and 0.56 was disposed of at landfill sites or used to backfill quarries.</p>
Fly-tipped construction waste on private (agricultural) land
<p>A report¹³ in 2002 estimated that 25% of farms in England and Wales have experienced fly-tipping in the last 5 years, which equates to some 44,000 farms. Construction waste was reported in 62% of such fly-tip incidents, and was the most commonly cited type of waste after green waste, but may account for a higher number of incidents. In terms of quantity, construction waste accounted for an estimated 380,000 tonnes of fly-tipped waste on farms in 2001, or 63% of the total.</p>
Fly-tipped construction waste recorded by local authorities
<p>Flycapture¹⁴ data from April 2005 to March 2006 identified 1,016,592 fly-tipping incidents of which 53,329 (5.3%) were construction, demolition or excavation waste. This figure is a 14% increase on the previous year, although this is due in part to local authorities familiarising themselves with the database.</p> <p>In Wales between April 2005 and March 2006 44,272 incidents of fly-tipping were recorded of which 2,715 (6.1%) were construction, demolition or excavation waste. This represents an increase of 75% in fly-tipping and 17% in construction waste since the previous year.</p>

Existing Measures and Legislation

19. Legislation is in place that makes the illegal disposal of waste an offence and places a duty of care on waste producers. Section 33 of the Environmental Protection Act 1990 prohibits the unauthorised deposit, treatment or disposal of waste and section 34 places a duty of care on waste producers to ensure that only authorised persons receive their waste for disposal. However, the duty of care regime is self-regulatory and suffers from limited awareness and compliance. A separate consultation on this regime is being carried out. SWMPs will help to address this issue by requiring those responsible for projects to sign up to ensuring that this statutory duty is observed.
20. The transportation of waste is also controlled by legislation under the Control of Pollution (Amendment) Act 1989 and the Controlled Waste (Registration of Carriers and Seizure of Vehicles) Regulations 1991 (as amended). This requires waste carriers to register with the Environment Agency. SWMPs will help to enforce this legislation as those responsible writing and implementing the plans will be required to record details of the registered waste carriers that they use.

21. It is important to note that many developers and principal contractors are often duped by illegal operators, including the growing number of organised crime gangs getting involved in fly-tipping. This is a particular problem with construction and demolition waste, especially in the Greater London and other metropolitan areas. It can sometimes lead to those developers and contractors being unwittingly involved in waste crime. By requiring documentary evidence of waste carriers and disposal sites for all site generated waste, SWMPs will close this loop for illegal activity.
22. The penalties for some waste crimes have recently been raised by the Clean Neighbourhoods and Environment Act 2005 and, as a result, courts are now able to order an offender found guilty of the main offence of illegal waste disposal to pay the full costs incurred by the enforcement authorities and to forfeit their vehicle. The maximum penalty for fly-tipping has increased from £20,000 to £50,000. As explained above, SWMPs will help developers and contractors to protect themselves against being victims of crime by ensuring that they only deal with legitimate operators. This will also help to close down the market for the criminal gangs.
23. On the resource efficiency side, fiscal measures continue to discourage the disposal of waste to landfill sites and to promote the recycling of hard construction waste, in particular aggregates. It therefore makes economic sense to manage the amount of waste produced on-site more effectively and to improve resource efficiency. The landfill tax escalator is increasing the cost of disposal by £3 per tonne per annum such that typical commercial waste disposal costs are presently between £12 and £38 per tonne. The revised Waste Strategy is considering continuing to increase the standard rate of landfill tax beyond £35 per tonne, and steeper increases from 2008 onwards, to give greater financial incentives to businesses to reduce and recycle waste.
24. At the same time the aggregates levy, introduced in 2002, has reduced demand for primary aggregates by increasing their cost and making the use of recycled and secondary materials a more attractive alternative. Since 2002 the cost of primary aggregates has increased by £1.60 per tonne which has helped to deter companies from sending recoverable materials to landfill.
25. Although not yet in place, the Code for Sustainable Homes will be launched in April 2007 as a voluntary standard in England. It is further proposed that from April 2008 all new homes that achieve a one-star rating and above this would include a SWMP. However, the Code at present refers only to the existing voluntary SWMPs which are less comprehensive in terms of ensuring responsible waste management than the proposed statutory alternative. Without statutory SWMPs the Code would only ensure that house building meets the SWMP requirement and not other forms of construction.

Effectiveness of Existing Policies

26. As illustrated above, the existing range of policies are proving effective in reducing dependence on landfill and encouraging recycling. Recent measures to combat fly-tipping focus on a more preventative approach and primarily target household waste, providing more flexible penalties for local authorities and the Environment Agency. These latter measures were implemented between 2005 and 2007 so it is too soon yet to review them.
27. The landfill and primary extraction measures are working effectively in general terms, and the overall amount of waste being sent to landfill is being reduced. But the revised Waste Strategy accepts that more needs to be done with certain waste streams, including construction and demolition waste and it will include further policies aimed at tackling this.
28. The landfill tax and aggregates levy complement each other in a number of respects but in particular with regard to encouraging the reuse of hard construction waste. An independent survey commissioned by the former Office of the Deputy Prime Minister, published in October 2004, stated that the majority of respondents from the recycling industry were of the opinion that the aggregates levy had contributed to growth in the market for their company's recycled aggregate. The survey also suggests that the landfill tax is a major incentive for companies responsible for construction projects to maximise the amount of construction waste that they reprocess and utilise.
29. Allied to this, the Government funded Waste and Resources Action Programme's (WRAP) Aggregates Programme has addressed difficulties in recycling mixed construction waste by offering grant support and disseminating good practice. This has helped to increase the total production of recycled aggregates by some 3 million tonnes per year, although due to

an increase in construction activity over the same period, the proportion remained constant at 51%. So there remains scope for an initiative such as SWMPs to build on this.

30. Fly-tipping incidents are dealt with by both local authorities and the Environment Agency. The Government's Waste Crime Strategy aims to reduce levels of waste crime by:
 - ensuring better prevention, investigation and enforcement of fly-tipping and other forms of illegal waste disposal. More effort spent on these aspects will mean less needs to be spent on clear-up and will result in cost savings;
 - making existing legislation more usable and effective;
 - ensuring that waste producers take responsibility for having their waste legally managed;
 - extending the range of powers available in the toolkit so that the Environment Agency and local authorities can be more flexible when dealing with fly-tipping;
 - improving the data and knowledge base so that resources can be better targeted; and
 - ensuring that the Environment Agency and local authorities can do their job as effectively as possible.

Site waste management plans will make a significant contribution to achieving these targets by addressing construction waste fly-tipping at source.

Impact on Existing Policies

31. Site waste management plans will help existing waste management policies to be more effective. They should reduce the quantity of construction waste that is taken to landfill and increase the practice of recycling aggregates. An unintended consequence of this will be a reduction in revenue from the landfill tax and the aggregates levy, which in turn might affect the beneficiaries of this funding. In the case of the landfill tax this includes programmes aimed at improving resource efficiency.
32. However, any impact on such beneficiaries must be considered against the considerable economic and environmental gains from improved resource efficiency and a reduction in the unnecessary disposal of materials to landfill.
33. Should these proposals result in a statutory site waste management plans the Code for Sustainable Homes will need to be amended to reflect this. At present the Code refers only to the voluntary code of practice.

Rationale for government intervention

34. This measure is needed primarily in order to tackle waste crime in line with domestic and European requirements. Waste crime occurs where illegal waste management is easier or more cost effective than the legitimate process. In achieving this, a possible side benefit will be an improvement in construction resource efficiency.
35. The current level of resource efficiency within the construction sector can be attributed to a number of factors including the traditional perception of landfill being the 'easy' option given the time required to sort any recoverable waste. This results in an acceptance that waste is a 'fixed' cost that would require significant upfront resources to tackle. Attaching a legal requirement to effective waste management should expose the true cost of unnecessary waste disposal and realise cost savings for the construction industry.
36. On the second issue, tackling rising levels of waste crime and fly-tipping is a high priority for the Government, not only to fulfil domestic aspirations but to comply with European directives. There is a manifesto commitment to introduce further measures to tackle fly-tipping and other forms of environmental crime. This commitment is also part of Defra's waste and waste crime strategies and its Local Environmental Quality Action Plan, DCLG's Cleaner, Greener, Safer agenda and the Home Office's Respect Agenda.
37. In line with European requirements, and as void space declines, this measure is needed to reduce our dependence on landfill, which in itself is an unsustainable waste management practice. As well as improving resource efficiency and minimising waste, SWMPs will serve to create a level playing field within the construction and waste management industries, by ensuring that the polluter pays and that this is consistent across all waste producers.
38. The Plans will help to fulfil European directive and domestic implementing regulations, including the requirements of Articles 3 of the Waste Framework Directive (91/156/EEC)

amending Directive 75/442/EEC on waste which requires that:

“Member States shall take appropriate measures to encourage:

- a) firstly, the prevention or reduction of waste production and its harmfulness...and
- b) secondly;
 - (i) the recovery of waste by means of recycling, re-use or reclamation...

39. In reducing fly-tipping, the Plans will contribute to the requirements of Article 4 of the Waste Framework Directive, which states that:

“Member States shall also take the necessary measures to prohibit the abandonment, dumping or uncontrolled disposal of waste”;

and Article 8 of the Waste Framework Directive, that:

“Member States shall take the necessary measures to ensure that any holder of waste:

- has it handled by a private or public waste collector or by an undertaking which carries out the operations listed in Annex II A or B, or
- recovers or disposes of it himself in accordance with the provisions of this Directive

40. SWMPs will also help to fulfil Article 6 of the Landfill Directive (99/31/EC), which sets out the types of waste that may be accepted at different classes of landfill site and to comply with the Landfill Regulations (2002) ban on the co-disposal of hazardous and non-hazardous waste at landfill sites, including the implications for contaminated soil.

41. Under the Landfill Regulations (2002) waste producers are encouraged to identify where there are higher concentrations of hazardous material, rather than consigning all waste arising as hazardous. Environment Agency guidance advises that “...development projects should incorporate an early consideration of the nature and extent of potential wastes at the planning stage ... to design and implement alternatives to landfill disposal.” This is a key role which could be fulfilled during the planning stage in preparing a SWMP.

42. As well as helping to meet these legislative requirements, SWMPs should act to level the playing field for both the construction and waste management industries. By empowering citizens to take individual responsibility for their waste, illegal waste carriers will lose their market share, leaving responsible contractors to compete on price and quality of service. Non-compliance will result in enforcement, making responsible waste management a more attractive proposition along with the environmental benefits it will bring.

Effect of no Government intervention

43. The Clean Neighbourhoods and Environment Act 2005 gave the Government and the Welsh Assembly Government enabling powers to introduce regulations for SWMPs, so it is committed in principle to laying these regulations. However, if this measure was not implemented then the high level of waste generation and fly-tipping in the construction industry would be likely to continue. The fly-tipping of construction and demolition waste might even increase given the long term trend in construction activity. Clear up and enforcement costs would need to rise as a result.

44. As indicated earlier, there has been an embedded culture within some of the construction industry that a certain level of waste is to be expected. In order to meet project deadlines, materials are often over-ordered to avoid delays and the additional cost of replacement orders. However, this approach can overlook the true cost of waste in terms of materials and labour, as illustrated below.

The true cost of waste	
Cost based on a 6 cubic metre skip	Cost
Skip hire	£85
Labour to fill skip	£163
Cost materials put in skip	£1,095
Total true cost	£1,343

Source: Amec

45. These embedded values suggest that it would take a significant Government intervention to improve the industry’s attitude to waste. If SWMPs were to remain a voluntary code of practice the level of uptake would be unlikely to increase significantly as companies not already conversant with this resource efficient approach to waste would lack the stimulus to change.

46. Implementing SWMPs as a regulatory requirement coupled with enforcement would push such companies into investigating more efficient ways of working. Then, as these companies begin to enjoy the cost savings, these will act as a catalyst to self-regulation.

Longer term consequences of no intervention

47. If the present situation continued unchecked, landfill sites would prematurely reach capacity meaning that new sites would need to be opened for material that should be considered a resource, not a waste. Despite improvements in engineering, landfill remains an unsustainable method of waste management, so any means for improving waste minimisation and recovery rates will lessen our dependence on this.

48. A lack of intervention would also mean continuing costs resulting from fly-tipping, not only the tangible issues of clean-up and enforcement, but also the social cost of a reduction in local environmental quality. The clean-up and enforcement costs that could be saved are significant. For example, in the financial year 2004/05 the total cost borne by the Environment Agency and local authorities was some £46 million, of which 5.2% (£2.4 million) - involved construction waste. These figures do not take account of fly-tipping on private land which, based on anecdotal evidence, could be as much as double the quantity of recorded fly-tipping.

Groups affected by this measure

49. The key groups that would be affected by this measure are those who responsible for writing and implementing SWMPs, such as principal contractors; and those that might regulate the Plans such as the Environment Agency and local authorities, carrying out basic checks, inspections and enforcement duties.

50. Parties indirectly affected by the measure would include: the building supply industry, faced with a slight reduction in demand and more stringent specification of materials and packaging; regulators, in terms of a decreasing workload tackling fly-tipping; and property buyers with a possible variation in property prices as a result of construction cost savings. For citizens in general, no specific group is expected to be more affected than any other. The proposed regulation would lead to some additional court cases, although some of the prosecutions for non-compliance with SWMP regulations are likely to be combined with prosecutions for other offences, eg, duty of care so the additional impact on courts is likely to be small.

51. A major factor in determining how many people will be affected by the regulations will be the minimum value of construction project to which an SWMP will apply. This is discussed further in section 5.

The effect of SWMPs over time

52. The positive benefits of reducing construction waste, including that element which is fly-tipped, will take time to emerge. The length of the learning curve to improving resource efficiency will vary depending on a company’s existing approach, timescales for planning and completing each project and the willingness of companies to invest time in planning ahead.

53. So although the SWMP requirement should result in a more immediate reduction in fly tipping, the broader issue of waste minimisation and resource efficiency is likely to take longer to result in industry-wide improvements that can be measured.

54. The data available for measuring construction waste is also limited in terms of accuracy and coverage, such that it might not detect a moderate change in waste performance. DCLG and WAG carry out surveys every two years on the use of hard construction waste arisings (i.e. aggregates) but their accuracy depends on a high response rate, and the most recent DCLG survey had a confidence limit for landfill disposal of +/- 19%. The Flycapture database includes a category of construction waste and records incidents by generic size (i.e. from a bin bag to a tipper truck load), but as yet does not record fly-tipping on private land.

55. There are other regulatory measures that might also influence the level of fly-tipping, so a more satisfactory measure of success might be a survey that establishes the level of SWMP uptake and the savings resulting from this approach. To allow time for the measure to bed in, a survey should be undertaken no earlier than two years from implementation.

(3) Consultation

56. This partial RIA has been drawn up with contributions from informal consultation with a small number of stakeholders and other Government departments.

57. Evidence has been gathered from the dissemination of DTI's voluntary code of practice SWMPs to Local Authorities both through a questionnaire completed a year after it was rolled-out, by a research project commissioned by WRAP and from a survey of SWMP costs and benefits by the Building Research Establishment (BRE).

58. Meetings have been held with the Environment Agency and DCLG, the latter representing the interests of planning authorities and building inspectors. These discussions have informed development of the options for how SWMPs might be implemented and regulated, and the appropriate enforcement options.

59. A further source of information has been industry articles on this proposed statutory measure and the perceived costs and benefits to industry. These have helped to inform the debate about the minimum qualifying value.

60. In September 2005 an informal working group representing other Government departments and construction industry interests began consideration of the key aspects underpinning SWMPs. A workshop was held in London and two further workshops in Wales, and these informed issues papers which were circulated as the basis for developing the draft regulations and a consultation paper.

61. During January and February 2006 Envirowise hosted a series of 15 SWMP events attended by 483 representatives from the construction sector. Feedback from these events helped to inform these proposals, and 94% of respondents stated that they were more likely to implement SWMPs as a result of these workshops.

62. However, these events were unlikely to have reached the full range of construction companies to which SWMPs will apply, perhaps demonstrated by the common support for a statutory requirement received during feedback. It is also possible that the publicity given to the possible future legal status of SWMPs drove up interest and proactive compliance in order to pre-empt such legislation.

63. The draft regulations and consultation document are expected to be issued in April 2007, during which stakeholder workshops will be held to facilitate feedback. Depending on the response and following amendments where justified, the final regulations will be prepared and implemented during April 2008.

(4) Options

64. This RIA considers two options; no change or a statutory requirement. The first option is self-explanatory. The second comprises a range of implementing options depending on the level of regulatory control required. This section summarises the key risks, costs and enforcement options.

65. In summary the choice is between:

Option 1 - No change. There would be no regulatory requirement to write and implement a SWMP. Greater uptake of the SWMP voluntary code of practice might be achieved through targeted publicity and training. Guidance on the voluntary scheme could also be updated and re-issued to suggest SWMPs are more detailed than the current check-list of issues to be considered. This proposal would entail costs to the public sector in funding publicity and in establishing training schemes. It might also not achieve the intended outcome as evidence from the current series of SWMP workshops suggests that industry take-up of the voluntary code has been driven by publicity surrounding the possible future legal requirement. If it remained a voluntary code, uptake might not be as great as Defra would like.

or

Option 2 – A statutory requirement. There would be a legal requirement to write and implement an SWMP for all construction work above a pre-determined value. The level of detail required might range from a simple tick-box check-list to a full inventory of waste management methods with tailored performance targets. It might be self-regulated or subject to routine inspection. There would be penalties for anyone committing offences under the new regulations.

66. Given the wide range of options for defining SWMPs and their regulation, it is not practicable to analyse every single combination here. Instead, a range of options is set out below, and each issue considered in terms of its cost and benefits.

Range of implementation options. (Listed in discrete columns; rows do not read across)

Minimum qualifying value	Level of detail in SWMP	Regulation and inspection	Offences	Penalties
0 – SWMP required for all sites	Responsibilities and recognition of waste minimisation principles, duty of care	None (self-regulated)	None	Nil (although other penalties would apply i.e. duty of care and fly-tipping)
> £100,000	Waste types and recovery/management methods	Tick-box check of main reporting requirements	Basic – keeping, making available for inspection	Criminal offence
> £200,000	Quantity of different waste types, evidence of waste carrier registration	More detailed site visits, probing any irregularities suspected	Intentional mis-leading or false statements	Fines/FPNs
> £300,000	Audit trail of all waste movements	Performance reviewed and target setting for next project	Failure to keep within performance targets	Fines equivalent to duty of care = max £5,000
> £500,000	Performance targets with review process			Penalty for main offence (not keeping SWMP) could be unlimited; proportionate to value of project
> £1,000,000				

Risks

67. Option 1 (no change) is likely to result limited further buy-in to the voluntary code of practice. Whilst some companies would adopt SWMPs or a similar process, many contractors would continue to designate potentially recoverable construction materials as waste and dispose of them legally or in some cases unwittingly pass them onto illegal operators.

68. Option 2 carries a range of risks depending on the sub-option considered. Generally, the more straightforward the SWMP and the greater the inherent saving, the greater will be the level of compliance. It is therefore important to ensure that SWMPs do not place an excessive burden on the construction industry, and that performance targets – if included – are realistic and achievable.

Compliance and Enforcement

69. The level of compliance will be affected by a range of factors including the degree of awareness, the cost and complexity of the requirement; the perceived and real benefits of compliance, and the significance and likelihood of enforcement action.

70. Given its competitive nature, the strongest incentive for industry compliance is likely to be the potentially significant cost savings from better resource efficiency. That said, the construction industry will need to actually achieve and attribute these benefits to the SWMP process in order for the risk of continuing non-compliance to be minimised. Such incentives are more likely to engender support for this measure than simply applying a disincentive for non-compliance.

Enforcement options

71. As noted above, compliance will be maximised where clients or contractors recognise the financial benefit of so doing, but resources will need to be committed to the SWMP process before this. Given the interval between cost and benefit, it might be appropriate to focus efforts on promoting the requirement and the benefits of compliance, and on providing advice on how to comply. Prosecutions would only be taken to deal with persistent offenders. Defra will assist with this aspect by promotion of the requirement and publicising good practice and success stories.
72. We know that enforcement is needed to underpin any new regulation needs in order for it to be effective, so enforcement authorities will need to allocate sufficient resources to this aspect. Many local authorities who experience problems with high levels of fly-tipping already have enforcement teams set up to deal with incidents. It is envisaged that powers to enforce SWMPs will simply be added to the list of powers these officers already have at their disposal to deal with other fly-tipping incidents.
73. The implementation of SWMPs will, like the duty of care, primarily be self-regulating. However, the level and immediacy of resource savings will vary between businesses meaning that some companies may choose to not participate. So there is a strong argument for a regulatory regime to kick-start the process at the outset.

The costs and benefits of compliance

Costs

74. It is difficult to estimate the true cost of writing and implementing a SWMP. Many construction projects already employ project managers that plan the movement of materials around a site and ensure that contractors and subcontractors work within that framework. A new requirement for SWMPs will impose little additional work on such projects. Indeed, some companies that have already adopted SWMPs are reporting that implementation costs are simply absorbed, suggesting little in the way of extra work.
75. The Building Research Establishment (BRE) recently contacted a number of construction projects that have voluntarily implemented SWMPs. This revealed the typical cost of SWMPs to be less than 1% of project costs with civil engineering projects typically costing less than housing. The cost of implementing a SWMP relative to project costs decreases significantly for major projects.

Benefits

76. The BRE survey suggested that companies that had already implemented SWMPs were achieving a reduction in waste of between 10 and 60% per site. Waste costs were reduced on some projects from 5% down to 2% of total project value. So for a project of £250,000 in value a saving of £7,500 could be achieved.
77. Further cost savings would be possible by applying other methods to improve resource efficiency such as setting design specifications to tally with standard material supply sizes. Cost savings could also be secured through improved material storage, off-site prefabrication and just-in-time delivery. So cost savings across the construction industry should be considerable.
78. Other factors such as the ongoing increases in landfill tax and the impact of the Aggregates Levy could further enhance the potential savings of implementing a SWMP. The Plans will also secure cost savings on fines payable for fly-tipping offences as the waste carrier registration element of a SWMP should reduce this risk.
79. Building materials and features salvaged from the demolition process are a further potentially valuable source of income. It is less clear how these cost savings might be distributed across the industry, but companies that adopt a co-ordinated strategy for moving resources between sites should benefit significantly.
80. Regardless of which method secures the greatest savings, given the estimate that some 13 percent of construction materials delivered to site are not used, there is undoubtedly a significant cost saving to be achieved by implementing SWMPs across the industry.
81. The table below summarises the costs and benefits of implementing SWMPs drawn from data collected by the BRE.

Costs and benefits of implementing SWMPs based on projects that have voluntarily adopted them.

Project value (band)	Assumed average value within band	Estimated cost of writing and implementing a SWMP	Estimated benefit from writing and implementing a SWMP
< £100,000	£70,000	£350	£210
> £100,000	£150,000	£500	£450
> £200,000	£250,000	£750	£750
> £300,000	£400,000	£1,000	£1,200
> £500,000	£1,600,000	£1,600	£4,800
Weighted average	£1,300,000	£1,400	£3,900

Source: Building Research Establishment survey for the Code for Sustainable Homes, 2006

82. These calculations indicate that SWMPs are not cost-effective for the smallest projects but become cost neutral at a project value of £250,000. This evidence would lend weight to setting the minimum qualifying value for SWMPs at this value, but consideration must also be given to the range of projects that are most in need of improving resource efficiency and most at risk of fly-tipping. See section 5.
83. Based on a minimum qualifying value set at the break-even point the cost of complying with the SWMP requirement would be £750 per project. Therefore, to be an adequate disincentive, the penalty for non-compliance should be at least that sum (see section 8, Sanctions).

Enforcement options

84. The range of enforcement options and bodies that might carry out this work are explored below, along with an estimate of the costs involved. In their Supplementary Planning Documents some local authorities have stated that they will require a SWMP to be submitted with the planning application. Following a DCLG consultation on the validation of planning applications last year it is likely that SWMPs will be included on the supplementary local list of information required by the local planning authority before they would validate an application.
85. Considering their existing regulatory contact with the construction industry, local authorities (LAs) should be well placed to monitor the writing and implementation of SWMPs. During the first point of contact, the planning application, it is unlikely that much of the information required for a SWMP will be available. Building design and construction details often follow this stage, and waste planning decisions will be influenced by the approved design.
86. During the construction phase the main opportunity for LAs to verify whether a SWMP is being implemented correctly would be during existing building control visits. Inspections are carried out at key stages in a construction project, the frequency and level of detail being determined by the scale and nature of the work. However, LA building control bodies do not visit all construction sites and developers may opt instead for a private sector approved inspector. Private inspectors work in competition with local authorities but have no enforcement powers. Using building control inspectors might also add an additional burden to scarce resources.
87. An alternative approach to enforcement would be for LAs to use their local environmental quality, environmental health or trading standards enforcement teams to carry out SWMP site visits. Many LAs, especially those in areas which suffer from high levels of fly-tipping, already now have enforcement teams, so these powers would simply be added to the list of ones they currently have available and might help to keep costs low or negligible. An initial check could establish whether a SWMP is in place and whether it is being implemented. If this reveals that an offence has been committed, the inspection could then become more detailed and appropriate enforcement action taken.

88. To complement the work of the local authorities, the Environment Agency could carry out inspections of SWMPs perhaps on larger scale sites, or on businesses that are considered to pose a higher risk of failing to comply. However, the Agency is unlikely to be involved in checking compliance with SWMPs only during existing investigations into waste crime incidents.
89. An estimate of the cost of providing this power to LAs and the Environment Agency is set out below. The estimate assumes that FPN receipts can be retained by LAs, but it is noted that Defra would need to obtain approval to any such scheme from HM Treasury before this could happen. Approval has not yet been sought, but will be if respondents to the consultation agree that FPN powers for this offence would be helpful. Given that the right to inspect SWMPs would be a power rather than a duty it would be down to the authorities to determine the appropriate level of resource required. In determining this, LAs and the EA would need to consider the potential cost savings from a possible reduction in fly-tipping clear-up and enforcement duties.

Costs to Local Authorities

90. A calculation of the average cost to local authorities of regulating SWMPs is provided at Annex A. This is based on SWMPs applying to projects of £250,000 or more in value and a steady improvement in the rate of compliance during years one to three becoming constant thereafter.
91. The total cost per local authority is estimated to be on average £18,971 in year three increasing to £49,812 each year from years three to five. This calculation does not take into account the possibility that savings might be secured from the reduction in clearing fly-tipping, investigation and enforcement costs that this measure should achieve over the five year period.
92. During the course of this consultation Defra will hold workshops with local authorities to establish the extent of any net additional costs. This will assume at this stage that local authorities are not able to retain receipts from FPNs as Defra will need to obtain HM Treasury approval for LAs to retain such receipts and an approach has not yet been made. If, as a result of these workshops, the conclusion is that there will be a net additional cost rise to LAs, then Defra accepts that it needs to cover these costs if this proposal is to be pursued.

Costs to the Environment Agency

93. It is anticipated that the majority of the day-to-day regulatory workload would be a matter for the local authorities, so the cost of regulation for the Environment Agency would be less significant. The Agency would be called into play where more significant waste offences are suspected.
94. Assuming that the Agency is called in to investigate 5% of the cases, this would equate to 9 cases taken to court each year, representing an annual expenditure of approximately £3,377.
95. Again this figure does not take into account the possible resource savings from a reduction in illegal construction waste activity resulting from SWMPs.

Unintended consequences

96. Although SWMPs are intended to improve resource efficiency and minimise waste, much of this will depend upon construction companies grasping the opportunity to improve their waste minimisation, reuse and recycling targets. So although an unintended consequence might be that some companies fail to produce a plan, it is equally important that those that do use it as an opportunity to improve their performance. Non-statutory guidance issued with the regulations will reinforce this message.
97. There is also a small risk that the fly-tipping of construction waste might increase if SWMPs with performance targets were the chosen model. Companies that might be struggling to meet their targets might choose to risk illegal waste disposal in order to meet them. This would depend on the relative cost and likelihood of SWMP enforcement relative to duty of care or fly-tipping offences.

Implementation and delivery plans

98. The SWMP Regulations are expected to be laid in Parliament during autumn 2007, coming into effect during the common commencement date in April 2008.

(5) Costs and Benefits

Sectors and Groups Affected

99. The groups directly affected by this measure have been identified in part 2. This section looks at the wider economic, social and environmental impacts of both doing nothing and the range of options for implementing SWMPs.

Option 1 – do nothing

100. Assuming that SWMPs remain nothing more than a voluntary code of practice, there is a high risk that Government would incur further costs in terms of clearing and taking enforcement action against illegal waste disposal. The environmental cost of fly-tipping and the unnecessary use of landfill space would continue to be an issue. Some of these consequences could be mitigated by awareness-raising and training events that might encourage construction companies to adopt the voluntary code. Increasing uptake could also reduce the accident rate on construction sites as this is linked to poorly managed working environments.

Option 2 – statutory requirement

101. The key issues underpinning SWMPs and their impact on sustainable development are discussed below.
102. In terms of social impact, Flycapture, the national fly-tipping database, has demonstrated a correlation between areas of higher deprivation and levels of fly-tipping. However, it is unclear whether the benefits from this measure i.e. reduced fly-tipping, would correlate with this pattern.
103. It is considered that this proposal will not have any impact on race equality, human rights, gender equality, disabled people, children and young people, or older people.

Minimum qualifying value

104. A key issue that will affect how widely SWMPs will impact on the economy, society and the environment is the minimum value of construction project that would require a SWMP.
105. Anecdotal evidence suggests that smaller construction firms are less likely to already engage in formal waste planning procedures than larger players. So there would be a case for setting the minimum value low enough to include these operators. However, if it was set too low most construction work, including minor repairs, would qualify meaning that in some cases the cost of implementing a SWMP relative to the value of the work and amount of waste produced might be disproportionately high. Similarly, the cost and practicality of regulating and enforcing such a widely applicable regime could become prohibitive.
106. An alternative approach would be to require a SWMP that is proportionate in detail to the value of a construction project. A basic level plan might apply to projects over £200,000 in value and a more detailed one for projects costing £500,000 or more.
107. The DTI voluntary code of practice adopted a minimum value of £200,000. This accounts for just 30% of the total number of projects carried out, but 90% of all projects by value. It is debatable whether such a level would capture the smaller scale companies that are in need of improving their resource efficiency performance. However, some of these will be subcontracted to larger building projects so their waste management practice would be controlled by an overarching Plan for that development.

108.A range of alternative minimum values and the proportion and value of projects they would harness is set out below.

Number of projects and companies requiring SWMPs for different minimum qualifying values

Minimum value	Percentage of projects	Percentage by project value	Number of companies affected	Number of projects
nil	100	100	6,160	81,532
£100,000	40	95	3,601	31,149
£200,000	30	90	2,918	22,653
£250,000	25	88	2,700	20,376
£300,000	20	85	2,483	18,099
£500,000	15	80	1,963	13,171

Source: UK construction projects notified to the Department of Trade and Industry, FY 2005-06.

- 109.The minimum value should also take account of the predicted cost-benefit impact of SWMPs. Research by BRE has established the cost neutral point to be a £250,000 project.
- 110.In the absence of any conclusive data, but mindful of the cost benefit analysis, it is proposed that the minimum qualifying value is set at £250,000 with more detailed reporting requirements for construction work valued in excess of £500,000. The lower tier would capture 7,200 projects annually.
- 111.The success of setting the threshold at these levels should be reviewed after two years, probably by way of a questionnaire, and the value adjusted if appropriate.
- 112.Whatever the final level agreed, SWMPs will clearly impact on the work of site managers but will in turn enable them to secure resource savings on materials. The most significant short term costs, but also potential cost-savings, are likely to be met by the predominantly smaller players with no history of formal waste management planning.

Level of detail, performance targets

- 113.A further criteria that will affect the impact of SWMPs and levels of compliance is how detailed a task completing an SWMP should be.
- 114.There are a range of options, but even at the most basic level a SWMP should include fundamental information that might be used as evidence should a duty of care or illegal waste disposal activity need to be investigated. Basic level information would include recording who is responsible for site waste management, identifying waste management contractors and tick-boxes indicating the types of waste expected to arise and options considered for re-use and recycling.
- 115.The more detailed SWMP might include fields for recording actual quantities of each type of waste arising, and would be updated as the project progresses right through to its completion. Waste carrier registration numbers would be recorded and individual waste transfer notes referenced to ensure a complete audit trail. Although this might be perceived as onerous at the outset, for many companies this would simply be a matter of recording information that is already collated elsewhere in a single document. Duplication of effort could be avoided by annexing the SWMP to existing resource management plans, according to individual company preferences.
- 116.The most advanced version of SWMP might include performance targets for re-use and recycling construction waste. These could draw on the Government's construction waste benchmarking project which will set self-updating performance indicators for different types of construction. Actual performance against these targets would then be recorded as the

project progressed. Desirable though this sounds as a method for minimising waste, a number of practical difficulties have been identified which could make this a very resource intensive system to operate. In particular it would be difficult and costly to gather evidence to set performance targets at an appropriate level for each business and specific project. Development projects can not easily be divided into generic types, and some companies will be better resourced to adapt to more stringent targets than others, affecting competition.

- 117.Ideally the level of detail should reflect the extent of progress on the construction project and should be proportionate to the amount of waste likely to arise. But for practical reasons a two-stage process is proposed. For each applicable project a SWMP will be prepared, in advance of construction commencing that sets out the amount of each type of waste that is likely to be produced on site and the expected process to be applied either on or off-site, i.e. reuse, recycling or disposal. Then during the construction phase and following completion, projects must log what actually happens. The level of detail in the reporting and review process will be higher for projects valued in excess of £500,000 than those below.
- 118.In terms of economic, social and environmental impact the greater the level of detail required, the higher the cost to the contractor, but the greater the environmental and social benefits.

Responsibility for SWMPs

- 119.As mentioned above, an SWMP needs to be written and implemented by someone with the necessary skills and influence. This would usually be the individual responsible for design, planning and site management. Responsibility for drafting the SWMP might therefore transfer from a designer or client during the pre-construction phase to the principal contractor during construction. Any such transfer of responsibility must be documented on the SWMP along with the date when the change takes effect.
- 120.In preparing a Plan there must be a clear chain of responsibility through contractors and sub-contractors that confirms ownership of individual elements of the SWMP. For example there might be a contractor responsible for hazardous waste disposal, who in turn monitors the work of sub-contractors in segregating the waste.
- 121.An effective method for setting up this chain of responsibility would be to build the requirements of the SWMP into individual contracts. In this way, payment schedules could correspond to providing documentation in fulfilment of individual components of the SWMP to demonstrate that the waste has been appropriately recycled or deposited at an authorised site. Similarly, sub-contractors responsible for waste storage on site should be informed of their responsibilities and agree to reporting back on progress in order to identify any compliance issues.
- 122.The SWMP should be updated whenever waste is processed or removed from the site and reviewed as the project progresses. It should be kept at the site office, so as to be available for inspection on request. If the SWMP owner is absent, a deputy should be identified to allow inspectors access to the Plan.
- 123.So there are clear benefits from the effective implementation of SWMPs and allocating responsibility for waste management tasks to individual contractors. The recorded chain of responsibility will ensure that responsibility for a waste offence is raised to the highest level.

Regulation, inspection

- 124.The costs and benefits of regulating SWMPs have been discussed previously, but in terms of impact on the economy, society and environment the more robustly the regime is enforced, the greater the cost to the public purse. However this would be offset by savings on other regulatory functions, such as clearing and investigating fly-tipping, and greater the benefits for society and the environment.
- 125.Adopting SWMPs could potentially affect the value of new buildings as the desirability of sustainable construction methodology could command a premium price tag. The cost of construction should be reduced through resource efficiency savings. More generally, SWMPs should not affect the quality nor the availability of goods and services.

Social impacts

126. A key social aspect that SWMPs will address is health and safety in the construction industry. Construction sites in which material storage is disorganised and poorly managed are more likely to result in injuries. The same applies to the storage of waste or materials for recycling. By implementing a SWMP, waste materials should be segregated and stored safely to allow the free movement of the workforce. This should result in a reduction in the industry accident rate.
127. Preparing and delegating responsibility for updating SWMPs will also provide an opportunity for increasing the skills of the construction workforce. Larger projects are likely to share their SWMPs with all key contractors, thereby developing a shared understanding of the principles of responsible waste management.

Environmental impacts

128. The main environmental benefits of SWMPs have been explained. SWMPs should also lead to an improvement in the appearance of the landscape and townscape as the fly-tipping of construction waste diminishes. Wildlife habitats affected by such activities should also benefit.

(6) Small Firms Impact Test

129. It is expected that the cost of producing a SWMP will not have a significant impact on small firms (those with less than 50 employees), and that any financial impact will be offset by the cost savings through better resource efficiency.
130. The table below indicates how many small firms would be required to write and implement a SWMP for different minimum qualifying values.
131. Of course small firms will be affected if they are contracted to a company that is required to write and implement a SWMP. However, implementing a SWMP should require no more work on behalf of subcontractors than should already be the case under their contractual agreement.

Number of small companies requiring SWMPs for different minimum qualifying values

Minimum qualifying value	Number of small companies affected
nil	6,120
£100,000	2,510
£200,000	1,770
£250,000	1,570
£300,000	1,430
£500,000	1,030
£1,000,000	550

Source: UK construction projects notified to the Department of Trade and Industry, FY 2005-06.

132. The impact on principal contractors or clients belonging to a small firm should be similar to that calculated in the table under the Benefits section, i.e. costs matching benefits for projects over £250,000 in value. Assuming that the minimum qualifying value is set at or above this figure there should be no net cost to small firms.

(7) Competition Assessment

133. Although this measure will primarily affect the construction industry, this will in turn impact on the materials suppliers and property sales markets.
134. The construction sector is composed of a large number of firms, none of which possesses more than a 2% overall share of the market. So there are no dominant firms on which the imposition of SWMPs might significantly alter competition within the industry.
135. As discussed earlier, the new requirements are likely to have a more significant impact on companies that do not already manage resources efficiently. However, this is neither likely to result in firms leaving the market nor will it discourage new firms from entering the market.
136. Placing a requirement to implement a SWMP might encourage innovation within the industry, such as developing new methods for recovering aggregates, but will not significantly affect methods of construction. There might be a move towards standardising designs in line with standard material specifications and the use of prefabricated elements to reduce waste on site.
137. The proposal might also influence property values, but to a limited extent relative to the overall value of a property. A property that is built to environmentally sustainable standards might be branded to appeal to a more discerning customer, and the price increased accordingly. But given that a SWMP should already secure cost savings for the developer, it will be for them to decide whether to pass these savings on to the customer, or whether to bank what might be a significant increase in profit margins.
138. So the imposition of SWMPs, whilst encouraging innovation and improving profit margins, is unlikely to have any significant effect on competition within the construction market. It is, however, likely to increase profits.

(8) Enforcement, Sanctions and Monitoring

139. As calculated earlier, given the estimated cost of writing and implementing a SWMP, the penalty for non-compliance should be at least that sum, i.e. £750. This section considers the range of offences, sanctions and monitoring.

Enforcement

140. Depending on the level of detail required in an SWMP, a proportionate approach to enforcement should apply. Alternatives to regulation such as promoting best practice and the potential resource savings or allowing the regime to operate on a self-regulatory or voluntary basis might require little or no government enforcement. But in order to achieve a level playing field, there are strong arguments in favour of a more regulatory approach that would support the duty of care and reduce waste crime.
141. Instead of replacing a statutory requirement, alternatives to regulation might be used to reinforce the benefits of SWMPs from a different angle. For example by encouraging clients or investors to sign-up to SWMPs, the demand for new buildings would be tied to this sustainable construction practice.
142. It is likely that compliance will increase as potential savings exceed the cost of complying, but due to the time lag between incurring costs and realising the benefits there is an important role that sanctions might fulfil. Such measures need to reflect the related duty of care and fly-tipping offences, and act as a strong disincentive to the companies concerned. If possible the penalty should be proportionate to the financial standing of the company and the scale of the project (and therefore the potential stockpile of waste).

Sanctions

143. Assuming that SWMPs are introduced as a statutory requirement, there would need to be a range of sanctions in place to tackle non-compliance. The range of offences that might result in enforcement proceedings will vary depending on the complexity of SWMP considered. These offences are listed below.
- Failure to make, keep and update a SWMP

- Failure to produce a SWMP upon request from an authorised officer
- Making a false statement in a SWMP
- Failure to assist an authorised officer in providing supporting evidence to a SWMP
- Failure to comply with or failure to implement the terms of a SWMP
- Forging a SWMP

144. It is proposed that a person guilty of any of these offences is liable on summary conviction to a fine not exceeding the statutory maximum, i.e. £5,000, or to imprisonment for two years, a fine or both, or on conviction on indictment to imprisonment for two years, a fine or both.

Monitoring

145. In order to monitor whether this measure is achieving its objectives a survey should be carried out to assess how widely SWMPs are being prepared, the degree of compliance with these plans and the costs saved. Both the regulator(s) and the regulated should be surveyed to assess the real costs and benefits achieved. This should be carried out no earlier than 2 years from the implementation date.

146. Although desirable, assessing the impact of SWMPs on construction waste disposal patterns would prove difficult given the accuracy of existing data and the range of other measures whose combined effect should reduce this waste stream. Nonetheless, it would be interesting to compare the number of fly-tipping incidents recorded on the Flycapture national fly-tipping database prior to the implementation date with the data two years after that date.

(9) Implementation and Delivery Plan

147. A detailed implementation and delivery plan will be developed as part of the final Regulatory Impact Assessment (RIA).

(10) Post Implementation Review

148. Section 8 sets out the proposed review process. This will be expanded in the final RIA.

(11) Summary and Recommendation

149. To be completed in the final RIA.

(12) Declaration and Publication

150. To be completed in the final RIA.

Annex A: Estimated cost to Enforcement Authorities of issuing Fixed Penalty Notices and taking Prosecutions for Site Waste Management Plan (SWMP) offences

This annex provides an estimate of the number of FPNs and court proceedings that might be taken by enforcement authorities during the first five years of the regulation.

The cost of this work is then compared against the receipts collected by local authorities.

Assumptions

During the first two years of regulation construction companies will be familiarising themselves with the process of site waste planning which for some might involve a significant change in practice. It is assumed that the enforcement authorities will advise companies that are not undertaking SWMPs of the new regulations to ensure that the process is fully understood. Only companies that persistently refuse to write and implement a SWMP will attract enforcement proceedings, so some enforcement action might occur towards the end of year two.

Assuming that a SWMP is required for all construction projects of £250,000 or more in value, the number projects requiring a plan each year would be 20,376, with 2,700 businesses affected. (Source: work notified to DTI)

Compliance is likely to increase as familiarity with the SWMP approach to waste planning improves, but will probably be limited at the outset. A non-compliance rate of 30% is expected in year one, 15% in year two and 5% in years three to five.

The power to regulate SWMPs will be just that, a power rather than a duty. Not all local authorities will consider the enforcement of SWMPs to be a priority. Indeed it is possible that only 70% of such authorities will make use of this power, others relying instead on the Duty of Care and other fly-tipping prevention measures.

So of the 410 local authorities in England and Wales (including 354 Waste Collection Authorities, 34 County Councils and 22 Welsh authorities) 287 might enforce SWMPs. The detection rate for SWMP offences would be on average 70% of the total number of offences committed, so year on year it would be 21%, 10.5% and then 3.5% respectively during years three to five.

A range of measures will be available for local authorities to enforce SWMPs and it is assumed that 10% of enforcement sanctions will be Fixed Penalty Notices (FPNs) and 25% will go to court. FPNs for SWMP offences would be equal to those for Duty of Care offences, i.e. £300. The cost-benefit calculations assume that local authorities will be able to keep receipts from FPNs, although this will be subject to Treasury approval.

Cost to Local Authorities

The cost to LAs will include staff time and training, which should decrease over time, and the administrative costs of work leading to issuing FPNs or pursuing court action. Flycapture Enforcement training, which already provides free advice to local authorities about new fly-tipping measures and powers, will be extended to cover SWMPs.

The estimate of costs is based on a recent review¹⁶ by the Environment Agency of the cost to councils of various fly-tipping processes.

Enforcement action by Local Authorities will result in improved resource efficiency and less fly-tipping of construction waste. Savings should therefore be secured in LA functions such as fly-tipping clean-up, although these are not estimated here.

The total sum likely to be collected in receipts from SWMP FPNs will decrease over time as familiarity and compliance with SWMPs increases.

Note: Although SWMPs should secure resource savings in local authority fly-tipping cleanup and investigation work, it is unclear whether the money saved can be transferred to those undertaking the regulatory work.

¹⁶ Environment Agency/BREW Review of Fly-Tipping Processes and Costs, January 2006.

Summary of Costs and Receipts

The table below summarises the forecast costs and receipts both on an England and Wales and an individual local authority basis. Revenues as well as costs will decrease in time. Full cost recovery is not possible on the basis of the table below, but it is possible that savings from a reduction in fly-tipping clean-up and enforcement could lessen total local authority costs still further.

Projected number of fixed penalty notices (FPN) and court cases

Year	Rate of non-compliance (%)	70% detection rate (%)	Number of cases detected, taken	Number of cases taken to court
1	30	21	0	0
2	15	10.5	0	50
3	5	3.5	71	178
4	5	3.5	71	178
5	5	3.5	71	178

Estimated costs/receipts to local authorities

Year	FPN costs at £50 per case	FPN receipts	Net income	Court costs at £380 per case	Total cost
1	0	0	0	0	0
2	0	0	0	£18,971	£18,971
3	£3,576	£21,300	£17,724	£67,536	£49,812
4	£3,576	£21,300	£17,724	£67,536	£49,812
5	£3,576	£21,300	£17,724	£67,536	£49,812

Cost to the Environment Agency

Although it is a matter for the Environment Agency to determine their level of involvement in taking prosecutions, it might be assumed that 5% of the cases with which local authorities would otherwise deal would be taken by the Agency. So from year three total costs for Local Authorities and the Agency would be approximately £46,435 and £3 377 per annum respectively.

Annex C - Confidentiality and complaints

1. Confidentiality

In line with Defra's policy of openness, at the end of the consultation period, copies of the responses we receive may be made publicly available through the Defra Information Resource Centre, Lower Ground Floor, Ergon House, 17 Smith Square, London SW1P 3JR. The information they contain may also be published in a summary of responses. If you do not consent to this, you must clearly request that your response be treated confidentially. Any confidentiality disclaimer generated by your IT system in e-mail responses will not be treated as such a request. You should also be aware that there may be circumstances in which Defra will be required to communicate information to third parties on request, in order to comply with its obligations under the Freedom of Information Act 2000 and the Environmental Information Regulations. The Information Resource Centre will supply copies of consultation responses to personal callers or in response to telephone or e-mail requests (tel: 020 7238 6575, e-mail: defra.library@defra.gsi.gov.uk). Wherever possible, personal callers should give the library at least 24 hours' notice of their requirements. An administrative charge will be made to cover photocopying and postage costs.

2. Complaints

If you wish to make a complaint, or query the consultation process, please write to Mr Neil Thornton, Director, Environment Quality and Waste Directorate at:

Department for Environment, Food and Rural Affairs
Environment Quality and Waste Directorate
Zone 6/D9
Ashdown House
123 Victoria Street
London SW1E 6DE

If your concern remains unresolved following this, please write to:

Marjorie Addo
Consultation Co-ordinator
Department for Environment, Food and Rural Affairs
Room Area 7D
Nobel House
17 Smith Square
London SW1P 3JR

consultation.coordinator@defra.gsi.gov.uk

Annex D. List of consultees

2010 Rotherham Ltd	Barrow in Furness Borough Council	Bristol City Council	Cambridgeshire County Council
A C Lloyd (Builders) Ltd	Basildon District Council	Bristol International Airport	Campaign to Protect Rural England (CPRE)
ACS Environmental Services Ltd	Basingstoke & Deane Borough Council	Bristol Water PLC	Campaign to Protect Rural England (CPRE)
Adonis Construction	Bassetlaw District Council	Bristol Wood Recycling Project	Cannock Chase District Council
Adur District Council	Bath & NE Somerset Council	Britannia Construction Ltd	Canterbury City Council
Aggreycycle UK Ltd	Bayer Crop Science Limited	British Parking Association	Caradon District Council
Alfred McAlpine Plc	Bedford Borough Council	British Aerosol Manufacturers' Association	CAREFOOT PLC
Allerdale Borough Council	Bedfordshire County Council	British Aggregates Association	Carillion National Building
Allerton Construction	Berwick upon Tweed Borough Council	British Chambers of Commerce	CarlBro
Alnwick District Council	Biffa Waste Services Ltd	British Coatings Federation Ltd	Carlisle City Council
Alpha Construction	BioRegional Reclaimed	British Council of Disabled People	Carrick District Council
Amber Valley District Council	Birch Tree Contracts Ltd	British Cycling	Castle Morpeth Borough Council
AMCO Ltd	Birmingham Chamber of Commerce & Industry	British Deaf Association	Castle Point Borough Council
AMEC DPS	Birmingham City Council	BRITISH ENERGY GENERATION LTD	CastleOak Care Partnerships Ltd
AmeyMouchel	Birmingham New Hospitals Joint Venture (BBCNL)	British Gas	Castles Shopfitters Limited
Anglo Holt	Birse Power Networks	British Gypsum Ltd	Cementation Foundations Skanska
A-One	Blaby District Council	British Nuclear Group	CEMEX Construction Services
Apollo Group	Blackburn with Darwen Borough Council	British Pyrotechnists Association	Charnwood Borough Council
Aqua Group	Blackpool Borough Council	British Shops & Stores Association	Chartered Institute of Environmental Health
Ardmore Construction Ltd	Blyth Valley Borough Council	British Tourist Authority	Chartered Institution of Waste Management (CIWM)
Argent Building Co Ltd	Bolsover District Council	British Trust for Nature Conservation	Chartered Institution of Water & Environmental Management (CIWEM)
Arun District Council	Bolton Metropolitan Borough Council	British Waterways	Chelmsford Borough Council
Ascot Environmental Ltd	Boots Company Plc	Broadland District Council	Cheltenham Borough Council
Ashe Construction Ltd	Borough of Poole	Broads Authority	Cherwell District Council
Ashfield District Council	Borough of Wellingborough	Bromsgrove District Council	Cheshire County Council
Ashford Borough Council	Boston Borough Council	Broxbourne Borough Council	Chester City Council
Aspire	Bournemouth Borough Council	Broxtowe Borough Council	Chester Le Street District Council
Associated Cooling Services	Bovis Lend Lease Limited	Buckingham Group Contracting Limited	Chesterfield Borough Council
Association of London Government	Bow Construction Ltd	Buckinghamshire County Council	Chichester District Council
Association of National Park Authorities (ANPA)	Bowmer & Kirkland Ltd	Building Research Establishment (BRE)	Chiltern District Council
Association of North East Councils	Bracknell Forest Borough Council	Bureauveritas	Cholderton & District Water Company Ltd
Atkins	Bradford City Council	Burger King Ltd	Chorley Borough Council
Axima Building Services Ltd	Brazier Construction	Burnley Borough Council	Christchurch Borough Council
Aylesbury Vale District Council	Breckland District Council	Bury Metropolitan Borough Council	Churngold Remediation Limited
Babergh District Council	Brecon Beacons National Park	Business in the Community	City Centre Commercials Ltd
Backhouse Construction Insurance Brokers	Brentwood Borough Council	Butler Fuels	Civic Trust
Baintree District Council	Brett Group	C J Ellmore & Co	Clegg Construction Ltd
Balfour Beatty	Bridgnorth District Council	C Spencer Limited	clipfine
Bardon Contracting	Brighton & Hove City Council	C4S/TRL Limited	Clydesdale
Barnsley Metropolitan Borough Council		Calderdale Borough Council	Coin Street Community Builders
Barratt Developments		Cambridge City Council	Colas Ltd
		Cambridge Gas & Water Company Limited	

Colchester Borough Council
 Commission for Architecture & the Built Environment (CABE)
 Community Recycling Network
 Composting Association
 Concrete-Repairs Ltd
 Confederation of British Industry (CBI)
 Congleton Borough Council
 Conlon Construction Limited
 Constructing Excellence NE
 Contract Fire Security
 Contract Natural Gas Ltd
 Copeland Borough Council
 Corby Borough Council
 Cornwall County Council
 Corporation of London
 Costain
 Cotswold District Council
 Council of the Isle of Scilly
 Country Land & Business Association (CLA)
 COUNTRYWIDE ENERGY
 County Surveyors Society
 Coventry City Council
 Cowlin
 CPL British Fuels
 Craven District Council
 Crawley Borough Council
 Crewe Nantwich Borough Council
 Crosby Homes
 Crown Construction & Interiors Ltd
 Crown Energy
 Cruden Group Ltd
 Cumbria County Council
 Cumbria Energy Ltd
 Dacorum Borough Council
 Darlington Borough Council
 Dartford Borough Council
 Dartmoor National Park Authority
 Daventry District Council
 Dean & Dyball Ltd
 Dee Valley Water PLC
 Defence Estates
 Department for Communities & Local

Government (DCLG)
 Department for Culture Media & Sport (DCMS)
 Department for Education & Skills (Dfes)
 Department for Environment Food & Rural Affairs (Defra)
 Department for International Development (DFID)
 Department for Transport (DfT)
 Department for Work & Pensions (DWP)
 Department of Health (DH)
 Department of Trade & Industry (DTI)
 Derby City Council
 Derbyshire County Council
 Derbyshire Dales District Council
 Derwentside District Council
 Devon County Council
 Dew Construction
 Dickinson Dees
 Disability Network
 Doncaster Metropolitan Borough Council
 Dorset County Council
 Dover District Council
 Dudley Metropolitan Borough Council
 Duke Energy International
 Dukeries Building Co. Ltd
 Durham City Council
 Durham County Council
 Durkan Ltd
 Easington District Council
 East Cambridgeshire District Council
 East Devon District Council
 East Dorset District Council
 East Hampshire District Council
 East Herts District Council
 East Lindsey District Council
 East Midlands Development Agency
 East Midlands RTAB
 East Northamptonshire Council
 East of England Development Agency
 East of England Regional Assembly
 East of England RTAB
 East Riding of Yorkshire Council
 East Staffordshire Borough Council

East Sussex County Council
 Eastbourne Borough Council
 Eastleigh Borough Council
 Economy Gas Ltd
 Economy Power & Gas Ltd
 ECOTRICITY
 Eden District Council
 Edmund Nuttall Ltd
 ELECTRICITY DIRECT (UK) LTD
 Elf Business Energy
 Ellesmere Port & Neston Borough Council
 Elmbridge Borough Council
 EMCE
 EMCOR
 Energy for Business Ltd
 Energy Supplies UK Ltd
 English Partnerships
 English Tourism Council
 Ensign Developments
 Envirolink Northwest
 Environment Agency
 Environment Agency Wales
 Environmental Campaigns (ENCAMS)
 Environmental Law Foundation
 Environmental Services Association (ESA)
 Envirowise
 Epping Forest District Council
 EPS Plc
 Epsom & Ewell Borough Council
 Erewash Borough Council
 Eric Wright Group
 Essex & Suffolk Water
 Essex County Council
 Exeter City Council
 Exmoor National Park Authority
 Expanded Limited
 Explorer Group Ltd
 Explosive Industry Group
 Fareham Borough Council
 Federation of Multiple DIY Retailers
 Federation of Small Businesses
 Fenland District Council

Flintshire County Council
 FM Conway Ltd
 Focsa Services (UK) Ltd
 Folkestone & Dover Water Services Ltd
 Foreign & Commonwealth Office (FCO)
 Forest Heath District Council
 Forest of Dean District Council
 Forestry Commission
 FORTUM DIRECT LTD
 Fortum Energy Plus Ltd
 Four Delivery / Costain
 Frank Haslam Milan
 Freight Transport Association
 Friends of the Earth
 Furniture Re-use Network
 Fylde Borough Council
 G F Holding (Contractors) Ltd
 Galliford Try Construction
 Garside Laycock
 Gateshead Council
 Gateshead Metropolitan Borough Council
 Gaz de France Energy Supply Solutions
 Gedling Borough Council
 Geoffrey Osborne Ltd
 George Wimpey (Southern Counties)
 Gerald Davies Ltd
 Gipping Construction Ltd
 Gleeson Homes Limited
 Global Natural Gas Ltd
 Gloucester City Council
 Gloucestershire County Council
 Gloucestershire Highways
 GMI Construction Group plc
 Golder Associates (UK) Ltd
 Gosport Borough Council
 Government Office for London (GOL)
 Government Office for the East Midlands (GOEM)
 Government Office for the East of England
 Government Office for the Eastern Region
 Government Office for the North East (GONE)
 Government Office for the North West (GONW)
 Government Office for the South East (GOSE)

Government Office for the South West (GOSW)	Hertsmere Borough Council	Joint Committee on Mobility for Disabled People	Liverpool City Council
Government Office for the West Midlands (GOWM)	Hewlett Civil Engineering Ltd	Joseph Rowntree Foundation	Local Government Association
Government Office for Yorkshire & the Humber (GOYH)	Heyrod Construction Ltd	Joven Ltd	Local Government East Midlands
Gravesham Borough Council	High Peak Borough Council	Kendall Cross Holdings Ltd	London Borough of Barking & Dagenham
Great Yarmouth Borough Council	Highland Fuels Ltd	Kendrick Construction	London Borough of Barnet
Greater London Authority (GLA)	Highways Agency	Kennet District Council	London Borough of Bexley
Greater Manchester Passenger Transport Authority	Hinckley & Bosworth Borough Council	Kent County Council	London Borough of Brent
Greater Manchester Waste Manchester CollectionsLtd	HM Treasury	Kerrier District Council	London Borough of Bromley
Green Alliance	Hochtief (UK) Construction Ltd	Kettering Borough Council	London Borough of Camden
Greenpeace	Home Office	Kier Eastern	London Borough of Croydon
Groundwork Oldham & Rochdale	Horsham District Council	Kier London	London Borough of Ealing
Groundwork UK	House Builders Federation	Kier Sheffield LLP	London Borough of Enfield
Guildford Borough Council	Huhtamaki Uk Ltd	Kier Southern	London Borough of Greenwich
GVA Grimley	Huntingdonshire District Council	Kimbolton Fireworks Ltd	London Borough of Hackney
H.J Banks & Co. Ltd	Hyder Consulting	Kings Lynn & West Norfolk Borough Council	London Borough of Hammersmith & Fulham
Halton Borough Council	Hynburn Borough Council	Kingston Upon Hull Council	London Borough of Haringey
Hambleton District Council	Ibex Interiors Ltd	Kirklees Borough Council	London Borough of Harrow
Hammonds	Ibstock Brick Ltd	Knowsley Metropolitan Borough Council	London Borough of Havering
Hampshire County Council	ICD Gas (Reepham Ltd)	Knox & Wells Ltd	London Borough of Hillingdon
Hanson Construction Projects	Improvement & Development Agency (IDeA)	Laing O'Rourke	London Borough of Hounslow
Hanson Environment Fund	Industry Council for Packaging & the Environment	Lake District National Park Authority	London Borough of Islington
Harborough District Council	Innogy PLC	Lakehouse Contracts Ltd	London Borough of Lambeth
Harlow District Council	Institute Leisure & Amenity Management (ILAM)	Lakehouse Contracts Ltd	London Borough of Lewisham
Harrison Cowley	Institute of Chartered Engineers	Lancashire County Council	London Borough of Merton
Harrogate Borough Council	Institute of Directors	Lancaster City Council	London Borough of Newham
Hart District Council	Institute of Environmental Assessment	Landscape Institute	London Borough of Redbridge
Hartlepool Council	Institute of Horticulture	LARAC	London Borough of Richmond upon Thames
Hartlepool Water PLC	Institute of Quarrying	Larnaca Gas (Reepham Ltd)	London Borough of Southwark
Haslam Homes	Institution of Civil Engineers	Law Officers' Department	London Borough of Sutton
Hastings Borough Council	Institution of Highways & Transportation	Leadbitter Construction	London Borough of Tower Hamlets
Hathaway Roofing Ltd	Interserve Project Services Ltd	Leeds City Council	London Borough of Waltham Forest
Havant Borough Council	Ipswich Borough Council	Leeds, Bradford & York Chamber of Commerce & Industry	London Borough of Wandsworth
HB Projects Ltd	Isle of Wight Unitary Council	Leicester City Council	London Bus Services Ltd
HBG UK Ltd	J & S Seddon (Building) Ltd	Leicestershire County Council	London Chamber of Commerce & Industry
HE Energy	J Murphy & Sons Ltd	Lend Lease Projects	London Councils
Helena Housing	Jackson Civil Engineering Ltd	Lewes District Council	London Development Agency
Henry Boot plc	Jacobs UK Ltd	Lichfield District Council	London Drywall Ltd
Herefordshire Council	James Burrell Ltd	Lincoln City Council	LONDON ELECTRICITY plc
Heritage Lottery Fund	JC Decaux	Lincolnshire County Council	London Energy Co. plc
Hertfordshire County Council	John Hellens Contracts Ltd	Linford Group Ltd	London RTAB
	John Laing Partnership	Linpac Plastics Ltd	London Thames Gateway Development Corporation
	John Sisk & Son	Liverpool Chamber of Commerce & Industry	London Transport

Longbow Design	Middlesex University	NISP	npower
Lord Chancellor's Department	Midland Shires	Noise Abatement Society	NSALG -National Society of Allotment & Leisure Gardeners
Lovell Partnerships Ltd	MIDLANDS GAS LTD T/A AMERADA	Nolan Davis Contracting Ltd	Nuneaton & Bedworth Borough Council
Luton Borough Council	Mid-Yorkshire Chamber of Commerce	Norfolk County Council	Oadby & Wigston B C
M S Oakes Ltd	Milton Keynes Council	Norman Disney & Young	Office for National Statistics
MAC Construction	Minchinhampton Architectural Salvage Co.	North Cornwall District Council	Office of the Secretary of State for Wales
Macclesfield Borough Council	Mining Association of the United Kingdom	North Devon District Council	Office of the Welsh Assembly
Magistrates Association	Ministry of Defence	North Dorset District Council	Oldham Borough Council
Maidstone Borough Council	Mobil Gas Limited	North East Assembly	OneNorthEast
Maldon District Council	Mole Valley District Council	North East Derbyshire Dist Council	Onyx Environmental Group Plc
Malvern Hills District Council	Monal Utilities Limited	North East Lincs Council	Optima
Manchester & Cheshire Construction Co Ltd	Morgan Est	North East RTAB	Osborne Homes
Manchester Airport	Morrison	North Hertfordshire District Council	Oswestry Borough Council
Manchester Chamber of Commerce & Industry	Morrison Utility Services	North Kesteven District Council	Owen Pugh Ltd
Manchester City Council	Morrison Utility Services	North Lincolnshire Council	Oxford City Council
Mann Construction Limited	MOSS CONSTRUCTION	North Norfolk District Council	OXFORD POWER LIMITED
Mansell Construction	My Planet Ltd.	North Shropshire District Council	Oxfordshire County Council
Mansell Construction Services Ltd	Myddelton Construction Ltd	North Somerset Council	P J Lilley Limited
Mansfield District Council	National Assembly for Wales	North Tyneside Borough Council	P T Contractors
Marine Conservation Society	National Association of Citizens Advice Bureaux	North Wales Energy/Energy Supplies UK Ltd	P. Waller Limited
Marriott Construction	National Association of Probation Officers	North Warwickshire Borough Council	Pakawaste Group
Marshalls Plc	National Byway	North West Development Agency	Peak Park National Park Authority
Marshalls Street Furniture	National Consumer Council	North West Leicestershire District Council	Pedestrians Association
MAVERICK ENERGY LTD	National Farmers' Union (NFU)	North West Regional Assembly	Pembrokeshire Coast National Park Authority
May Gurney Ltd	National Federation of Builders	North West RTAB	Pembrokeshire County Council
McDonalds Restaurant	National Federation of Demolition Contractors	North Wiltshire District Council	Pendle Borough Council
McNicholas Construction	National Grid	North York Moors National Park	Pennine Natural Gas Ltd
Medway Council	National Specialist Contractors Council	North Yorkshire County Council	PENTEX OIL & GAS LIMITED
Melton Borough Council	National Trust	Northampton Borough Council	Penwith District Council
Mendip District Council	NCWRP	Northamptonshire County Council	Perfect Pizza Ltd
Merseyside Environmental Advisory Service	NetRegs	Northern Counties Safety Group	Perseco
Merseytravel	Network Rail	NORTHERN ELECTRIC & GAS	Peter Clegg & Son (Builders) Ltd
Merthyr Tydfil County Borough Council	New Forest Committee	Northern Electric & Gas Ltd	Peterborough City Council
Metropolitan Borough Of Wirral	New Forest District Council	Northern Gas Supplies Ltd	Pittvale Property
MGS Building & Electrical Cont Ltd	New Opportunities Fund	Northern Ireland Office	Pizza Hut UK
Mid Bedfordshire District Council	Newark Sherwood District Council	Northumberland County Council	Planning Officers' Society
Mid Devon District Council	Newcastle City Council	Northumberland National Park	Plymouth City Council Untary
Mid Kent Water PLC	Newcastle Under Lyme Borough Council	Norvic Gas Ltd	Pochin (Contractors) Ltd
Mid Suffolk District Council	Newcastle University	Norwich City Council	Port of London Authority
Mid Sussex District Council	Newcastle Upon Tyne City Council	Nothumbrian Water Ltd	Portland Outdoor Advertising Ltd
Midas Group	Newport County Borough Council	Nottingham City Council	Portsmouth City Council
Middlesbrough Council	NewWest Gypsum Recycling (UK) Ltd	Nottinghamshire County Council	Portsmouth City Primary Care NHS Trust

Portsmouth City Teaching PCT
 Portsmouth Water PLC
 Poster Publicity
 POWERGEN (UK) PLC
 Premier Waste Services (UK) Ltd
 Preston Borough Council
 PriDE
 Privy Council Office
 Professional Anglers Association
 Purac Ltd
 Purbeck District Council
 Purcreation
 Quantum Gas Management Ltd
 Quarry Products Association,
 RAC
 Railtrack PLC
 Reading Borough Council Unitary
 Redcar & Cleveland Borough Council
 Redcliffe Homes Ltd
 Redditch Borough Council
 Redrow
 Redrow Homes
 Regent Gas Ltd
 Regional Assembly for Yorkshire & the Humber
 Reigate & Banstead Borough Council
 Restormel Borough Council
 RGCM Ltd
 Ribble Valley Borough Council
 Richard Broughton Associates
 Richmondshire District Council
 Ringway Ltd
 Roalco Ltd
 Robert Woodhead Ltd
 Rochdale Borough Council
 Rochford District Council
 ROK
 Rolls-Royce
 Rossendale Borough Council
 Rother District Council
 Rotherham Borough Council
 Roy Hankinson Group
 Royal Borough of Kensington & Chelsea

Royal Borough of Kingston Upon Thames
 Royal Institution of Chartered Surveyors (RICS)
 Royal National Institute of the Blind (RNIB)
 Royal Society for Nature Conversation (RSNC)
 Royal Society for Prevention of Cruelty to Animals (RSPCA)
 Royal Society of the Prevention of Accidents (RoSPA)
 Royal Town Planning Institute
 Royal Town Planning Institute (RTPI)
 RSKENSR
 Rugby Borough Council
 Runnymede Borough Council
 Rushcliffe Borough Council
 Rushmoor Borough Council
 Rutland County Council
 RWE Trading Direct Ltd
 Ryedale District Council
 Salsbury District Council
 Salford City Council
 Sandwell Borough Council
 Sandwell Homes Ltd (Investment Division)
 Sandwell Metropolitan Borough Council
 Sanitary Medical Disposal Services Association
 Saturn Gas Limited
 Save Waste & Prosper
 Scarborough Borough Council
 Schofield Lothian
 Scotland Office
 SCOTTISH & SOUTHERN HYDRO-ELECTRIC
 Scottish Executive
 SCOTTISH GAS
 SCOTTISH HYDRO-ELECTRIC GAS
 Scottishpower
 SDC Builders Ltd
 Sedgefield Borough
 Sedgemoor District Council
 Seeboard Energy Gas Ltd
 Sefton Borough Council
 Selby District Council
 Sensory Trust
 SERAC LTD
 SERTAB

Sevenoaks District Council
 SEVERN TRENT ENERGY
 Severn Trent Water Ltd
 Seymour (CEC) Ltd
 SGS UK Ltd
 Sheffield City Council
 Shell Gas Direct Ltd
 Shepway District Council
 Shrewsbury & Atcham B C
 Shropshire County Council
 Sir Robert McAlpine
 SITA
 SJ Berwin LLP
 Skanska
 Slough Borough Council
 Smartestenergy Ltd
 Smith, Anderson & Co Ltd
 Snowdonia National Park Authority
 Society of County Treasurers
 Society of Local Authority Chief Executives
 SOL Construction
 Solihull Borough Council
 Somerset County Council
 South Bedfordshire District Council
 South Buckinghamshire District Council
 South Cambridgeshire District Council
 South Derbyshire District Council
 South East Centre for the Built Environment (SECBE)
 South East England Development Agency (SEEDA)
 South East England Regional Assembly
 South East Water PLC
 South Gloucester Council
 South Hams District Council
 South Holland District Council
 South Kesteven District Council
 South Lakeland District Council
 South Norfolk Council
 South Northamptonshire Council
 South Oxfordshire District Council
 South Ribble Borough Council
 South Shropshire District Council

South Somerset District Council
 South Staffordshire Council
 South Staffordshire Water PLC
 South Tyneside Metropolitan Borough Council
 South West of England Development Agency
 South West RTAB
 South West Water Ltd
 SOUTH WESTERN ELECTRICITY plc
 Southampton City Council
 Southend on Sea Borough Council
 Southern Counties
 SOUTHERN ELECTRIC GAS
 Southern Water Services Ltd
 Spelthorne Borough Council
 St Albans City Council
 St Edmundsbury Borough Council
 St Helens Metropolitan Borough Council
 Stafford Borough Council
 Staffordshire County Council
 Staffordshire Moorland District Council
 Stevenage B.c.
 Stockport Metropolitan Borough Council
 Stockton-on-Tees Borough Council
 Stoke on Trent City Council
 Stradform (South West) Ltd
 Strata Construction
 Strategic Rail Authority
 Stratford on Avon District Council
 Stroud District Council
 Suffolk Coastal District Council
 Suffolk County Council
 Sunderland city Council
 Sunderland Housing Group
 Surrey County Council
 Surrey Heath Borough Council
 Sustainable Development Commission
 Sustrans/CTC
 Sutton & East Surrey Water PLC
 Swale Borough Council
 SWALEC
 SWH Ltd
 Swindon Unitary Council

T Denman & Sons Ltd
Tamdawn Regeneration Ltd
Tameside Borough Council
Tamworth Borough Council
Tandridge District Council
Taunton Deane Borough Council
Taylor Woodrow Construction
TCPA - Town & Country Planning Association
Teesdale District Council
Teignbridge District Council
Telford & Wrekin Council
Tendring District Council
Tendring Hundred Water Services Ltd
Test Valley Borough Council
TEW Engineering Ltd
Tewkesbury Borough Council
TFA Interior Projects Ltd
TfL StreetManagement
Thames 21
Thames Valley Chamber of Commerce
Thames Water Utilities Ltd
Thanet Distirct Council
The Aqua Group
The Environment Centre
The Environment Practice
The Gas Company
The Gas Supply Company
The Yorkshire & Humber Assembly
Thomas Barnes Group
Thomas Fish & Sons Ltd
Three Rivers District Council
Three Valleys Water PLC
Thurrock Council
Thurrock Thames Gateway Development Corporation
Timber Trade Federation
Tonbridge & Malling Borough Council
Torbay Council
Torfaen County Borough Council
Torrige District Council
Total Gas Marketing Ltd
TRADA Technology
Trafford Borough Council

Transport 2000
Transport for London
Trant Construction Ltd
Trent & Dove Housing Ltd
TRL Ltd
Tunbridge Wells Borough Council
TXU Energi
TXU ENERGI
Tynedale District Council
Tyneside Cyrenians
UCATT
UK ELECTRIC POWER LIMITED
United Utilities PLC
University of Salford
University of Southampton
Urban Parks Forum
UTILITY LINK LIMITED
Utopia Construction
Uttlesford District Council
Vale Of Whitehorse District Council
Vale Royal Borough Council
Veolia Water Solutions & Technologies
Vinci PLC
Vinden Partnership
Vodafone
Vodafone UK
Wakefield City Council
Walker Developments SW Ltd
Walsall Metropolitan Borough Council
WAMITAB
Wansbeck District Council
Warings Contractors Ltd
Warrington Borough Council
Warwick District Council
Warwickshire County Council
Waste & Resources Action Programme (WRAP)
Waste Planning
Waste Watch
Wastefile UK
Wates Living Space
Watford Borough Council
Waveney District Council

Waverley Borough Council
Wealden District Council
Wear Valley District Council
Welwyn Hatfield District Council
Wessex Water Services Ltd
West Berkshire District Council
West Devon Borough Council
West Dorset District Council
West Lancashire D C
West Lindsey District Council
West Mercia Constabulary
West Midlands Local Government Association
West Midlands Regional Chamber
West of England Partnership Office
West Oxford District Council
West Somerset District Council
West Sussex County Council
West Sussex County Council
West Wiltshire District Council
Westinghouse Rail Systems Limited
Westminster City Council
Weymouth & Portland Borough Council
Whitbread Group PLC
White Design Associates
Wigan Metropolitan Borough Council
Wilding Butler Construction Ltd
Wildlife & Countryside Link
Wilfrid Lord Group Ltd
Willmott Dixon Ltd
Wiltshire County Council
Winchester City Council
Windsor & Maidenhead Royal Borough Council
WMR Ltd
Woking Borough Council
Wokingham District Council
Wolverhampton Borough Council
Wolverhampton City Council
Women's Environment Network
Woodland Trust
Worcester City Council
Worcestershire County Council
Worthing Borough Council

Wrigley Company Ltd
Wychavon District Council
Wycombe District Council
Wyre Borough Council
Wyre Forest District Council
Wyvern Waste Services Ltd
YE Gas Ltd
York City Council
Yorkshire & the Humber RTAB
Yorkshire Dales National Park
YORKSHIRE ELECTRICITY
Yorkshire Forward
Yorkshire Water Services Ltd
Zenith Development Partnership