



**SITE WASTE MANAGEMENT
PLANS**

Guidance for Construction
Contractors and Clients

VOLUNTARY CODE OF PRACTICE

DATE ISSUED: 8 JULY 2004

The DTI drives our ambition of 'prosperity for all' by working to create the best environment for business success in the UK. We help people and companies become more productive by promoting enterprise, innovation and creativity.

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SUSTAINABILITY FORUM



Foreword

The Department of Trade and Industry has joined the construction industry in funding the key working group which produced this important guidance document on Site Waste Management Plans (SWMPS).

We have to work together to resolve the shortage of Landfill space and the declining number of waste management sites. Note that it is not essential for there to be a separate SWMP document for your site - the guidance given here can equally well be included in a Waste Management Section of an overall Site Environmental Management Plan.



We are jointly determined to minimise waste at source on construction sites. The key to this is ensuring that site engineers, surveyors and planning and procurement experts accurately assess the use of materials and the potential for their re-use and recycling both on and off site.

This guide's 'checklist' focuses on a range of challenging questions. Its follow-up 'datasheets' give the types and quantities of potential waste materials in the construction process. The guidance gives practical options for re-use and recycling. The savings benefits must be considerable and far outweigh any small cost of doing this work. The sector tells me that 20% of materials on site can be saved. For instance in aggregates the potential savings of a 50% take-up of SWMPs by the top 2,000 contractors are excess of £100 million.

We intend to implement this excellent report through workshops run by Constructing Excellence in conjunction with Envirowise, and by posting of the documents on our website www.dti.gov.uk/construction/sustain

Initially the guide will be a voluntary code of practice, for a trial period of one year.

I am grateful for all the support we have had from the sector in producing this guide to benefit us all.

A handwritten signature in black ink, reading "Nigel Griffiths".

Nigel Griffiths MP
Parliamentary Under Secretary for Construction & Small Business

Acknowledgements

This guidance document has been prepared by a small working group lead by DTI. The group included representatives of the following organisations: Carillion plc, Constructing Excellence, Defra, DTI, Environment Agency, Envirowise, WRAP, ODPM and Crane Environmental. [Any suggestions for improvements to this guidance document should be sent to: David Hughes, DTI, Construction Sector Unit, Bay 267, 151 Buckingham Palace Road, London SW1W 9SS].

The Working Group would particularly like to express their appreciation to Carillion plc for the substantial contribution they have made in preparing this document.

Contents

1	Introduction	4
2	Background	5
3	Guide To Formulating a Site Waste Management Plan	5
4	General Guidance on Waste and Legislation	6
4.1	Guidance	6
5	Duty of Care - Your Responsibilities	7
5.1	Filling in the Paperwork	7
5.2	Checking	8
5.3	What is Waste?	8
5.4	Waste Classification	8
5.5	Special Waste	9
6	Best Practice: waste minimisation	9
6.1	Identify a Project Manager	9
6.2	Programme Execution	10
7	Guide To Best Practice & Training Materials	10
7.1	General	10
8	Guide To Appointing Waste Sub-Contractors	11
8.1	Nominated Representative	11
9	General Reporting Requirements	11
9.1	Criteria and Circumstances for Reporting via the Site Waste Management Plan arrangements	11
Annexes		
A.	Checklist	12
B.	Site Data Form	15

1 Introduction

Site Waste Management Plans (SWMPs) are an important tool for construction companies and their clients, of all sizes, to improve their environmental performance, meet regulatory controls and reduce rising costs of disposing of waste. This document sets out the basic structure of SWMPs and how companies can best use them to improve and manage their operations at all stages of site activity. It includes useful checklists and other guidance to help ensure the Plan is a practical tool.

Why do you need an SWMP?

Adopting a site management approach based around an effective SWMP can bring your company many benefits including:

- Better control of risks relating to the materials and waste on your site,
- A tool to help you deal with any queries from, for example the environmental regulators, regarding wastes arising from your site,
- A mechanism to demonstrate to your clients how you manage your waste and minimise costs and risks to them,
- A tool to help you fulfil the requirements of your quality and environmental management systems,
- Compliance with likely future contractual requirements from public and private sector clients, and
- A system to help you and your workforce make cost savings by better managing your materials supply, materials storage & handling and better managing your waste for recovery or disposal.

How to use this document

The background information on SWMPs is based upon the experience of some of the UK's leading construction companies and gives you useful guidance on how an SWMP relates to your legal obligations with regard to definitions of waste and includes references to good practice, (for further information see the web-links at section 7.1).

Use the Key Steps (section 3, pages 5 & 6) and follow the signposts to the guidance, checklists that will help you quickly create an effective SWMP.

Identify and measure your waste to enable completion of the Site Data Form . This will help you relate your particular site characteristics to the different elements of the SWMP. For example, if there are no demolition operations on your site then you can ignore the sections relating to this.

2 Background

The purpose of this document is to:

- Assist Contractors in the development and roll out of Site Waste Management Plans
- Ensure that all Contractors are aware of their legal duties when dealing with waste
- Highlight the examples of best practice that will assist companies with compliance.

This guidance document is intended for use by companies engaged in projects of £200,000 or more in value. Other, smaller companies or smaller projects may also find the guidance useful.

In any construction project, there may be a variety of different wastes to be dealt with, from office and canteen waste to asbestos and clinical waste. Coupled with this range of wastes is an array of legislation on how the waste is to be dealt with, combined with ever increasing prices for the legitimate disposal of waste due to increasing standards of environmental protection at waste management sites and rises in the Landfill tax.

Not only is waste becoming more and more expensive to dispose of, it also amounts to waste of valuable resources. And as landfill gets more scarce, we have to start being more innovative with what we do with our waste and look to manage it far more effectively.

3 Guide To Formulating a Site Waste Management Plan

There are nine important steps to producing a Site Waste Management Plan:

Step 1 – Identify who is responsible for producing the SWMP and ensuring that it is followed – and make sure that they know who they are! Different individuals may be responsible during the planning stages and the site-work stages. They must know that they are responsible and what they are responsible for. They must have sufficient authority to ensure that others comply with the SWMP.

Step 2 – Identify the types and quantities of waste that will be produced at all stages of the work programme/plan. (See the Site Data Form and checklist points).

Step 3 – Identify waste management options including reference to the waste hierarchy, on- and off-site options and pay particular attention to arrangements for identifying and managing any hazardous wastes produced.

Step 4 – Identify waste management sites and contractors for all wastes that require them and ensure that the contracts are in place, emphasising compliance with legal responsibilities such as the Duty of Care. (See Site Data Form).

Step 5 - Carry out any necessary training of in-house and sub-contract staff so that everyone understands the requirements of your Site Waste Management Plan.

Step 6 – Plan for efficient materials and waste handling and do this early enough bearing in mind any constraints imposed by the site and its location. Based upon steps 2-6 develop indicative percentage targets for each disposal or waste stream and record on datasheet.

Step 7 – Measure how much waste and what types of waste are produced and compare these against your SWMP to make sure you are on track to manage all wastes properly and to learn lessons for next time you have to produce an SWMP. These figures should be recorded on the datasheet.

Step 8 – Monitor the implementation of the SWMP to make sure that all is going according to plan, be prepared to update your plan if circumstances change, learn lessons for next time.

Step 9 – Review how the SWMP worked at the end of the project and identify learning points for next time – share these with colleagues who may be involved in preparing or using SWMPs so that they can benefit from your experiences also. You may wish to compare your achieved percentages against your SWMP targets on the datasheet and identify learning points.

4 General Guidance on Waste and Legislation

4.1 Guidance

The following definitions and guidance is not intended to be an exhaustive in depth look at waste legislation. It is intended to give an initial overview of UK waste Legislation and outline our legal duties.. You are also encouraged to visit the 'NetRegs' website, which has specific information for a range of construction activities: www.netregs.gov.uk

5 Duty of Care - Your Responsibilities

All those who produce or handle wastes from demolition, earthworks and construction activities have legal responsibilities – Duty of Care - for its safe keeping, transport and subsequent recovery or disposal. Failure to comply can result in an unlimited fine.

Duty of Care is a legal requirement under Section 34 of the Environmental Protection Act 1990. Detailed requirements for waste transfer notes are set out in the Environmental Protection (Duty of Care) Regulations 1991. 'Waste Management –The Duty of Care, Code of Practice' was published by the Government in March 1996.

Duty of Care requires you to take care of your waste while its in your control, check that the person to whom you give your waste is authorised to receive it, make out a waste transfer note when the waste is handed over and to take all reasonable steps to prevent unauthorised handling or disposal by others. For example, checking that your waste goes to the intended facilities can avoid flytipping.

Examples of authorised persons are council waste collectors, registered waste carriers, holders of a waste management licence or holders of a registration of an exemption from the need to hold a waste licence.

5.1 Filling in the Paperwork

When waste is passed from one person to another, the person taking the waste must have a written description of it and a transfer note must be filled in and signed by both parties involved in the transfer. Repeated transfers of the same type of waste between the same parties can be covered by the one transfer note for up to one year.

The transfer note must include:

- What the waste is, how much there is and its 6-digit European Waste Code
- What sort of containers it is in.
- The time, date and place the waste was transferred.
- The names and addresses of both persons involved in the transfer.
- Details of which category of authorised person each one is e.g. producer, registered waste carrier, waste licence holder
- If either of the persons is a registered waste carrier, the certificate number of the registration
- If either of the persons has a waste management licence, the licence number of the facility.

- Where appropriate, the name and address of any broker involved in the transfer of waste
- Signed by both parties, and transfer notes kept for two years

5.2 Checking

- If you are dealing with hazardous wastes, such as asbestos, chemicals, oils or contaminated soils, you have extra legal responsibilities and may be required to complete detailed waste transfer consignment notes. If unsure, check with your local Environment Agency office: 0845 9 333 111.
- Check the registration certificate of the waste carrier before handing over the waste. This can be an A4-sized colour certificate (photocopies are not sufficient) or one that looks like a credit card. Both have security features built in.
- Check with your waste carrier where the waste is being taken and make sure the destination is authorised to receive it. If in doubt, check with the Environment Agency 0845 9 333 111. For difficult or bulky wastes, it may be appropriate to check that the waste wagons have actually delivered to the intended site.
- Be alert to any evidence or suspicion that demolition, earthworks or construction waste is being dealt with illegally. If you have any suspicions that someone is handling waste illegally or using an unauthorised disposal site, contact the hotline number 0800 80 70 60.

5.3 What is waste?

For our purposes waste is defined as:

Any substance or object that you discard, intend to discard, or are required to discard is waste and as such is subject to a number of regulatory requirements. The term 'discard' has a special meaning. Even if material is sent for recycling or undergoes treatment in-house, it can still be waste.

Whether or not a particular material is waste is for the person producing it to decide in accordance with the law.

5.4 Waste Classification

Wastes from construction, demolition and excavation operations will normally be a controlled waste, classified as commercial or industrial waste, and hence subject to waste-related legislation.

Wastes from construction, demolition and excavation operations will normally be a 'controlled waste' and hence subject to waste-related legislation.

However

Certain types of controlled waste have properties that make them especially hazardous or difficult to dispose of. These wastes are referred to as Special Waste and require a pre-consignment note system for their recovery or disposal.

5.5 Special Waste

The Landfill Regulations 2002 have already implemented the European Hazardous waste list for landfill. Defra will publish their consultation on Hazardous waste in 2004.

As a result of these changes to the law, the term "Special Waste" is being replaced by the term "Hazardous Waste" to describe a wider number of wastes with hazardous properties and requiring new control measures.

6 Best Practice: waste minimisation

Following the guidance in Section 3, a Site Waste Management Plan for a particular contract will improve waste management practices and help to reduce the amount of waste produced (and associated costs). However, to obtain the best possible results a full waste minimisation initiative is undoubtedly the key to success – particularly for larger projects. This section provides guidance on how to introduce the concept of waste minimisation.

6.1 Identify a Project Manager

It can be a daunting task to incorporate waste minimisation practices onto a contract. Before any action is taken a project leader (or 'champion') and project team should be in place. There can be no prescriptive rule as to who will make a good project manager for a waste minimisation programme. However he or she must be able to demonstrate a number of characteristics:

- The project leader must be able to communicate with staff and management.
- He or she should be able to put in place the required resources, information, staff motivation and training when necessary.
- A good knowledge of the contract and especially its operations side is also essential, and it may therefore suit a member of staff who has worked in several different sections, with a good overview of them all.
- Management must also recognise that the project leader will require time set aside for waste minimisation activities and make the necessary commitment.
- A project team should be appointed for larger contracts.

When the project leader and team have been established, the programme can get underway, following the steps below.

6.2 Programme Execution

The implementation of the waste minimisation changes require:

- Planning
- Ownership
- Staff education/training
- Monitoring

To have the greatest impact the programme should be a planned series of events, throughout which all the staff involved must be kept informed of progress. It is also beneficial if staff are given the opportunity to input to the process. Staff undertaking the waste producing processes often can provide practical details and become useful sources of information. Employees need to be told why the changes are happening and what the benefits will be. This is important, as initially the reason for the changes may not be clear to the staff, as the benefit may be seen further down the line, at a process with which they have no involvement.

The monitoring of all changes is vital if the success of the programme is to be measured. A clear success indicator can be, for example, a reduced electricity bill, or reduced disposal costs.

7 Guide To Best Practice & Training Materials

7.1 General

There are a variety of examples of best practice in the preparation of site waste management plans. These are included in the websites of the various organisations listed - please see the links below:

www.smartwaste.co.uk

www.ciria.org.uk

www.constructingexcellence.org

www.envirowise.gov.uk

www.greenwich-village.co.uk

www.bre.co.uk

www.carillionplc.co.uk

www.defra.gov.uk/environment (+issue covered)

www.dti.gov.uk

www.netregs.gov.uk

Demolition Issues

<http://www.ice.org.uk/downloads//Demolition%20Protocol%20-%20Implementation%20Document%20-%20Final.pdf>

Pollution prevention materials order form:

http://www.environment-agency.gov.uk/business/444251/444731/?version=1&lang=_e

Sample case studies, provided by Carillion plc are also available at:

Tool Box Talks

Everything from bats to wild parsnips!

<http://www.carillionplc.com/sustain-2002/Z.Toolbox%20Talks.htm>

*Case Studies

This link takes you to Carillion's internet site which details all of their case studies surrounding sustainability, you will see that all aspects of sustainability are covered.

<http://www.carillionplc.com/sustain-2002/Z.Case%20Records.htm>

A case study from Carillion's works at Notts Tram.

<http://www.carillionplc.com/sustain-2001/case-records/notts%20tram.pdf>

8 Guide To Appointing Waste Sub-Contractors

8.1 Nominated Representative

A 'nominated representative' of the lead sub-contractor company, normally either the site engineer or site surveyor, should have the responsibility of preparing the Site waste management plan and reporting its outcomes on the relevant data sheets to the client. The client would then notify the local authority.

9 General Reporting Requirements

9.1 Criteria And Circumstances For Reporting Via The Site Waste Management Plan Arrangements

These reporting arrangements are aimed at the medium to large sized companies engaged in any building, refurbishment or civil engineering work. They are intended to encompass developments where the total value of a project is £200,000 or in excess of that sum. However, smaller companies will also gain operational improvements by introducing SWMPs on contracts of smaller value.

Companies should develop the format of their SWMPS to best suit their requirements, but are encouraged to follow the guidance given here to ensure that they cover all the key aspects required for such plans, including data reporting. A sample data reporting sheet is provided.

Annex A. Site Waste Management Plan Checklist

Project name	
Project address/location	
Main contractor: <i>Contractor details, including signature of authorised representative</i>	
Client signature	
Signature of identified sub-contractor (see Q3 & 4)	
Signature of identified sub-contractor (see Q3 & 4)	

Project Stages	Questions to consider	Tick if 'Yes'	Comment: If 'yes', what action have you taken/do you propose to take? If 'no', why not?
Policy	1 Has your organisation adopted a waste management policy?		
	2 Has the client signed the Site Waste Management Plan?		
	3 Have relevant sub-contractors producing significant wastes streams been identified?		
	4 Have the identified sub-contractors signed the Site Waste Management Plan?		
Procurement	5 Has a careful evaluation of materials been made so that over-ordering and site wastage is reduced?		
	6 Has full consideration been given to the use of secondary and recycled materials?		
	7 Is unwanted packaging to be returned to the supplier for recycling or re-use?		
	8 Can unused materials be returned to purchaser or used on another job?		
Project planning	9 Has responsibility for waste management planning and compliance with environmental legislation been assigned to a named individual at both main contractor and identified sub-contractors?		
	10 Has a project programme been developed to include likely waste arisings (how much, when, and what types)?		
	11 Has an area of the site been designated for waste management, including segregation of waste?		

Project Stages	Questions to consider	Tick if 'Yes'	Comment: If 'yes', what action have you taken/do you propose to take? If 'no', why not?
Project planning	12 Have targets been set for the different types of waste likely to arise from the project?		
	13 Have measures been put in place to deal with expected (and unexpected) hazardous waste?		
	14 Has disposal of liquid wastes such as wash-down water and lubricants been considered?		
	15 Where relevant, has a discharge consent been obtained from the Agency?		
	16 Has agreement been sought from the sewerage company for trade effluent discharge?		
	17 Have opportunities been considered for re-use of materials on-site?		
	18 Have opportunities been considered for re-use of materials off-site?		
	19 Have opportunities been considered for on-site processing and re-use of materials?		
	20 Have opportunities been considered for reprocessing materials off-site?		
	21 Have you considered what are the most appropriate sites for disposal of residual waste from the project?		
	22 Are there opportunities for reducing disposal costs from waste materials which may have a commercial value?		
	Site operations	24 Has responsibility for waste management on-site and compliance with environmental legislation been assigned to a named individual?	
25 Have toolbox talks been planned for all site personnel about waste management on-site?			
26 Are selected waste materials segregated to allow best value to be obtained from good waste management practices?			
27 Are containers/skips clearly labelled to avoid confusion?			

Project Stages	Questions to consider	Tick if 'Yes'	Comment: If 'yes', what action have you taken/do you propose to take? If 'no', why not?
Site operations	28 Are Duty of Care procedures complied with, including provision of transfer notes and checking authorisation of registered carriers, registered exempt sites and licensed waste management facilities?		
	29 Are any checks made that excavation waste is received at the intended site?		
	30 Is implementation of agreed waste management procedures monitored?		
	31 Are reports regularly produced regarding waste quantities and treatment/disposal routes, and on costs incurred?		
	32 During site operations, are barriers to good waste management practice considered and noted for incorporation into the post-completion review?		
Post completion	33 Has a final report of use of recycled and secondary materials, waste reduction, segregation, recovery and disposal, with costs and savings identified, been completed?		
	34 Has the final report been signed by the relevant sub-contractors and the client?		
	35 Have key waste management issues been considered for action at future projects?		

Please feel free to add extra sheets if you wish (e.g. if you wish to include a project site plan showing location of waste management facilities)

ANNEX B. Site Waste Management Plan data sheet

Project name _____

Project address/location _____

Main contractor _____

Person responsible for waste management on site
(name and job title) _____

Person and company completing this form, if different _____

Types of waste arising (add more rows if needed):

Material	Quantity (in m ³)						
	Re-used on-site	Re-used off-site	Recycled for use on-site	Recycled for use off-site	Sent to recycling facility	Sent to WML exempt site	Disposal to land-fill
Inert							
Active							
Hazardous							
Totals (in m ³)							
Performance score as % *							
SWMP Target %*							

**There is an option to develop this form as a measurement tool to evaluate against each waste stream.*



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