Site waste – it's criminal
A simple guide to Site Waste Management Plans

Introduction

10m tonnes of construction products are wasted every year, at a cost of £1.5 billion

Much of this site waste is harmful to the environment and costly to your business. Site Waste Management Plans (SWMPs) will help you manage site waste more effectively, reducing potential harm to the environment and human health.

SWMPs are now a legal requirement in **England** for all construction projects that were started after 6 April 2008 with an estimated construction cost of over £300,000.

If you are in **Northern Ireland**, **Scotland** or **Wales**, you are not legally required to have a SWMP. However, a SWMP will help you manage your materials more effectively and could help you to reduce the amount of waste you produce and save you money.

In Northern Ireland the Department of the Environment Northern Ireland (DOENI) is consulting on proposals to make SWMPs a legal requirement. The regulations are expected to come into force in spring 2011. For more information see our **guidance on site waste management plans for Northern Ireland**.

This simple guide will help you create an effective SWMP, whether you are required to have one by law, it is requested by your client or planning authority, or you just want to follow industry good practice.

Follow the steps to prepare your plan and put it into practice. Once you have developed your plan, you can use the checklist in part three of this guide to make sure you've covered all areas.

How to use this document:

The document is in four parts:

Part one: What you need to know about SWMPs

Part two: How to create your own SWMP

Part three: SWMP checklist

Part four: Further guidance and information

Part one: What you need to know about site waste management plans

What is a SWMP?

A SWMP sets out how resources will be managed and waste controlled at all stages during a construction project.

A SWMP covers:

- **Who** will be responsible for resource management.
- **What** types of waste will be generated.
- **How** the waste will be managed – will it be reduced, reused or recycled?
- **Which** contractors will be used to ensure the waste is correctly recycled or disposed of responsibly and legally.
- **How** the quantity of waste generated by the project will be measured.

Who is affected by a SWMP?

SWMPs affect anyone who is:

- planning or delivering a construction project in England with an estimated construction cost of over £300,000
- working on smaller projects in England and want to follow industry good practice
- planning a public sector construction project valued at more than £200,000 in Northern Ireland
- planning a project for which your client or planning authority requires a SWMP
- in Northern Ireland, Scotland and Wales and wants to follow industry good practice
- a supplier to the construction industry.

Why do you need a SWMP?

- **To comply with the law** – All projects in England with an estimated construction cost of over £300,000 must have a SWMP before work begins.
- **To protect the environment** – SWMPs help to manage and reduce the amount of waste produced by construction projects, which means less waste goes to landfill. Other environmental benefits include less damage to the local environment, less fly-tipping, lower energy use and greater use of recycled materials.
- **To save you money** – Managing your materials more efficiently immediately cuts costs. Better storage and handling reduces waste and makes it easier for materials to be recovered. Reusing materials on site will cut your disposal costs.

What are the benefits of a SWMP?

- **Save time** – You can answer queries about your waste from your environmental regulator or local council quickly and easily.
- **Help you avoid prosecution** – You can easily make sure all your waste is disposed of legally.
- **Win new business** – You can prove your environmental performance, which can give you an advantage in the tendering process.
- **Understand and reduce waste disposal costs** – You understand how your waste is managed so you can identify where to save money and reduce costs.
- **Enhance your reputation** – Your customers can see where you are helping the environment and making cost savings.
- **Help the environment** – You will manage materials and waste on site more responsibly so they are less of a risk to the local environment.
- **Improve future projects** – When your SWMP is complete you will have useful information for future projects about how you used resources and managed your waste.

Site waste – the facts:

The average 8 cubic yard skip costs around £150.*

The average cost of what is being thrown away in that skip is over £1,500 £1,600.*

The cost of waste can be as much as £43/m2 in typical construction projects.**

10m tonnes of construction products are wasted every year, at a cost of £1.5 billion.**

A reduction of 1% of this would save £15m and 104,000 tonnes of product a year.**

(*Source: Envirowise 2008)

(Source: Environment Agency 2008)**

Part two: How to create your own site waste management plan
Simple steps to help you create your own plan

A successful SWMP requires careful planning and preparation. Naturally, the bigger the project, the more work required.

You must prepare a SWMP before work begins if your project is in England with an estimated construction cost of over £300,000, or if it is a public sector contract over £200,000 in Northern Ireland.

Remember this guide is just a starting point. For your SWMP to be effective you must develop it to suit your particular project.

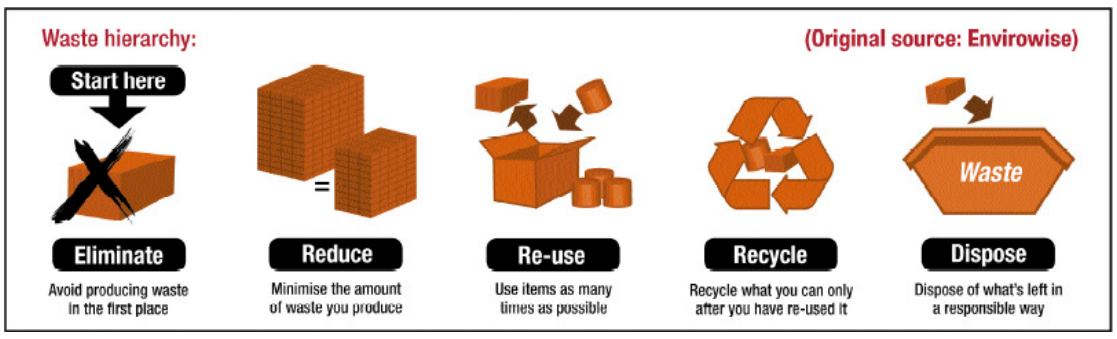
Step one – Plan and prepare

It is important that you start your SWMP during the concept and design of the project. Design decisions can make a significant contribution to preventing and reducing waste in the first place. For example: Can you purchase materials with less or returnable packaging? Can you pre-order materials to specification? Has sufficient storage space been created to allow wastes to be properly segregated as they arise? Speak to your suppliers to see if they can help.
You must consider whether you can reuse any of the materials generated on site. Can you reuse excavated soil to landscape an area, for example? Planning these steps in advance will enable you to get the most out of your materials and help prevent them becoming waste.

You must record all decisions about the project design, construction methods or materials that will minimise the waste produced on site. Make sure you record all measures taken to reduce waste, even where waste is totally eliminated. This will enable you to quantify tonnages of reduced waste and cost savings.

Make sure you schedule time to prepare your SWMP while the construction work is being planned. This early stage is the best opportunity to reduce the amount of waste your project will produce.

For further information see **WRAP's designing out waste guide**.
[http://www.wrap.org.uk/content/client-good-practice-guidance-preparation-and-design-tools]



Step two – Allocate responsibility for the SWMP

Several people can be involved in the delivery of the plan, but someone must be appointed to take overall responsibility for the SWMP. Typically, this will be the client in the pre-construction phase, but responsibility may transfer to the principal contractor when construction starts. However, at any time during the plan, one person should be in charge and responsible for updating it. That person needs to clearly understand their responsibilities and have the authority to ensure that others will cooperate.

The client and the principal contractor must sign a declaration that they will handle materials efficiently and manage waste appropriately in line with their duty of care.

Read our guidance on **your duty of care waste responsibilities**.
[http://www.netregs.org.uk/library_of_topics/waste/storage_handling__transport/duty_of_care.aspx]

Step three – Identify your waste

Identify the types and quantities of waste that the project will produce.

Think through every stage of the project and work out in advance what materials will be used. You must estimate how much waste will be produced and set realistic targets for how much of that waste you can reuse, recycle or dispose of.

A simple way of getting this information together is to use a waste data form. See an **example waste data form on page 7.**

You can also **download our template waste data form (PDF 57KB)**.
[http://www.netregs.org.uk/pdf/SWMP_waste_data_form.pdf]

This should include the waste hierarchy, on-site and off-site options for handling the waste, and any special arrangements you need to make for hazardous waste.

Use the data form at the planning stage of your project and then throughout the project, for example to report weekly or monthly summaries.

You need to update the waste data form regularly when waste is processed or taken away.

Site Waste Management Plan data sheet

Project name:			
Date when this sheet was filled out:			
Stage of project (eg planning stage, during project delivery, end of project):			
Report number (projected waste arising should be report number one etc):			
Project address / location:			
Estimated cost of the project:			
Client:			
Principal contractor:			
Person responsible for waste management on site (name and job title):			
Person and company completing this form, if different:			
Sites your waste is going to (including permit, licence or registered exemption reference number and details):			
A	B	C	D (add more boxes if needed)
Details of the people removing waste from your site (including their waste carrier registration number):			
A	B	C	D (add more boxes if needed)

		Quantity (specify volume or weight, eg m³, kg, T, number of skips)														
Types of waste arising (add more rows if needed):	**EWC** code**	**Reused**				**Recycled**						**Disposed of**				Relate to boxes above (ie insert A or B etc)		**WTN † completed?**
		on site		off site		for use on site		for use off site		Sent to recycling or reprocessing facility		land-fill		other than landfill (eg incinerated)				
Target / Achieved (T) / (A)		T	A	T	A	T	A	T	A	T	A	T	A	T	A	Waste site	Waste carrier	
Inert																		
Non-hazardous																		
Hazardous																		
Totals (m³, kg, T)																		
Performance score as %*																		
SWMP Target %*																		

Step four – Identify how to manage your waste

Work out the best options for recycling and disposing of all the types of waste your site produces. Make sure you know where, when and what sort of materials you can reuse, recycle or dispose of both on-site and off-site.

- Store and dispose of all waste responsibly. Don't mix different types of waste, you can save time and money if you segregate wastes as they are generated.
- Keep signed waste transfer notes (WTN) or consignment notes for all waste that you dispose of or transfer from your site.

You must keep WTNs for at least two years and consignment notes for at least three years. This could be kept as an appendix to your plan. For more information see our guidance on **records for receiving and transferring waste** [http://www.netregs.org.uk/library_of_topics/waste/storage_handling__transport.aspx].

Step five – Identify where and how to dispose of your waste

Make sure you know where and how your waste will be disposed of. If you are using waste disposal contractors you will need to make sure they dispose of it safely and legally.

Check that:

- anyone transporting your waste, including your own business, is registered as a waste carrier with your environmental regulator – record their waste carrier registration number on your plan
- all sites receiving your waste have an appropriate permit, licence or registered exemption from your environmental regulator – record these details (including the permit or licence reference number) on your plan.

You can check registered waste carriers with your environmental regulator.

Environment Agency: Public registers
[http://www2.environment-agency.gov.uk/epr/]

Northern Ireland Environment Agency: Registered waste carriers
[http://www.doeni.gov.uk/niea/waste-home/public_reg/reg-waste-carrier-transporter/carriers.htm]

SEPA: Registered waste carriers
[http://www.sepa.org.uk/waste/waste_regulation/waste_carriers_and_brokers/who_is_registered.aspx]

You can find licensed waste sites in your area using our **Waste Directory** [http://sepa-app-net02/NetRegs/library_of_topics/waste/storage_handling__transport/find_your_nearest_waste_site.aspx].

Step six – Organise your materials and waste

Make significant savings by carefully planning the materials you need for your project.

Avoid over-ordering to save money and reduce site waste.

Pre-order materials to specification at the design stage to reduce waste created from off-cuts and reduce labour costs.

Consider any limitations of your location.

Consider using recycled or previously used materials as another way of keeping costs down and helping the environment.

Record all the decisions that you make to minimise waste, such as the construction methods and materials to be used. Make sure you also record your SWMP targets in your waste data form.

Step seven – Communicate the plan and carry out training

Once you have a clear plan, let everyone know about it, especially subcontractors.

You must keep the SWMP on site. Make sure everyone working on the project knows where to find it.

Make sure that all workers on your site have the right training and information to carry out their work according to the SWMP. Meet with staff and contractors to clearly explain why the SWMP is important. Include SWMP information in your site induction, and provide updates through toolbox talks.

You may need to develop a training programme to make sure everyone understands how to report waste and material use. The training should ensure that everyone is aware of the importance of asking for and recording the correct paperwork, receipts, destinations for materials etc.

Train your workers on the importance of not mixing wastes or contaminating skips.

Designate skip areas and label skips clearly.

During your project, carry out spot checks and monitor your staff regularly to make sure they are following procedures.

Appoint a 'site champion' with the authority to make sure everyone sticks to the plan. **Someone fly-tips in the UK every 25 seconds. Fly-tipping costs the taxpayer £63million each year. (Source: Defra)**

Step eight – Measure your waste and update your SWMP

Once your project is underway you need to update the SWMP regularly when waste leaves your site.

Keep track of all movements of waste within and from your site. You must record the types of waste taken, who removed the waste and where they took the waste.

Keep your waste documents as an appendix to your plan and make sure you update your plan with the totals of waste handled to reflect the progress of the project.

- Measure how well the plan is working by assessing the type and quantity of waste that is produced.
- Take measurements so you can compare with future projects, for example:
- Volume (eg number of full skips)
- Value (eg cost of disposal)
- Weight (eg weighbridge tickets returned to you).
- Record your waste costs against:
- Value of project
- Area of build floorspace
- Volume of building.

Track your progress by:

-updating your waste data form regularly
-revising your waste data form if circumstances change.

Make sure everything is going according to your plan and make any changes required.

Step nine – Review the success and learn lessons for the future

By the end of the project the SWMP should give you an accurate record of how effectively you have managed the materials on the site and how well you met your waste management targets.

If your project is in England with an estimated construction cost of between £300,000 and £500,000, within three months of the project being completed the principal contractor must add more information to the plan to:

- confirm the plan has been monitored and updated on a regular basis
- explain any changes from the original plan. If your project is in England with an estimated construction cost of over £500,000, you also need to:
- compare the estimated and actual quantities of each waste type
- estimate the cost savings achieved by the plan.

The information in your plan will be useful for future construction projects. You could put together a report of the results of the SWMP and a list of action points for the future, which you can:

- send to staff and customers to inform everyone involved in delivering the SWMP about its value, impact on the cost of the project and benefits to the environment
- use to help you plan future projects.

You must keep the SWMP for at least two years after the project has finished, either at the project site, or at the principal contractor's main place of business.

Part three: Site waste management plan checklist

Planning and preparation

- ❑ Have you set aside time to prepare your SWMP?
- ❑ Have you considered the construction methods and materials that you can use to reduce the amount of waste your project produces?
- ❑ Have you thought about ordering materials that have less or reusable/returnable packaging?
- ❑ Have you recorded all of your waste reduction decisions in your plan?

Allocating responsibility

- ❑ Has someone with authority been assigned overall responsibility for the SWMP?
- ❑ Have you included a declaration from the client and principal contractor in your SWMP?

Identifying your waste

- ❑ Have you assessed the waste produced at each stage of the project - the types, how much and when, including the processes involved?
- ❑ Have you indentified which workers will produce waste?

Managing your waste

- ❑ Has an area of the site been set aside for storing new materials and waste, including separate containers for different types of waste? You must store new materials separately from waste, and make sure storage areas are secure against vandalism.
- ❑ Have you set targets for the different types of waste likely to be produced by the project? Include targets for the amounts of each waste type to be reused, recycled and disposed of.
- ❑ Have measures been put in place to deal with expected and unexpected hazardous waste?
- ❑ Have you considered whether you can reuse materials either on site or off site?
- ❑ Have you considered on-site and off-site processing and reuse of materials?

Disposing of your waste

- ❑ Have you considered how you will dispose of liquid wastes such as wash-down water and lubricants?
- ❑ Have you got agreement from your water and sewerage operator for trade effluent discharge?
- ❑ Are you complying with your duty of care, including using waste transfer notes or consignment notes for all movements of waste from your site and checking the details of those removing the waste?
- ❑ Has someone been made responsible for checking that loads of waste leaving your site are accurately described, and waste transfer notes and consignment notes are completed correctly?
- ❑ Have you checked that every waste carrier you use is registered with your environmental regulator?
- ❑ Have you checked that all sites receiving your waste have the appropriate permits, licences or registered exemptions?
- ❑ Have you identified your nearest waste sites? Use our **Waste Directory** [http://www.netregs.gov.uk/wastedirectory].
- ❑ Have you considered how to reduce disposal costs by reusing or recycling waste materials with a commercial value? See **www.nisp.org.uk**

Organising materials and waste

- ❑ Have you assessed the quantities of materials you need to order to reduce over-ordering and site waste?
- ❑ Can you return unused materials to the supplier, sell them or use them on another job?
- ❑ Have you considered using recycled materials?
- ❑ Can you return unwanted packaging to the supplier for reuse or recycling?
- ❑ Will you separate different types of waste to enable you to get best value from good waste management practices?
- ❑ Have you labelled containers and skips clearly to avoid confusion? Colour coding your containers could help.
- ❑ Are your storage areas secure and weatherproof to prevent wind and rain damaging your materials?

- ❑ Have you covered or netted any loose materials to prevent them being spread and possibly causing pollution?
- ❑ Is everyone who will handle waste aware of the SWMP requirements?

Communicating and training

- ❑ Have you planned site inductions and toolbox talks for all site staff?
- ❑ Are contractors and subcontractors trained and aware of their responsibilities?
- ❑ Have contractors and subcontractors understood and agreed the SWMP?
- ❑ Are SWMP requirements built into contracts?
- ❑ Are you carrying out spot checks and monitoring your staff regularly to make sure they are following procedures?

Measuring and monitoring your waste

- ❑ Are you updating your plan every time waste is removed from your site?
- ❑ Are you checking the SWMP regularly and making sure targets are being reached?
- ❑ Are the agreed waste management procedures being checked and monitored regularly?
- ❑ Are you producing regular reports on waste quantities, treatment/disposal routes and costs?
- ❑ When construction is underway, are you making notes of problems and recording them for your next plan?

Reviewing the success and learning lessons for the future

- ❑ Have you produced a final report on the use of recycled and secondary materials, waste reduction, segregation, recovery and disposal, and identified the costs and savings?
- ❑ Have you explained any changes to the plan?
- ❑ Have any issues or problems been taken into account for action in future projects?
- ❑ Is there a copy of the SWMP at the project site? You must keep it for two years at either the project site or at the principal contractor’s office.

❑ Have you used the results to help you win future contracts?

Part four: Further guidance and information

Need more help?

Visit www.netregs.org.uk/business_sectors/construction.aspx

- **NetRegs** (www.netregs.org.uk) – A free website that provides environmental legislation guidance to small and medium-sized businesses in Northern Ireland and Scotland.
- **Pollution prevention guidelines: Working at construction and demolition sites (PPG 6)** (http://www.doeni.gov.uk/niea/ppg06.pdf) Produced by the environmental regulators to help the construction industry manage the environmental impacts of their activities.
- **DEFRA** (http://archive.defra.gov.uk/environment/waste/topics/construction/index.htm) – Leading on sustainable development as the way forward for government.
- The construction programmes of **WRAP** and **Envirowise** help businesses from across the construction supply chain to reduce cost and increase efficiency through the better use of materials. Use their SWMP template to go beyond minimum requirements and move from standard to good and best practice. The template is targeted at projects over £500,000 and can be used as guidance to help you get more out of your SWMP.
- **WRAP** (http://www.wrap.org.uk/content/site-waste-management-plans-2) – Support for the construction sector and their clients.
- **CIRIA** (www.ciria.org) – Bringing together the many stakeholders in the modern built environment to identify and promote industry best practice.
- **NISP** (National Industrial Symbiosis Programme) (www.nisp.org.uk) – Helping companies improve their resource efficiency by identifying value in under-utilised resources.

For further guidance on compliance with the SWMP Regulations in England, call the Environment Agency's customer contact centre 08708 506 506.

NetRegs provides guidance on environmental legislation to small and medium-sized businesses in the UK in partnership with the Environment Agency, Northern Ireland Environment Agency (NIEA) and SEPA.