



Apprentice Centre

Recycling lives
Waste Minimisation & Management

1



Key Legislative Drivers Timeline

EU directive

UK Law

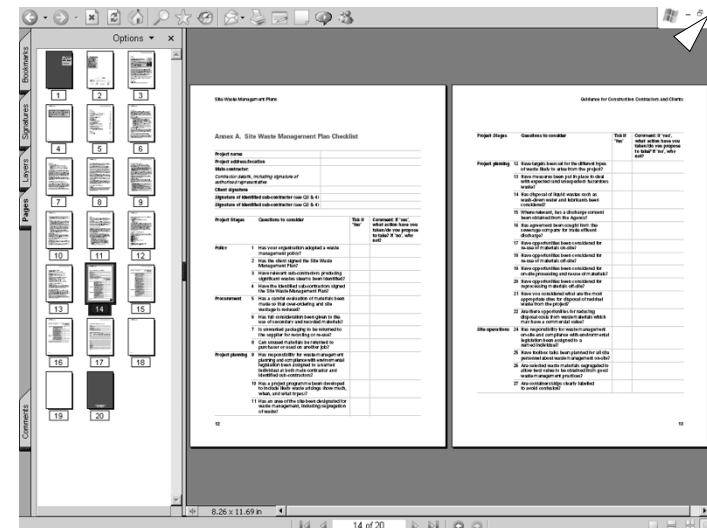
RoHS Regulations	Code for Sustainable Homes	SWMP Regs			
WEEE Regulations	WEEE Regulations into force	Code for Sustainable Buildings			
2006	2007	2008	2009	2010	2011

Fiscal

Landfill Tax Increase	Landfill Tax Increase	Landfill Tax Increase	Landfill Tax Increase	Landfill Tax Increase	Landfill Tax Increase
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Targets & Bans

Waste Strategy for England 2007	SWMP required on projects over £250,000
Oct 07 Treatment of non-haz waste before landfill	SWMP Checklist & Datasheet to be completed



http://www.greenspec.co.uk/rtr/APD_SWMP_SiteWastePlan.rtf - Microsoft Internet Explorer

File Edit View Insert Format Tools Table Go To Favorites Help

Address http://www.greenspec.co.uk/rtr/APD_SWMP_SiteWastePlan.rtf

Site-Waste-Management-Plan-Checklist

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) (darker grey tone suggests unnecessary, unlikely or undesirable; white spaces are possible options)

Waste group	Material	Retain, install and reuse	Remediate or repair, install and reuse	Re-use off site	Segregate to recycle or recover on site	Segregate to recycle off site, off-site take back collection scheme	Disposal to recycling facility	Disposal to WML exempt site	Reduce Hazard then landfill	Disposal to landfill
Inert	Clean Subsoil									
	Clean Sand									
	Clean Gravel									
	Clean Rock									
Inactive	Flat Glass									
	Set Concrete									
	Masonry Stone, Brick, Block									
	Ceramics									
	Cement, mortar, screed, render									
Active	Topsoil									
	Green Waste									
	Untreated timber									
	Lime mortar, render, paint, Limecrete									
	Mixed Metals									
	Office papers									

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) (darker grey tone suggests unnecessary, unlikely or undesirable; white spaces are possible options)

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	Green Waste									
	Untreated timber									
	Lime mortar, render, paint, Limecrete									
	Mixed Metals									
	Office papers									

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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?
Procurement	5a Has a careful evaluation of materials been made so that over-ordering and site wastage is reduced? How are materials procured? Who procures the materials? Does this affect 'ownership' and wastefulness? How are usage or wastage % of materials estimated?	D=	Provide Outline Bill of Quantities Provide Contractors Buying department remeasure Workshop to compare and decide Provide Manufacturer's supply batch quantities/product literature Workshop to Determine manufacturer supply batch quantities, compare predicted waste, suggest opportunities to reduce
	5Ab Are the designers involved in the SWMP workshops? Acknowledgement of standard sizes? Awareness of minimum orders? Choice of materials, minimising different types? Simplification of construction? Use of preassembly or prefabrication? Has provision for storage been made in the design for spares for ongoing maintenance of the building? Has the Client's FM been involved in its provision?		Provide Manufacturer's technical literature on products Workshop to review and highlight high waste quantities
	6a Has full consideration been given to the use of secondary and recycled materials? Are materials from alteration or demolition works recyclable during the project to return to the site as new product? Consider temporary and permanent works Ensure specification does not exclude recycled Check each trade or work packages	D=	Provide Outline or Full Spec or Bill of Quantities or annotated drawing Workshop to review spec or Bill of Materials and brainstorm Provide WRAP Reference Guides on recycled materials Provide Live website access with links to recycled material or products Aggregates, WRAP, Recup, EcoConstruction.org, NGS GreenSpec Workshop to compare, comment, and offer improvement opportunities
	7a Is unwanted packaging to be returned to the supplier for recycling or re-use? Have all take-back, use or return, return to stock schemes been investigated? Are systems in place to enable return of pallets and packaging on multiple delivery items?	D=	Provide information on manufacturers with packaging take-back scheme Provide NGS GreenSpec APP ROMP Recycling Opportunities materials Packaging Provide SMART Audit statistics on waste % Provide Envirowise Guide to packaging Workshop to determine routes to reuse or recycling

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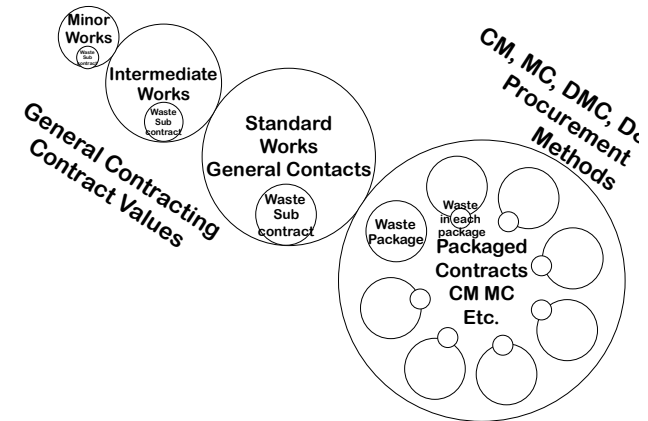
Assembly in Project Specification

Specification C20 Demolition/ Deconstruction Resource Recovery	Specification C21- C90 work on existing buildings	Specification C91 Alteration Resource Recovery Waste minimisation	Specification D10- D19 Earthwork Foundations
Specification D20 Excavation Resource Recovery Waste minimisation	Specification D21- Q28 New-build Structure Landscape	Specification Q29 Landscape Resource Recovery Waste minimisation	Specification R10- Z31 Services Reference Sections

Assembly in Project Specification

<p><u>Appendix</u></p> <p>EWC</p> <p><u>European Waste Catalogue</u></p>	<p><u>Appendix</u></p> <p>SWMP</p> <p><u>Site Waste Management Plan</u></p>	<p><u>Appendix</u></p> <p>ASR</p> <p><u>Architectural Salvage Reclaim</u></p>	<p><u>Appendix</u></p> <p>MEW</p> <p><u>Materials Exchange Websites</u></p>
<p><u>Appendix</u></p> <p>FFEI</p> <p><u>Furniture Fixtures Equipment IT Recovery</u></p>	<p><u>Appendix</u></p> <p>ROMP</p> <p><u>Recycling Operations Materials Packaging</u></p>	<p><u>Appendix</u></p> <p>MRR</p> <p><u>Materials Recovery & Reuse</u></p>	<p><u>Appendix</u></p> <p>PDA</p> <p><u>Pre-Demolition Audits</u></p>

Future Development



Material streams

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If we use to engage consumers and encourage better recycling behaviour, it is essential that material streams signage at long sites and household recycling centres includes clear, legible and practical layouts with consistent and distinct colouring.

The colours detailed have been tested for visibility, usability and consumer engagement. They are suitable for use across the various print and digital processes.

This colour palette contains artwork and copy references for print, with references for other use and RAL and 3M Vinyl references for other use such as vehicle livery, signage, vinyl lettering etc. The vinyl references have been carefully chosen to be the most widely available, off-the-shelf and cost-effective options.

Note: The colour blocks on this page and in use throughout these guidelines should not be assumed as accurate colour references. Refer to the relevant formulae guidelines for each colour system.

Each material stream download contains the preferred wording for that material. However, you may replace this with your own wording, e.g. you might prefer to use 'dirties cans' instead of 'cleaner cans'.

In all cases you must seek prior approval from WRAP.

Artwork download

To help you choose the most appropriate material streams signs for your applications, WRAP has provided a master iconography that can be downloaded as a PDF file from www.recyclepartners.org.uk.

Guidance download

<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>
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Material streams with illustrations

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Providing clear instructions that make recycling as easy as possible will encourage good recycling behaviour. The material streams signage should be used to reinforce the importance of collecting and correctly disposing of the desired materials.

To offer flexibility we have provided an alternative range of imagery using clear and unambiguous illustrations for each of the material streams.

Usage

You are free to choose whether to use the imagery based on the recycle icon or the illustration. The choice may depend on the requirements of the particular application, e.g. communications, bin stickers, signage etc.

For example, the illustrated versions might be appropriate where a significant proportion of local residents do not speak English as the language.

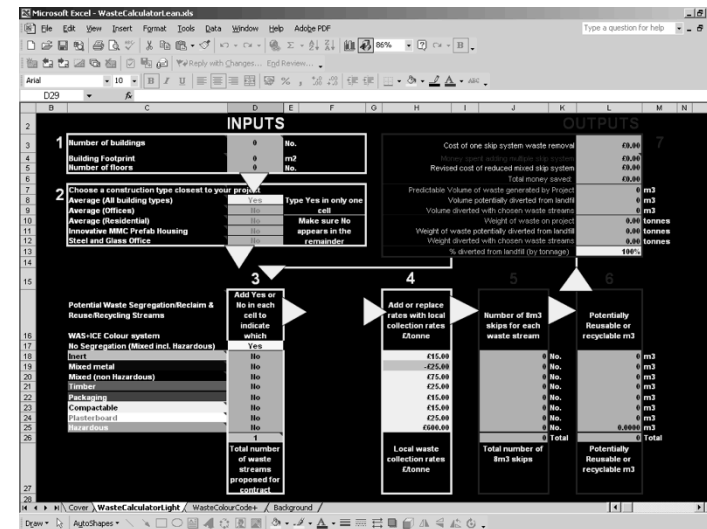
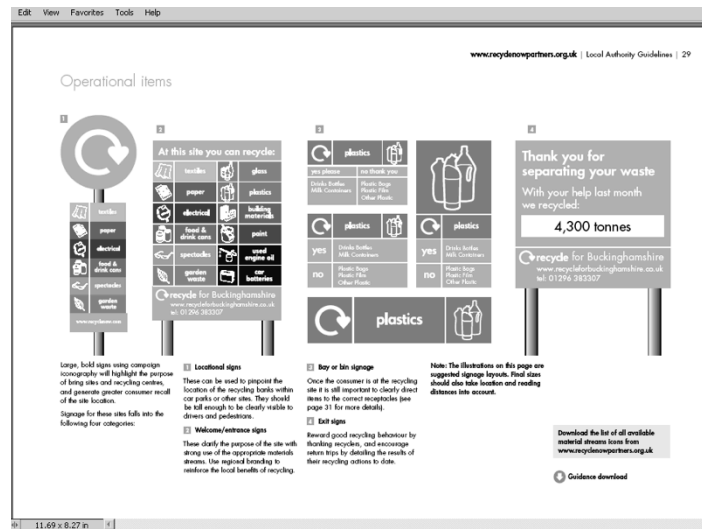
The same restrictions on colour, size, positioning etc. apply equally to the illustrated material streams as to the icon-based streams.

Note: Change is used for items and materials which do not easily fit into the main material streams e.g. spectacles, furniture, large-scale containers.

Artwork download

Guidance download

<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>	<p>Recycle 130 C</p> <p>Recycle 130 100 0</p> <p>Waste #E8B17</p> <p>RAL 9003</p> <p>Waste 15-25 Agnes</p>
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Empty Paint Tins Only

Reduce Reuse Recycle
let's get it sorted
www.wasact.org.uk

	Biohazard
	Gypsum
	Hazardous
	Inert
	Metal
	Mixed
	Packaging
	Plate Glass
	Wood

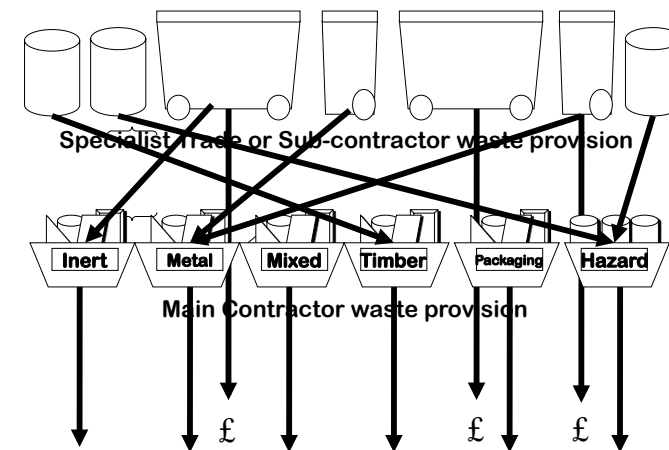
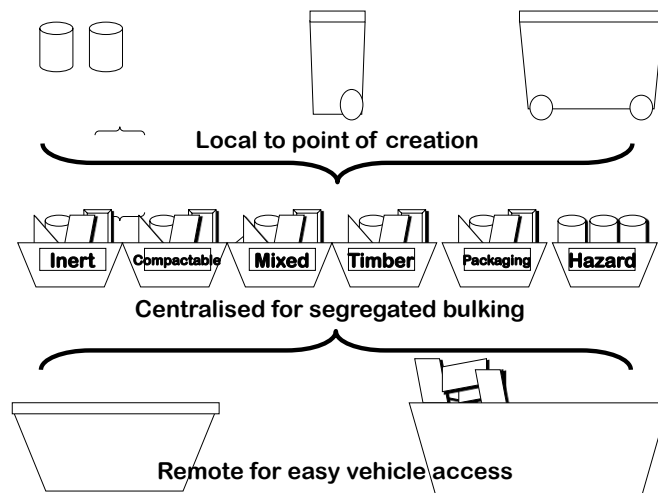
05/08/2013

© NGS 2004-06 Waste Colour Code

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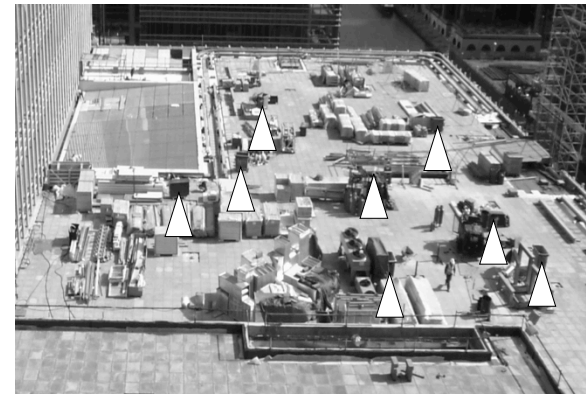
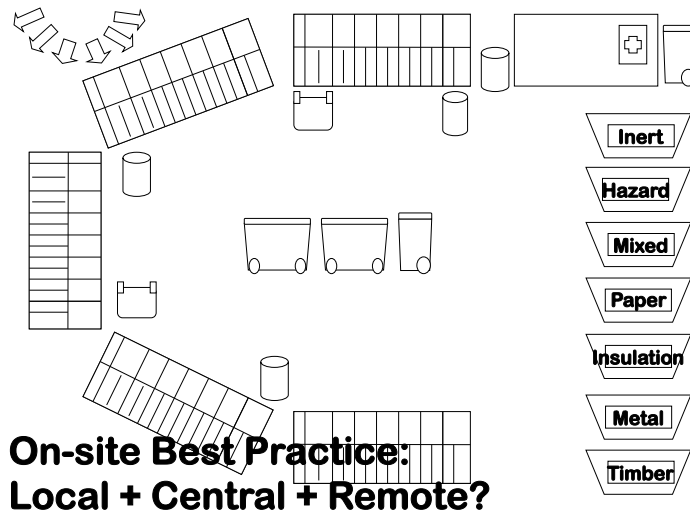
Colour code Poster Campaign
In site offices



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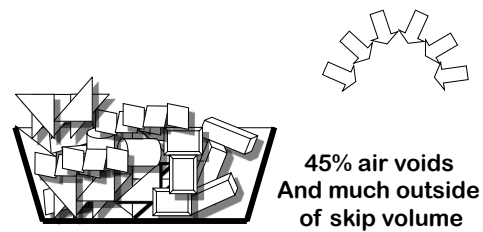
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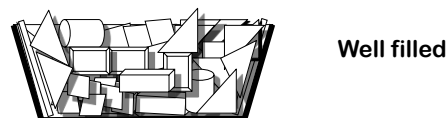


Local Waste Segregation

Each sub-contractor responsible for own waste
Each generating different waste to each other
Isle of Dogs Canary Wharf © NGS

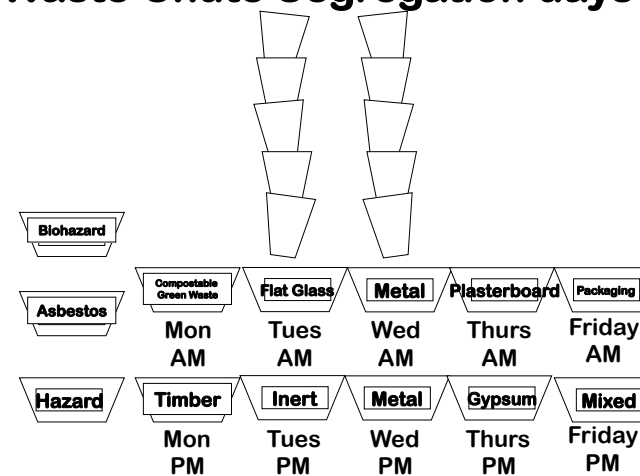


On-site Poor Practice: Filling



On-site Best Practice: Filling

Waste Chute Segregation days



Easy Access Drop End

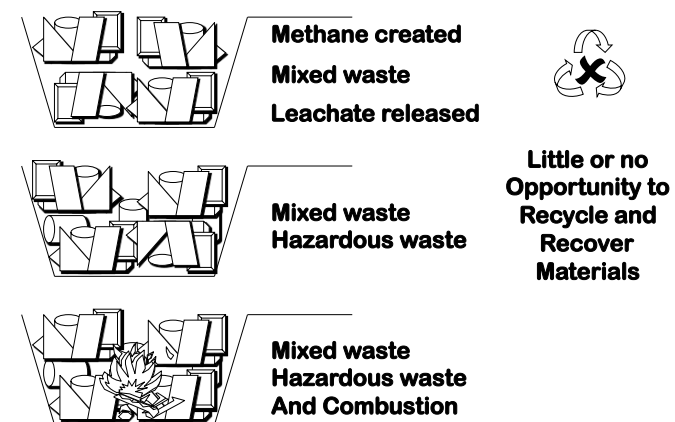
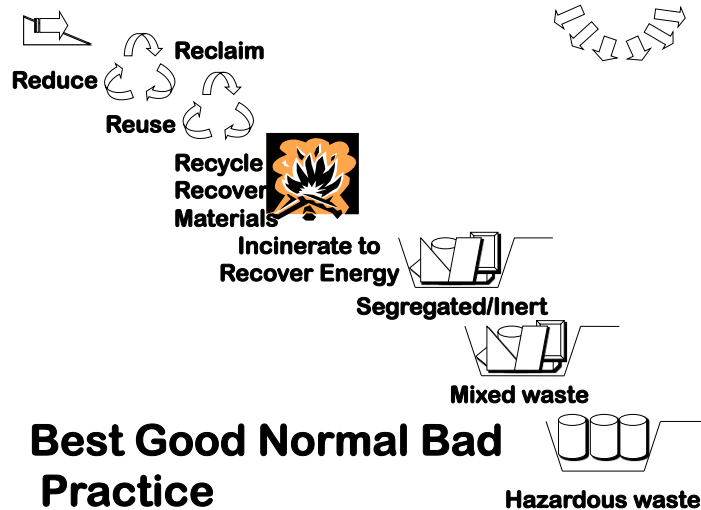
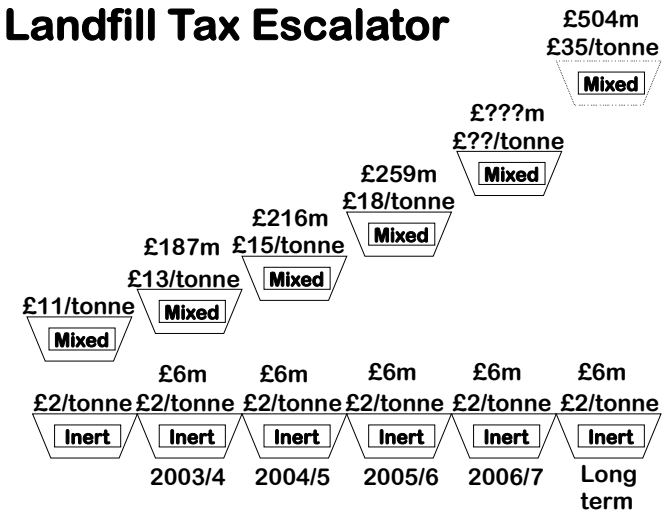


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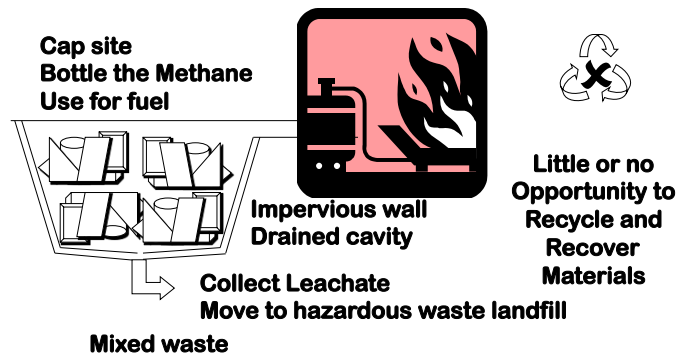
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Landfill Tax Escalator



Bad Landfill Practice



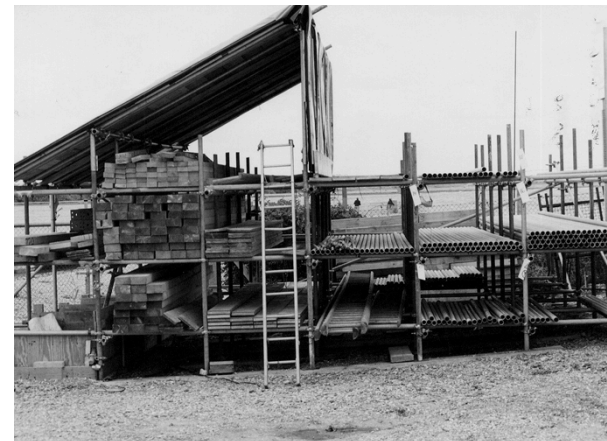
Better Landfill Practice

Materials Protection:

Full hbmpp scheme
No absorbent surfaces
Corner Protection
Stability bracing
Moisture control
But:
Rain Cover needed
Not Remote storage
Not off the ground
Not JIT but JIC



BedZED Beddington Sutton Architect: Dr Bill Dunster





Excess Materials Storage

Greenwich Millennium Village © NGS



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Discharge Luminares

Purpose made waste collection container



40% Airspace in skips

Any new build site across the country (GMV Phase 2 a) © NGS



Remote Waste Segregation

Greenwich Millennium Village Phase 2a © NGS





Domestic Waste + Skip Fires

Close to boundary: invitation to local ASBO residents



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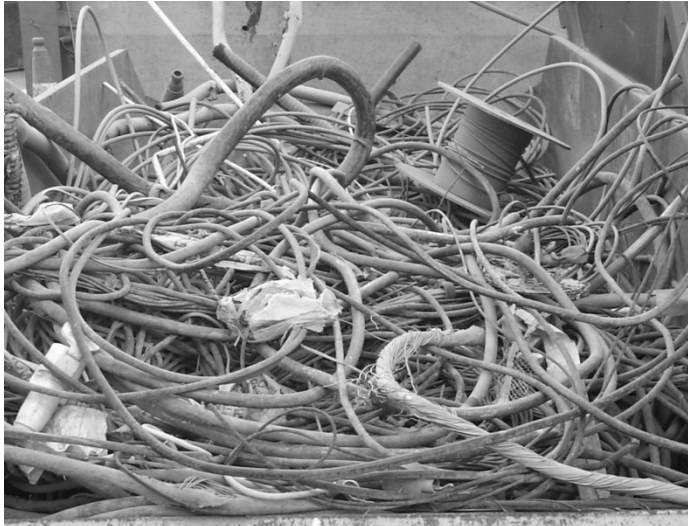
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Rear End Loaders & 4 Wheel bins
© North Norfolk



REL Rear End Loaders
© North Norfolk



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Feedback



- **These files are created by generalists** with a big dollop of green flavour
- These files are updated from time to time
- We are not experts so from time to time these file may get out of date or may be wrong.
- If you feel that we have got it wrong please let us know so we can put it right.

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- **Brian Murphy BSc Dip Arch (Hons+Dist)**
 - Architect by Training
 - Specification Writer by Choice
- **Greening up my act since 1999**
- **Founded National Green Specification 2001**
- **Launched www.greenspec.co.uk 2003**
- **Created: NGS at www.greenspecdownload.co.uk 2012**
- **E BrianSpecMan@aol.com**
- **Twitter: <http://twitter.com/brianspecman>**
- **Scribd: www.scribd.com/brianspecman**
- **Facebook: <http://www.facebook.com/brianspecman>**

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