# Waste

## Waste (for (add date) or in (Local Authority name))

Subsection of the 'WasteChapter'. Introduction to the context national, regional and local, generally including paragraphs containing the following information;

Unchecked, development produces significant levels of waste during the stages of demolition, construction and the later activities of future occupants. National Government has set challenging targets for waste recovery and recycling to ensure the objectives of the European Landfill Directive are met and waste is managed sustainably. To underpin this, landfill tax has been created to rise annually and encourage a curb on waste management that does not benefit our future environment.

To maintain both environmental and economic sustainability our present approaches to waste must increasingly follow the three R's principal;

**Reduce;** choose materials and products that are not excessively packaged, buy only what we will consume and lobby manufacturers to package in sustainable materials that can be readily recycled.

**Re-use;** separate materials, which may still have a valuable life span for others or ourselves and store such reclaimed materials securely until they can be re-deployed. This may simply mean mending items we might otherwise dispose of or taking old clothes to charity stores. Or finding out who locally will overhaul computers, white goods – fridges, cookers etc – or tools before finding them a new home. See also Chapter 'Buildings Adaptability Durability and Materials' 'Sustainable Demolition' section.

**Recycle; the** majority of waste we produce can be recycled, vegetable matter will make good compost for gardens and parks, most glass can be readily melted down to produce new products and that which can't may be used as road aggregate. Paper can be converted into new card and paper products and even certain plastics can be reformed anew.

Three main areas should be considered when constructing or refurbishing developments for sustainable waste management.

- Create a pre-build waste management site and strategy for the separation and re-use of materials; see Chapter 'Buildings Adaptability Durability and Materials'
- Ensure after auditing reusable onsite materials that new materials bought in are minimised in favour of reclaimed materials.
- Ensure the layout and design of the development provides future occupants with good waste separation facilities, working with the Local Authority to determine what will be needed. Facilities for waste segregation and recycling should be designed so that they are safe and convenient to use for all potential occupants.

Considering sustainable waste management during construction and as part of the design process creates distinct advantages for the developer including:

- Reducing direct costs to the developer in terms of landfill tax and waste handling costs including transportation and labour
- Increasing profitability of the build by more thorough quantity surveying and sustainable local sourcing of reclaimed materials

Meeting the demands of the green consumer market who may pay a premium for buildings that have been designed to 'green' specifications or reject those which have not.

### How Waste can be Reduced throughout Construction

- Audit the site for reclamation of onsite materials and take a deconstruction rather than demolition approach to buildings which need to come down
- Establish a recycling and reuse waste segregation and build centre on the site to ensure all materials including reclaimed or recyclable materials are properly stored and handled to minimise damage
- Carry out a waste audit identifying waste by type and making proposals for dealing with those waste streams. The emphasis should be on recycling both on and off site
- > Carefully set aside and protect topsoil for use later in landscaping
- Use prefabricated assemblies as waste can be reduced, re-used and recycled more easily under factory conditions
- Use materials such as FSC timber, avoid all PVC based products, choose natural floor coverings, recycled materials in building fabric, low VOC-paints, etc which will not cause a future hazard.
- > Avoid the practice of over-ordering construction materials.
- Choose reclaimed materials where possible i.e. bricks and stone where possible, timber, ornamental features, glass etc.
- Minimise the need to buy in aggregates but crushing suitable re-useable damaged brick etc on site

Use the <u>BRE SMARTWaste</u> tool to monitor waste as it is generated at site so immediate qualified steps can be taken to reduce it. The SMARTWaste (Site Methodology to Audit, Reduce and Target Waste) system is a web-based, integrated, approach to evaluating waste and its generation. It can be applied to any waste generating activity, and is adapted for the construction, demolition, refurbishment, manufacturing and pharmaceutical industries. In addition to identifying cost savings, improvements to resource use and productivity, the system is designed to demonstrate continuous improvement through:

- > waste benchmarking
- identifying key demolition products for reuse or recycling
- > identifying key waste products for reduction, reuse and recycling
- > sourcing local resource and waste management facilities
- > sourcing local supplies of reclaimed and recycled building products.

It includes four core tools: SMARTStart: defining preliminary environmental performance indicators (EPIs) for waste generation on a site by site, and organisation basis

**SMARTAudit** (detailed audit): a robust and accurate mechanism benchmarking waste and categorising by source, type, amount, cause and cost.

**SMARTStart+** (monitoring and target setting): an opportunity to measure performance of contractors; an essential requirement under best value and continual

improvement.

**BREMAP** (resource exchange): a geographical information system (GIS) that allows firms to reduce their transport of bulky waste by locating the nearest most suitable waste management site.

Tailored Pre Demolition Audits are also available. The audit provides a list of key demolition products (KDP) that can be assessed using a reclamation valuation

survey and translated into embodied energy and hectares of rainforest as an indicator of environmental quantification.

## Standards, Policy and Legislation

Subsection of the 'Waste Chapter' introducing policy framework containing the following information;

### Local Context

This section should outline the Authorities approach to strategic waste management and recycling indicating how the authority intends to achieve compliance with the other standards included below.

It should also detail any arrangements the authority made or its policy stance in relation to;

- > the development of Aggregate Recycling Facilities in appropriate locations
- the development and or creation of reclaimed buildings materials storage facilities
- Other recycling or re-use provision the authority either offers or supports in conjunction with partner organisations

Questions: Does the Authorities Local Plan include a policy relating to substitute materials? Does this policy enshrine the re-use of building materials from other developments where this is technically and economically feasible as a top level priority?

Has the Local Authority considered facilities for or entertained favourable agreements with suppliers regarding recycled materials storage and distribution?

National policy urges increased use of secondary or recycled aggregates, how dothe local planning policies reflect this?

Has the Local Authority developed a voluntary 'considerate and sustainable constructor's charter'?

## Regional

A draft of the new Regional Spatial Strategy (RSS) 'PLANet Yorkshire and to National Government by the Yorkshire and Humber Assembly by the end of April 2005.

In July 2001 the Assembly commenced work on the Regional Waste Strategy and this was finally adopted in 2003. The challenges set out in the Regional Waste Strategy are significant – the region currently performs poorly in terms of many sustainable waste management indicators.

During 2001-02 significant effort was made to raise the profile of waste management issues in the region. Numerous sub-regional and local events were held with stakeholder groups, local authorities and the public. Presentations set out the extent of the challenges and a range of potential responses were debated.

The Assembly also established a Regional Waste Steering Group to prepare the draft Regional Waste Strategy. A land-use planning focused Regional Technical Advisory Body (RTAB) has been subsequently set up to advise the region on waste planning issues and offer technical advice on the implementation of the policies presented in RSS. The spatial/land use planning elements of the Regional Waste Strategy were subsequently included in the Selective Review of RPG.

The Regional Waste Strategy for Yorkshire and the Humber is expected to be based upon the following aims:

- Working towards zero growth in waste at the regional level by 2020;
- Reducing the amount of waste sent to landfill in accordance with the EU Landfill Directive;
- Exceeding government targets for recycling and composting, with the objective to bring all parts of the Region up to the levels of current best practice;

Planning Policy Statement 10 for Sustainable Waste Management indicates that Regional Planning Bodies should prepare and deliver waste planning strategies that:

- Help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option but one which must be adequately catered for;
- Enable sufficient and timely provision of waste management facilities to meet the needs of their communities;
- Help implement the national waste strategy, and supporting targets, and are consistent with obligations required under European legislation;
- Help secure the recovery or disposal of waste without endangering human health and without harming the environment and ensure waste is disposed of as near as possible to its place of production;
- Reflect the concerns and interests of local communities, the needs of waste collection authorities, waste disposal authorities and business and encourage competitiveness;
- Protect green belts but recognise the particular locational needs of some types of waste management and that the wider environmental and economic benefits of sustainable waste management are material considerations that should be given significant weight in determining whether proposals should be given planning permission
- Ensure the layout and design of new development supports sustainable waste management.

#### European and National

The EU Directive on Waste, Planning Policy Statement 10 for Sustainable Waste Management (PPS10), and the National Waste Strategy for England and Wales (2000) all promote a comprehensive approach to waste management: Reduce the amount of waste produced;

Make the best us of the waste that is produced; and,

Choose waste management practices which minimise risks of immediate and future environmental pollution and harm to human health.

**In 2002 an Aggregates Levy** was introduced for primary aggregates, with the aim of encouraging the use of recycled material. In 1999 only 17% of the aggregates used by the construction industry were recycled. The aim is to increase this to 25% by 2006.

**The Antisocial Behaviour Act** (Nov 2003) highlights a number of problems including flytipping.

The Clean Neighbourhoods and Environment Act 2005 contains a range of measures to improve the quality of the local environment by giving Local Authorities

and the Environment Agency additional powers to deal with things such as fly-tipped waste and litter.