# County Durham WASTELOCAL PLAN



# April 2005

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Photographs on front cover: Aerobic digester, Thornley, County Durham

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## COUNTY DURHAM Waste Local Plan Adopted Plan

April 2005



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The County Durham Waste Local Plan

**Consultation on the Plan** 

Need for the Plan

**Purpose of the Plan** 

**Relationship with other Plans** 

**Municipal Waste Management Strategy for County Durham** 

**Role of Durham County Council** 

Sustainability Appraisal of the Plan

## 1. INTRODUCTION

#### The County Durham Waste Local Plan

1.1 The County Durham Waste Local Plan sets out the detailed local planning policies and proposals that will guide future development associated with waste management within County Durham. It provides the framework for waste planning throughout the County in the period from 2000 to 2016.

#### Consultation on the Plan

- 1.2 The Revised Waste Local Plan was placed on statutory deposit for a six week period from 19 May 2003 to 1 July 2003 to enable representations to be made in support of, or objecting to the changes made to the Plan since the First Deposit Draft.
- 1.3 The County Council considered all views received within this period before deciding to make pre-inquiry changes to the Plan. A Public Inquiry into the proposed Waste Local Plan was then held before an independent inspector. This considered unresolved objections to the Plan, and recommended a number of modifications before the County Council adopted the Plan.

#### Need for a Plan

- 1.4 Under the 1991 Planning and Compensation Act, the County Council as Waste Planning Authority (WPA) is required to prepare a local plan for the depositing of refuse or waste materials, normally classified as controlled waste, either separately or jointly with a minerals local plan. The County Durham Minerals Local Plan is now adopted. The adopted Waste Local Plan supersedes the existing Waste Disposal Local Plan which was adopted in 1984.
- 1.5 The primacy of the development plan in the planning system means that the Waste Local Plan is needed in order to set out the criteria and standards by which development proposals will be considered and to balance the conflict between the need for the facility and protection of the environment. The Waste Local Plan transposes European and National guidance into a county and local context.

#### Purpose of the Plan

1.6 The purpose of the Waste Local Plan is to integrate the need to manage waste and the need to protect the environment and quality of life. Since the County Durham Waste Disposal Local Plan was adopted, there have been fundamental changes in policy which recognise that waste minimisation, reuse and recovery are essential in saving primary resources, reducing the amount of waste going to landfill for final disposal and minimising the risk of immediate and future environmental pollution and harm to human health.

1.7 County Durham, like much of the North East region, is a major producer of waste. The disposal of waste can be a contentious issue, as this can cause major disturbance to people's living conditions and the wider environment. The Waste Local Plan contains detailed policies and, where possible allocations, which will provide the framework by which planning applications for waste management facilities can be assessed. This will give a degree of certainty to residents, the waste industry and other interested parties as to how proposals will be assessed and determined during the period to 2016.

#### **Relationship with Other Plans**

- 1.8 The Waste Local Plan is a statutory local plan and part of the development plan for County Durham. It has been prepared in accordance with the provisions of the Town and Country Planning Act 1990, as amended by the Planning and Compensation Act 1991. Other relevant statutory development plans within the County are:
  - County Durham Structure Plan. This is prepared by the County Council and provides the broad strategic framework for planning in the County, setting out the overall principles for the Waste Local Plan and other local plans. The Structure Plan was adopted in 1999 and runs to 2006;
  - County Durham Minerals Local Plan. This is prepared by the County Council and sets out the detailed local planning policies and proposals that will guide future mineral development within County Durham. The Minerals Local Plan was adopted in 2000 and runs to 2006;
  - District Local Plans. These are prepared by District Councils and provide detailed policies and proposals on a district basis for development other than minerals or waste disposal (housing, industry, open space etc.)
  - Waste Disposal Local Plan (adopted in 1984). The provisions of this Local Plan remained in force only until such time as they were replaced by the Waste Local Plan and appropriate provisions of other plans set out above.
- 1.9 Taken together these plans provide a comprehensive development plan framework for land use planning within the County. Although the Waste Local Plan is the most detailed plan in relation to waste development, reference may also have to be made to other parts of the Development Plan. The different parts of the Development Plan should be consistent with each other but, in the unlikely event of any conflict, legislation requires that the provisions of the most recently adopted local plan will prevail.
- 1.10 In preparing the Waste Local Plan the County Council has had regard to the established framework of policy and advice on waste management at the European, national, regional and local level. Government policy and advice on the planning aspects of waste is set out in a number of documents including the Government's strategy for sustainable waste management and Planning Policy Guidance Notes (PPG's), in particular PPG 10 (Planning and Waste Management), PPG 23 (Planning and Pollution Control), and PPG 12 (Development Plans).

1.11 Regional Planning Guidance for the North East (RPG 1) was issued in November 2002. Waste is one of the issues to be developed further in the early review of RPG 1. A Draft Regional Waste Management Strategy is being prepared by consultants. The finalised Waste Management Strategy for the North East will then be integrated into the Regional Spatial Strategy, the replacement for RPG 1 under the Government's reform of the planning system.

#### Municipal Waste Management Strategy for County Durham

1.12 The Municipal Waste Management Strategy for County Durham (MWMSCD) was adopted jointly in 2001 by the County Council and the seven district councils in County Durham. It addresses the sustainable management of municipal waste that will be generated in the County for the next 20 years. The Strategy is influential in informing the Waste Local Plan, in relation to the management of municipal solid waste and achieving targets for waste recovery and landfill diversion.

#### **Role of Durham County Council**

- 1.13 A two-tier system of local government operates in County Durham. The responsibilities of the Authorities for the management of wastes are defined in the Environment Protection Act 1990. As the WPA, the County Council has the duty to arrange for the disposal of waste that has been collected, under contract, by the seven District/Borough Councils as Waste Collection Authorities (WCAs). The County Council also provides Civic Amenity Sites or Household Waste Recycling Centres where the public can deposit household waste items free of charge.
- 1.14 As the WPA, the County Council is responsible for determining planning applications for development associated with the deposit, treatment, storage, transfer, processing and disposal of waste in County Durham. This Plan addresses the land use implications of the Municipal Waste Management Strategy for County Durham, although as outlined in Section 7 on 'Information on Waste', municipal waste forms only around one quarter of all waste arisings in the County.
- 1.15 The Environment Agency has responsibility for licensing and monitoring the operation of waste management facilities, registering carriers of waste, monitoring the movement of hazardous wastes and producing Strategic Waste Management Assessments.

#### Sustainability Appraisal of the Plan

1.16 The policies and proposals of the Waste Local Plan have been subject to sustainability appraisal during their preparation and revised as necessary. Copies of the Appraisal which were prepared to accompany the First Deposit Draft Waste Local Plan and the Revised Deposit Draft Waste Local Plan are available on request.



## 2. THE COUNTY DURHAM CONTEXT

- 2.1 County Durham is a mainly rural county with large areas of agricultural land and moorland. The County covers an area of 223,000 hectares, of which some 200,000 hectares (90%) is agricultural land. County Durham's population in 2001 was 493,470 and is forecast to fall to 488,769 by 2016.
- 2.2 The main population centres, including Durham City, Chester-le-Street, Crook, Consett, Stanley, Peterlee, Seaham, Spennymoor, Shildon, Bishop Auckland and Newton Aycliffe, are located in the centre and east of the County. The west of the County, to the west of the A68, mainly comprises the upper valleys of the River Wear and the River Tees, covering approximately half the County. The population is mainly in small towns and villages with the main centre being Barnard Castle with a population of around 5,000.
- 2.3 The conurbation of Tyne and Wear and the County of Northumberland lie to the north of the County, Cumbria is to the west and to the south are Darlington, Teesside and North Yorkshire.



- 2.4 The County's economy has undergone a major restructuring in recent decades, predominantly due to the decline of the coal industry. The main transport routes through the County, the A1(M), the A19(T) the A66 and the East Coast Main Line are the economic arteries for the County.
- 2.5 The County is rich in minerals, the extraction of which has, in the past created opportunities for landfill. However, the Magnesian Limestone Escarpment which extends throughout the eastern most part of the County is a major aquifer which will restrict future waste activity.
- 2.6 County Durham exhibits a very wide range of landscapes from the Pennine uplands and the Pennine fringe in the west, through the lowland plains and valleys of its major rivers to the limestone plateau and coast in the east. Included in these are some of the most attractive landscapes in northern England. The County also has an increasing number of protected wildlife sites of County, national and international significance and supports a variety of protected species.



**European Context** 

The EU Landfill Directive

The EU Strategic Environmental Assessment Directive

**National Context** 

**Regional Context** 

**Environment Agency** 

**County Durham Structure Plan** 

**District Local Plans** 

#### **3. POLICY CONTEXT**

3.1 The Waste Local Plan has not been prepared in isolation but is derived from and relates to policies at all levels.

#### **European Context**

- 3.2 Concern for the environment is now a global issue, especially in relation to matters such as climate change, depletion of non-renewable resources and loss of the ozone layer. These concerns are embodied in the concept of 'sustainability', the interpretation of which in terms of the Plan is outlined in section 4.
- 3.3 International concern for both the impact of the disposal of waste, and the loss to landfill of a valuable asset has resulted in European legislation on waste management. This is delivered through a range of Directives which set out various requirements for waste management practice and provide the framework for national legislation on waste. The Waste Framework Directive first introduced the waste hierarchy (Section 4). These Directives were implemented by the Waste Management Licensing Regulations 1994. These regulations place certain responsibilities on the County Council in preparing the Waste Local Plan which require policies for suitable waste disposal sites or installations the aim of which is to ensure that waste is recovered or disposed of without endangering human health or harming the environment.
- 3.4 The Packaging Directive, implemented by the Packaging Regulations 1997, has set targets for the recovery and recycling of packaging materials and products. The Regulations impose certain obligations upon large businesses to reduce, over time, the amount of packaging that they use. The producer responsibility concept is due to be expanded to include batteries, end of life vehicles and waste electrical and electronic equipment.
- 3.5 The EU Integrated Pollution, Prevention and Control Directive will also have a major impact on waste management during the Plan period and the emerging EU Directive on Incineration of Waste will place increased levels of control on incineration plant.

#### The EU Landfill Directive

3.6 Perhaps the most significant recent policy instrument on waste is the EU Landfill Directive which is now incorporated into the British regulatory system. This Directive will require substantial changes to the way waste is managed in County Durham. The main objectives of the Directive are to ensure high and consistent standards of landfill practice across the European Union, to stimulate recycling and recovery of waste, and to reduce emissions of methane (a powerful greenhouse gas). Perhaps the most significant aspect of the Directive is the required stepped reduction in the quantities of biodegradable municipal waste going to landfill. The staged targets will come into effect in 2010, 2013 and 2020 following the Government's negotiated derogation (an agreed delay) of four years on the dates indicated in the Directive, on the basis that additional time is required to develop a range of alternative management techniques. A system of tradable permits has now been established as the means of ensuring that the targets are met. The Directive has also ended the practice of codisposing of hazardous and non-hazardous wastes.

#### The EU Strategic Environmental Assessment Directive

3.7 During the life of this Plan, a new European Directive requiring Strategic Environmental Assessments of plans and programmes being developed within Member States will come into force. It was adopted in April 2001 and will relate to all plans which are in the process of being prepared. In the UK this should be no more onerous than existing legislation, but does have a stronger emphasis on the need for environmental baseline data and the need to look at reasonable alternatives for developments within plans. UK legislation will follow and it is expected that guidance on complying with this directive will be incorporated within new guidance on sustainability appraisal of development plans in the near future.

#### National Context

- 3.8 'Waste Strategy 2000' sets out a vision of sustainable waste management in England and Wales until 2020. It offers a strategic overview of waste policy, outlines the scale of the task facing us and the tools that can be brought to bear on that challenge, and gives details of the actions stakeholders need to take to meet the vision and targets we have set ourselves. The key aims of the strategy are: to tackle the growth in waste; and, to maximise the amount we recover from waste through increased recycling, composting, and energy recovery.
- 3.9 Policies and proposals throughout the Plan have had regard, as appropriate, to national policy guidance set out in Planning Policy Guidance Notes (PPG's) and Mineral Planning Policy Guidance Notes (MPG's).
- 3.10 PPG 10 "Planning and Waste Management", (published September 1999) sets out the general policy context and the criteria for the siting of waste facilities, it also updates existing guidance for waste management with developments in waste policy and the establishment of the Environment Agency. Consequently, PPG 10 replaces various sections of PPG 23 Planning and Pollution Control relating to waste management. PPG 10 sets out four principles of waste management: the Best Practicable Environmental Option (BPEO); regional selfsufficiency; proximity principle; and, the waste hierarchy. The relationship of these principles to the Waste Local Plan is set out in Section 5, The Waste Local Plan Strategy.

- 3.11 Planning Policies for the Countryside are set out in PPG 7 "The Countryside: Environmental Quality and Economic and Social Development". The guidance seeks to promote greater flexibility in the re-use of rural buildings to assist farmers in setting-up new, diversified businesses which is seen as essential in achieving a competitive sustainable agricultural industry. Local Authorities are advised to take a positive approach towards farm diversification proposals, a commitment set out in the Rural White Paper. Proposals for facilities on farms will need to be determined with regard to these additional considerations.
- 3.12 Mineral Planning Guidance Note 7 "Reclamation of Mineral Workings" (published November 1997) sets out the contribution which reclaimed mineral sites can make to the Government's policies for sustainable development and waste disposal. The guidance also provides some advice on the preparation of schemes of conditions for restoration, aftercare and afteruse.
- 3.13 PPG 22 "Renewable Energy" (published February 1993) recognises that waste can potentially play a role in contributing to renewable energy targets. The government has set a target of generating 10% of UK electricity requirements from renewable sources of energy by 2010 and an aspiration to double this by 2020.

#### **Regional Context**

- 3.14 Government advice contained in PPG 11 "Regional Planning" (published October 2000) seeks to strengthen planning for waste management at the regional level, by encouraging waste management decisions to take account of the need for regional self-sufficiency and the proximity principle. Individual counties or districts cannot be considered in isolation because waste often crosses boundaries. In some circumstances, local options for the management of some types of waste may not be available. The Government wishes to see Regional Waste Strategies developed to form an integral part of Regional Planning Guidance (RPG), which should then be reflected in the more detailed policies of waste local plans. PPG 11 suggests that RPG should:
  - v Set regional waste management capacity and disposal targets to promote sustainable waste management, minimisation and alternatives to landfill;
  - v Set indicators for the measurement of progress against these targets which can be regularly monitored;
  - Specify the number and capacity of the different types of waste management facilities required, identify their broad locations, supported where appropriate by a criteria based approach; and
  - v Assess the need for facilities to deal with special/hazardous waste in the region.
- 3.15 Regional Planning Guidance for the North East (RPG1) was published in November 2002. It sets the framework for development plans in the region, including the Waste Local Plan. The County Council has taken into account RPG1 in preparing the Waste Local Plan and the Guidance may also be material to decisions on individual planning applications.

3.16 PPG 10 also recommends the establishment of Regional Technical Advisory Bodies (RTAB) comprising representatives from Waste Disposal Authorities. Waste Collection Authorities, the Environment Agency and the waste industry to provide specialist advice to Regional Planning Bodies on options and strategies for dealing with waste that will need to be managed in each region. The North East RTAB was established in 1999. Consultants have been appointed to assist with the development of a Regional Waste Strategy which will be incorporated into RPG for the North East at the first early review in 2002/03. Waste guidance in RPG 1 is being revised as part of the preparation of a draft Regional Spatial Strategy (RSS). RPG 1 will be replaced by the RSS. The RSS will take account of the work which has been undertaken by consultants and overseen by the North East RTAB on behalf of the North East Assembly, to develop a Regional Waste Strategy (a draft of which was published for consultation in February 2003). When finalised it is anticipated that the Regional Waste Strategy will identify regional waste arisings, set targets for waste recycling, composting, energy from waste and landfill, and provide a context for decisions on the number, size and locations of new waste facilities in the region. RPG 1 recommends that, until the North East RTAB is in a position to recommend preferred options for inclusion in RPG1, development plans should make provision for appropriate methods of waste management which will assist in achieving government targets.

#### Environment Agency

3.17 The Environment Agency aims to prevent or minimise the effects of pollution on the environment. The Agency issues waste management licenses and is responsible for the enforcement of any conditions it imposes. It also has an important role in providing up to date information on waste arisings and the extent, and need for waste management and disposal facilities. It publishes this and other relevant information in reports known as Strategic Waste Management Assessments (SWMA) for each of its nine planning regions. The SWMA for the North East Region was published in 2000. The use of this data, together with data from the 1999-2000 site returns is explained in greater detail in Section 7, 'Information on Waste'.

#### County Durham Structure Plan

3.18 The County Durham Structure Plan was adopted in 1999. It provides the strategic framework for the Waste Local Plan. The Structure Plan aims to continue to ensure the safe and effective treatment and disposal of waste, both from within the County and from elsewhere, in ways that minimise the impact upon and improve the environment of the County. This will be achieved by reducing the amounts of waste produced, increasing the use of re-usable materials, recovering materials and energy from the waste stream, and seeking the positive use of landfill disposal for environmental improvement schemes and land renewal. The Plan also seeks the transport of waste in bulk by rail.

#### **District Local Plans**

3.19 The district councils have prepared, or are in the process of preparing, local plans to cover their areas. These local plans deal with issues other than minerals and waste but will often contain policies and proposals relevant to proposals for waste management, particularly in relation to environmental issues (for example, nature conservation designations, and landscape areas). The plans also contain detailed Green Belt boundaries which are not shown in the Structure Plan.



Principles for the Waste Local Plan Aims and Objectives of the Waste Local Plan Sustainable Development Protection and enhancement of the environment Promoting efficient use of resources Achieving the Objectives

### 4. STRATEGY

4.1 The Strategy of the Waste Local Plan is derived from and develops the adopted Structure Plan strategy in relation to waste planning. This seeks to ensure effective treatment and disposal of waste in ways which minimise the impact on the environment of the County.

#### Principles for the Waste Local Plan

4.2 The principles of waste management set out in national guidance are:

#### v Best Practicable Environmental Option

Decisions should be guided by the Best Practicable Environmental Option (BPEO) principle. This establishes the option that provides the most benefit or the least damage to the environment as a whole, at an acceptable cost, in the long term as well as in the short term. (This is discussed further in Section 5).

- v Waste Management Hierarchy
- REDUCTION
- RE-USE
- RECOVERY (recycling, composting, energy)
- DISPOSAL
- 4.3 A sustainable approach to waste management requires an increase in the proportion of waste management by the options towards the top of the hierarchy, with priority given to the reduction of waste at source, and less reliance on simple disposal without recovery. The waste hierarchy is not to be applied rigidly when assessing proposals and flexibility is needed when developing options to arrive at the best balance of environmental, social and economic needs.

#### v Proximity Principle

This requires waste to be managed as close as possible to where it is produced. This creates a more responsible and sustainable approach to the generation of waste and limits pollution from transport.

#### v Regional Self Sufficiency

This requires that most waste should be treated or disposed of within the region in which it is produced. Each region is expected to provide sufficient facilities to treat or dispose of waste it produces. It is recognised that it may not be economic for all regions to have specialist recycling or recovery facilities and that the BPEO for some waste types may be to transport waste across regional boundaries, for example in directing difficult waste to specialist treatment facilities. However, the vast majority of waste should be managed within the region of its generation. Regional Planning Guidance has a central role in this process, particularly in providing a framework for the sub-regional provision of facilities.

- 4.4 The Waste Local Plan reflects this approach in **five key principles.** We should:
  - 1. Cut down the waste we produce;
  - 2. Increase re-use, recovery, recycling and composting of waste;
  - 3. Find the best, most practicable, environmentally friendly ways to manage waste;
  - 4. Deal with waste as close to its source as possible, limiting impacts of transporting waste; and
  - 5. Plan for self sufficiency in managing the waste generated in County Durham and our share of regional facilities as set out in the Regional Spatial Strategy.

#### Aims and Objectives of the Waste Local Plan

#### Sustainable Development

4.5 Increased emphasis is being given at all levels to the need for sustainable development which has been defined as:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Our Common Future, Brundtland Commission, 1987).

- 4.6 The issue of sustainability deals with the potential impact of current activity upon the future and encompasses social, economic and environmental objectives. It embodies issues of global importance in seeking to sustain human and natural resources, and needs to be reflected in action at every level.
- 4.7 'Waste Strategy 2000', the National Waste Strategy for England and Wales, applies the principles of sustainable development to waste management. The Waste Local Plan Strategy seeks to develop a land use framework around which waste management practices in the County would become more sustainable.
- Waste has two key impacts on sustainability, through its production and 4.8 through its management. The use of resources in the production of goods and the rate of their consumption dictate the generation of waste. The management of this waste has environmental impacts. A reduction in waste produced or an increase in recycling will therefore represent a move towards sustainable development. Waste reduction is therefore a key element in the Government's waste strategy, but it is recognised that waste production can never wholly be eradicated. Issues of sustainable production and consumption and waste minimisation are not direct land use issues but the Waste Local Plan must acknowledge these issues as desirable objectives which must be applied in tandem with land use policies for sustainable waste management. This will be achieved in part by the provision of a network of facilities to ensure that waste which is produced is managed in such a way as to minimise harm to the environment. The overall aim of sustainable development is fundamental to the Strategy of the Waste Local Plan and underlies its policies throughout.

- 4.9 The Waste Local Plan is directly relevant to three of the four County Council corporate aims. These are:
  - v Building a strong economy;
  - v Promoting strong, healthy and safe communities; and
  - v Looking after the environment.

The supporting strategic objective "to reduce waste and manage its disposal effectively" is particularly relevant to this Plan.

- 4.10 Following on from the Plan's principles and the overall aim of sustainable management of waste the Waste Local Plan Strategy has **two further aims**:
  - v Protection and enhancement of the environment from the impact of waste management; and
  - v Promotion of efficient use of resources.

#### Protection and enhancement of the environment

- 4.11 This includes the minimisation of adverse environmental impact, by aiming to reduce pollution from waste management operations including the handling, processing, transportation and disposal of waste, promoting sensitive working practices, and the protection of natural resources.
- 4.12 Ensuring that local communities are effectively protected from any adverse impacts arising from waste management operations is essential if the quality of life of the County's residents is to be maintained. Noise, odours, dust, traffic, ground water pollution, visual intrusion and other impacts can all have a negative impact on the life of communities. Operating sites to the highest standards is the best way to minimise such impacts. Controlling the impacts of waste management operations may also bring benefits for the waste management industry by reducing the level of public opposition to new proposals. Other bodies, particularly the Environment Agency and district councils, also have statutory responsibilities for control of pollution and environmental impacts.
- 4.13 County Durham enjoys a rich natural and cultural heritage which must be safeguarded for the benefit of future generations. Areas and features of international, national, regional or County-wide importance are an irreplaceable resource and therefore need to be identified and protected. Measures are also required to protect the quality of the wider environment, through the overall conservation of the general character and diversity of the landscape, cultural heritage and ecology, as well as more fundamental environmental elements such as air, soil and water quality. Waste management can, in some circumstances, bring about environmental benefits or community benefits.
- 4.14 The Waste Local Plan includes detailed land use policies on environmental protection (Section 6). Policies in the Local Plan which identify criteria for assessing future waste management proposals will also ensure the protection of the environment, directing development away from sensitive areas.

- 4.15 Protection of the environment will be addressed through the Waste Local Plan through the following objectives:
  - a) To protect and enhance the natural and built environment, including sites of ecological and landscape value and character, vulnerable aquifers and the Green Belt;
  - b) To protect local amenity by minimising the adverse impact of waste management operations on local communities and residential areas, for example, by promoting and agreeing sensitive working practices and effective restoration schemes;
  - c) To protect human health by the minimisation of pollution of land, air and water;
  - d) To ensure the effective reclamation of disposal sites by requiring phased restoration and suitable after-uses; and,
  - e) To protect and enhance the attractiveness of County Durham as a location for investment.

#### Promoting efficient use of resources

- 4.16 The generation of waste in itself conflicts with the principles of sustainability. Some materials are discarded which have the potential to be re-used, recycled, composted or otherwise recovered. Resources can be used more efficiently by:
  - v reducing waste at source, (reducing the use of raw materials and minimising waste in production processes);
  - v re-using waste materials and recycling;
  - v minimising the amount of waste which is produced;
  - $\mathbf{v}$  recovering value and benefit from waste which is produced; and
  - v public involvement and raising public awareness.

To encourage this, it is necessary to ensure that an adequate planning framework is in place to enable sufficient waste management facilities to be provided, for the reduction, reuse, recovery and disposal of waste in accordance with the waste hierarchy.

- 4.17 The Waste Local Plan has the following objectives in relation to promoting efficient use of resources:
  - a) Promoting the minimisation of waste generation;
  - b) Promoting the maximisation of the re-use of non-renewable resources;
  - c) Promoting the maximisation of the recovery of value from waste which is produced; and
  - d) Promoting the minimisation of the disposal of waste material which is capable of being recovered.

#### Achieving the Objectives

- 4.18 These objectives will be achieved by ensuring that the Waste Local Plan:
  - v emphasises the importance of waste reduction;
  - encourages consideration of the waste implications from all new major development proposals;

- establishes detailed planning policies to protect both people and the environment from unacceptable adverse impacts of waste management operations;
- makes provision for waste management facilities to deal with waste arising within County Durham and an appropriate share of the regional requirements in accordance with the proximity principle and regional selfsufficiency;
- v makes provision for new or improved waste treatment facilities, provided that they accord with the principles set out above;
- v makes provision for waste disposal facilities including landfill where necessary to manage the residual proportion of waste material and where recovery does not represent the BPEO; and,
- v monitors the provision of waste management facilities in relation to ensuring sufficient capacity is available to deal with waste arisings in County Durham.

Waste Local Plan aims and objectives						
Primary aim	Secondary aims	Objectives				
	Protect and enhance the environment	To protect and enhance the natural and built environment, including sites of ecological and landscape value and character, vulnerable aquifers and the Green Belt.				
Sustainable development		To protect local amenity by minimising the adverse impact of waste management operations on local communities and residential areas for example in promoting and agreeing sensitive working practices and effective restoration schemes.				
		To protect human health by minimising pollution of land, air and water. To ensure the effective reclamation of disposal sites by requiring phased restoration and suitable after-uses.				
		To protect and enhance the attractiveness of County Durham as a location for investment.				
	Promote efficient use	Promoting the minimisation of waste generation.				
		Promoting the maximisation of the re-use of non-renewable resources.				
	of resources	Promoting the maximisation of the recovery of value from waste which is produced.				
		Promoting the minimisation of the disposal of waste material which is capable of being recovered.				

#### Figure 4.1 Waste Local Plan aims and objectives



**Sustainable Development** 

**Best Practicable Environmental Option** 

Need

**Environmental Protection** 

Location of new waste management facilities

**Safeguarding Waste Sites** 

## **5. OVERARCHING POLICIES**

#### Sustainable Development

- 5.1 The overall aim of sustainable development is fundamental to the Strategy of the Waste Local Plan. To achieve this primary aim, it is not only essential that we seek to reduce and re-use waste but also that all waste management facilities maximise the recovery of resources from waste arisings where this is practical and appropriate. This can be achieved through recycling, composting or energy recovery. Additionally, the County Council recognises the desirability of providing a network of facilities in order to allow waste to be managed in such a way as to minimise harm to the environment.
- 5.2 Sustainable Waste Management is based on the principles of:
  - v The minimisation of harm to the environment;
  - Encouraging a move away from the disposal of waste towards waste reduction, reuse, recycling and recovery, which are higher in the Waste Hierarchy (see para. 4.2);
  - The location of recovery and disposal facilities closer to the sources of waste to limit the distance for transporting waste – the Proximity Principle;
  - v The management of each waste stream within the region from which it is sourced Regional Self Sufficiency;
  - The development of the economic potential of a sustainable waste industry through a range of complementary waste management facilities; and;
  - Encouraging development which satisfies all of the above, without having detrimental impacts upon existing communities and community development.
- 5.3 The principles of sustainability are set out in the key principles of the Plan and in key policies which over-arch all other policy provisions in the Plan. Account should therefore be taken of these overarching policies in addition to any other relevant policies, when considering any waste development proposal in the County.

#### **Best Practicable Environmental Option**

5.4 A sustainable system of waste management requires that a whole range of factors are taken into account in making decisions on how best to manage waste and ensure that this represents the Best Practicable Environmental Option (BPEO). The BPEO procedure is an objective means of determining the most appropriate waste management option for a particular situation which meets the aims of sustainable waste management. The BPEO will vary over time from area to area and for each particular waste type. The BPEO for a particular type of waste is likely to be a mix of different waste management methods.

- 5.5 The importance of identifying the BPEO is given considerable weight in Government guidance and the National Waste Strategy, which advises that local authorities will need to adopt an integrated approach which recognises that each step in the waste management process is part of a whole. Evaluating the BPEO must take into account the Waste Hierarchy, Regional Self Sufficiency, and the Proximity Principle and consider economic and social considerations as well as environmental and resource impacts. In particular it must recognise that environmental, social and economic costs of transporting waste are also an essential part of the BPEO criteria.
- 5.6 When proposing a particular waste management facility, it is the applicant's responsibility to demonstrate that the proposal represents the BPEO. In identifying the BPEO, a range of criteria will need to be considered, including an appropriate combination of land use planning issues, an Environmental Statement, life cycle analysis and social and economic factors. However, the level of detail required in any assessment will depend upon the size and scale of the proposal. For example, a small scale recycling facility is less likely to cause significant harm and will serve only the local area compared to a larger scale landfill facility which may have wider impacts.
- 5.7 The assessment of need is also relevant in considering BPEO. If waste capacity was permitted in excess of local need, it could result in waste being imported over longer distances, and discourage the development of facilities closer to the origin of waste. This would be contrary to the proximity principle and would be unlikely to represent the BPEO.
- 5.8 A range of tools and techniques are being developed to assist in assessing BPEO. The Environment Agency has developed a 'Life Cycle Analysis' software tool called WISARD to model waste management options flows and impacts.

#### Policy W1

Proposals for waste management facilities will be determined having regard to the overall aim of sustainable development. Also, regard will be had to the ability to satisfy the BPEO, the requirements of regional self-sufficiency, the proximity principle and the waste hierarchy.

#### <u>Need</u>

5.9 The Waste Local Plan seeks to achieve a major change in the way waste is managed in the County, by providing for appropriate new waste management facilities in the most sustainable locations. To ensure that this takes place, there is a requirement to assess the need for new waste facilities in the County. This assessment of need will not consist of a purely mathematical need calculation for a proposed facility, but it will also focus upon whether a proposal will move the waste material further up the hierarchy. This policy will apply to all waste development.<sup>1</sup>

- 5.10 As a direct result of the Waste Disposal Local Plan strategy which encouraged the reclamation of former mineral working by means of the deposit of waste, County Durham has, until recently, had an abundance of available landfill capacity. This has not only discouraged the development of more sustainable methods of waste management but also encouraged large quantities of waste to be imported into the County. Significant financial investment will be required in the County to move away from the current heavy reliance on landfill. The assessment of proposals for waste management facilities, based upon need and wider sustainability grounds, should give the waste industry the certainty it requires to make the necessary investment in facilities.
- 5.11 Transporting waste over a long distance does not encourage a waste producing area to take responsibility for the waste it produces. The provision of new facilities according to need is necessary to accord with the proximity principle, to encourage areas to take responsibility for dealing with their own waste, and to recognise that transporting waste itself has an environmental impact.
- 5.12 A Technical Paper has been prepared providing detailed information on waste, including assumptions on waste arisings (See Section 7 and the technical paper on waste information published in 2005.) This forecasts that there will be a shortfall in the supply of waste management facilities in the County to meet the projected waste arisings up to 2016. In order to help the WPA to assess need, applicants are encouraged to include information on the forecast level and category of waste to be handled at their proposed facility.

#### Policy W2

Proposals for new waste development will be required to demonstrate that there is an established need for the facility. They should show that they would make a contribution to the implementation of the County's sustainable waste strategy, having regard to the capacity of the existing provision and to whether the facility would move the management of waste material up the waste hierarchy, contribute to regional selfsufficiency and meet the proximity principle. Excessive provision which would result in the unnecessary importation of waste into County Durham will not be permitted.

#### **Environmental Protection**

5.13 The Waste Local Plan has an important role to play in ensuring that the environment and quality of life of people will not be adversely affected to an unacceptable degree by waste development. Waste operations and associated vehicle movements can give rise to a variety of adverse impacts which can affect individuals, communities and particular social groups. The County Council attaches overriding importance to ensuring that the treatment and disposal of waste and any associated activities are carried out in accordance with the principles of sustainability. The impacts must be acceptable both in

terms of the local and the wider environment and the amenity of local communities. Protection and enhancement of the environment is one of the key aims of the Plan. Minimising environmental disturbance has advantages to residents and the wider economy in improving and maintaining the attractiveness of an area. All proposals for waste development will be assessed against the policies in Section 6, (Environmental Protection).

#### Policy W3

Proposals for new waste development will be required to demonstrate that the natural and built environment and the living conditions of local communities will be protected and where possible enhanced.

#### Location of new waste management facilities

- 5.14 PPG 10 advises that WLP's should identify existing waste management sites with capacity for the future and, where practicable, new or extended sites sufficient to make adequate future provision of waste management facilities. Paragraph 33 states that "where new or replacement facilities are needed, preferred locations should be identified. Where specific locations are not identified, WPAs should indicate either 'areas of search' within which particular facilities might be acceptable on planning grounds, or identify comprehensive criteria against which applications for the development of waste management facilities could be considered. Identification of specific sites for development is the best way that the planning system can make provision for future waste management facilities."
- 5.15 Since the publication of PPG 10, the Government has published a research report to assist waste planning authorities in preparing development plans. Guidance on policies for Waste Management Planning (published May 2002), echoes PPG 10 in emphasising the value of identifying sites for waste development but also recognises that it is not always possible to do so. It advises that where it is not practicable to identify the full range of sites likely to be required, waste planning authorities could consider adopting a 'hybrid strategy' a combination of criteria based policies and site specific allocations. The main justification for a hybrid approach would be that the level of environmental information available to justify the identification of individual sites is not available. However, the guidance suggests that if this is the case, then it should still be possible to identify preferred areas of search for waste facilities.
- 5.16 The WLP Key Issues Paper invited consultees to submit ideas and proposals for new waste management facilities. Unfortunately, very few proposals for specific sites were forthcoming. This approach can only be successful with the active and continuing participation of the waste industry. There is also considerable uncertainty surrounding the implementation of the EU Landfill Directive and its implications for landfill capacity, and the Environment Agency's policy on landfill location. It is clear that the direction of waste

management in the County must change, yet the precise nature, scale and location of new facilities needed to bring about this change are dependent on a range of policy and commercial decisions which are unpredictable at present and in many cases are beyond the control and remit of the waste planning authority. Against this background, the Waste Local Plan First Deposit Draft set out criteria against which new development proposals for a range of waste management facilities could be assessed. Site specific proposals for the locations of new waste management facilities were not introduced at that stage of the Plan.

- 5.17 In response to the First Deposit Draft Waste Local Plan, various sites for both landfill and non-landfill facilities were proposed by industry. The Environment Agency objected to all of the landfill sites that were proposed, due to a lack of information accompanying the submissions. In addition, with one exception, it was not possible for the County Council to consider any of the non landfill proposals due to the absence of any supporting information to justify the submissions. In these circumstances therefore, the Plan has adopted a hybrid approach, with criteria based policies and areas of constraint<sup>2</sup> identified together with one site specific allocation for waste facilities at Thrislington Quarry (see Section 15).
- 5.18 PPG 10 (Annex A) advises that waste management facilities should be located where they are compatible with neighbouring land uses, and where they will have the least impact on the local population and the environment. PPG 10 identifies a number of possibilities where waste development could be located, e.g. within or adjacent to:
  - v industrial areas;
  - v degraded, contaminated, or derelict land;
  - v working or worked out quarries;
  - v existing landfill sites;
  - v existing or redundant buildings;
  - $\mathbf v\,$  sites previously occupied by other types of waste management facilities; and
  - v other suitable sites located close to railways or water transport wharves, or major junctions in the road network.
- 5.19 The Waste Local Plan provides guidance on general locations as well as possible suitable locations for each type of development. In accordance with the proximity principle and to minimise transport impacts, new facilities should be located close to the sources of waste. The County Durham Structure Plan gives priority to development within or well related to the County's main towns, where it is likely that most waste is generated. Policy W4 sets out the principle criteria for the location of new waste management facilities. Proposals for new sewage treatment works or extensions to existing works will be determined against Policy W52.

<sup>23</sup> 

<sup>&</sup>lt;sup>2</sup>The proposals map identifies a number of key constraints. For reasons of legibility it has not been possible to identify a number of the other key constraints including international and national nature conservation designations. (It should also be noted that the proposals map implies no hierarchy of importance with respect to the designations mapped and others covering nature conservation.)

#### Policy W4

Proposals for new waste management facilities will be determined having regard to the following criteria:

- i) the environment and local amenity is adequately protected;
- ii) the location minimises the environmental impacts of transporting waste;
- iii) opportunities to integrate waste management facilities with other facilities or developments which will benefit from the recovery of materials or energy have been identified and taken advantage of;
- iv) opportunities have been identified to extend or develop existing waste management facilities or develop new facilities alongside existing facilities where this would bring environmental benefits;
- v) opportunities have been identified to develop new facilities where they would bring environmental benefits such as on appropriately located previously used or derelict land or former mineral workings; and
- vi) the safe and free flow of traffic on the highway networks affected by the facility shall be safeguarded.

#### Safeguarding Waste Sites

- 5.20 Current sites for the treatment and disposal of waste are part of the existing infrastructure that is delivering essential waste management services to County Durham. Depending on individual circumstances, such sites may have the potential to increase their capacity, or to diversify to provide additional waste services or facilities. As a relatively 'low value' land use, these sites are vulnerable to redevelopment for other permanent land uses. Therefore existing waste sites, in addition to sites which may be developed during the plan period, should be safeguarded.
- 5.21 Local planning authorities in the County will be required to consult the County Council on planning applications adjacent to existing waste management facilities, within 250 metres of a landfill site and on applications on or adjacent to proposed facilities. It is important that sensitive land uses are not located close to existing or proposed waste facilities in order to reduce the potential risk of problems relating to amenity in the future.

#### Policy W5

Existing sites in use for waste development (including sewage and water treatment sites) and proposed major sites for waste development should be safeguarded and protected from development which would prejudice their use for waste management. The County Council will oppose proposals for development within or in proximity to these sites where the proposed development would prevent or prejudice the use of the site for waste development.



**Integrated Pollution Prevention and Control** Design Landscape North Pennines Area of Outstanding Natural Beauty Areas of High Landscape Value and Heritage Coast **Green Belt Nature Conservation Cultural Heritage Listed Buildings and Conservation Areas** Durham Cathedral and Castle World Heritage Site, Historic Battlefields and Historic Parks and Gardens Archaeology **Public Rights of Way and Countryside Recreation Agricultural Land** Water Resources Flood Risk Transport, traffic and access **Modes of transport** Environmental impact of road traffic Planning obligations for controlling environmental impact of road traffic **Protecting Local Amenity Visual Intrusion** Odour Noise Dust and mud Litter Vermin and birds Land instability Site Management - Development involving Landfill or Landraise **Cumulative Impact** Preventing the spread of Soil and Animal bone diseases

### **6. ENVIRONMENTAL PROTECTION**

- Environmental protection covers a wide range of different issues. Although 6.1 the various effects that will need to be considered in relation to proposals for waste management facilities will often be complementary in their requirements, there may be occasions when conflicts arise. Where they do arise, each case will be treated on its merits, depending upon the relative significance of opposing considerations. In assessing the likely impact of proposals, including those arising from an intensification of an existing waste development, the County Council will have regard to the relationship of the site with neighbouring development. PPG 23 advises that public perception of the impacts of waste development can be a material consideration in planning decisions. The County Council will have regard to concerns expressed in response to planning proposals, and in considering the weight to be attached to such concerns, will seek advice from the relevant regulatory bodies on issues such as the significance of any perceived risk to human health or the environment from a proposal. Waste management facilities are also subject to a system of waste management licensing administered and enforced by the Environment Agency, which is designed to protect both human health and the environment.
- 6.2 PPG 12 requires local authorities to take account of the need to revitalise and broaden the local economy and stimulate employment opportunities. Waste management, particularly recovery operations, can make a significant contribution to local employment and the local economy. However, waste development on industrial estates must not detract from the ability of the remainder of the site to attract other forms of new development. Provided that the waste management use is compatible with other existing or proposed forms of industrial development, there is no reason why this should be the case. The County Council will have regard to the economic effects of waste management development. PPG 12 also requires consideration to be given to the relationship of planning policies and proposals to social needs and problems, including the likely impact on different groups in the population. These issues are addressed in the Sustainability Appraisal.
- 6.3 The policies covering environmental protection are derived from the objectives and principles set out in Section 4.

#### **Integrated Pollution Prevention and Control**

6.4 Complementary planning and waste management licensing systems operate to protect the environment from the harmful effects of development. Under the Environmental Protection Act 1990 (EPA), most waste treatment and disposal sites needed to be either licensed or registered as exempt by the Environment Agency. A new regime, Integrated Pollution Prevention and Control (IPPC), implements the EU IPPC Directive (1996). Current landfill operations will require a IPPC permit in order to continue to operate. Planning permission or a Certificate of Lawful Use or Development is required before a permit can be issued.

6.5 The potential for pollution affecting the use of land can be a material planning consideration. The relationship between planning and pollution control is not always clear. Both seek to protect the environment but in general, planning focuses on whether the use of the land is acceptable in principle, rather than controlling the process itself. There may be material considerations which are common to both processes.

#### **Design**

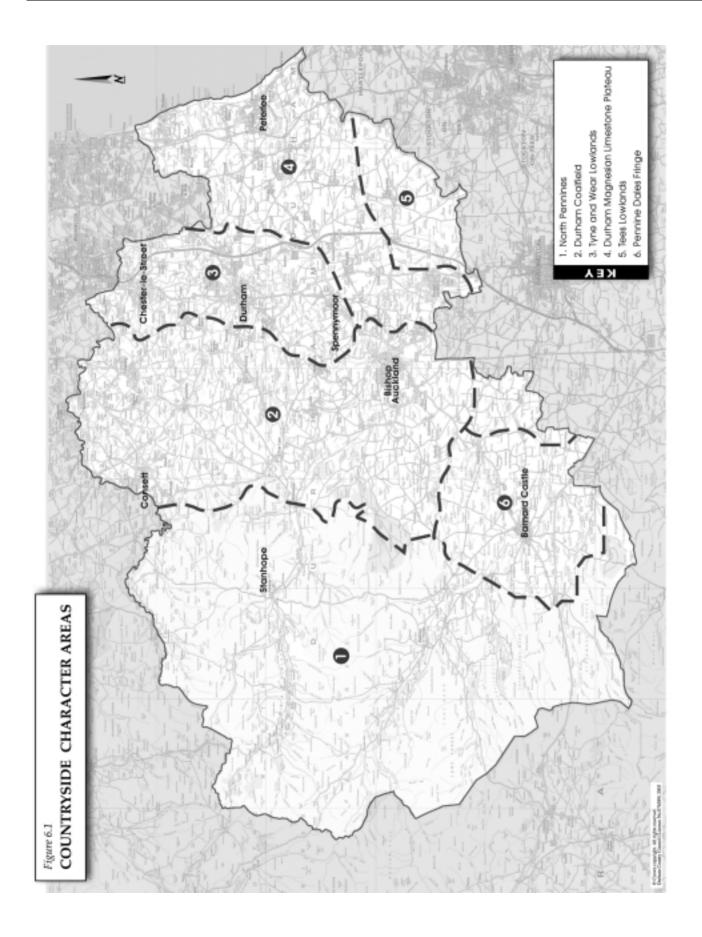
6.6 Buildings for waste management development should be well designed and attractive and should complement their landscape setting. Where appropriate, they should be an example in themselves, in terms of maximising recycling and the re-use of waste materials and incorporating sustainable urban drainage. Guidance on sustainable building is available in "Building-in Sustainability - A guide to sustainable building and construction in the North East" which was published in 2002. The document provides guidance on how development can become more energy-efficient, better-planned and designed, and more integrated with the local community.

#### Policy W6

New buildings for waste management uses should be carefully sited and designed to complement the location and existing topography. Landscape proposals should be incorporated as an integral part of the overall development of the site. Where appropriate, the opportunity should be taken to illustrate best practice by incorporating sustainable design principles in new building, using recycled materials wherever possible.

#### **Landscape**

- 6.7 Waste developments can have a considerable impact on the character of the landscape. Physical impacts may arise from damage to the natural topography, or from the removal of hedges, trees and other mature or historic landscape features. Visual impacts may arise from the appearance of operational and tipping areas, litter-trap fencing, stockpiles and screening mounds, buildings, processing plant and security lighting. Traffic, signage and highway improvement works around waste facilities can affect the character of rural roads. Potential impacts can often be avoided through sensitive site selection, design and restoration. In some cases waste disposal can facilitate the reclamation of former mineral workings.
- 6.8 It is necessary to ensure that the character of the landscape of the County is not adversely affected by development. The County exhibits a very wide range of landscapes and each of these has a distinctive local character based on differences in geology, soils and vegetation and on patterns of human settlement, farming practices and industrial development. In 1998 the Countryside Agency published the 'Character Map of England' which maps and describes the character of 159 separate Countryside Character Areas. Figure 6.1 shows those character areas that occur in County Durham. The County Council has published a detailed landscape character assessment which will work within this framework to identify local landscape types and character areas, along with landscape strategies and guidelines, as supplementary guidance.



6.9 The County Council will pay close attention to both the short and long term effects of waste developments on the character of the County's landscapes. Permission will not be granted for development which would result in the loss of important landscape features or which would have a significant adverse effect on the character of the landscape. The potential for waste developments to contribute to wider goals of restoring or enhancing landscape character will be taken into account.

#### Policy W7

Proposals for waste developments which would result in the loss of important landscape features or which would have a significant adverse effect on the character of the landscape will not be permitted. In determining applications for waste developments, the waste planning authority will have regard to the potential of waste developments to restore or enhance landscape character.

#### North Pennines Area of Outstanding Natural Beauty

- 6.10 The North Pennines Area of Outstanding Natural Beauty (AONB) has been designated for its national importance and contains extensive areas of near wilderness landscapes and smaller scale traditional agricultural landscapes, both of which are extremely sensitive to change. On 13 June 2000, the Government issued an amendment to PPG 7 on the countryside, stating that the landscape qualities of National Parks and AONB's are equivalent, and therefore the protection given to both types of area by the land use planning system should also be equivalent. In relation to major<sup>1</sup> projects, the assessment required in paragraph 4.5 of PPG 7 for National Parks will also apply to proposals in AONB's. When considering planning applications for development within AONB's, the applicant should now include an assessment of:
  - i) the need for the development, in terms of national considerations, and the impact of permitting it or refusing it on the local economy;
  - ii) the cost of and scope for developing elsewhere outside the area or meeting the need for it in some other way; and
  - iii) any detrimental effect on the environment and the landscape, and the extent to which that should be moderated.
- 6.11 Environmental impacts should therefore be a primary consideration in assessing any proposal for waste development within or adjacent to the AONB. Even relatively small scale development can have a damaging effect on the AONB's special character, and it will generally be inappropriate to allow waste development within the area. Any development that may be permitted will need to pay particular attention to the environmental sensitivity of the AONB.

Proposals for waste developments in or adjacent to the North Pennines AONB will be subject to the most rigorous examination. Proposals will not be permitted except in exceptional circumstances and where it can be demonstrated that:

- a) there is an overriding national need for the development which cannot be met at an alternative, less sensitive site, and which is sufficient to outweigh the need to conserve the character of the area;
- b) the proposal will not have a detrimental effect on the special character of the area;
- c) the proposal is in the public interest;
- d) high environmental standards are maintained; and,
- e) where appropriate, the site is restored within an acceptable timescale.

Additionally all proposals will be required to demonstrate that more sustainable options for waste management, further up the waste hierarchy have been investigated and found not to be feasible.

#### Areas of High Landscape Value and Heritage Coast

- 6.12 In addition to the AONB, there are a number of areas within the County which are considered to be sufficiently important to the appearance of the County to be worthy of special recognition. These include Areas of High Landscape Value (AHLV's) and The Heritage Coast. AHLV's are identified in the County Structure Plan, and defined in detail in District Local Plans. The Heritage Coast, a later designation, is defined in Easington District Local Plan although both designations are shown on this Plan's Proposals map.
- 6.13 AHLV's include regionally and locally important landscapes principally within the major river valleys of the County. These areas are important for nature conservation, for their archaeological heritage, historical and cultural associations and are highly valued for both formal and informal recreation.
- 6.14 Heritage Coasts are designated nationally in recognition of their national scenic importance. Heritage Coast status was afforded to three substantial sections of the County Durham Coast in 2001, covering almost 13km from Crimdon in the south to Salterfen Rocks in the north in the Borough of Sunderland. The area features fine magnesian limestone grasslands, wooded denes, cliffs and stacks. A Management Plan for the Heritage Coast is currently being prepared and will be published in 2005.
- 6.15 Certain types of waste developments will be located in urban areas and their impact on the landscape is likely to be minimal. However others, such as landfill operations, will take place in the open countryside and have the potential to impact on the landscape of the County either through direct impacts on landscape features or through the visual intrusion of industrial operations in a landscape valued for its scenic qualities. Given that landfill sites are inevitably located in open countryside, it is also necessary for regard to be had to the proximity principle. Whilst alternative, less sensitive sites

may be available, these may involve the transport of waste over large distances and may therefore, on balance, prove to be unsustainable. For this reason, the development of waste facilities within the landscape areas outlined above will be subject to the most careful consideration. In particular, the County Council will consider the availability of alternative sites or methods of waste treatment/disposal which are less harmful to the landscape whilst having regard to the desirability of reducing the transportation of waste materials. However, it is recognised that the location of certain facilities, particularly sewage treatment works, is constrained by topography and the pattern of existing infrastructure. Whilst alternative, less sensitive sites may be available, these may not always represent the BPEO.

#### Policy W9

Proposals for waste developments in Areas of High Landscape Value and the Heritage Coast will be given the most careful consideration. Proposals will only be permitted where it can be demonstrated that:

- a) there is a need for the development, having regard to the Proximity Principle, BPEO and operational requirements, which cannot be met from an alternative, less sensitive site;
- b) the proposals will not have an unacceptable detrimental effect on the special character and quality of the area;
- c) high environmental standards will be maintained; and
- d) where appropriate, the site is restored within an acceptable timescale.

Additionally all proposals will be required to demonstrate that more sustainable options for waste management, further up the waste hierarchy have been investigated and found not to be feasible.

#### Green Belt

- 6.16 The North Durham Green Belt was established in March 1999 by the adoption of the County Durham Structure Plan. The Green Belt is currently being defined in detail within district Local Plans. Until all detailed boundaries have been defined in Local Plans, regard should be had to the general extent of the Green Belt as defined in the adopted County Structure Plan.
- 6.17 Government policy on Green Belts is contained within PPG 2 "Green Belts". The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open. The purposes of including land within the North Durham Green Belt are to check the sprawl of the Tyne and Wear conurbation, prevent towns and villages in the north of the County from merging into one another, assist in safeguarding the countryside from encroachment, and preserve the setting and special character of the historic City of Durham. The Green Belt also assists urban regeneration in the towns in the north west and east of County Durham and in the former mining villages around Durham City.
- 6.18 The general policies controlling development in the countryside apply with equal force in Green Belts but there is in addition a general presumption against inappropriate development. Such development will not be approved

except where very special circumstances can be demonstrated. PPG 2 lists a number of developments which are considered appropriate in a Green Belt, such as agriculture, forestry and mineral extraction and other uses which retain the open nature of the Green Belt. Within the Green Belt the erection of new buildings for waste management facilities are viewed as being inappropriate development and will only be allowed where very special circumstances can be demonstrated.

- 6.19 In certain circumstances the erection of new buildings, plant and machinery at existing sewage treatment works in the Green Belt may be considered as appropriate development. Many such facilities require additional development to improve the quality of treatment, in line with current legislative requirements. Such development may be considered appropriate within an existing sewage treatment works designated as a major developed site within the Green Belt in a district local plan or provided it can be achieved by infilling, would maintain openness and would not conflict with the purposes of including land within the Green Belt. Similarly, small scale development needed to ensure the management and/or energy recovery of landfill gas may also be considered as appropriate development provided that adequate arrangements have been made to ensure the removal of redundant equipment. If the proposed development does not meet these criteria, very special circumstances will be required to justify it.
- 6.20 The North Durham Green Belt contains many agricultural and other rural buildings which with normal maintenance and repair can be expected to last many years. Changes to the rural economy may lead to buildings becoming underused and redundant. With suitable safeguards the re-use of such buildings could help farmers in diversifying their enterprises and should not prejudice the openness of the Green Belt.
- 6.21 The disposal of waste in voids created by mineral extraction has been the traditional method of restoring such sites. It is recognised that new applications for waste disposal may come forward as part of proposals for further mineral extraction. Provided that such applications satisfy Green Belt policy and all other relevant development plan policies such proposals may be permitted within the North Durham Green Belt.
- 6.22 In considering all applications for waste development within the North Durham Green Belt the waste planning authority will also have regard to both the proximity principle and the availability of alternative sites outside the Green Belt. However, with the exception of proposals for additional development at existing sewage treatment works, landfill gas recovery plant or small scale proposals involving the re-use of rural buildings it is considered that for most other types of waste development suitable alternative sites should be available outside the Green Belt.
- 6.23 There may be cases where overriding need and/or substantial environmental benefits will justify inappropriate development within the Green Belt. In accordance with PPG 2, it is for the applicant to demonstrate the "very special circumstances" in which permission could be granted for inappropriate development in the Green Belt. Should the Council be minded to grant planning permission for development which would be inappropriate, but where very special circumstances have been demonstrated, the proposal will be treated as a departure from the Waste Local Plan.

Proposals for waste development within the North Durham Green Belt will be determined as follows:

- a) the erection of new buildings, plant or machinery will be considered to be inappropriate development and will not be permitted except:
  - at existing sewage treatment works within the Green Belt where development can be achieved by infilling, would maintain openness and would not conflict with the purposes of including land within the Green Belt; or
  - ii) small scale landfill gas collection and associated power generation facilities which neither affect the visual amenity of the Green Belt nor prejudice or significantly delay the reclamation of the site.
- b) the deposit of waste for the restoration of mineral voids will only be permitted where it maintains the openness of the Green Belt and does not conflict with the purposes of including land within it. In all instances high environmental standards must be maintained and the site should be restored within an acceptable timescale.
- c) the re-use of a building will only be permitted within the Green Belt where:
  - the proposal does not have a materially greater impact than the present use on the openness of the Green Belt or the purposes of including land within it;
  - ii) strict control is exercised over the extension of re-used buildings, and over any associated uses of land surrounding the building;
  - iii) the buildings are of permanent and substantial construction, and capable of conversion without major or complete reconstruction; and
  - iv) the form, bulk and general design of the buildings are in keeping with their surroundings.

In considering all applications for waste development regard will be given to the application of the proximity principle and the availability of suitable alternative sites outside the Green Belt. In all cases the visual amenities of the Green Belt should not be injured by reason of siting, design or materials.

#### **Nature Conservation**

- 6.24 The sound stewardship of wildlife and key features, for the benefit of this and future generations, depends on the wise use and management of the County's resources as a whole. The decisions of local planning authorities in relation to the development and use of land can contribute to this objective. Waste management facilities can potentially have serious damaging effects, both directly and indirectly. National planning policy in relation to nature conservation is set out in PPG 9.
- 6.25 In recent decades there has been an increased recognition of the importance of nature conservation, with national, European and international legislation and directives placing an obligation on member states to ensure the protection and management of key sites and areas. These key international obligations are set out below:
  - i) The Berne Convention carries an obligation to conserve the habitats of wild plants and animals especially those listed in the convention as endangered or vulnerable.

- ii) The Ramsar Convention requires the conservation of wetlands, especially sites listed under the Convention.
- iii) EU Council Directive on the Conservation of Wild Birds requires member states to take measures to preserve a sufficient diversity of habitats for all species of wild birds naturally occurring within their territories and to take special measures to preserve the habitats of particularly sensitive species and migratory species (Special Protection Areas (SPA's)).
- iv) EU Council Directive on the conservation of habitats of wild fauna and flora-the Habitats Directive - provides for the designation of Special Areas of Conservation (SAC's) and requires member states to maintain or restore natural habitats and wild species at a favourable conservation status. (Collectively SPA's and SAC's are known across Europe as the Natura 2000 network). The Conservation (Natural Habitats) Regulations 1994 (as amended 2000) requires Local Planning Authorities to review extant planning permissions which are likely to have direct, indirect or cumulative significant effects on existing and future SPAs, and on candidate and designated SACs).

#### International Designations

6.26 A number of areas and sites have been identified under these international designations including parts of the North Pennine Moorlands which has been designated as both a SPA and SAC. In addition a number of other sites are currently designated or proposed as SPA's and SAC's<sup>2</sup>. The protection of these sites is of the highest priority. The Habitats Directive requires that any proposed development on a SPA or SAC will need to be subject to the most rigorous examination.

#### Protected Species and their Habitats

- 6.27 Certain Species are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation (Natural Habitats and C.) Regulations 1994 and may be found in many places which are not designated for their nature conservation interest. It is an offence to ill treat, to kill, injure, sell or take any protected species or intentionally damage their resting place or breeding sites or to pick, collect, cut, uproot or otherwise destroy listed plant species. Other species are protected by their own legislation. Some information on the occurrence and distribution of protected species within the County may be obtained from either the County Council or English Nature. Only by protecting the habitats of these species can their survival be ensured.
- 6.28 The Council will also seek from the applicant adequate information concerning the presence or absence of protected species in order to consider what precautions should be undertaken to prevent a breach of the relevant wildlife legislation from occurring. Where a site is thought to contain or support a protected species the County Council will consult English Nature prior to the determination of any planning application.

#### National Designations

6.29 Sites of Special Scientific Interest (SSSI) have been identified by English Nature as being sites of nationally important nature conservation and ecological interest. The most significant SSSI's of biological importance are

<sup>&</sup>lt;sup>2</sup>Special Areas of Conservation have currently been identified at Castle Eden Dene, the Durham Coast, Moor House - Upper Teesdale, North Pennine Dales Meadows, North Pennine Moors and Thrislington. Special Protection Areas have been designated on the Northumbria Coast and on the North Pennines Moors.

known as Nature Conservation Review Sites (NCRs). The most significant SSSI's of geological and geomorphological interest are known as Geological Conservation Review Sites (GCR's.) These nationally important sites may also be designated as National Nature Reserves to be managed primarily for nature conservation. Where the site concerned is a NNR or identified in the Nature Conservation Review or Geological Conservation Review particular regard should be paid to the site's national importance. Some SSSI's or groups of SSSI's may additionally be identified as of international importance under the international conventions and directives described in 6.25 i)-iv). These international measures place additional protection upon these SSSI's. SSSI's are particularly vulnerable to being damaged and should be afforded maximum protection. Waste development even beyond the boundary of an SSSI can have serious impacts on the site, for example through any resultant alteration to the local hydrological system or through pollution.

Sites of Nature Conservation Importance (SCNI's) and other Sites of Local Importance

6.30 Nature conservation in the County is dependent not only on the conservation of nationally designated sites but also on a whole range of natural and semi-natural vegetation types which provide the habitats for many rare and valued species. These include traditionally managed hay meadows, limestone grasslands, wetlands, heathlands and moorlands and the coastal area. The County Council has adopted both Nature Conservation and Geological Conservation Strategies to assist in the identification, conservation and enhancement of this natural heritage and in collaboration with Durham Wildlife Trust and English Nature has identified a range of nature conservation sites, including County Wildlife Sites and County Geological Sites. Locally important Sites of Nature Conservation Importance are identified and designated by District Councils in their Local Plans. The County Council will assess both the short and long term impacts of any proposed waste development on a Site of Nature Conservation Importance and planning permission will not be granted for proposals which would detract from the overall value of such a site.

**Biodiversity** 

- 6.31 Maintaining and enhancing biodiversity is an important issue. The County's wildlife cannot be sustained solely by site protection but depends on the wise management of the land resource and its nature conservation value as a whole. Detailed information relating to biodiversity is outlined in the County Durham Biodiversity Action Plan. This sets out a strategy and contains local targets for various habitats and species. Where appropriate, when submitting applications for waste development developers should demonstrate how they have had regard to the Biodiversity Action Plan.
- 6.32 Development can often be designed to retain local wildlife habitats such as hedgerows, woodlands, roadside verges, old pastures and ponds or restore them as part of a reclamation scheme. In 1999 English Nature published a guide to "natural areas in the North East Region" which depicts the natural dimension of particular landscapes and identifies a range of issues relating to their management and enhancement. Where appropriate, applicants will be

encouraged to have regard to English Nature's natural area profiles in preparing reclamation schemes which include the creation of new areas of wildlife or geological interest.

#### Wildlife Corridors

6.33 Wildlife corridors, and other linear habitats, as defined in district local plans, assist in providing an inter-connecting network of habitats allowing for the movement of species. Many species cannot survive within the limits of designated sites and conservation of these continuous features is vital to the maintenance of the current range and diversity of flora and fauna within the County. If their integrity or continuity is allowed to be adversely affected by waste development then, in the longer term, the value of such habitats and the diversity of species within them may decline.

#### Ancient Woodlands

6.34 Particular protection should also be afforded to ancient woodlands. Mature deciduous woodlands are probably the richest and most diverse habitat type in the County having taken many hundreds of years to develop their complex interdependent communities of plants and animals. Once lost an ancient woodland cannot be recreated and no amount of replanting will compensate for its disappearance. A Nature Conservancy Council survey in 1987 revealed that such areas, continuously wooded since 1600, were relatively scarce in County Durham. The County Council will assess both the short and long term impacts of the proposed waste development on ancient woodland.

#### Policy W11

Waste development not directly connected with or necessary to the management of a nature conservation site of European importance, or a Ramsar site, and which is likely to have a significant effect on the site (either individually or in combination with other plans or projects) will be subject to the most rigorous examination. Development which would adversely affect the integrity of the site will not be permitted unless:

- a) the developer has demonstrated that there is no alternative solution; and
- b) there are imperative reasons of over-riding public interest.

Where the site concerned hosts a priority natural habitat type and/or a priority species, development will not be permitted unless it is necessary for imperative reasons of human health or public safety, or for benefits of primary importance for the environment.

Where development is permitted in accordance with the Habitats Regulations, the use of conditions or planning obligations will be considered in order to avoid and minimise harm to the site, to enhance the site's nature conservation interest and to secure any compensatory measures and appropriate management that may be required.

Waste development in or likely to have an adverse effect on a Site of Special Scientific Interest will be subject to special scrutiny. Where such development would have an adverse effect, directly or indirectly, on the special interest of the site it will not be permitted unless the reasons for the development clearly outweigh the harm to the special nature conservation value of the site.

#### Policy W13

Waste development likely to have an adverse effect on a Local Nature Reserve, a County Wildlife/Geological Site or a Regionally Important Geological/Geomorphological Site, will not be permitted unless the reasons for the development clearly outweigh the harm to the substantive nature of the conservation value of the site.

#### Policy W14

Waste development should seek to preserve the nature conservation value of defined wildlife corridors by maintaining their integrity and continuity. Where possible, waste development should contribute to their nature conservation value through appropriate reclamation and management.

#### Policy W15

Planning permission will not be granted for waste development which would have an adverse impact on badgers, seals or species protected by Schedules 1, 5 or 8 of the Wildlife and Countryside Act, as amended or Schedules 2 or 4 of The Conservation (Natural Habitats, &c.) Regulations 1994, as amended. Where an overriding need for the development is demonstrated, the waste planning authority will impose conditions on the planning permission or enter into planning obligations to:

- i) facilitate the survival of individual members of the species;
- ii) reduce disturbance to a minimum
- iii) provide adequate alternative habitats to sustain at least the current levels of population of the species.

#### Policy W16

Waste development which would have a significant adverse impact on areas of ancient woodland will not be permitted.

#### Policy W17

All proposals for waste development should incorporate appropriate measures to ensure that any adverse impact on the nature conservation interest of the site is minimised. In considering proposals for waste development regard will also be had to:

- a) opportunities to enhance existing and create new areas of nature conservation interest;
- b) the need to conserve features of local nature conservation value; and
- c) species and habitats identified in the County Durham Biodiversity Action Plan.

#### Cultural Heritage

- 6.35 County Durham's landscape has been shaped by centuries of human activity, exploitation and processes. To provide a framework for broadening our understanding of the landscape as a whole the County Council has begun the process of characterising our historic landscape. The programme moves beyond individual buildings, ornamental landscapes or archaeological sites, establishing an over-arching view of the whole historic landscape.
- 6.36 Historic Landscape Characterisation focuses on aspects of the landscape that have not always been regarded as archaeological, considering components that are 'natural' but nevertheless the product of centuries of human action, such as hedgerows, woodland, ponds and modified watercourses. It also takes account of more intangible matters reflected in its physical structure: time-depth and patterns such as settlement, land-use and the mixture of enclosed and non-enclosed land, arable and grazing, woodland and parkland.
- 6.37 When complete, a map base covering the whole county will allow better appreciation of the history and development of local landscapes, whilst offering an understanding of the landscape of County Durham as a whole, and will contribute to decision making in the future. It is anticipated that this work will be completed by 2005 and will then become supplementary planning guidance.

#### Listed Buildings and Conservation Areas

- 6.38 Most waste developments involving disposal take place in the open countryside. Nevertheless, there may be proposals which affect the built heritage of the County, particularly isolated listed buildings in the countryside and rural areas included in conservation areas. In order to protect this heritage, proposals which adversely affect listed buildings, conservation areas or their settings will be resisted. Conservation Area designations are set out in detail in District Local Plans.
- 6.39 Through careful design and provision of suitable stand-off distances it should, in many cases, be possible to accommodate waste developments in the vicinity of listed buildings and conservation areas without adversely affecting the site or setting. Where, exceptionally, operations which detract from the setting of such areas are necessary, the Waste Planning Authority will take into account the significance and quality of the historic feature against the need for the proposed development. Consideration will be given to the availability of alternative sites and the degree to which the development can be designed to minimise damage to the historic environment.

There will be a presumption in favour of the preservation of Listed Buildings. Proposals for waste developments which would result in the demolition, alteration with adverse impact, damage or other adverse change to the special character or setting of a listed building will not be permitted unless it can be demonstrated that:

- a) there are no alternative sites available; and,
- b) there are imperative reasons of over-riding public interest sufficient to outweigh the loss of or damage to the special architectural or historic interest of the building and/or its setting.

#### Policy W19

Proposals for waste development which would have an adverse effect on a Conservation Area will only be permitted where it can be demonstrated that there are no alternative sites available and that there is an overriding need for the development which outweighs the importance of preserving the character and setting of the Conservation Area.

## Durham Cathedral and Castle World Heritage Site, Historic Battlefields and Historic Parks and Gardens

- 6.40 Durham Cathedral and Castle form one of a select number of sites in Britain to be designated as a World Heritage Site in recognition of its outstanding international historic importance. The Government, as a signatory to the UNESCO World Heritage Convention, is committed to protecting and preserving these sites so that they can be enjoyed by future generations.
- 6.41 English Heritage's Register of Historical Battlefields includes Neville's Cross on the edge of Durham City where the battle took place in 1346. Much of the area of the battlefield has been developed over the centuries but a significant amount is open and protected from most types of development by the Green Belt and by a specific policy in the City of Durham Local Plan.
- 6.42 Historic Parks and Gardens are of similar significance and make an important contribution to the quality of the County's landscape and reflect the cultural and horticultural traditions of their time. They are also likely to be of importance in other respects, and in particular offer a resource for recreation, tourism and education and often provide outstanding settings for listed buildings. English Heritage's Register currently includes 15 parks or gardens within the County which are considered to be of national importance. Detailed designations and boundaries of Historic Parks and Gardens are set out in detail in District Local Plans. Many other Parks and Gardens are identified in District Local Plans as being of historical significance. These too are a material consideration in the determination of planning applications.

Where proposals for waste development are within, adjacent to, or otherwise likely to affect Durham Castle and Cathedral World Heritage Site, sites included on the national and local Registers of Historic Battlefields, and Parks and Gardens of Special Historic Interest, they will only be permitted where:

- a) they would not involve the loss of features considered to form an integral part of the special historic character, landscape setting or appearance of the heritage asset; and
- b) they would not otherwise detract from the interpretation, enjoyment, layout, design character, appearance or setting of the heritage asset.

When determining planning applications, special consideration will be given to matters of design, including landscaping, visual impact, and views both to and from the designated area, in order to conserve its character and setting.

#### Archaeology

- 6.43 The importance of archaeological sites and the need for their conservation is underlined in PPG 16, "Archaeology and Planning". It recognises that archaeological remains are a finite, irreplaceable and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. It states that where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation.
- 6.44 County Durham possesses a rich archaeological heritage including many sites of industrial archaeological interest. They represent an irreplaceable asset of educational, cultural, recreational and tourism value. The County Council's Archaeological Unit maintains a 'Sites and Monuments Record' a complete list of all scheduled ancient monuments in the County together with an extensive listing of other known or suspected sites of regional and local importance.
- 6.45 Where waste management operations, including disposal, coincide with undisturbed land, this will usually involve the prior removal of topsoil and subsoil. This may damage any archaeological features upon or just below the surface of the ground. Waste operators should therefore give early consideration, before planning applications are made, to whether archaeological remains exist on the site. The undertaking of an archaeological assessment and field evaluation will be required where there is a strong indication that important remains exist and the results of these evaluations should be made available to the Waste Planning Authority as part of any subsequent planning application. The provision of this information will ensure that the archaeological importance of the remains can be judged against the need for the proposed development, and that each application is judged on its merits.

- 6.46 In considering applications for waste developments which would affect areas of archaeological interest, the Waste Planning Authority will, in conjunction with the applicant and the County Archaeological Unit, seek means of accommodating the development in ways which would not cause unacceptable damage to the remains. It may, for example, be possible to amend site boundaries to avoid the most sensitive areas though this may not always be a suitable solution. In some cases an archaeological excavation to allow for preservation of the remains by record may be an acceptable alternative, particularly where remains are of local rather than national importance. In such cases, the Waste Planning Authority will need to be satisfied before granting planning permission, that the appropriate provision for the excavation and recording of the remains has been made, at the developer's expense. Such activities should be carried out before development commences, working to a brief prepared by the Waste Planning Authority.
- 6.47 The preservation of important archaeological remains by record is, however, for a variety of reasons, the second best option and particular efforts should therefore be made to ensure that nationally or regionally important remains are preserved in situ.

Where there is reason to believe that important archaeological remains may exist within or in the vicinity of the site of a proposed waste development, developers will be required to provide an archaeological assessment and field evaluation prior to the determination of the planning application.

#### Policy W22

Where nationally important archaeological remains, whether scheduled or not, and their settings are affected by a proposed waste development there will be a presumption in favour of their preservation in situ.

Proposals for waste development that would have an adverse effect on regionally important archaeological remains will only be permitted where the need for the development outweighs the importance of retaining the site intact and no other suitable locations are available.

#### Policy W23

Where the preservation of archaeological remains in situ is not appropriate, planning permission will not be granted unless satisfactory provision has been made for the excavation and recording of the remains.

#### Public Rights of Way and Countryside Recreation

6.48 The County Structure Plan places considerable emphasis on providing opportunities for both residents and visitors/tourists to enjoy and have access to the countryside. The County's existing public rights of way and cycleways provide important means of getting into and enjoying the countryside. Equally, the County's country parks and picnic areas are of

strategic importance due to their accessibility to its towns and villages and main transport routes. The County Council will have particular regard to the effect of proposals on the local path network. Even where provision is made for the retention or diversion of such rights of way, their amenity value could be significantly undermined by the development.

#### Policy W24

Waste development will be permitted where it can be demonstrated that there will be no significant adverse impact upon the recreational value of the countryside, and in particular facilities such as the local path network, country parks and picnic areas.

Adequate arrangements will be required for the continued use of public rights of way and permissive paths such as railway walks both during and after waste development, either by means of existing or diverted routes.

#### Agricultural Land

- 6.49 Agriculture is the predominant land use in the County and occupies approximately 90% of its land surface. Government guidance requires that the development of agricultural land should only be permitted where no suitable alternative sites are available. Where development of agricultural land is unavoidable, the loss of high quality (best and most versatile) Agricultural Land Classification (ALC) (grades 1, 2 and 3a) will be strongly resisted and development directed towards poorer quality land unless other sustainability considerations suggest otherwise.
- 6.50 County Durham predominantly comprises land with an ALC of grades 3, 4 and 5. However, there are a number of areas of higher quality (best and most versatile) agricultural land in the County. These can be locally extensive, for example in the lighter soils in the river valleys. Given the relative shortage of higher quality land in the County, it is therefore unlikely that a loss of this land would be either desirable or necessary. Where waste development is proposed on agricultural land, the County Council will expect applicants to provide evidence of the agricultural land classification grading of the subject site. However, any decisions to permit development on any agricultural land will be taken only after advice has been sought from DEFRA.
- 6.51 It is likely in both the short and medium term that much of County Durham's waste will continue to be disposed of by landfilling in voids created by former mineral workings. The same level of flexibility or choice of location of landfill sites does not apply as for the other types of development. Landraise, or other waste facilities involving built development are not limited in location to the same extent.
- 6.52 The safeguarding of natural resources including soil quality and high quality agricultural land remains a relevant factor to be balanced with other sustainability considerations. Where the irreversible development of a greenfield site is being proposed soils may be removed from a site, and used to improve the restoration of another site, being mindful of soil variations and avoiding the mis-matching of materials. (Otherwise soils should be

retained on site for the eventual reclamation of the subject site). It is acknowledged in such instances that it may prove difficult to maintain the quality of best and most versatile agricultural land. Such a procedure may be more acceptable on poorer quality agricultural land provided that proposals can demonstrate that restoration to the equivalent standard is achievable. Where conditions permit, soils should be stockpiled for the shortest duration possible, preferably less than six months, be used in progressive restoration, and when stockpiled receive careful management to maximise their potential and re-use.

- 6.53 It is recognised that there may be exceptional circumstances where high quality (best and most versatile) agricultural land may be required for development (whether permanent or temporary), associated with waste disposal. In these circumstances it is recognised that there would be little prospect of reclaiming such land to its original quality. Planning permission will require that following the cessation of development, this land should be restored in order to achieve the best practicable, or optimum, quality of restoration for the agreed afteruse. Where alternative after-uses, for example forestry and recreation are proposed on poorer quality agricultural land, then the methods used in restoration and aftercare should enable the land to attain its original land quality grade, and have the capability of being farmed to an appropriate standard for its agricultural land classification.
- 6.54 Where waste developments are proposed, consideration will also be given to the impact of the loss of agricultural land on the farm unit. Developers should recognise that in addition to land quality issues, there may well be a range of other agricultural and land use considerations arising from development in the countryside, (for example, noise, dust, odours and vermin). Where proposals relate to agricultural holdings, decisions will also be taken having regard to PPG 7, Annex B paras B7-12. In considering waste development proposals in rural areas, the County Council will expect applicants to demonstrate that the land would be managed and reclaimed to minimise the impact on established rural interests, (for example having regard to guidance set out by the DEFRA codes of Good Agricultural Practice for the protection of Air, Water and Soil.)

#### Policy W25

When considering proposals for waste development the waste planning authority will take account of the overall effect on the quality of agricultural land in the area. Proposals that would impact upon, or lead to the loss of high quality (best and most versatile) agricultural land will be strongly resisted. Where a development will result in the loss of agricultural land, it will only be permitted where there is a need for the development which cannot be met on previously developed sites and on land within the boundaries of existing urban areas;

Where development of agricultural land is unavoidable the use of areas of poorer quality land will be preferred to land of higher quality, except where other sustainability considerations indicate otherwise.

#### Water Resources

- 6.55 Water is an essential resource for domestic, agricultural and industrial use and is also vital to the ecological well-being of the County's natural environment. The quality of water resources is of great importance, and surface water and groundwaters in aquifers need protection from pollution.
- 6.56 Waste development has the potential to pollute surface and groundwater resources if operations are not effectively controlled and monitored. For example, problems can arise from surface run-off, leachate from waste disposal and composting sites, and the discharge of waste water.
- 6.57 East Durham lies on a major aquifer, a vital source of groundwater. The main groundwater abstraction points are numerous and subject to change. Groundwater can be at risk of contamination by leachate from landfill sites, which can accumulate over many years. Due to the slow movement of groundwater through aquifers, effects of pollution will be persistent and may take a long time to manifest themselves. Groundwater pollution, if it is possible at all, may take decades to clean up, even after the source of the problem has been removed. Prevention of pollution and protection of groundwater quality and yield is of paramount importance. Waste sites can be lined and surfaces capped with impermeable material to reduce the risk of pollution. However, even with the best available engineering measures, it is impossible to eliminate risk of contamination and there may be certain areas of the County where the risk is so great as to make waste disposal unacceptable.
- 6.58 In December 2002 the Environment Agency published a modification to its Policy and Practice for the Protection of Groundwater. Regulatory Guidance Note 3 (RGN3) provides the Environment Agency's position statement on the location of landfills with respect to groundwater protection. The guidance note makes it clear that the Environment Agency seeks to discourage the location of landfill developments with a long term pollution potential in areas where water resources are particularly sensitive. The Environment Agency identified these as groundwater Source Protection Zones. The Environment Agency will object to any proposed landfill site in groundwater Source Protection Zone I. For all other proposed landfill site locations, the Environment Agency requires that the applicant conducts a risk assessment, based on the nature and quantity of the wastes, and the natural setting and properties of the location. Where the risk assessment demonstrates that active long term site management is essential to prevent long-term groundwater pollution, the Environment Agency would object to sites:
  - v on or in a Major Aquifer;
  - ${\rm v}~$  within Source Protection Zones II and III, and
  - v below the water table (in any strata where the groundwater provides an important contribution to river flow and other sensitive surface waters).

These areas are known as areas of groundwater vulnerability and are shown on the Proposals Map.

- 6.59 Regulatory Guidance Note 3 has significant and far reaching implications for County Durham. In the west of the County a number of private dwellings and agricultural abstractors are supplied by springs and private boreholes which abstract water from the underlying strata, whereas the geology of the central and eastern part of the County has been significantly disturbed by extensive coal mining, resulting in a particularly complex hydrogeology. The Magnesian Limestone Major Aquifer underlies the eastern part of the County and is exploited for drinking water by both Northumbrian Water Ltd and Hartlepool Water Company. Clay deposits are, however, present throughout the County which may provide a suitable low permeability base for landfill or landraise. These areas are largely uncharted and many will have suffered disturbance over a sustained period of time. Furthermore, the British Geological Survey is currently undertaking monitoring of ground movement on the Magnesian Limestone Escarpment. The Water Framework Directive, which became effective in 2003, will be an additional consideration in the assessment of risk to groundwater by the Environment Agency.
- 6.60 The Environment Agency has a duty to protect the quality of groundwater and to conserve the use of water resources, and assesses the risk of pollution from proposed development. The Environment Agency will be consulted when applications are received which may affect water resources, and should provide advice on practicable improvements that might be incorporated to minimise the perceived impact of the development on their interests. The Government has recently indicated that the Environment Agency should support local authorities at planning appeals where decisions, taken on the basis of advice it has given, are appealed against.

Proposals for waste development which does not involve landfill or landraise will not be permitted unless it can be demonstrated that there will be no significant adverse impact or significant deterioration to:

- a) the quality of surface or groundwater resources; and
- b) the flow of surface or groundwater at or in the vicinity of the site.

#### Policy W27

Proposals for landfill and landraise will not be permitted in Groundwater Source Protection Zone I. For other parts of the County, a risk assessment of a level of detail appropriate to the site's location, its hydrogeology and the nature of the wastes should accompany each planning application. Unless it demonstrates that active long-term site management is not essential to prevent long-term groundwater pollution, proposals for landfill and landraise will not be permitted on or in a Major Aquifer, or within Groundwater Source Protection Zones II or III, or below the water table in any strata where the groundwater provides an important contribution to river flow or other sensitive surface waters.

#### Flood Risk

- 6.61 Flood risk is an increasingly important issue for the land-use planning system. The planning system is required to act on a precautionary basis to ensure that new development is safe and not exposed unnecessarily to flooding by considering flood risk on a catchment-wide basis.
- 6.62 PPG 25 "Development and Flood Risk" (published July 2001) acknowledges that the experience of recent years suggests that the incidence of problems due to river flooding may be getting worse, both in frequency and scale. This arises from changes in river hydrology due to human activity, changes in land management, variations in the intensity of rainfall and the increase in development in areas at risk.
- 6.63 PPG 25 advocates that local planning authorities should adopt a risk-based approach to proposals for development in or affecting flood risk areas or where the development may increase flood risk elsewhere. Applicants for planning permission should, therefore, assess the risk posed by development and submit a flood risk assessment, (FRA). This should consider the specific risk of flooding to the development being proposed over its expected lifetime and its possible effects on flood risks elsewhere in terms of flood flows and flood storage capacity and the run off implications. In line with the precautionary principle, the County Council may be minded to refuse planning permission in circumstances where a FRA is required but has either not been carried out or does not adequately address the issues that need to be considered. The assessment of risk should follow guidance as set out in Annex F of PPG 25. This assessment of risk should include consideration of:
  - ${\bf v}~$  the area liable to flooding;
  - v the probability of flooding occurring, both now and over time;
  - v the extent and standard of existing flood defences and their effectiveness over time;
  - $\mathbf{v}$  the likely depth of flooding;
  - v the rates of flow likely to be involved;
  - v the likelihood of impacts to other areas, properties and habitats;
  - v the effects of climate change; and,
  - v the nature and currently expected lifetime of the development proposed and the extent to which it is designed to deal with flood risk.
- 6.64 In addition to the risk based approach, PPG 25 expects local planning authorities in the preparation of plans and their development control decisions to implement a sequential test. Accordingly, in drawing up policies, local planning authorities should give priority in allocating or permitting sites for development to those areas at least risk from flooding. When allocating land, there is a need to demonstrate that there are no reasonable options available in a lower risk category, consistent with other sustainable development objectives. PPG 25 does not specifically refer to waste management operations but like all new development, they should be subject to the sequential test.

- 6.65 In applying the sequential test, PPG 25 states that local planning authorities should consult the Environment Agency on the distribution of flood risk and the availability of flood defences in the County. The sequential test should also take into account the effects of flood risk on both local public transport availability and the surrounding road network serving any proposed development.
- 6.66 Waste management facilities within floodplains can cause problems in respect of drainage and floodplain protection. Proposed waste management facilities will be assessed in terms of the impact of flooding on them and their impact on flood risk, either directly or through the increase in run-off that is likely to result from waste operations. Landfill and landraise can interfere with the natural behaviour of surface and ground water whilst other waste management facilities can worsen the potential risk of flooding through the development of impermeable structures and surfaces. Where waste management facilities are proposed in areas which may be subject to flooding, the development should be suitably designed to cope with the risk of flooding or include effective proposals to protect the land, including provision for long term maintenance, as part of the development.

Proposals for new waste development will not be permitted in flood risk areas unless it can be demonstrated that:

- a) there is no alternative option available in a lower risk flood zone;
- b) there will be no unacceptable risk from flooding;
- c) there will be no unacceptable increase in the risk of flooding elsewhere, as a result of the development; and,
- d) appropriate measures exist or can be carried out to manage and minimise the risk of flooding.

#### Transport, traffic and access

- 6.67 Like many other industries which involve bulk transportation, the transport of waste materials usually involves the use of heavy lorries which can cause noise and disturbance, threaten road safety, and cause damage to roads and verges. Its impact on the road network and the amenity of communities, often some distance from the site itself, can therefore be considerable.
- 6.68 Currently the vast majority of movement of waste products is by road, with sites, where waste is processed, receiving a high number of vehicle movements per day. This is especially the case with sites, such as energy from waste facilities which are dependent on a high throughput to ensure economic viability. In considering transport options, the effect on National Air Quality Standards should be taken into account. Where a waste development is likely to have significant transport implications, a Transport Assessment will be required. The coverage and detail of the Transport Assessment should reflect the scale and transport implications of the proposal and should address the operation and where applicable the restoration of the site.

#### Modes of transport

6.69 The selection of more sustainable modes of transport, or those which are less intrusive on the amenity of areas adjacent to routes and sites, can have a positive impact on the quality of life of nearby residents. In particular, opportunities to make use of rail links and pipelines can reduce impacts as well as being more sustainable in a wider sense, subject to an assessment of their direct environmental effects. Locations which are closest to the source of the waste and which can be served by more environmentally acceptable means of transport should be included in the criteria used in selecting sites.

#### Policy W29

Waste development will be required to incorporate measures to minimise transportation of waste. A Transport Assessment shall be produced in support of all proposals for waste development which is likely to have significant transport implications. The Transport Assessment will be required to show, where practicable, that full consideration has been given to the transport of waste by rail and through pipelines.

6.70 Policy W24 encourages the use of rail to transport waste. Existing rail routes therefore need to be protected from inappropriate development. Any proposal which would breach such a route will not be acceptable. Where a link is currently disused, temporary uses which maintain the integrity of the alignment, such as recreational routes, may be permissible.

#### Policy W30

Planning permission will not be granted for any development which would reduce the potential for the use of the following rail connections for the transport of waste materials and by-products:

a) Bishop Auckland - Eastgate;

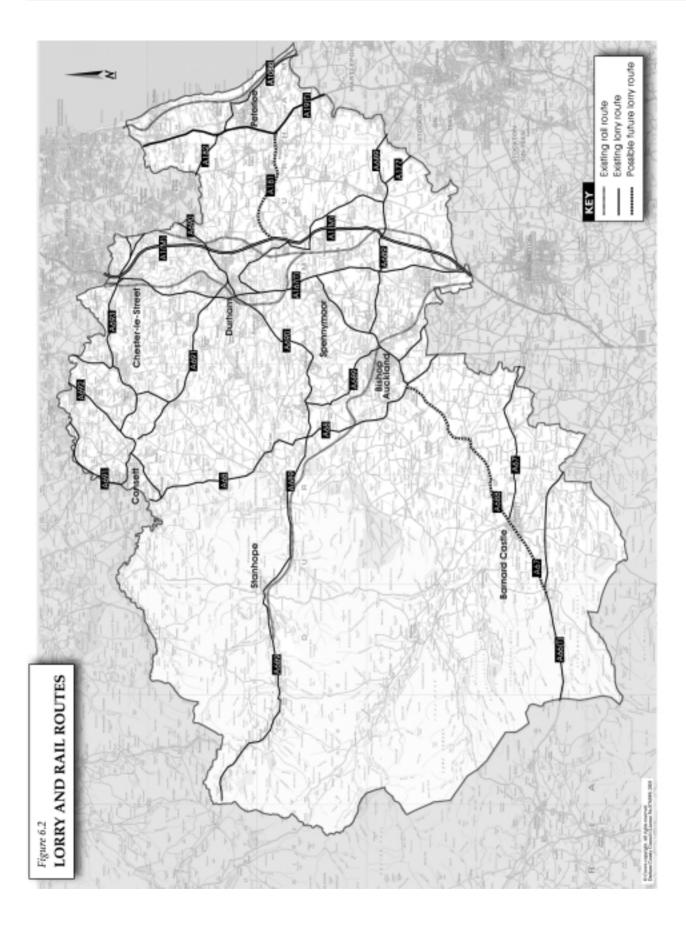
b) Ferryhill - Cornforth - Raisby Quarry;

c) Thrislington Quarry; and

d) The Leamside Line.

#### Environmental impact of road traffic

- 6.71 If alternative off-road modes of transport cannot be used to transport waste materials to and from sites, it is essential that the impacts of road traffic are minimised. This relates not only to the routes used being capable of accommodating the tonnage transported along them but also ensuring that roadside communities are not adversely affected by the transport impacts of the proposed development. The Structure Plan defines a strategic road network of routes suitable for carrying heavy lorries. These are shown in Figure 6.2.
- 6.72 The Highways Agency has a strict policy of not allowing direct access from private development to motorways or motorway slip roads other than in particular circumstances. The Secretary of State has advised that he will direct Local Planning Authorities (LPA's) to refuse planning applications for



development whose access arrangements breach this policy. Similarly, it is necessary in general to restrict the formation of new accesses to trunk roads if they are to continue to perform their function as routes for the safe and expeditious movement of long distance through traffic. A particularly strict policy is appropriate to fast stretches of rural trunk road and to trunk roads of near motorway standard, inside and outside urban areas. Where a development is likely to generate a material increase in traffic (as defined in PPG 13), either via an existing direct access or via an otherwise acceptable new access to a trunk road, which would result in the access becoming overloaded, planning permission would be refused. More likely, if improvements to the existing or proposed new access could be designed consistent with the a 15 year design horizon, to provide the additional capacity, any planning permission would be conditional on the development not occurring unless and until those improvements have been carried out.

#### Policy W31

Waste development will only be permitted if:

- a) traffic estimated to be generated by the development can be accommodated safely on the highway network and the amenity of roadside communities is protected;
- b) the strategic highway network can be safely and conveniently accessed; and
- c) the impact of traffic generated by the development on local and recreational amenity is otherwise acceptable.

## Planning obligations for controlling environmental impact of road traffic

6.73 As well as ensuring that development takes place in the most suitable location, it is also essential that operators are using the most appropriate routes along which to transport waste and that the amenity of areas is protected. This will usually be controlled by conditions on any planning consent or by legal agreements.

#### Policy W32

In granting planning permission for waste development, planning conditions will be imposed and planning obligations or other legal agreements sought, to cover the following matters, insofar as they fairly and reasonably relate to the proposed development:

- a) the routeing of traffic to and from the site;
- b) highway improvements or maintenance;
- c) the prevention of the transfer of mud, dust, litter or release of smoke onto the public highway by measures including the provision of wheel cleaning facilities, suitably metalled access roads and the sheeting of laden vehicles;
- d) access to and from the site and the provision of on-site turning, parking, loading and unloading areas; and
- e) the means of transporting material within the site, or between different parts of the same working area.

#### Protecting Local Amenity

6.74 Waste management operations can give rise to various sources of disturbance to local communities. Planning conditions will be used to secure measures to address these issues where necessary and where control is not already exercised through site licensing.

#### **Visual Intrusion**

6.75 Major sources of visual impact from waste management operations are the creation of new landforms through landfill and landraise operations; stockpiles of soils and processed material; removal of vegetation; chimney stacks; and plant and buildings. The degree of impact will depend on the topography of the area, the site's proximity to residential areas and the scale and nature of the development. Care in the detailed siting and design of the development can help to reduce visual intrusion. New facilities will be developed with appropriate screening and planting works to reduce visual impact. New plant and buildings should be constructed using appropriate colours and materials.

#### <u>Odour</u>

6.76 Waste management facilities have the potential to produce odours which can present a nuisance. This is normally the result of the decomposition of non-inert waste. Landfill gas can also give rise to offensive smells. The employment of appropriate site practices at landfill sites such as appropriate use of cover material and technological solutions in buildings can minimise these impacts. Planning conditions will be used, as appropriate, as a means of securing an effective odour control regime.

#### <u>Noise</u>

- 6.77 Noise from waste management operations can be a major source of disturbance if not properly controlled, particularly where it is in close proximity to residential and other noise sensitive areas. Noise can arise from a variety of sources, especially during site engineering operations, waste processing, compaction and the general operation of site machinery and the movement of heavy lorry traffic. PPG 24 and MPG 11 provide guidance on the use of planning conditions and for controlling noise through measures including the hours of operation, setting of noise limits at places where people live and work, and the siting of plant in relation to dwellings.
- 6.78 Noise as well as other impacts can pose additional nuisance when activities take place outside normal working hours. Ensuring that the intrusion of working on local amenity is reduced to an acceptable level will generally require limits on working hours.

#### Dust and mud

- 6.79 Problems of dust and mud arise from site preparation works, the handling of soils and the processing, treatment and transport of materials. This can be a pollution control issue as well as a material planning consideration. Site operators will be expected to use well maintained and managed equipment and vehicles. They should also employ recognised methods to suppress and control dust and mud, including the spraying of material with water during handling and transport; the watering of areas of the site used by vehicles; the surfacing of site haulage roads with tarmac or concrete; the use of dust extractors; and ensuring that vehicles which use public roads undergo wheel washing and sheeting before leaving the site. Planning conditions will be used, as appropriate, as a means of securing an effective dust and mud control regime.
- 6.80 The effects of dust and noise are also covered and controlled by the Integrated Pollution, Prevention and Control (IPPC) process. IPPC is governed and enforced by the Environment Agency. Local authorities can also enforce dust and noise effects through the Environmental Protection Act 1990 and local authority integrated pollution prevention and control measures. It is, however, important to emphasise that the planning considerations of noise and dust relate to the wider context of local amenity. It does not therefore follow that if a proposal is acceptable in environmental health terms, it is also acceptable in planning terms.

#### <u>Litter</u>

6.81 Litter arises where loose, uncompacted waste becomes windblown during transport, transfer, storage or disposal. Adherence to licence conditions and good management practices result in litter waste being kept to a minimum. Measures to combat litter can include use of cover material at landfill sites, use of perimeter catch fencing, and sheeting of vehicles during transport and containers during storage, and in extreme circumstances temporarily closing down facilities.

#### Vermin and birds

- 6.82 Waste management sites, particularly landfill sites are potential attractors of vermin and birds which can both present a health risk and can also pose a threat to local wildlife, which may be a particular issue in the vicinity of sites of recognised nature conservation value. Planning conditions will be used to secure such measures as necessary where control is not already exercised through site licensing.
- 6.83 Putrescible waste can attract large numbers of birds. This can be a nuisance to people living nearby. It can also present a risk to aircraft in areas adjacent to airports and airfields or low flying areas. The relevant aerodrome will be consulted on all applications for landfill or other waste related development within 13 kilometres of major civil aerodromes. Within this area, there may be restrictions on development which might create a bird strike hazard, or on the detailed design of facilities. In County Durham, such arrangements apply to Teesside Airport.

#### Land instability

- 6.84 Unstable land has the potential to affect the integrity of landfill sites including controls over landfill gas and leachate as well as built development. New proposals should therefore include a thorough site investigation and the incorporation of appropriate measures in the design of the site to deal with this issue.
- 6.85 The means of reducing the impact of waste management on local amenity and preventing the problems outlined above will vary from site to site. Adherence to the high standards outlined in Policy W34 (site management) will help to achieve these ends and operators will be expected to ensure that pollution control is considered in the earliest stages in designing the development.

#### Policy W33

Waste development will be required to incorporate suitable mitigation measures to ensure that any harmful impacts from the following sources are kept to an acceptable level:

- a) pollution by noise, odour, litter, vermin and birds, dust and mud;
- b) visual intrusion;
- c) traffic and transport; and
- d) subsidence and landslip.

#### Site Management – Development involving Landfill or Landraise

- 6.86 In order to minimise the environmental impact of landfill and landraise developments, operators must adhere to the high standards of site management required by planning conditions and associated codes of practice. If this were not the case an operator could gain an unfair advantage over other, more responsible operators; unnecessary environmental damage would be caused; and future consideration of waste developments could be prejudiced as a result of increased public opposition.
- 6.87 The usual method of remedying breaches of planning controls is through enforcement action. The Waste Planning Authority will continue to pursue this where appropriate. Compliance with planning requirements will be monitored on a regular and consistent basis to enable the identification of shortcomings in the operation of sites, and any remedial measures required (including, where appropriate, publicly available records). The nature of waste development is such, however, that enforcement action may not always be effective for a number of reasons:
  - Landfill and landraise are, by their nature, environmentally intrusive. Relatively minor breaches of planning conditions can cause extensive problems. If an operator is unwilling to remedy these then the degree of public nuisance caused by the time enforcement action takes effect will often be disproportionally large;

- Landfill and landraise are, essentially temporary developments. Although some sites may take many years to reclaim, others may only operate for a relatively short time and this may make the taking of effective enforcement action impractical;
- v the progressive nature of waste disposal and reclamation means that by the time breaches are discovered it may not be practical to remedy them without creating unreasonable additional disturbance
- v an operator may go out of business before reclamation is complete, leading to an increase in derelict land; and
- v once waste disposal has ceased, ensuring that reclamation schemes are carried out properly can be difficult through the use of enforcement action.
- 6.88 The increasing use of soils and soil making materials for a variety of uses has resulted in a decline in the availability of suitable materials to carry out the restoration of landfill and landraise sites following the completion of tipping operations, in a phase or on a site as a whole. Where a site operator is unwilling, or unable to fund the restoration works, including the acquisition of suitable soils, this can result in the suspension of restoration operations until suitable materials are attracted to the site, in turn potentially delaying the overall time scale for reclamation and aftercare works. Incomplete restoration schemes can cause a range of problems such as adverse visual impact, flooding caused by run off from inappropriate landforms and even erosion of the landfill or landraise cap which could compromise leachate control.
- 6.89 For the above reasons the Waste Planning Authority must consider the intended operator's financial and technical capabilities to undertake the proposed reclamation and aftercare. The need for this arises in part because, except where there will be progressive reclamation, the work required is likely to take place after the revenue generating waste disposal operations have been completed. Applicants should therefore demonstrate the likely financial and material budgets for reclamation and aftercare, and how they propose to make provision for such work during the operational life of the site. Adequate safeguards should be in place. This may include the use of appropriate mutual funds operated through the industry, or other means including an escrow account or financial bond to ensure that any breach of planning conditions, particularly with regard to the reclamation and aftercare of the site, can be remedied without additional public cost. Such safeguards will not be sought to discharge the financial obligations arising from the waste management licence as these will be a matter for the Environment Agency.
- 6.90 In determining planning applications the Waste Planning Authority will have regard to the operator's track record in reclamation. The specialist nature of waste management means that most operators will have a clear track record against which past performance can be assessed objectively in relation to compliance with planning conditions on other sites worked by the intending operator or associated companies. Any in-house environmental management systems or environmental auditing may also be taken into account.

6.91 The nature of the waste industry is such that it is unlikely that many wholly new operators will emerge. The main consideration in relation to any entirely new operators that may wish to commence landfill or landraise operations in the County will be that they should be able to demonstrate their financial and technical capabilities are sufficient to undertake the restoration and aftercare of the relevant site in a satisfactory manner.

#### Policy W34

In considering planning applications for landfill and landraise the waste planning authority will require the applicant to demonstrate that their technical and financial capabilities are sufficient to undertake the proposed reclamation and aftercare of the site in accordance with an agreed scheme of planning conditions. The waste planning authority will ensure that adequate safeguards are in place, which may include appropriate mutual funds operated through the industry, or other means, including an escrow account or financial bond, to ensure that any breach of planning conditions, with regard to the restoration and after-care of the site, can be remedied without additional public cost.

#### **Cumulative Impact**

- 6.92 Where a number of separate waste management facilities are situated in close proximity it is necessary to assess the overall impact of these on communities and the natural environment. Some impacts, such as biodiversity effects, may require the assessment of cumulative impact over a wide area. Even where the impact of single effects or individual sites is acceptable it may be that, in combination with others, the overall environmental effects are not. Such cumulative impacts can occur in a number of ways:
  - i) the cumulative impact of a number of separate effects from a single site;
  - ii) the cumulative effects from two or more active sites;
  - iii) the combined effect on the landscape and ecology; or
  - iv) the cumulative impact on the quality of life for local communities from a relatively unbroken sequence of disposal and reclamation.

All the above components will need to be assessed carefully to determine if they should be applied to any new proposal.

- 6.93 In assessing the effect of proposals on an area it is necessary to take into account the overall level of environmental impact, including the effects of successive operations, irrespective of the number of sites involved. This will include, where appropriate, consideration of the potential impact from sites with planning permission but where disposal has not started, together with current planning applications for waste development.
- 6.94 In assessing the cumulative impact of a proposal on the landscape, the Waste Planning Authority will need to take into account the character of the landscape; the site's setting, the effects of other operations upon it, including the degree of maturity of any reclaimed sites; and the extent to which the landscape can accommodate the changes proposed. The definition of a site's setting will vary according to the character of the landscape but will generally reflect the scale of the local topography.

- 6.95 In assessing the cumulative impact of proposals on local communities, the extent of the locality will reflect the scale, duration and particular impacts of both the proposal and other operations on the communities affected jointly by them. This will be determined by such factors as the scale of the landscape, settlement and communications patterns in the locality, and the scale and setting of the site. It may also be necessary on occasion to consider the cumulative impact of other non-waste development (for example mineral extraction), where waste disposal would add to their existing adverse impacts.
- 6.96 The time period over which cumulative impacts are considered will depend upon the particular circumstances of individual proposals. The key test will be whether the disturbance caused by previous working remains a material consideration in terms of an area's amenity, landscape and ecological value, and its overall attractiveness.

In considering proposals for waste development the cumulative impact of the following will be taken into account:

- a) existing waste development in the area;
- b) waste development with planning permission, including proposals not yet started;
- c) past waste development in the area;
- d) current planning applications for waste development in the area;
- e) other non-waste activities in the area.

Permission will not be granted where the cumulative impact exceeds that which would be acceptable if produced from a single site under the relevant policies of this plan.

#### Preventing the spread of Soil and Animal borne diseases

6.97 During the early stages of the foot and mouth outbreak in 2001 many infected and suspect livestock were disposed of on agricultural land by burial or burning. In order to prevent disturbance to these sites and prevent the spread of soil and animal borne diseases the County Council will adopt a precautionary approach. DEFRA will be consulted upon all applications for waste development where there may be a risk of disturbance to any animal carcass disposal sites, or where there may otherwise be a possibility of plant or animal diseases being spread through the excavation and movement of soils.

# Information on Waste

**Information on Waste** 

Annual Waste Management Requirement (including projected imports)

### 7. INFORMATION ON WASTE

- 7.1 Paragraph 20 of PPG 10 states that Waste Planning Authorities will need information on projected waste arisings, recycling and recovery levels and the extent of existing facilities in order to formulate policies and proposals for waste management facilities in development plans, and in deciding individual planning applications. It is vitally important that the information on waste arisings is reliable and accurate to help formulate the Local Plan's policies and proposals.
- 7.2 The principal source of waste information is the Environment Agency. Over the last three years the Agency has published a number of reports on waste information including in October 2000 the Strategic Waste Management Assessment for the North East, (SWMA). This report was based upon a National Waste Production Survey, which involved data collection from the industrial and commercial waste sector. Whilst the survey produced valuable data at the regional level, it displayed several anomalous results for County Durham, suggesting that overall, the data should be used with caution below regional level. The SWMA explained that the sample size of the survey does not support high levels of precision at the local level.
- 7.3 Unfortunately, with the exception of the municipal waste stream, currently available information on waste arisings for County Durham is largely inaccurate and unreliable. Until this situation is rectified, the amount of waste that is likely to need to be managed has been forecast using waste deposits information, provided by the Environment Agency, together with available data on waste recovery. The County Council recognises the shortcomings of using this information and will monitor and update the forecasts throughout the Plan process, as and when reliable information becomes available.
- 7.4 In addition, the overall impression of available facilities to manage waste arisings in the County could be misleading as sites will not operate to their permitted maximum for waste recovery and recycling. Additionally, there may be an element of double counting as much of the material that is currently received at Transfer Facilities and Household Waste Recycling Centres sites is simply transferred onto landfill sites in the County.
- 7.5 There are 45 categories of exempted activities from the licensing regime. In County Durham alone, there are hundreds of sites accepting waste which are exempt from the licensing regime. These can vary from individual chemist shops to large scale industrial units and take a significant proportion of waste arisings. However, the Environment Agency is unable to estimate the types and quantities of waste these sites accept, due to problems with existing legislation.
- 7.6 In order to establish the level of waste management facilities necessary to manage the various waste streams within the County, forecasts of the projected waste management requirement have been prepared. These forecasts will be used to identify deficiencies in the current waste management structure and aid the identification of the need for any new facilities in the County.

# Annual Waste Management Requirement (including projected imports)

7.7 In order that the data on waste can be regularly reviewed and updated, a technical paper is produced separately to the Plan detailing the assumptions used by the County Council and providing projections of waste arisings over the Plan period.



Waste reduction and re-use

## 8. WASTE REDUCTION

#### Waste reduction and re-use

- 8.1 'Waste Strategy 2000', the National Waste Strategy for England and Wales, applies the principles of sustainable development to waste management. The overall aim of the Waste Local Plan is to develop a framework around which waste management practices in the County would become more sustainable. The generation of waste has a key impact on sustainability. The use of resources in producing goods and the rate of their consumption dictate the generation of waste. A reduction in waste produced or an increase in recycling will therefore represent a move towards sustainable waste management. Waste reduction is a key element in both the Government's waste strategy and the Municipal Waste Management Strategy for County Durham, (MWMSCD). Sustainable production and consumption and waste minimisation are not land use issues in themselves but the Waste Local Plan acknowledges them as desirable objectives, along with initiatives aimed at reducing the generation of waste. To encourage reduction of waste, it is necessary to ensure that an adequate planning framework is in place to enable sufficient waste management facilities to be provided, for the reduction, re-use, recovery and disposal of waste in accordance with the waste hierarchy.
- 8.2 Reductions in waste generation and significant increases in rates of recovery and recycling over the Plan period are achievable and are being led by a range of initiatives and policy measures. These include:
  - the Waste Resources Action Programme (WRAP) to deliver increases in re-use, recycling and use of recycled materials. The Government has set up the WRAP to overcome market barriers to promoting re-use and recycling, focusing on developing markets and end uses for secondary materials, promoting investment in reprocessing, managing research and information, and providing advice and technical support;
  - encouraging public procurement of recycled products as a means of increasing demand and providing more secure markets for recycled goods;
  - v the Integrated Pollution Prevention and Control (IPPC) regime which includes waste minimisation requirements for regulated activities;
  - education and waste awareness initiatives, including the National Waste Awareness Initiative, and proposed regional/County initiative for a wide ranging and education and waste minimisation and awareness raising programme;
  - Producer Responsibility, making producers take greater responsibility for their goods at the end of their lives. Individual initiatives have been introduced or are planned for a variety of waste streams. These involve setting targets for the recovery and recycling of packaging waste, agreements on the recycling content of newspapers, an initiative to address junk mail, and European directives aimed at end-of-life vehicles, batteries and waste electric and electronic goods;
  - v the Aggregates Levy (introduced in April 2002);

- the Landfill Tax introduced in 1996 to encourage greater diversion of waste away from landfill, tax credits to help fund environmental schemes although 60% of credits are required to be focussed on sustainable waste management; and
- v the use of permits, operated by the Environment Agency, to limit landfill of biodegradable municipal waste.
- 8.3 All proposals for development will need to take account of the volumes and types of waste generated by the development during construction and subsequent occupation. Planning applications for all major development should include measures to minimise the use of raw materials, minimise, re-use and recycle waste, and dispose of unavoidable waste in an environmentally acceptable manner. The emerging Regional Sustainable Development Guide contains information on designing for minimum waste.



Locations for Waste Recovery Facilities

Recycling

Household Waste Recycling Centres (HWRC's)

Waste Transfer Stations and Materials Recovery Facilities

**Recycling of inert waste** 

End of Life Vehicles (ELV's)

Composting

Aerobic and Anaerobic digestion

**Energy from Waste** 

**Gasification and Pyrolysis** 

Incineration

# 9. WASTE RECOVERY

## Locations for Waste Recovery Facilities

- 9.1 The introduction of new legislation on the management of waste has acted as a catalyst for the development of alternative methods of waste management. Throughout the Plan period there will be a need for non landfill development to facilitate waste recovery and recycling such as digesters, new energy from waste technologies such as pyrolysis, and the expansion of composting schemes on both a small and large scale. The site requirements and land use impacts of these facilities are different. However, experience has shown that such facilities are sufficiently flexible to be developed at a variety of scales according to circumstances and requirements. It is also clear that the potential impacts of each of these facilities are easier to mitigate and control if the waste management operations are contained within a building. In the case of composting for example, the Environment Agency's adopted position is that in order to prevent any adverse effects of composting, all or part of the process should take place in a sealed building or under negative pressure<sup>1</sup>. The Waste Local Plan adopts a similar but broader approach by seeking to ensure that new waste management facilities are located within appropriate buildings in order to contain and control any potential impacts.
- 9.2 In addition to the development of new facilities at existing waste sites, it is anticipated that there will be an increasing demand for facilities on industrial sites throughout the County. The development of high quality and attractive industrial locations has been both a priority and a success of the County Council over a number of years. The attraction of high quality industrial development is supported and encouraged, subject to the standard of existing industrial parks being maintained or enhanced, and that any negative impacts are mitigated as far as practicable.
- 9.3 In County Durham, the traditional method of dealing with waste has been to landfill in the voids created by quarrying. Although landfill will still be required on some scale for many years to come, there are clear signs that waste management is entering a new era and emerging as a modern, cleaner, growth industry, employing new technologies. The development of facilities for waste has traditionally been dogged by a poor image and negative perceptions. The location of modern facilities within contemporary, and well designed buildings or enclosed structures appropriate to the technology or process, will assist in over-coming these problems and should help to resolve planning objections. Longstanding perceptions about the nature of the waste industry will need to be overcome if we are to develop the range of facilities needed over the coming years and maintain acceptable operating standards at industrial locations throughout the County.
- 9.4 Although landfill development inevitably takes place externally, ancillary or other new waste developments that are proposed within a landfill site should, subject to satisfying other criteria, (e.g. Green Belt policy) be located within a building. In-vessel composting, such as aerobic digestion, should also take place within buildings to ensure that the impacts of storage, handling and movement of waste, and visual impact is kept to a minimum. Where the expansion or intensification of existing facilities is proposed, the opportunity to improve the overall quality and standard of the development by housing them within a building should be taken.

9.5 There will however continue to be a need for some of the more traditional, non-landfill waste management methods, some of which may have specific impacts and therefore specific locational requirements. Where it is not feasible to accommodate such development within a building or enclosed structure, (e.g. scrap yards), then it is recognised that there should be a limited number of appropriate sites able to accommodate proposals of this nature and that they should generally be directed to General and Local Industrial Estates, taking account of the relevant policies in District Local Plans. It is also recognised that there is scope to accommodate some waste recovery facilities on farms as part of farm diversification activities, although the specific impacts and specific locational requirements mean that only a limited range of waste recovery operations are likely to be appropriate as part of farm diversification activities. Such development should involve the re-use of appropriate rural buildings and be consistent in scale with their rural location.

### Policy W36

Unless it can be clearly demonstrated that any environmental impacts can be effectively mitigated by alternative means, proposals for new or the expansion of existing waste management facilities (with the exception of landfill) should be fully contained within well designed buildings or enclosed structures appropriate to the technology or process, appropriate in scale and character to their surroundings.

## Site Assessment

- 9.6 An outline review has been undertaken of employment sites throughout the County in order to ascertain their potential for waste development and to guide the waste industry. This review has focussed on the nature of locations and their current land uses. No detailed assessment has been undertaken of the potential to accommodate waste development. Although not all sites have vacant premises at present, this may change during the life of the Plan and re-development opportunities may arise. It is recommended that discussions are held with the site owner, together with the County Council, prior to the submission of any planning application.
- 9.7 There are some sites however, or parts of larger sites where waste development will not be appropriate. These sites generally consist of blue chip/research and development operators where clustering is sought, or where there are sensitive developments well established on the site such as, food production.
- 9.8 Table 9.1 lists the sites that are deemed not to be appropriate for waste development. At other general industrial and employment sites, there may be potential to accommodate waste development. These sites have not however been assessed for their suitability in terms of environmental considerations or their suitability in terms of the proximity principle and whether they represent the best practicable environmental option (BPEO). Whilst the review of employment sites has not resulted in allocations in the Plan, Thrislington Quarry has been allocated for waste development under Policy W58, in view of its location, industrial nature and general conformity with

the preferred locations indicated in PPG10. Where a number of sites are acceptable in a geographically similar location and could all serve a particular waste source, the proximity principle, the BPEO, together with the status of the various industrial sites should be considered. Ideally, preference should be given to General Industrial Estates and Local Industrial Estates before Prestige Industrial Estates but only where the proximity principle would not be compromised and there would not be a greater impact upon the environment.

# Table 9.1 Employment sites not appropriate for waste development

Technology Parks	
NetPark	Sedgefield District
Mountjoy Science Park	City of Durham District
Strategic Reserve Sites	
Heighington Lane West	Sedgefield District
South of Seaham	Easington District
Business Parks	
Abbey Woods	City of Durham District
Aykley Heads	City of Durham District
Belmont Business Park	City of Durham District
Mount Oswald	City of Durham District
Bracks Farm	Wear Valley District
Bracken Hill	Easington District
Consett Business Park	Derwentside District
Ponds Court	Derwentside District
Prestige Industrial Estates	
Belmont	City of Durham District
Bowburn North	City of Durham District
Chilton Extension	Sedgefield District
Dawdon	Easington District
Drum (part)	Chester-le-Street
Fox Cover	Easington District
Green Lane	Sedgefield District
Greencroft	Derwentside District
Heart of the Park	Sedgefield District
Heighington Lane (part)	Sedgefield District
Low Willington	Wear Valley District
Number One	Derwentside District
Seaham Grange	Easington District
South Church	Wear Valley District
Peterlee North West (part)	Easington District
Peterlee South West (part)	Easington District

# **Recycling**

- 9.9 Waste recycling is well established for a number of materials, such as paper and aluminium cans. The range of materials that will be subject to recycling initiatives is likely to grow significantly over the next few years. Waste recycling can have significant potential advantages including:
  - reduced environmental impacts arising from waste treatment and disposal;
  - v energy savings;
  - v extending the life of, and maximising the value of, raw materials.
- 9.10 However, potential problems and disadvantages of recycling also need to be recognised and managed. These include the costs and environmental impacts of collection, transport, and processing; the current shortage and volatility of markets for some products; and the visual and physical impact of recycling banks and centres. Life cycle analysis can be used to help identify most appropriate locations for new facilities.
- 9.11 Household waste is a relatively small part of the overall waste stream (approx. 20%), but it is important that we make significant progress towards managing it in a more sustainable way. At present just 11% is recycled in County Durham compared with 10% nationally. The Government has set challenging targets to increase the recycling of household waste, which are national targets supported by Statutory Performance Standards. These national targets are:
  - v to recycle or compost at least 25% of household waste by 2005;
  - $_{v}$  to recycle or compost at least 30% of household waste by 2010; and
  - v to recycle or compost at least 33% of household waste by 2015.

The Statutory Performance Indicators for County Durham are to recycle or compost 10% of household waste by 2003 and 18% by 2006.

9.12 The collection of household waste for recycling can be carried out in a number of ways. These include 'bring' systems, where the public take their waste to Household Waste Recycling Compounds or recycling centres, or Materials Recycling Facilities (MRF's) – a specialist plant which may separate, store and process recyclable material. In County Durham, existing waste transfer stations may have the potential for adaptation to MRF's to enable the recovery and recycling of materials from Municipal Solid Waste (MSW). The Municipal Waste Management Strategy for County Durham (MVMSCD) identifies the need for all district and borough councils in the County to increase kerbside collection of recyclable materials, both in terms of the number of properties served and the range of materials collected. This in turn will require additional facilities for "bulking up" recyclates. Other proposals that provide small scale 'bring' facilities for the recycling of waste will be supported.

# Household Waste Recycling Centres (HWRC's)

- 9.13 These sites provide a facility for the public to deliver their recyclable household waste and to properly dispose of waste which cannot be recycled. Like "bring facilities" which are recycling facilities provided by WCA's at supermarkets and other publicly accessible areas, such sites can provide recycling facilities for materials such as cans, paper, glass, textiles, garden waste and engine oil etc. HWRC's form the major source of organic wastes for composting in the County, however this may change with the development of green waste kerbside collection schemes. The MWMSCD recognises the increasing need for more recycling and that sites for HWRC's should maximise their potential in terms of the range of facilities they are able to provide.
- 9.14 The MWMSCD proposes that recyclable materials collected from HWRC's will be combined with materials collected directly from households by district councils to be fed into a materials recovery or bulking up facility.

### Site Requirements

9.15 HWRC's need to be located near to the County's main centres of population to maximise their accessibility. These sites should be carefully designed to ensure that maximum recovery is achieved, and to allow adequate access with space for queuing and manoeuvring vehicles. The facilities should be either fully or partially enclosed with an impermeable surface and include appropriate design of surface water drainage.

### Policy W37

Proposals for Household Waste Recycling Centres will be permitted where they help achieve a network of facilities accessible to centres of population and where they can be satisfactorily located:

- a) on land identified for general industrial use; or
- b) on previously developed land in sustainable locations; or
- c) as part of an existing waste management facility.

## Waste Transfer Stations and Materials Recovery Facilities

9.16 A waste transfer station allows waste to be stored temporarily prior to transportation in bulk to recycling, reprocessing, treatment or disposal facilities. This can reduce the overall number of vehicular movements by allowing larger vehicles or different transport systems to be used to transport waste over larger distances if required. Waste transfer operations can manage a variety of waste types. A network of facilities across the County will ensure that collected materials are sorted and supplied to the reprocessing industries.

- 9.17 Existing Waste Transfer Facilities which currently handle municipal waste in the County will continue to operate as bulking up facilities and may also handle segregated recyclate, prior to the waste being transferred to reprocessing facilities or final disposal. However the MWMSCD proposes that, as increasing volumes of waste are diverted from landfill, their role should be modified to provide additional bulking up and sort facilities in support of kerbside collection schemes and Bring systems. They may also be capable of incorporating other waste management facilities.
- 9.18 A new waste transfer station is required in Teesdale, which may be provided as part of the redevelopment/relocation of the Household Waste Recycling Centre. Indeed, approval was given for a waste transfer station and recycling compound at Stainton Grove, in April 2003. A further facility may also be needed in Wear Valley as existing landfill capacity in the west of the County becomes exhausted. These facilities would help to reduce costs, reduce the environmental impact of excessive transportation of waste and would also be capable of providing bulking up facilities in support of recycling schemes.
- 9.19 A Materials Recovery Facility (MRF) usually receives sorted waste which is then further separated into recyclable materials. A MRF may also store bulked up materials awaiting re-processing. Useful materials are sorted and supplied to the reprocessing industry for processing into new products. Any non-recoverable materials are transferred for final disposal.

## Site Requirements

- 9.20 Waste Transfer Stations and Material Recovery Facilities usually require industrial-style buildings and storage areas of a sufficient size to accommodate a large tipping hall to deposit and load materials. They would also need to accommodate equipment to sort, grade, compact and bale materials, as well as storage and loading facilities for recovered materials. Suitable urban locations would include industrial estates, appropriate previously developed land, or adjacent to an existing waste management facility. Importantly, the facility would require good accessibility to receive delivery of collected waste and to transfer it in bulk by road, rail or water to other waste management facilities. In considering the location of new facilities, account should be taken of relevant policies in District Local Plans.
- 9.21 A transfer station could be a small facility serving the local community, or could deal with up to 50,000 tonnes per annum. Transfer facilities are needed in both rural and urban areas to provide an integrated network across the County, and they should be sited on appropriate industrial sites or previously developed sites in sustainable locations and contained within a building.
- 9.22 Materials Recovery Facilities can range from a small scale local recycling operation to a large scale facility dealing with up to 100,000 tonnes per annum. Such a facility should incorporate sufficient flexibility so that different materials from different sources can be sorted in response to fluctuations in the recyclables markets. There may be benefits in

reduced traffic movements if they are located adjacent to an existing waste management facility. Thrislington Quarry has been allocated for waste development under Policy 58.

## Policy W38

Proposals for Waste Transfer Stations and Materials Recovery Facilities will be permitted where it can be demonstrated that the development will assist the efficient collection and recovery of waste materials, and they can be satisfactorily located:

- a) on land identified for general industrial use ; or
- b) on previously developed land in sustainable locations; or
- c) as part of an existing waste management facility; or
- d) where the proposal forms part of an integrated waste management facility.

Provision will be made for new waste transfer facilities in Teesdale and Wear Valley.

## Recycling of inert waste

9.23 Facilities for the re-use and recovery of inert waste, including construction and demolition waste, can reduce both the amount of waste landfilled and the need for quarrying primary minerals. Recycling of these wastes to produce secondary aggregates can take place either at centralised processing facilities or on a construction site. The use of mobile facilities may be appropriate for large scale demolition operations, which allows the waste to be recycled close to where it arises. This reduces the need for double handling and unnecessary transport journeys of waste. A range of materials such as crushed concrete, road planings, minerals wastes and some industrial wastes can be recycled and utilised as substitutes for primary aggregates. However, the removal of these materials from the waste stream will inevitably delay reclamation of former mineral workings. Any unusable residues can be used in landfill engineering.

### Site Requirements

9.24 Suitable locations for recycling inert waste may include appropriate industrial areas, previously developed land, operational quarries or landfill sites. These facilities should be located away from residential areas. Hardstanding will be required for stockpiling material and crushing, screening and other processing operations. Some elements of the operation and storage may need to be enclosed.

### Policy W39

Proposals for the recovery and recycling of inert waste materials, including construction and demolition waste, will be permitted, provided that they can be satisfactorily located:

- a) at existing waste transfer stations; or
- b) on land identified for general industrial uses; or
- c) on previously developed land in sustainable locations; or
- at existing landfill or mineral sites (see Minerals Local Plan Policy M5) where it can be demonstrated that the use will not unduly prejudice the agreed reclamation timescale for the site.

Temporary developments may be acceptable in conjunction with construction developments where the material is recycled and re-used on site.

### End of life vehicles

9.25 End of life vehicle facilities (ELV), car breakers, vehicle dismantlers, metal recycling sites and sites used for the storage of abandoned vehicles contribute to metal recycling and the re-use of car parts, which avoid the waste stream altogether. Traditional scrap yards and metal recycling sites are recovery and bulking up facilities which concentrate on providing high quality metals to the smelting industry. These facilities allow for the efficient recovery of metals for recycling, whilst bulking up can reduce the overall number of vehicular movements. The implications of the End of Life Vehicle Directive, which came into effect in April 2002, are likely to be significant.

### Site Requirements

9.26 Scrap yards can vary in size from small to large scale operations. Due to their often noisy, unsightly and industrial character, they require careful siting in appropriate industrial areas. Modern facilities require industrial buildings able to accommodate workshops and storage space, in addition to metal processing and sorting equipment. Small facilities could be accommodated as part of a larger waste management facility. Wherever possible, the facility's operations should be enclosed to help reduce its environmental impacts although it is recognised that it would not always be possible to have the entire operation housed within a building. In considering the location of new facilities, account should be taken of relevant policies in District Local Plans.

#### Policy W40

Proposals for waste management facilities which handle, process, transfer or store scrap or abandoned vehicles or other scrap metal will be permitted:

- a) provided they can be satisfactorily located on land identified for general industrial use or on previously developed land in sustainable locations; or
- b) where they form part of an integrated waste management facility on an existing waste management site.

# Composting

- 9.27 Composting is the decomposition of organic waste to form a compost or soil improver. As well as producing a useful material, it removes a significant and potentially polluting element of the waste stream and reduces demand for peat and other soil improvement products for horticulture and land reclamation. There are alternative processes to render organic waste into material which is capable of being used as a soil improver. These include vermiculture or vermicomposting, which involve the use of worms to break down material.
- 9.28 Home composting has long been undertaken by private households to break down biodegradable kitchen and garden waste into a fertile compost. Home composting reduces the volume of waste to be collected and reduces transport but although it is very much encouraged, it has not been included by the government in waste recycling targets due to difficulty in its measurement. It is also not subject to planning control.
- 9.29 The Waste Local Plan is therefore more concerned with centralised composting, where biodegradable material is delivered to a central site where it is composted using windrows on a hardstanding or in large containers. The scale of operations can vary considerably from small community schemes to large scale centralised commercial facilities. Community composting is organised by groups of households whose organic wastes are combined to create larger volumes of compost. Composting schemes can also take place on farms, helping farmers to diversify their operations.
- 9.30 New facilities are required to process green waste which is both produced by District/Borough Councils and delivered by the general public to Household Waste Recycling Centres. The MWMSCD forecasts that two new facilities will be required in the County. A temporary facility has been established as a pilot plant at Joint Stocks Quarry, near Coxhoe but more permanent composting facilities will be necessary in the longer term.
- 9.31 Without careful management, the use of windrows can produce odours and air-borne pollutants whose emissions can be a health hazard. Liquid effluent is also produced which is a potential pollutant. The Environment Agency issued a policy statement in August 2001, which indicated that new composting facilities should not be located within 250 metres of a workplace or the boundary of a dwelling unless a risk assessment proves otherwise. However, the Environment Agency suggest a number of measures that may be undertaken in order to reduce the adverse effects of composting including that such operations are undertaken within a building.

### Site Requirements

9.32 Large scale composting usually can be carried out in windrows, which are open linear heaps of material. Small facilities may only require an area of hardstanding and drainage for composting; a covered area for screening and storing materials; and a small building for equipment storage. However, large scale centralised commercial facilities may have a greater impact and require care in their siting. The enclosure of such facilities would be preferable. In particular, enclosure of commercial composting facilities makes the control of emissions easier to enforce and more cost effective. Enclosure also allows greater control of the atmospheric conditions in which the composting is taking place, thereby improving the efficiency of the process. Centralised composting facilities could be located at existing landfill sites, quarries, appropriate industrial sites, previously developed land or in "redundant" buildings. Only small scale composting schemes will be permitted as part of farm diversification.

### Policy W41

Proposals for the development of indoor composting schemes, including small scale community composting schemes, will be permitted where they:

- a) form part of an integrated waste management facility; or
- b) can be satisfactorily located on general industrial sites or on previously developed land in sustainable locations; or
- c) involve the re-use of appropriate rural buildings, or small scale extensions, or small scale new build, as part of farm diversification

### Policy W42

Proposals for outdoor composting schemes, including small scale community composting schemes, will be permitted where they can be satisfactorily located:

- a) on previously developed land in sustainable locations; or
- b) on existing areas of hardstanding such as disused airfields or farmyards; or
- c) where they form part of an integrated waste management facility; or
- d) where they form part of a reclamation proposal which makes beneficial use of the composted material, and
- e) the processing of waste remains ancillary and appropriate in scale to an existing primary use.

## Aerobic and Anaerobic digestion

9.33 Aerobic digestion is the biological degradation of organic waste in the presence of oxygen and is normally carried out in a vessel. Anaerobic digestion is the biological degradation of organic waste without oxygen and also takes place in a vessel. The processes allow the control and containment of potential pollutants, including methane gas. Anaerobic digestion produces more gas including methane, but the primary aim is to produce a good quality compost. This reduces the volume of waste and

requires less space than composting. Gas from the anaerobic digestion process can be used as a fuel. The MWMSCD envisages that a number of sites will be developed in the County for aerobic digestion although since the technology is not yet established for municipal waste, initially a pilot plant is operational at Thornley. Anaerobic Digestion has been used successfully to treat sewage sludge, but the technology is not yet established for other waste types in the UK.

### Site Requirements

9.34 Digesters can stand alone or be part of a larger waste management site. The process is generally industrial in terms of the nature of the equipment required, however, smaller scale anaerobic digestion facilities are being trialed in the Region at present, usually on farms in the first instance. In general, digesters require an industrial building and a large upright vessel would be required with ancillary areas for sorting the different types of organic wastes. The buildings would also be needed to store ancillary equipment. Locations could be on appropriate industrial or previously developed land, near to the main source of waste to reduce transport costs. Like aerobic digestion, anaerobic digestion can take place at any scale that is required and also requires a vessel. The enclosure of such facilities within a building would be preferable.

## Policy W43

Proposals for aerobic and anaerobic digestion plants which make a significant contribution to sustainable waste management in County Durham and which make the best practical use of by-products (soil improvers and recovered materials) will be permitted:

- a) where they can be satisfactorily located on land identified for general industrial uses or on previously developed land in sustainable locations;
  - or
- b) where the proposal forms an integrated part of an existing waste management facility or sewage treatment plant.

## Policy W44

Proposals for small-scale aerobic and anaerobic digestion plants which make the best practical use of by-products will be permitted:

- a) on general industrial sites; or on previously developed land in sustainable locations; and
- b) where the processing of waste is appropriate in scale to an existing primary use of the site ; or
- c) where they involve the re-use of appropriate rural buildings and hard standings, including as part of farm diversification.

# Energy from Waste

- 9.35 Waste recovery also includes the recovery of value from waste in the form of energy, through direct heat and/or electricity. Energy from waste is the processing of waste under controlled conditions to produce heat which is recovered for a beneficial purpose. Energy from Waste plants release carbon dioxide from burning carbon although they can displace the need to use more polluting fossil fuels to generate heat. The Government therefore encourages the recovery of energy from waste, where appropriate, as part of its renewable energy strategy. Energy from Waste includes a potentially wide range of facilities. Some technologies are fully developed and in commercial use, such as incineration, whilst others still require full scale testing, particularly for unsegregated waste but technology is developing guickly. Energy can also be recovered from waste through the use of waste as a fuel substitute. Refuse derived fuel (RDF) is produced from MSW with noncombustible materials removed. RDF can either be used on site or transported for use at alternative locations. Sewage sludge drying also offers a potential source of renewable energy, capable of being converted directly to electricity or producing a product which can provide a medium calorific value fuel. In any energy from waste proposal, the potential for including Combined Heat & Power (CHP) technology should be considered to maximise energy recovery. The range of available Energy from Waste technologies are likely to expand in the future but the most advanced at present include:
  - v Gasification
  - v Pyrolysis
  - v Incineration with energy recovery
- 9.36 In order to meet national and European waste recovery targets, the MWMSCD is clear that capacity for recovering energy from waste needs to be developed. The MWMSCD states the County Council's intention to pursue a policy which will avoid mass burn incineration. The Strategy therefore includes the adoption of alternative waste to energy technologies.
- 9.37 The MWMSCD identifies the need to ensure that facilities are available to deal with biodegradable and non-biodegradable elements of the municipal waste stream in order to ensure that all targets for municipal waste are met. The Strategy considers that if trials of pyrolysis and gasification systems prove successful in handling these waste streams, they will provide an alternative to incineration which will avoid many of its drawbacks. The Strategy envisages that a single facility will be required in the short term but that a second plant may be required as more stringent targets take effect.

# Gasification and Pyrolysis

9.38 Gasification is a process where carbon based wastes are heated up in the presence of air or steam to produce fuel rich gases which are burnt to raise the temperature of the waste material still further. Pyrolysis is a similar process to gasification which produces a liquid fuel.

9.39 Each of these technologies requires industrial scale facilities and are usually totally enclosed. The scale and site area needed depends on the capacity of the plant and the ancillary waste sorting that is required. The impacts in terms of land use planning are similar to those of aerobic digestion. Like incineration, these technologies will be subject to a tightening of EU emission limits as a result of the EU Waste Incineration Directive. Gasification and pyrolysis plants and anaerobic digesters can be accommodated on industrial estates, although it may be appropriate to locate the facilities close to the main sources of waste in order to satisfy the proximity principle.

## **Incineration**

- 9.40 The incineration process involves waste being burnt to generate heat, which is used to generate high pressure steam, which in turn generates electricity. Some of the electricity can be used for the operation of the plant and the remainder exported to the national grid. The surplus heat from the turbines can be used for local industrial and domestic heating schemes. Using Combined Heat and Power (CHP) technology helps maximise energy recovery but this is dependent on the availability and suitability of nearby users. As well as the ability to generate heat and electricity, incineration has a number of benefits, including the ability to handle large volumes of waste which are reduced in volume and is a proven and commercially viable technology. The construction of an incineration plant has high capital cost and operation itself invariably requires delivery of a minimum tonnage of waste over a long time period in order to generate consistent power output. Waste incineration is capable of handling the volumes of waste which will remain after re-use, recycling and composting but the capacity of any incinerator must not be so large as to undermine performance in waste reduction and recycling.
- 9.41 However, around 30% of the original volume of material remains as an ash residue. This can be utilised where there is the potential for the recovery and industrial use of residues from the incineration process, or otherwise landfilled. Until relatively recently, the main objective behind waste incineration was to reduce the bulk of waste to a smaller volume of ash to reduce landfill disposal. Most of these incinerators were fitted with rudimentary emission control systems. These early incinerators have closed down due to the introduction of EU Directives that have raised environmental standards for waste incineration and a further tightening of EU emission limits is expected with the proposed Waste Incineration Directive.
- 9.42 New waste incinerators have come on-stream in recent years, taking advantage of availability of funding through the Non Fossil Fuel Obligation (NFFO). However, there is still public concern in the UK over potential airborne emissions from these new incinerators. Planning has no direct control over this issue as pollution control is the sole responsibility of the Environment Agency.

# Site Requirements

9.43 Energy from Waste facilities can range from small scale plants to large installations with a capacity of 200,000 tonnes per year or more. A major facility may require a site of around 3-5 hectares as these should be capable of accommodating a range of integrated waste management facilities dealing with recycling and materials recovery. Potential locations could include appropriate industrial areas, previously developed land and existing, permanent waste management facilities. These facilities should be located near to major waste arisings to reduce transport costs. To enable surplus heat to be used for community heating schemes, the plant needs to be near suitable end users, subject to environmental safeguards, as set out in Section 6 of the Plan.

## Policy W45

Proposals for the development of energy from waste facilities will be permitted where it can be demonstrated that they contribute to a sustainable waste management system for County Durham and:

a) where they can be satisfactorily located on land identified for general industrial uses, or on previously developed land in sustainable locations;

or

b) where the proposal forms an integrated part of an existing permanent waste management facility

Proposals should be able to demonstrate that they:

- i) generate useable electricity and heat; and
- ii) enable the recycling of bottom ash.



Landfill and Landraise

Reclamation of former mineral workings

Tipping on agricultural land

Energy recovery from landfill gas

Incineration without energy recovery

Mining of waste

# **10. WASTE DISPOSAL**

# Landfill and Landraise

- 10.1 Waste disposal by landfill is by far the dominant form of waste management in the County. As previously discussed, the extent of this reliance on landfill must significantly be reduced over the plan period. The Plan seeks to move towards a more sustainable waste management system, which has greater recycling, composting and recovery facilities. This shift is supported by the mechanisms of the Landfill Tax and the EU Landfill Directive. Regardless of these measures, landfill will remain an important waste management option and an essential component of an integrated waste management strategy for the County. There are also wastes where it is the only available waste management option and the BPEO, such as heavy sludges from some industrial processes and some incineration residues. At current rates of tipping, it is clear that new landfill capacity is going to be required during the plan period.
- 10.2 In addition to the progressive mandatory limits on the landfill of biodegradable municipal waste, the Landfill Regulations require both new and existing landfill sites to be designated as inert, hazardous, or non-hazardous sites, ending the practice of co-disposal of wastes. This process was completed in 2004. The Landfill Regulations require that waste must be pretreated before it is landfilled and certain wastes are banned from landfill altogether, such as liquid wastes and tyres. Gas from all landfill sites accepting biodegradable waste must be collected, treated and used (see Policy W48). The Landfill Directive is intended to reinforce the shift away from landfill towards greater recovery of waste. It will have numerous complex impacts on the implementation of the Local Plan. These impacts will need to be closely monitored. The Landfill Regulations also set out the general considerations to be taken into account in locating landfills. These include the distances to sensitive receptors, the existence of groundwater, coastal water or nature protection zones; geological or hydrogeological conditions, the risk of flooding, subsidence, or landslides on the site; and the protection of the natural or cultural heritage in the area. Where appropriate, each of these considerations is acknowledged and addressed in Section 6 of the Plan.
- 10.3 The Environment Agency has issued guidance on the location and impact assessment of waste management facilities. The guidance indicates that waste management facilities should be located where they minimise environmental harm. More detailed guidance on this issue is provided in Section 6 of the Plan.
- 10.4 PPG 23 recognises that the distinction between planning and pollution control is not always clear cut, and that matters which may be relevant to a pollution control authorisation or license may also be material planning considerations to be taken into account in planning decisions. Paragraph 1.34 of PPG 23 advises that planning authorities should not substitute their

own judgement on the potentially polluting effects of landfill developments for that of the Environment Agency. Policy W46 clarifies the land use planning considerations for the location of landfill and landraise and complements Section 6, specifically Policy W27 (Protection of Water Resources). The Environment Agency's Regulatory Guidance Note 3 (RGN 3) outlines their position on the protection of groundwater from the polluting risk of landfill and landraise developments. The County Council will consult the Environment Agency on all applications and during pre-application discussions for landfill and landraise development in relation to RGN 3 as a material planning consideration.

- 10.5 PPG 10 advises that Waste Planning Authorities "should not seek to prohibit the development of particular types of facilities unless they are confident that adequate alternative facilities will be available in their area. They should recognise that, whilst it can be valuable to set targets for the various waste management options, there is no guarantee that these will always be met". Whilst in such circumstances the absence of alternative provision could result in insufficient disposal capacity, the possible consequence may be that waste may have to be transported over longer distances in contravention of the proximity principle. It is only through careful management of waste disposal capacity that Waste Planning Authorities can be proactive in encouraging more sustainable waste management options further up the waste hierarchy and bring about a shift away from landfill.
- 10.6 It is therefore reasonable to require proposals for new landfill capacity to demonstrate that there is a need for the facility. Applicants will be required to demonstrate that the need cannot be met by alternative waste management methods which are above landfill in the waste hierarchy. Alternatively, evidence will be required to demonstrate that there are other material considerations which override a lack of need, such as the opportunity to reclaim degraded or contaminated land, and that this represents the BPEO. It is recognised that landfill or landraise can sometimes be a valuable means of reclaiming derelict or contaminated land and restoring former mineral workings. Whilst planning permission for additional landfill capacity needs to be carefully controlled, there may be particular circumstances where landfill represents the BPEO. There may be compelling evidence that a lack of short term landfill capacity would, if not met, have a serious impact on the environment through an increase in waste material being transported by road across the County. Proposals must demonstrate that this capacity cannot be accommodated elsewhere in the County on the basis of the BPEO. It may also be the case that a proposal is needed to provide a facility for the disposal of residues from an adjacent MRF or Energy from Waste facility and that in locational terms, the proposal represents the BPEO.
- 10.7 Where proposals for landfill come forward, they will need to demonstrate that they contribute to a sustainable waste management system and represent the BPEO and that they meet the criteria and policies of the Development Plan. The objectives and guiding principles set out in the Strategy and the overarching policies and criteria in Section 5 will be used to assess whether a development proposal contributes to a sustainable waste management system in County Durham.

- 10.8 Inert wastes are commonly used in non-inert landfill sites for site reclamation and in site engineering. A balance needs to be drawn between the beneficial use of inert materials for these site engineering purposes and their potential use in place of primary aggregates. Operators of non-inert waste landfill sites will be encouraged to take measures to ensure that the amount of inert waste which is landfilled is minimised to be consistent with environmental, operational and reclamation requirements. Wherever possible inert waste should be segregated and reused to help to conserve existing landfill capacity for non-inert waste. Re-use will most likely be for lower grade uses such as for daily cover, bunds, roadways and restoration, but should include higher grade uses where practicable.
- 10.9 Non-inert landfill sites produce leachate, which is caused by water percolating through waste. This is a potentially polluting liquid that can cause harmful effects to groundwater and surface water. Any leachate produced must be safely controlled and managed. Given that leachate can continue to be produced for many years beyond the cessation of waste disposal operations, it is important that monitoring continues until levels are safe.
- 10.10 RGN 3 expresses concern as to the reliability of long term active site management, such as leachate collection systems to prevent long-term water pollution, and that Risk Assessments must now consider the long-term degradation of such measures.

## Reclamation of former mineral workings

- The approach taken in the Waste Disposal Local Plan (adopted in 1984) was 10.11 to match predicted waste arisings with sufficient landfill disposal capacity, including the use of waste to restore guarries. The significant change in the approach to waste management policy since that Plan's adoption aims to increase the recovery of waste and reduce the volumes of waste which are landfilled. The diversion of waste to recycling is beginning to have an effect on the rates of incoming waste at licensed landfill sites, notably for inert waste. A lack of sufficient inert material may delay reclamation of some mineral workings. Problems encountered from the suspension of tipping operations, caused for example when there is insufficient material to achieve the approved reclamation scheme, are addressed in the Reclamation section (Section 12). Proposals for mineral extraction will normally need to demonstrate that an appropriate form of reclamation is viable without the need for large-scale imports. Future restoration and reclamation of land is likely to require the development of alternative and more innovative reclamation strategies. Proposals for the reclamation of mineral workings will also be assessed against the policies and proposals of the County Durham Minerals Local Plan.
- 10.12 Past reclamation standards at many former waste disposal sites in the County have been significantly below modern standards. Standards have recently improved in response to more stringent environmental requirements, better industry practice and stronger planning control. The Environment Act 1995, supported by Government Guidance in MPG 14

'Environment Act 1995: Review of Mineral Planning Permissions' (published September 1995), requires the updating of old mineral planning permissions in order to secure improved operating and environmental standards. The review process may offer the opportunity to bring about the reclamation of a mineral site to an appropriate standard without importing waste material. Policies M48, M49 and M53 of the County Durham Minerals Local Plan also seek to secure improvements needed to ensure the satisfactory working and reclamation of quarries.

## Policy W46

Proposals for new landfill or landraise sites and extensions to existing sites which create new landfill capacity will only be permitted where it can be demonstrated that:

- a) they contribute to a sustainable waste management system for County Durham; and
- b) they represent the best practicable environmental option; and
- c) they satisfy an established need; and
- d) they achieve overall environmental benefits; or
- e) a proposal represents a small 'windfall' scheme which will secure the reclamation of registered contaminated or previously developed land within a short timescale or increase the nature conservation interest of a proposed site through the creation of new habitats, without creating a significant amount of new voidspace.
  Proposals for new landfill/landrasing development in areas of groundwater vulnerability will not be permitted unless it can be

demonstrated that it meets the terms of Policy W27.

# Tipping on agricultural land

10.13 The adopted Waste Disposal Local Plan carried a presumption against tipping on agricultural land but allowed tipping of baled waste or inert material on unproductive agricultural land if agricultural quality was improved. The significant changes in national waste management policy require this approach to be reviewed. There may be cases when the need to improve degraded agricultural land can be justified, for example to achieve adequate surface water drainage or allow land to be worked more easily. However, this would normally require material such as construction and demolition waste which can usually be readily recycled. There are also several sites, mainly former mineral workings, which are licensed to accept inert waste materials for positive reclamation purposes. The diversion of clays and soils away from permitted landfill sites which require these materials to achieve approved landforms and after-uses may impede and delay their timely and proper restoration.

### Policy W47

Proposals for development by landfill or landraise on agricultural land, which have the primary purpose of improving agricultural land quality, will only be permitted where it can be shown that:

- a) the quality of land will be improved and it cannot be improved by other more suitable methods; and
- b) the proposal represents the Best Practicable Environmental Option; and
- c) there is no unacceptable loss of amenity caused by the operations; and
- d) restoration of the site is not unduly delayed; and
- e) the materials used are inert.

### Energy recovery from landfill gas

- 10.14 One of the main aims of the Landfill Directive is to reduce emissions of landfill gas (methane) from landfill sites. Most landfill sites in the County at present either passively vent or flare off the gas. The Landfill Directive requires that all landfills accepting biodegradable waste include measures to treat and use the gas. If it is not possible to use the gas for energy generation, it must be flared.
- 10.15 New proposals for development at existing sites may present the opportunity to install a system which will positively utilise the available gas. The availability of funding, initially through the Non Fossil Fuel Obligation (NFFO) and now through the Renewables Obligation, has acted as a catalyst for the development of power generation schemes from landfill gas.
- 10.16 4 megawatts (MW) of power is already being generated from landfill gas at the former Coxhoe landfill site and 2MW at St. Bedes landfill site. Planning permission has been granted at Bolam and Todhills landfill sites to generate landfill gas but they are not yet operational. Further proposals will be looked on favourably where they represent the BPEO. Consideration will be given to the location of the necessary infrastructure to ensure that there is no adverse impact on amenity through noise or visual impact, or interference with the reclamation of the site. Proposals in the Green Belt will be considered against Policy W10.

### Policy W48

Proposals for the generation of energy from landfill gas will be permitted where they contribute to the development of sustainable waste management.

## Incineration without energy recovery

10.17 Incineration without energy recovery is not generally considered to be a sustainable waste management option and it does not comply with the guiding principles and overall aims of the Waste Local Plan. However, for some wastes, such as special wastes and medical or clinical wastes, incineration may be the Best Practicable Environmental Option. The vast majority of these types of waste are exported outside the County to specialised facilities and the County Council considers that there is sufficient existing capacity to deal with such waste arising in County Durham for the Plan period. However, any new proposals will be assessed against demonstrable need and the criteria and policies of the Development Plan.

## Policy W49

Waste incineration without energy recovery will not be permitted unless it can be demonstrated that there is an overriding need for the facility that cannot be met from other facilities and it represents the Best Practicable Environmental Option.

## Mining of waste

- 10.18 Mining of waste involves the recovery of materials from a landfill site by reexcavating and processing the previously deposited waste. Proposals to rework sites may come forward for technical reasons, for example to reengineer a landfill site or to overcome a pollution problem or to allow further development on the land. Alternatively, a change in economic circumstances may prompt an interest in re-using deposited waste, such as the introduction of the Aggregates Tax.
- 10.19 However, re-excavation of waste can cause significant amenity problems and, particularly if putrescible waste is involved, can cause problems through the release of landfill gas, leachate or odours. It can also result in contamination of materials and a long term delay to site reclamation. For these reasons, a balance needs to be stuck between encouraging the re-use and recycling of materials and the impact that re-working may have on the site and its surroundings.
- 10.20 The removal of waste materials such as mineral working deposits, ash and clinker is classed as mineral extraction and proposals are subject to policies in the County Durham Minerals Local Plan.

### Policy W50

The mining or excavation of waste will only be permitted where:

- a) it will provide a demonstrable benefit to the environment, human health and local amenity; or
- b) the waste is shown to be endangering human health or harming the environment; or
- c) removal of the waste is required to facilitate major infrastructure projects; and
- d) the proposals represent the Best Practical Environmental Option.



**Special Waste** 

**Clinical Waste** 

Sewage and water treatment sludge

**Agricultural Waste** 

# **11. OTHER WASTE**

# Special Waste

- 11.1 Special waste is often referred to as hazardous or toxic waste as defined in the Special Waste Regulations (as amended 1996). A further review of these regulations is currently underway as a means to implement the changes that the European Commission has recently made to its list of Hazardous wastes and incorporated into the European Waste Catalogue. The revised list includes a number of waste streams not previously considered to be hazardous, including televisions, computer monitors, fluorescent lighting and end of life vehicles. Whilst all these terms address particular aspects of those wastes, only the term special waste has a legal definition. For the purposes of this section, the term 'hazardous' will be used.
- 11.2 By virtue of their various harmful properties, hazardous wastes require particular care in their disposal. They are controlled by their own set of regulations, over and above the control exerted over other waste types, in terms of transport, treatment and disposal. There are various options available for the management of hazardous wastes, normally involving pre-treatment to reduce the hazard (including incineration), so the residual waste can be safely landfilled.
- 11.3 Various chemical and biological processes are available for the treatment of special waste. Bio-remediation relies upon bacteria and other micro-organisms to break down the waste into less hazardous material. It is, however only suitable where hydrocarbons are present in the waste and has been used at Templetown Brickworks, Consett to help 'clean' contaminated soils. Chemical treatment includes neutralisation which can treat acid and alkali wastes and oxidation which involves the addition of an oxidising agent to convert a hazardous waste into an innocuous form. Solidification immobilises the hazardous waste so that it is resistant to chemical or biological degradation and is suitable for disposal to landfill. These processes are types of industrial processes and can be located at industrial sites.
- 11.4 Hazardous waste can sometimes be disposed of straight to landfill, in codisposal sites, where hazardous wastes are jointly disposed of with other wastes, such as municipal waste. However, in July 2002, the implementation of part of the EU Landfill Directive ended the practice of co-disposal of waste in this country for new landfill facilities and in 2004 for existing landfill sites. Some existing landfill capacity in the County may be permitted by the Environment Agency to continue to accept hazardous waste beyond 2004. This will be dependent on the Agency's consideration of site conditioning plans under the Landfill Regulations 2002.
- 11.5 Most of the hazardous waste arising in the County is exported to specialised facilities elsewhere in the region and beyond. Due to the high costs of these facilities and economies of scale to make them viable, it is unlikely that the small volumes of hazardous waste produced in the County could justify the development of a hazardous waste facility here.

# **Clinical Waste**

11.6 Clinical waste is generated from a variety of healthcare facilities, such as medical and dental practices, and some similar waste found in the household waste stream. At present, County Durham has no licensed facilities for the treatment of clinical waste. Hospitals in the County currently store and subsequently export their waste to facilities elsewhere. For example, the waste can be exported to an incinerator in Leeds or to other plants such as Eurocare's treatment facility in Newcastle. The neutralised residues are then landfilled.

### Policy W51

Proposals for the handling, storage, treatment, processing, incineration or disposal of special or clinical waste will be permitted only if the applicant can demonstrate to the satisfaction of the Waste Planning Authority that there is an established need for the facility, that it represents the Best Practical Environmental Option, and that it can be satisfactorily located:

- a) where it forms an integral part of a major waste management facility; or
- b) within a medical or research institution which is generating the waste; or
- c) on land identified for general industrial uses.

### Sewage and water treatment sludge

- 11.7 The volume of sewage (waste water) that will require treatment is directly related to the County's population and that produced from commercial and industrial premises. It is conveyed for treatment to a sewage treatment works. Sewage treatment produces an effluent which is returned to watercourses and a solid material (sewage sludge) which requires disposal. Sewage sludge is the inevitable by-product of sewage treatment. Changes in population distribution and economic growth in the County over the Plan period may increase demands on sewage treatment and increase the quantity of sludge to be disposed of. This will also be directly related to the level of treatment provided, with higher standards generating more sludge by-product. The Waste Local Plan is concerned only with by-product sludge arisings and not the amount of sewage which receives treatment and discharged to water courses under consent from Environment Agency.
- 11.8 Environmental impacts can result from the discharge of inadequately treated sewage; the actual treatment process; the discharge of treated effluent; and the treatment and disposal of sewage sludge. The discharge of sewage and effluent into watercourses is not the responsibility of the land use planning system but is regulated and controlled by the Environment Agency. The land use planning system does however, influence the provision of sewage treatment works and the disposal of sewage sludge, as both require land.

- 11.9 Responsibility for sewage treatment and disposal in the North East lies with Northumbrian Water Ltd. Throughout County Durham, there are 150 sewage treatment facilities operated by Northumbrian Water Ltd. The Urban Waste Water Treatment Directive (UWWTD) and the Bathing Waters Directive place obligations on Northumbrian Water Ltd in respect of its sewage treatment and discharge standards. The higher standards and consequential increased production of sludge as a result of these Directives has already occurred and will be maintained. Further, more modest, increases will occur as further river water quality improvements are made including nutrient removal from certain treated sewage discharges. The requirement to upgrade the levels of treatment and discharges also applies to the treatment works.
- 11.10 The UWWTD requires that sludge should be re-used whenever appropriate and that disposal routes should minimise the adverse effects on the environment. Waste Strategy 2000 states that the main option (around 50%) for re-use has been the controlled application to agricultural land, subject to strict environmental safeguards. Other options include incineration, landfill, land reclamation, and use on dedicated sites. A further option is to produce a synthetic light aggregate which would assist in reducing demand for primary aggregate or landfill. Sludge previously dumped at sea now has to be disposed of by other routes such as spreading on agricultural land and energy recovery. Waste Strategy 2000 identifies the spreading of sludge on agricultural land as representing the BPEO in most circumstances.
- 11.11 By their very nature, proposals for new or extended sewage treatment works can cause considerable public concern. In making provision for new sewage treatment works, there will need to be a balance between meeting higher discharge standards and the environmental benefits of the development, and the protection of the existing environment and amenity. In providing for new sewage treatment works which are necessary in order to comply with regulatory requirements, it is important that any potential adverse impact of the development, such as odour, access arrangements, landscaping and visual impacts, are taken into account. Where this type of development is proposed within the Green Belt, regard should be had to Policy W10.
- 11.12 The region is supplied with water from a network of water treatment works; six of which are in County Durham: Mosswood, Honey Hill, Tunstall, Great Lumley, Lartington and Wearhead, in addition to bore hole sources in the east of the County. During the production of potable water from raw water taken from reservoirs and rivers, the natural turbidity and colour is removed by adding coagulants and removing the sediment. The resultant water treatment sludge is a by-product of this treatment and must either be re-used or disposed of. At present much of this material is applied to land. Re-use options would exploit the mineral content of the sludge as a soil improver, soil forming material or as a filler in construction material manufacture.

### Policy W52

Proposals for new, or extensions to existing, sewage treatment works will be permitted where they represent the Best Practical Environmental Option and where:

- a) they are required to improve the treatment of sewage and waste water; or
- b) they are required to improve discharge standards; or
- c) they are required to provide increased treatment capacity.

Prior to the development of new green field sites or extensions to existing sites priority should be given, where possible, to accommodating any additional development as infill development within the curtilage of existing STW sites. Additionally, proposals for recovery of sludge to produce beneficial end products will be encouraged where they can be located without significant adverse effects on local communities or the environment.

## Agricultural Waste

- 11.13 The Environment Agency has estimated that 647,000 tonnes of agricultural waste and by-products was produced in County Durham in 1998. This estimate was generated using a model based on head of livestock and land area information and so must be treated with a degree of caution.
- 11.14 The bulk of agricultural waste produced on farms in County Durham consists of animal matter such as manure and slurry, together with silage effluent and crop residues. The majority of slurry and manure wastes are normally disposed of through application to fields as a soil conditioner or fertiliser and should be more accurately regarded as an agricultural by-product.
- 11.15 Farms also produce a range of wastes of both an organic and inorganic nature, including for example tyres, plastic bags and sheeting, scrap metal and machinery, and pesticides. Currently the majority of these wastes fall outside the legal definition of controlled waste but the Government has advised that it intends to consult on amendments to the controlled waste regulations which will extend regulatory controls to agricultural waste.
- 11.16 During the foot and mouth crisis, County Durham was one of most seriously affected areas in the country. Apart from the devastating effects on agriculture and the rural economy, the crisis has also had significant but as yet unquantified effects on stock levels and agricultural waste arisings.
- 11.17 In recent years the issue of animal waste has drawn much public attention because of the BSE crisis and the Over Thirty Month Scheme (OTMS) for culling cattle. Significant arisings of waste material will require treatment or

disposal, or both over the plan period although overall volumes may be expected to decline as more farmers leave the industry. At present it is uncertain as to whether there is sufficient evidence to justify the provision of a new facility for the disposal of carcasses in the County. The County Council will liase with DEFRA and monitor changes in Government advice in this regard. In 1997 the Government issued planning advice on facilities to deal with cattle slaughtered as a precaution under the OTMS.

## Policy W53

Proposals for the development of incineration facilities for the disposal of animal carcasses will only be permitted where it can be demonstrated that:

- a) there is an established need for the facilities; and
- b) they contribute to a sustainable waste management system for County Durham; and
- c) they represent the Best Practical Environmental Option.

Where appropriate, proposals should produce electricity and useable heat.



**Reclamation Conditions** 

After-care of closed sites

After-use

# **12. RECLAMATION**

- 12.1 The opportunity to restore a site by the importation of waste should be determined by a demonstrable need to import waste to achieve a satisfactory reclamation of the site. To ensure that long term environmental impacts are minimised and the overall aim of sustainability is achieved, the County Council will aim to ensure that all land taken for waste management is restored to a high standard and is capable of sustaining an acceptable after-use.
- 12.2 When assessing the potential for different after-uses, and for any possible importation of fill materials, regard will need to be had to other relevant parts of the Development Plan as appropriate.
- 12.3 The process of restoring sites may itself have environmental impacts relating to, for example, the import of fill material and necessary site operations. Any such impacts will be taken into consideration when the effects of a proposal are being assessed, and will be dealt with in terms of the relevant policies.

# **Reclamation Conditions**

- 12.4 Where a reclamation proposal involves the importation of waste, regard will be had not only to the adequacy of the proposals themselves but also to their feasibility, including the likely financial and material budgets for restoration, aftercare and after-use, implementation of the scheme, and the availability of waste material which needs to be imported. Where proposals will require long term management beyond any after-care period, provision should be made for this through, for example, the use of endowments or formal agreements, or the transfer of land to an appropriate agency. The relevant considerations for the reclamation of any given site will be identified in pre-application discussions.
- 12.5 A successful restoration depends on the way in which soils are stripped, stored (if necessary), replaced and subsequently managed. Proposals should be supported by a detailed soils handling strategy which includes details of soil profiles and the treatment of soils following reclamation. Where there is a shortage of soil material then every attempt should be made to recover suitable soil-making material from the excavated overburden.
- 12.6 Working schemes should maximise the potential for progressive restoration. Where appropriate a staged approach should be adopted to the restoration of landfills, (ie partial soil replacement and grass seeding with final restoration postponed until the cessation of deferential settlement and remedial engineering works.) Sites should be managed under a care and maintenance basis until such a time it is agreed that a viable block of land is available for final restoration and subsequent aftercare.

### Policy W54

Planning applications for waste development should include proposals for the satisfactory reclamation of the site. Conditions will be imposed, and planning obligations or other legal agreements sought, to cover the following matters as necessary:

- a) the submission of further detailed reclamation proposals at specified stages in the development;
- b) the phased reclamation of waste operations where appropriate in order to ensure that the period over which land is out of beneficial use is kept to a minimum;
- c) the stripping, storage, replacement and management of any topsoil, subsoil and soil making material in good condition for ultimate restoration;
- d) the installation of drainage systems;
- e) the contouring and grading of restored land;
- f) a programme of after-care following the completion of restoration including, where appropriate, provision for long term management;
- g) the removal of buildings, plant, structures, machinery and hardstanding used in connection with the waste operations after the completion of operations; and
- h) the mitigation of any adverse traffic impact due to site reclamation activity; and
- i) any other matters necessary to ensure the satisfactory reclamation of the site.

## After-care of closed sites

- 12.7 Waste management facilities can be divided into two types those involving built development of a permanent nature and those where operations make use of land for a temporary period, following which land can be returned to its previous use or a new use can be established. Restoration, aftercare and after-use are not directly relevant to facilities involving permanent built development such as transfer stations, incinerators etc. They are more pertinent to transient operations such as the landfilling of waste.
- 12.8 In order to ensure that newly restored land is properly treated during its first critical years and to ensure it is reclaimed to a satisfactory standard, "After-Care Conditions" are imposed by the Planning Authority where reclamation to agriculture, forestry or amenity is proposed. An aftercare scheme submitted by the applicant and approved by the County Council should cover a period of 5 years or such other maximum period after compliance with the restoration condition as may be prescribed. The maximum 5-year aftercare period may be extended by mutual consent, where this will enable the reclamation objections to be met.

12.9 During the after-care period sites are monitored annually in accordance with MPG 7. However, interim assessment may also be taken to monitor progress. Operators are required to produce annual monitoring reports, recording work that has been undertaken and setting out a detailed programme for the forthcoming year.

# After-use

- 12.10 Appropriate after-uses can help to conserve and enhance the character of the landscape and nature conservation value while maximising benefits to local communities and the environment. The usual location for landfill development is away from urban areas and accordingly, an open after- use will usually be most appropriate. It may be appropriate to restore land to its former character as part of the agricultural landscape. However, where the site may have previously contained the best and most versatile land, the presence of systems such as landfill gas and leachate control can inhibit the range of agricultural operations and reduce potential land quality for the foreseeable future. In such cases the operators will need to forward comprehensive reclamation schemes, including details of gas and leachate control, as part of the planning application. Attention should always be paid to the opportunities for environmental enhancement and other public benefits.
- 12.11 Opportunities will also often arise for the creation through reclamation of new features of landscape, nature conservation or amenity value including community woodlands, public open space, wetlands, heathlands or other habitats of nature conservation interest. The development of such features may help to mitigate the adverse impacts of the working site. Waste operators will need to have regard to the advice contained in any landscape and nature conservation strategies prepared by the Waste Planning Authority when designing reclamation schemes. In the case of non profit making afteruses, applicants will be required to provide long term management proposals to demonstrate how such uses will be sustainable in the long term (both during and beyond the after-care period. Where woodland is proposed, landfill operators should have regard to the advice contained within the County Woodland Strategy and other relevant advice when planning reclamation of appropriately engineered sites to forestry. Should any proposal arise for new planting on former landfill sites in the area covered by the Great North Forest, the scope for creating new community woodland will be of particular importance. When considering sport and recreation afteruses, regard should also be had to District Local Plans and Sport and Recreational Strategies.

#### Policy W55

All proposals for the after-use of waste management sites shall have particular regard to the following:

- a) the impact on the amenity of local communities and opportunities for their enhancement;
- b) the impact on landscape character and opportunities for improvements to the landscape;
- c) impacts on the cultural and built environment;
- d) the quality of agricultural land;
- e) opportunities for the provision of sport and recreational facilities or public open space;
- f) opportunities for the enhancement and creation of features of nature conservation importance;
- g) opportunities for the creation of community woodlands;
- h) opportunities for the creation of new rights of way; and
- i) the likely traffic impact due to the after-use of the site.



**Environmental Impact Assessment** 

**Planning Conditions** 

**Legal Agreements** 

# **13. DEVELOPMENT CONTROL**

- 13.1 All waste management processes have the potential to adversely affect the environment. This is largely due to the nature of the material being handled, the method of treatment and disposal or the scale of operations and the long-term consequences of the deposit of waste. In preparing planning applications, applicants will be expected to take full account of all relevant planning policy guidance and where appropriate, mineral planning guidance, particularly MPG 7, 'The Reclamation of mineral workings'. Paragraph 3.5 of PPG 23 'Planning and Pollution Control' states that, 'Planning authorities must have sufficient information on which to base their development control decisions'. This is needed to enable a balanced and fully informed assessment of all relevant considerations. Such information should include, as appropriate:
  - i) Need for the facility;
  - ii) Benefits of the proposal;
  - iii) Present use of the site;
  - iv) Full working scheme, including method of handling, phasing, treatment, processing and storage of material;
  - v) Type(s) of material to be accepted and recycled/managed;
  - vi) Source and amount of waste material available and its eventual destination;
  - vii) Site area and capacity;
  - viii) Estimated maximum daily/yearly rate of acceptance of material (loads and tonnes);
  - ix) Duration of operation;
  - x) Hours and days of operation;
  - xi) Details of vehicular site access existing and proposed;
  - xii) Details of car parking and vehicle circulation areas;
  - xiii) Transport arrangements, traffic levels and traffic routeing associated with the operation;
  - xiv) Details of all buildings and structures associated with the proposal;
  - xv) Details of all plant/machinery to be used;
  - xvi) Assessment of landscape and ecology;
  - xvii) Assessment of the presence of any protected species and details of proposals for their protection;
  - xviii) Measures to monitor/prevent or minimise pollution and environmental disturbance;
  - xix) Surface drainage details and hydrogeology;
  - xx) Geology;
  - xxi) Number of site employees;
  - xxii) Existing site features, including trees, hedgerows water courses, land drains, ponds, underground services and overhead lines on or adjacent to the site;
  - xxiii) Compatibility with existing or proposed neighbouring land uses, landscape and visual impact;
  - xxiv) Site preparation works, including details of all fencing, landscaping and other associated works to be provided before or during the operations;

- xxv) The local impact of emissions to atmosphere of any product gases resulting from energy from waste facilities. Such impacts to be quantified and modelled to produce maximum ground level concentrations of gases against nationally acceptable air quality standards;
- A detailed reclamation scheme, addressing where appropriate gas and leachate infrastructure, methods and machinery for handling and storage of soils, pre and post settlement levels, final contours, and relationship of the final landform with the surrounding area;
- xxvii) Impact on public rights of way/bridleways, etc.;
- xxviii) Assessment of potential impacts on all elements of the historical environment, including archaeology;
- xxix) After-care;
- xxx) After-use; and,
- xxxi) Long term management provisions.

#### Environmental Impact Assessment

- 13.2 Environmental assessment is a technique for drawing together, in a systematic way, analysis and assessment of a project's likely environmental effects. The information provided enables the identification and evaluation of likely effects and assists WPA's in making decisions on planning applications.
- 13.3 The process is governed by the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. The WPA has to take account of the Regulations, and relevant government advice including Circular 2/99, when deciding whether to require an Environmental Impact Assessment. The 1999 Regulations describe two groups of projects, Schedule 1 and 2.
- 13.4 For any planning applications for development falling under Schedule 1, Environmental Impact Assessment is mandatory. Schedule 1 developments include waste disposal installations for the incineration, chemical treatment or landfill of hazardous waste, or the incineration or chemical treatment of non hazardous waste with a capacity exceeding 100 tonnes a day.
- 13.5 For any planning applications falling under Schedule 2, the WPA has to decide whether an Environmental Impact Assessment is required based on guidance in the Regulations. Schedule 2 developments include installations for the disposal of waste, waste water treatment plants, and the storage of scrap iron within 100 metres of any controlled waters.
- 13.6 Pre-application discussions with the County Council are advised to establish whether an EA is needed and, if so, which issues are most important. If an applicant disagrees with the decision requiring an Environmental Statement to be produced then a direction must be obtained from the ODPM.

## **Planning Conditions**

- 13.7 Under section 70 of the Town and Country Planning Act, the WPA can grant planning permission subject to conditions. In accordance with Government guidance contained in Circular 11/95, it is preferable to avoid nuisance and adverse impact by imposing planning conditions rather than to resort to other legislation after problems have developed. Permission will only be granted where it is clear that operations can be carried out in such a manner so as to minimise disturbance, mitigate any adverse impact of the development, and where appropriate, achieve satisfactory restoration and aftercare to a beneficial after use. Where necessary, conditions will be attached to any permission to secure this. Conditions should only be imposed if they satisfy the following tests; necessity, relevant to planning, relevant to the development being permitted, enforceable, precise and reasonable in all other respects.
- 13.8 The list below sets out some of the issues the WPA may seek to control through the imposition of suitable planning conditions. The list is not intended to be exhaustive but aims to provide a guide for the control of waste development proposals.
  - a) commencement and duration of the operation (including completion and reclamation of landfill, temporary ancillary facilities, and removal of plant and buildings);
  - b) protection of landscape, areas of nature conservation, geological and scientific value;
  - c) protection of local amenities and the environment, including measures to control noise, emissions, light, smell, dust, litter and any other nuisances arising from waste development;
  - d) measures to protect, drainage, flood prevention and water resources from pollution on site and in the surrounding area;
  - e) the preservation in situ and/or the investigation and recording (including the appropriate publication of results) of archaeological remains, including an archaeological watching brief for works in progress;
  - f) protection of rights of way;
  - g) restrictions on the hours and days of operation; this may exclude weekends, public holidays and night time working;
  - h) details of the layout and design of buildings, plant, operational areas, means of access, working areas and haul roads;
  - the provision of new landscaping/screening and fencing including the prior planting and subsequent maintenance of trees, shrubs or hedges around the periphery of the site in order to screen the development;
  - the prevention of mud being carried onto the public highway and measures to mitigate this, including the provision of wheel cleaning facilities and suitably surfaced access roads;
  - k) controlling how and when soils can be handled, stripped and stored;
  - details of phasing of infilling and progressive reclamation of the site, including depth of soil cover following completion of importation of waste materials, and satisfactory surface infrastructure for the control of landfill gas emissions and leachate control to ensure that the achievement of the approved afteruse is not compromised;

- m) provision of aftercare measures;
- n) the retention and maintenance of habitats of acknowledged nature conservation value, or creation of replacement habitats where appropriate;
- o) long term land stability; and
- p) restrictions on lorry movements into and out of a site. These may be in the form of average and/or maximum levels.

#### Legal Agreements

- 13.9 The Planning and Compensation Act 1991 substitutes new sections for the Section 106 provisions of the Town and Country Planning Act 1990 and introduces the concept of planning obligations which comprise both planning agreements and unilateral undertakings. This provides for the WPA to enter into an agreement with any person with an interest in the land in their area for the purpose of restricting or regulating the development or use of that land.
- 13.10 The WPA will seek to secure legal agreements, where appropriate, in order to achieve control over waste operations, and ultimate reclamation and aftercare, which are beyond the scope of planning conditions and cannot otherwise be adequately covered under other relevant legislation. Legal agreements can usefully cover such matters as:
  - v traffic management;
  - v off-site highway works, including improvements and maintenance of sites;
  - v transfer/dedication of public open space/rights of way;
  - v off-site landscaping works;
  - v revocation of rights conferred by previous planning permissions;
  - preparation of reports reviewing the viability and economic feasibility of recycling; and
  - v long term management of restored landfill sites.

They may also cover several of the issues listed in para 13.8, such as the protection and enhancement of nature conservation features, which may require a long term commitment to management.

13.11 Where the Waste Planning Authority is minded to grant planning permission subject to a legal agreement, the permission will not be issued until the legal agreement is completed by all parties. It is common for all parties with an interest in the application site to be required to be signatories to such agreements.

#### Policy W56

The Waste Planning Authority will seek to secure a legal agreement between appropriate parties in order to ensure satisfactory control over waste development in terms of site development, operations, reclamation and aftercare, mitigation of off site impacts, off site landscaping and/or highway improvements, where such matters are beyond the scope of planning conditions.

County Durham Waste Local Plan April 2005



Monitoring and Review

**Monitoring Information** 

# **14. MONITORING AND REVIEW**

#### Monitoring and Review

- 14.1 Local planning authorities are required to keep under review matters which may be expected to affect the development of their area or the planning of their area. The policies and proposals in a development plan, such as this Waste Local Plan should be monitored, in order to assess its effectiveness.
- 14.2 Monitoring information will be collected and used to establish whether the strategy of the Plan is being implemented as intended. It will allow the Council to identify where policies need to be strengthened, maintained, changed in some way, or in cases where a policy has served no purpose. removed from the Plan. This can then lead to decision making on the need for and scope of a Plan review. Although most of the policies will remain relevant throughout the Plan period, and even beyond, regular monitoring and review will ensure that its provisions remain up to date. Where necessary, formal alterations may be adopted before the end of the Plan period. Changes to waste management, the provision of waste management facilities and the amount of waste being managed will be monitored, in partnership with the Environment Agency. If monitoring shows that the rates at which new waste management capacity is being created and/or the rate at which landfill space is being filled are substantially different from those sought or anticipated in the Plan, the quantities and provision for waste management facilities will be re-assessed.
- 14.3 A number of other matters may influence the effectiveness, validity and practicality of the Plan:
  - The legislative context in which waste management is carried out may change. Numerous European directives, UK legislation, government guidance and targets strongly influence waste planning. A regional waste strategy is currently being prepared. The implication for the Waste Local Plan of any such changes will be included in the monitoring report.
  - The context in which the planning for waste takes place may change. Public attitudes to the creation of waste and recycling, manufacturers' approach to packaging and new techniques for dealing with waste will be developed. These sorts of changes may have a significant impact on the relevance and practicality of the present Plan, and will be included as information becomes available.
  - The details of assumptions and current baseline data about waste, waste facilities, and other waste operations, need to be collected regularly, in liaison with the Environment Agency, waste operators and other agents. Elsewhere in this Plan, problems about the creation of an accurate baseline information system have been highlighted, and assumptions outlined where accurate data is not available. Monitoring requires these assumptions and questionable information to be reviewed regularly.
- 14.4 Various types of monitoring will be undertaken:
  - General contextual information will be collected to reflect aspects of environmental, economic and social change, recognising that planning is only one of the factors bringing about change.

- Measuring the applications of the Plan to development control decisions, by monitoring the use of policies in assessing waste development proposals. This can point to the need to modify the wording of policies to make them work better. It can also identify policies which appear to be little used, and may be combined with others or omitted in a subsequent review.
- v A series of targets and indicators have been developed focusing on the land use aspects of the plan:
  - a) A key objective is "to protect and enhance the natural and built environment, including sites of ecological and landscape value and character, vulnerable aquifers and the Green Belt".

The target is to investigate the potential impact of all proposals for waste related development on the above.

The indicators will be the number of waste proposals refused in order to achieve this objective, or permitted with conditions which allow the development to meet this objective.

Indicators will include the number of applications refused on, or allowed with conditions relating to:

- 1 landscape grounds connected with landscape value designations;
- 1 ecological grounds connected with nature conservation designations, protected species and biodiversity;
- 1 the openness of the Green Belt;
- 1 protection of the built environment; and
- 1 the quality of surface or ground water resources.
- b) A second key objective is "to protect local amenity by minimising the adverse impact of waste management operations on local communities and residential areas for example in promoting and agreeing sensitive working practices and effective reclamation". The target is to investigate the potential impact on local communities and residential areas of all proposals for waste related development. The indicators will be the number of waste related planning applications refused in order to reach this objective, or the number where conditions ensure sensitive working practices and effective reclamation in order to achieve this objective. Indicators will include the number of applications refused on, or allowed with conditions relating to:
  - 1 impact of transport and traffic movement;
  - 1 impact on residential visual amenity;
  - 1 impact of odour, noise, litter and vermin and birds;
  - 1 agreed schemes of working; and
  - 1 appropriate reclamation and after care.
- c) A third key objective is to promote the efficient use of resources. The Local Plan, as a land use plan, can only assist in this process by setting a suitable framework for facilities to be provided by the waste industry.

The target is to assess the provision of waste management facilities to achieve increased re-use of non-renewable resources.

The indicators will be the number, type and capacity of facilities for recycling, composting and energy recovery which have been granted planning permission each year.

#### Monitoring Information

- 14.5 The implementation of planning conditions and legal agreements will be monitored to ensure the implementation of the Plan is securing appropriate avoidance, mitigation and compensation of potentially detrimental impacts. Annual monitoring reports for each part of the Development Plan are seen as a useful way of publishing results of plan monitoring on a regular basis and it is intended that this Plan will be monitored in this way. Much of the basic information required to monitor progress will come from the Environment Agency, applicants and the waste industry. (A checklist of information required from applicants is included in Section13.) The Annual Monitoring Report will contain:
  - 1. An assessment of the significance of changes to the legislative framework of waste management, and the implications for the Waste Local Plan.
  - 2. An assessment of regional waste strategy developments, including the implication of cross boundary proposals.
  - 3. Details of contractual changes in the local waste industry, which impact on the policies of the Waste Local Plan.
  - 4. Changes in waste management facilities in the County and adjacent areas, including capacity and permitted waste types (including new or closed facilities).
  - 5. A revision of the projected waste management requirement and waste disposal capacity available.
  - 6. Details of amount & type of materials re-used, recycled, composted, recovered and disposed of, in the County, by locations and activity.
  - 7. Assessment of policies used in deciding waste development applications, and comment on their helpfulness.
  - 8. An indication of changes in forecasted waste arisings, and recycling activity, reflecting the habits of the consumer.
  - 9. Information on cross boundary movement of wastes.
  - 10. Figures, where available, for transporting waste, including distance travelled.

#### Policy W57

The County Council will monitor on an annual basis the County's capacity for waste management. If monitoring shows that the objectives of the Plan are not being achieved, proposals in the Plan will be reviewed. Reviews will seek to ensure that appropriate provision continues to be made for the County and that sites for the re-use and recovery of waste are readily available.



**Thrislington Quarry** 

**Allocation for Waste Facilities** 

## **15. SITE SPECIFIC POLICIES**

#### **Thrislington Quarry**

#### Allocation for waste facilities

Grid ref: 4314 5330 Area: 96 hectares

#### **Description**

- 15.1 Thrislington Quarry is a very large limestone quarry south of Cornforth and west of the A1(M). The area with permission for extraction is in excess of 100 hectares; approximately 28 hectares of unworked land consented for extraction remains. Mineral extraction has left a relatively flat quarry floor, at around 30-40 metres below the original ground level.
- 15.2 As yet there is no agreed scheme for the reclamation of the quarry, and to date the only infilling in the quarry void has involved the disposal of waste stone from the quarry in the north west corner of the site. Also, in the long term there remains the prospect of extended quarrying operations to the east of A1(M). An allocation for an eastern extension is made under Policy M56 of the County Durham Minerals Local Plan. Operations may require access through the existing void.

#### Key Issues

#### Location

15.3 Thrislington is located relatively centrally within the more populated eastern part of County Durham. It lies approximately 1.5 km east of Ferryhill. The villages of West Cornforth and Bishop Middleham are approximately 0.5 km to the north and southeast respectively. Spennymoor is around 5 km to the west and the other main towns of Durham City, Newton Aycliffe and Bishop Auckland are located within 10 km of the site. In terms of the proximity principle therefore, the site is well located in relation to potential sources of waste material. However, detailed proposals will need to identify actual sources of waste to be managed at the site and demonstrate that the proposal accords with the proximity principle through avoiding transporting material over long distances and contributes to sustainable waste management in County Durham. Thrislington Quarry is capable of accommodating considerable capacity for waste recovery, recycling and composting, currently estimated to be around 210,000 tonnes per annum, and potentially landfill, although the precise type, mix and scale of each component in the allocation is subject to the proposals being developed in further detail. However, any detailed proposal will need to be subject to an evaluation against a range of criteria, including the provisions of the Habitats Regulations 1994, the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and the Environmental Impact Assessment Regulations (England and Wales) 1999.

#### Local Amenity

15.4 Residential properties lie to the north of the quarry, in West Cornforth, off Garmondsway Road and Stobbs Cross Road. These dwellings are over 200m from the quarry void and are screened from it by screening mounds. However, detailed proposals would need to take account of the potential impact upon the amenity of these dwellings and outline any mitigation measures that may be necessary to protect residential amenity.

#### Traffic and accessibility

- 15.5 The quarry is well located in relation to the strategic road network by virtue of the West Cornforth by-pass and the new eastern access to the A177. There are already a significant number of vehicular movements in the area surrounding the quarry and the existing access points are heavily used. Any intensification of operations at the site will impact upon the area. Detailed proposals would need to address the issue of vehicle circulation within the site and vehicle movements into and out of the site and on the local road network, and demonstrate how the increased movements can be satisfactorily accommodated.
- 15.6 The East Coast Main Line railway runs along the western boundary of the quarry and works complex, and is currently accessed by a railhead which is linked to the quarry by means of a tunnel. The promotion of rail access as a means of sustainable transport will need to be balanced against the potential for the use of rail to attract waste from longer distances, contrary to the proximity principle.

#### Landscape

15.7 The site is visually contained and the quarry floor is well screened from most public vantage points.

#### Public Rights of Way

15.8 All public rights of way follow the perimeter of the site.

#### **Nature Conservation**

15.9 The Thrislington candidate Special Area of Conservation, also comprising a Site of Special Scientific Interest and Thrislington Plantation National Nature Reserve adjoins the southern edge of the quarry void, housing a number of scarce plant and insect species. This habitat must remain undisturbed by any development of the quarry, in line with the provisions of the Habitat Regulations 1994, which prevents development unless it can be demonstrated that the features of interest will not be damaged; and the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000), which places a duty on authorities to both protect and enhance the features of interest of the SSSI.

#### Geology

15.10 The marl slate heaps within the quarry are of interest due to their fossilised flora and fauna and have County Geological Site status. It is unlikely, however, that the development of recovery facilities at Thrislington would be compromised by or would impact upon the geological interest of these heaps.

#### Archaeology

15.11 There is recorded archaeology in the east of the site. Assessment and evaluation would be required to ascertain the potential of any undisturbed areas of the site. Where quarrying has already taken place, archaeological interest is likely to have been completely removed.

#### **Groundwater**

- 15.12 The site is located within a major aquifer and the proposal may at least in part be located below the natural water table. Permitted quarrying operations will take a substantial part of the void below the water table and consequently detailed proposals will need to take this into account. Issues to consider are:
  - v the effectiveness and long term sustainability of the water control; and
  - v leachate management.

The Environment Agency objected to the designation of the site for landfill due to lack of submitted information.

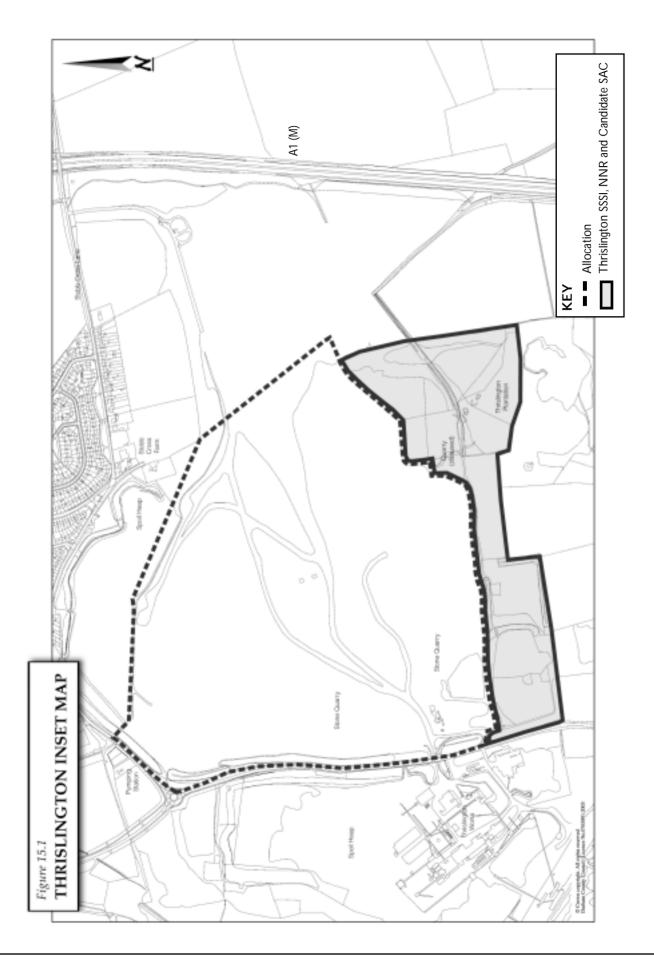
#### **Quarry Reclamation**

15.13 No reclamation scheme has been agreed for any part of the quarry and no progressive reclamation has so far been undertaken. Infilling with waste is not essential to achieve the reclamation of the site. Whilst waste recovery facilities may occupy a significant proportion of the worked out area of the quarry floor, progressive reclamation of the remaining area of the quarry void will still be required and should not be delayed unnecessarily. Detailed proposals will need to demonstrate this will not be prejudiced.

#### Policy W58

Proposals for waste facilities at Thrislington Quarry will be permitted, provided that:

- a) there is first agreed a comprehensive scheme for integrating, phasing and managing those facilities with and alongside the extraction and processing of stone and sand from the quarry, including its expansion and/or progressive restoration; and
- b) comprehensive measures are established to protect groundwater, based on a satisfactory outcome of a risk assessment carried out in accordance with Policy W27; and
- c) it is demonstrated that there will be no direct or indirect adverse impact upon the integrity of Thrislington candidate Special Area of Conservation (that also comprises a Site of Special Scientific Interest and the Thrislington Plantation National Nature Reserve), unless those facilities can be justified and managed in accordance with Policies W11 and W12; and
- d) traffic generated by development can access the highway network safely and will not significantly increase the impact on those living locally; and
- e) individually and collectively, proposals also accord with all other policies in the Waste Local Plan.





- Appendix A Bibliography
- Appendix B Summary of Policies
- Appendix C Glossary of Waste Types
- Appendix D Glossary of Terms

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## **APPENDIX B – SUMMARY OF POLICIES**

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- 2. County Durham Context
- 3. Policy Context
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- W2 Need
- W3 Environmental Protection
- W4 Location of Waste Management Facilities
- W5 Safeguarding Sites

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- W7 Landscape
- W8 North Pennines Area of Outstanding Natural Beauty
- W9 Area of High Landscape Value and Heritage Coast
- W10 Green Belt (Waste Development)
- W11 Nature Conservation (European Designations)
- W12 Nature Conservation (National Designations)
- W13 Nature Conservation (Local Designations)
- W14 Nature Conservation (Wildlife Corridors)
- W15 Nature Conservation (Protected Species)
- W16 Nature Conservation (Ancient Woodland)
- W17 Nature Conservation (Minimisation of adverse impact)
- W18 Listed Buildings
- W19 Conservation Areas
- W20 Durham Cathedral and Castle World Heritage Site, Historic Battlefields and Historic Parks and Gardens.
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- W24 Rights of Way
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W57 Monitoring and Review

#### 15. Site Specific Allocation

W58 Thrislington Quarry

# **APPENDIX C - GLOSSARY OF WASTE TYPES**

#### **Agricultural Waste**

Waste and by-products arising on farms consisting of organic matter such as manure, slurry, silage effluent and crop residues and non-organic materials. Agricultural waste is non-controlled waste.

#### **Biodegradable Waste**

Waste that is capable of breaking down, such as food, garden waste and paper. This process can produce landfill gas and leachate as by-products.

#### **Clinical Waste**

Waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practices which may prove hazardous.

#### **Commercial/Industrial Waste**

Controlled waste arising from factories, industrial plants, wholesalers, catering establishments, shops and offices.

# Construction and Demolition Waste

Controlled waste arising from construction and demolition. The majority of this waste is bulky and inert. There is potential for using recycled construction and demolition waste as a substitute for primary aggregates.

#### **Controlled Waste**

All waste which requires a waste management licence for its treatment or disposal.

#### Green Waste

Includes vegetation and plant matter from household gardens, local authority parks and gardens and commercial landscape gardens.

#### Hazardous Waste

(See Special Waste)

#### Household Waste

Waste which local authorities have a duty to collect from households. Also included is waste which householders themselves take to HWRC's and Bring systems.

#### Inert Waste

Waste material that when disposed does not undergo any significant physical, chemical or biological transformation; does not adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm to human health; and does not endanger the quality of any surface water or groundwater e.g. glass, rubble and concrete.

#### Sewage Sludge

The solid material that is produced after waste has been treated at a sewage treatment works. The treatment consists of one of the following: dewatering; thickening; digestion or thermal drying.

#### **Special Waste**

Often referred to as hazardous or toxic waste as defined in the Special Waste Regulations (as amended 1996). By virtue of their various harmful properties, special wastes require particular care in their disposal. The regulations are expected to be brought into line with the EU list of Hazardous Waste and may broaden the range of waste streams considered to be hazardous.

#### **Treated Waste**

Waste which is treated in some way to reduce the potential to pollute or reduce the volume requiring final disposal or make final disposal more environmentally acceptable e.g. incineration, pulverisation, baling.

## **Untreated Waste**

Waste disposed of in the form which it is collected.

## Municipal Solid Waste (MSW)

Household waste and any other wastes collected by a Waste Collection Authority, or its agents, such as municipal parks and gardens waste, beach cleansing waste, commercial or industrial waste, and waste resulting from the clearance of fly-tipped materials.

## Mine and quarry wastes

Overburden, rock and residues from initial processing of the extracted material. Extraction and processing waste may include waste rock and sandy debris or fined grained materials. These materials are non hazardous and mostly chemically inert. They are often largely identical to the geological deposits in the locality from which they are extracted. Waste from mines and quarries is noncontrolled waste.

## Metals

Scrap metal is derived from two main sources: New Scrap is derived from metal processing, such as off cuts, stampings etc.; Old Scrap is derived from end of life or obsolete products, this includes 'heavy scrap' from dismantling industrial plant, and 'light scrap' from the processing of consumer goods.

#### Non-Hazardous Waste

Waste which is neither inert nor classed as Special and does not fall within the hazardous waste classification.

## **Putrescible Waste**

Waste which is able to decompose upon contact with oxygen, e.g. kitchen scraps.

## **APPENDIX D - GLOSSARY OF TERMS**

#### **Aerobic Digestion**

Biological degradation of organic material in the presence of oxygen, producing a residue suitable for use as a soil improver.

## **Anaerobic Digestion**

Biological degradation of organic material in the absence of oxygen, producing methane gas used to generate electricity and a residue suitable for use as a soil improver.

## AHLV

Area of High Landscape Value, (designated by Local authority).

## AONB

North Pennines Area of Outstanding Natural Beauty, (designated by the Countryside Agency).

# Best Practicable Environmental Option (BPEO)

The BPEO procedure establishes for a given set of objectives, the option that provides the most benefits or the least damage to the environment, as a whole, at acceptable cost, in the long term as well as in the short term.

## **Best Value**

A statutory duty on local authorities to deliver services, including waste collection and waste disposal management, to clear standards on both cost and quality.

## **Biodiversity**

Biodiversity is about the whole range of living things from well known trees, flowering plants, birds, animals and butterflies to lesser known mosses, lichens, fungi, marine species and even bacteria. Biodiversity is also about the wide range of habitats that these animals live in and depend upon.

#### **Bring Systems**

System by which the public deliver their recyclables to a central collection point, such as those in supermarket car parks, or at HWRC's.

## Co-disposal

The calculated and monitored treatment by disposal of special waste with other non-special waste, usually household but could include industrial and commercial waste in a landfill.

# Combined Heat and Power (CHP)

The combined production of heat, usually in the form of steam, and power, usually in the form of electricity. In waste-fired facilities the heat would normally be used as hot water to serve a district-heating scheme.

## Composting

An aerobic process by which biologically degradable wastes, such as kitchen and garden waste, are broken down to form a stable, granular material containing valuable organic matter, to improve the soil structure and to enhance its biological activity.

## DEFRA

Department of Food and Rural Affairs.

#### Dioxins

A family of 210 chlorinated compounds. 17 of the compounds are toxicologically significant. Dioxins are a by-product of any combustion process, principally formed in the 250-400°C temperature range.

#### DTLR

Department of Transport, Local Government and the Regions.

#### Energy from Waste (EfW)

The conversion of waste into a useable form of energy, e.g. heat or electricity. Common conversion processes are incineration and anaerobic digestion.

#### **Environment Agency**

Aims to prevent or minimise the effects of pollution on the environment and issues permits to monitor and control activities that handle or produce waste within the scope of the Environmental Protection Act 1990. It also provides up to date information on waste arisings and the extent of, and need for management and disposal facilities.

#### **Escrow Account**

An independently held account into which the site operator pays, at a rate and to a limit agreed with the waste planning authority, to meet reclamation requirements.

#### **Flood Risk Assessment**

An assessment of the risk of flooding to the development being proposed over its expected lifetime and its possible effects on flood risks elsewhere in terms of its effects on flood flows and flood storage capacity and the run-off. Guidance on the content of flood-risk assessments is set out in Annex F of PPG 25.

#### **Flood Zones**

Three types of Flood Zones have been identified to support the implementation of Government Planning Policy to prevent inappropriate development in flood risk areas. Flood Zone 3 (High Risk) identifies areas of land with a 100 to 1 (1%) chance (or greater) of flooding each year from rivers, or 200 to 1 (0.5%) chance (or greater) of flooding each year from the sea. Zone 2 (Low to medium risk) identifies areas of land with an annual chance of flooding below that of Zone 3 but greater than 1000 to 1 (0.1%). Flood Zone 1 (Little or no risk) identifies areas of land with an annual chance of flooding of less than 1000 to 1

(0.1%). Flood zone areas are identified by the Environment Agency and are subject to regular review.

## **Fly Tipping**

The illegal and uncontrolled disposal of waste to land.

## Gasification

A means of recovering energy from waste. The process converts carboncontaining material into a gas which can be used as a fuel to generate electricity or steam.

## **General Industrial Use**

Areas identified for industrial development, including B2 uses.

#### Groundwater

An important part of the natural water cycle and present within underground strata known as aquifers. Groundwater has a substantial strategic significance in public water supply. It also provides supplies for private, industrial and agricultural abstractors who cannot obtain, or prefer not to use, water from the public mains.

#### Household Waste Recycling Centre (HWRC)

A facility provided by the Waste Disposal Authority which is available to the public to deposit waste which cannot be collected by the normal household waste collection round. Also referred to as Civic Amenity Site or Household Waste Disposal Compound.

## Incineration

The controlled burning of waste. The fuel used in incinerators is usually MSVV, but could include other carbon based waste streams. Energy may also be recovered from incineration in the form of heat. This process leaves an ash residue which can be recycled and/or used in the construction industry.

## Integrated Pollution Prevention Control (IPPC)

Designed to prevent or reduce pollution by integrating permitting processes based on the application of best available techniques (BAT). It gives priority to prevention at source, and ensuring prudent management of natural resources, in compliance with the "polluter pays principle". The Directive covers emissions to air, land & water. See PPC.

## **Kerbside Collection**

The collection by the local authority of recyclable goods directly from households, or occasionally industrial or commercial premises.

## Landfill

The controlled deposit of waste to land.

## Landfill Directive

Set of European Community Rules on landfill to ensure high standards for disposal and to stimulate waste prevention, via recycling and recovery.

## Landfill Gas

The gas generated in any landfill site accepting biodegradable organic matter. It consists of a mixture of gases, predominantly methane and carbon dioxide. It has an offensive odour due to traces of organosulphur compounds, and is explosive.

## Leachate

Water which seeps through a landfill, and by doing so extracts substances from the deposited waste. Physical and chemical characteristics of the leachate depend on the fill materials and the degradation process taking place in the landfill. Leachate is polluting substance.

## Life Cycle Assessment

A method for evaluating the materials, inputs and emissions relating to the

whole life of a product from raw material acquisition, through manufacture, distribution, retail, use, re-use, maintenance, recycling and waste management. Environmental impacts and costs are taken into account. Life-cycle analysis involves the collection of data to produce an inventory, life-cycle assessment to the evaluation of the output.

## Material Recycling Facility (MRF)

A specialist plant which separates, processes and stores recyclables which have been collected either separately from waste (a "clean" MRF) or unsorted (a "dirty" MRF).

## MWMSCD

The Municipal Waste Management Strategy for County Durham.

# PPC - Pollution, Prevention and Control

The new regime which implements the EU Directive on integrated pollution prevention and control.

## **Precautionary Principle**

Taking action now to avoid possible environmental damage when the scientific evidence for acting is inconclusive but the potential damage could be great.

## Previously Developed Land (PDL)

Land which is or was occupied by a permanent structure (excluding agricultural or forestry buildings), and associated fixed surface infrastructure. The definition covers the curtilage of the development. Previously developed land may occur in both built-up and rural settings. The definition includes defence buildings and land used for mineral extraction and waste disposal where provision for restoration has not been made through development control procedures. The definition excludes land and buildings that are currently in use for agricultural or forestry purposes, and land in built-up areas which has not been developed previously. Also excluded is land that was previously developed but where the remains of any structure or activity have blended into the landscape in the process of time (to the extent to which it can reasonably be considered as part of the natural surroundings) and where there is a clear reason that could outweigh the re-use of the site - such as its contribution to nature conservation - or it has subsequently been put to an amenity use and cannot be regarded as requiring redevelopment.

#### Producer Responsibility Obligations

Requires those producing and selling goods to take greater responsibility for those goods at the end of the products life.

## **Priority Habitats and Species**

Priority habitats and species benefit from a higher degree of protection than other habitats and species protected under the Habitats Directive and are indicated by an asterisk in Annexes I and II of the Habitats Directive.

## **Proximity Principle**

Waste should generally be disposed of as near as possible to its place of production.

## Reclamation

Operations which are designed to return the area to an acceptable environmental condition, whether for the resumption of a former land use or for a new use. The term 'Reclamation' includes both restoration and aftercare as defined in the 1990 Act. Reclamation can also include events which occur prior to some operations taking place such as soil stripping etc.

#### Recovery

Value can be recovered from waste by recovering materials through recycling, composting, or recovery of energy. Energy can be recovered from waste, through: incineration; use as a fuel substitute; materials recovery (with energy released as a by-product;) and, waste disposal (with fuel recovered as a by-product of the process).

## Recyclable

Material with potential to be recycled.

## Recyclate

Materials collected for recycling.

## Recycling

A means of recovering value from waste where materials which would otherwise become waste are separated collected and processed into useable material or product.

#### Refuse Collection Vehicle (RCV)

A wagon used to collect waste.

## Refuse Derived Fuel (RDF)

A fuel product produced from the combustible fraction of household waste.

## **Regional Self-Sufficiency**

Most waste should be treated or disposed of within the region in which it is produced.

#### Regional Technical Advisory Body (RTAB)

Provides specialist advice on waste to Regional Planning Bodies on options and strategies for dealing with the waste that needs to be managed within the region.

#### Restoration

The works carried out at a site to create a final landform, and replacement of soils, prior to commencement of aftercare.

#### Source Protection Zones

The Environment Agency has identified three groundwater Source Protection Zones. Zone 1 (Inner Source Protection); Zone II (Outer Source Protection) and Zone III (Source Catchment). Zone I (Inner Source Protection) is located immediately adjacent to the groundwater resource. It is designed to protect against the effects of human activity which might have an immediate effect upon the source. This area is defined by a 50-day travel time from any point below the water table to the source and as a minimum of 50 metres radius from the source. This 50 day travel time zone is based on the time it takes for biological contaminants to decay. Zone II (Outer Source Protection) is larger than Zone 1 and is the area defined by a 400 day travel time from any point below the water table to the source. The travel time is based upon that required to provide delay and attenuation of slowly degrading pollutants. Zone III (Source catchment) covers the complete catchment area of a groundwater source. All groundwater within it will eventually discharge to the source.

## Sustainable Development

Development which meets the needs of today without compromising the ability of future generations to meet their own needs.

## Time Depth

The presence in a landscape of features surviving from many different periods of its history.

#### **Transfer Stations**

A place to which waste is delivered for sorting prior to transfer to a place for recycling, treatment or disposal.

#### Vermiculture

Process where waste is eaten and converted by worms.

## Waste Collection Authority

Borough/District Councils: Durham City, Sedgefield, Easington, Wear Valley, Chester-le- Street, Teesdale, Derwentside. All have a duty to collect household waste except in certain prescribed areas. They also have a duty to collect commercial waste if requested to do so and may also collect industrial waste.

#### Waste Hierarchy

This is a theoretical framework which acts as a guide to waste management options which should be considered when assessing the BPEO.

## Waste Planning Authority

Durham County Council, responsible for ensuring that an adequate planning framework exists. They are required to prepare a Waste Local Plan and also have responsibility for determining planning applications for waste management facilities.

## Waste Disposal Authority

Durham County Council, responsible for providing disposal sites and HWRC's.

## Water Table

The top surface of the saturated zone within the aquifer.

#### Windrows

Open linear heaps of material associated with large scale centralised composting.

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