

CUMBRIA MINERALS AND WASTE LOCAL PLAN

1996 - 2006



CUMBRIA MINERALS AND WASTE LOCAL PLAN

Adopted June 2000

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1 INTRODUCTION

1.1 Background to the Plan

- 1.1.1 The Cumbria Minerals and Waste Local Plan (hereinafter referred to as the Plan) presents the County Council's policies and proposals that will guide minerals and waste development in the County to the year 2006.
- 1.1.2 The County Council is the planning authority for minerals and waste development in Cumbria, except for the Lake District and Yorkshire Dales National Parks. This responsibility includes the making of planning policy and deciding planning applications. Under the Town and Country Planning Act 1990 the County Council is required to produce both a Minerals and a Waste Local Plan. Because of the often close relationship between minerals and waste development and the similar environmental issues associated with them, the County Council has decided to prepare a combined Plan. The Plan area is shown on Figure 1.
- 1.1.3 The Plan was placed on deposit for inspection and representation in September 1996. Following representations, a series of Proposed Changes to the Plan were published in April 1997. A Public Inquiry was held in Autumn 1997, during which a Planning Inspector considered objections to the Plan. The Inspector's Report was received in January 1998.
- 1.1.4 After considering the Inspector's recommendations, the Proposed Modifications to the Deposit Version of the Plan were approved in October 1998, with the exception of the section on Coal. A Members' Coal Working Party reconsidered the County Council's response to the Inspector's recommendations on coal. The Working Party's recommendations were included in the Proposed Modifications to the Deposit Version of the Plan, which were placed on deposit between January and March 1999.
- 1.1.5 Ten formal representations were received on the Proposed Modifications. The only letter of objection was from the Secretary of State for the Environment Transport and the Regions over original Policy 30 (Policy 32 in the adopted version of the Plan). This policy guides proposals for the development of new quarries for the extraction of general crushed rock aggregates. In February 2000, the Secretary of State issued a direction to modify this policy and its supporting text to bring it into conformity with National Policy Guidance set out in Minerals Planning Guidance Note 1 "General Considerations and the Development Plan System". This policy was made less restrictive thereby introducing sufficient flexibility to comply with the direction without jeopardising the aims of the Plan.
- 1.1.6 This Further Proposed Modification was advertised between May and June 2000. No objections were received and the Plan was adopted on 27 June 2000.
- 1.1.7 The Plan guides minerals and waste development for a 10 year period from 1996 to 2006. The base date for the Plan is January 1996 and for the most part the document refers to the situation from this date. There are, however, some sections, such as that on coal and radioactive waste, which are more up to date following modifications made in response to representations. It is important that the Plan is kept up to date. The County Council will therefore view it every five years.

1.2 The Purpose of the Plan

- 1.2.1 The Cumbria and Lake District Joint Structure Plan 1991-2006 (the Structure Plan) sets out broad strategic policies for controlling and guiding development for the supply of minerals and the handling and disposal of waste. The purpose of the Minerals and Waste Local Plan is to set out detailed policies and guidance. This will provide more certainty regarding the extent and location of future minerals and waste development for industry and residents. The Plan will replace the deposit Cumbria and Lake District Joint Minerals Plan (1986) and the adopted Coal Local Plan (1991).
- 1.2.2 The Plan, together with the Structure Plan and any adopted district local plans comprise the development plans for the County. The Town and Country Planning Act 1990 requires decision makers to have regard to the development plan, so far as it is material to a planning application. Where the development plan is material to a proposal, the Act requires the application to be determined in accordance with the plan, unless material considerations indicate otherwise.

- 1.2.3 The policies in this Plan together with any relevant development plan policies and any material planning considerations will be taken into account in determining planning applications for minerals and waste developments. All relevant policies have to be taken together when considering any proposal.
- 1.2.4 Cumbria has extensive deposits of economically valuable minerals. Around five million tonnes a year of crushed rock and sand and gravel are produced. Coal, slate, gypsum, peat, barytes, iron ore, mudstone and building stone are worked, together with slate waste and blast furnace slag.
- 1.2.5 It is essential to the economic health of the nation that industry is provided with an adequate and steady supply of the minerals it needs. The minerals from Cumbria are used in the construction industry, in iron and steel production, for power generation, in glass, paper, textiles and other manufacturing industries and for agricultural and horticultural use. Minerals can only be worked where they occur and the County Council, like other authorities, has a responsibility to contribute to the local, regional and national need for minerals.
- 1.2.6 Cumbria's households, businesses and industries produce a large amount of waste every year. Each year about two million tonnes is disposed of at sites within the County, mainly by landfill, although about 0.5 million tonnes is spread on the land. In addition some waste, estimated to be about 15% of the total arising, is recycled. It is important for the social, environmental and economic well being of the County that sites are made available for the management of this waste and, where it cannot be recycled or energy recovered from it, for its safe disposal.
- 1.2.7 The minerals and waste industries contribute considerably to the economic well-being of the County. In addition to the materials and service they supply, they are an important direct employer, often providing employment in rural areas where employment opportunities are limited. These industries also purchase services which provide additional employment and sustain the profitability of other businesses.
- 1.2.8 Cumbria is endowed with a high quality environment of international and national significance. Across the County minerals of potential economic value lie within areas of special landscape, nature conservation, historical or recreational importance. Such mineral resources may also be located close to communities. Similarly, potential sites for handling, treating or disposing of waste are often in areas that are environmentally sensitive.
- 1.2.9 Finding sites for mineral working and waste facilities that do not in some way impact upon the environment and local people is generally not possible. The Plan has to strike a balance between meeting the needs of society for minerals and waste facilities, conserving natural resources and protecting the environment and people's quality of life. It is therefore essential to have detailed up to date policies to provide a clear basis upon which decisions can be taken and to identify suitable areas to meet the need for minerals and waste facilities over the Plan period.
- 1.2.10 To give clear guidance, the policies in some cases state that permission will not be granted. This is where it is clear to the County Council that demonstrable harm would be caused to an important interest, which is not justified by the need for the development. This is particularly the case where there are already sufficient sites within an area.
- 1.2.11 The main questions that are addressed in the Plan are:
- How can the County Council ensure the most sustainable use of Cumbria's resources and that new development is carried out in the least environmentally damaging way whilst contributing to the economic well being of the County?
 - How much aggregate and other minerals will need to be supplied from Cumbria to 2006 and beyond, what additional extraction should be permitted and where should it be located?
 - How much waste will need to be managed in Cumbria, and where will additional waste management facilities be needed?
 - How can the County Council ensure that minerals and waste sites are restored and returned to an appropriate and beneficial after-use?

1.3 Environmental Assessment of the Plan

- 1.3.1 The Government has made it clear that development plans have a key role in ensuring that development and growth are sustainable. It is now expected that local authorities build an Environmental Assessment of their plan into the plan-making process. This will show how environmental concerns have been addressed in deciding between different policy options. The Environmental Assessment of the consultation draft of this Plan was carried out by the County Council's Environment Officer. The recommendations of the Environmental Assessment have been carefully considered and some modifications made to the Plan.

2 POLICY CONTEXT

2.1 Introduction

2.1.1 Local plans must accord with European, national, regional and local policies, unless there are clear and justifiable reasons why this should not be so.

2.2 European

2.2.1 The EC Waste Framework Directive sets a number of objectives for the management of waste. The key objective is that waste is recovered or disposed of without endangering human health and without harm to the environment.

2.2.2 It calls for the establishment of an integrated and adequate network of waste disposal installations to ensure that the EC as a whole becomes self sufficient in waste disposal and to enable waste to be disposed of in one of the nearest appropriate facilities.

2.2.3 The Framework Directive also requires that Waste Plans should encourage the prevention or reduction of waste production and its harmfulness, encourage the recovery of waste by means of recycling, reuse or reclamation and the use of waste as a source of energy.

2.2.4 This Local Plan has been prepared having regard to the objectives of the Framework Directive.

2.3 National

2.3.1 The UK Strategy on Sustainable Development stresses the importance of combining economic growth with care for the environment in order to attain sustainable development. Government intends the goal of sustainable development to guide future policy.

2.3.2 DOE Minerals Planning Guidance Note 6 (MPG6) states that the objectives of sustainable development for minerals planning are:

- to conserve minerals as far as possible, whilst ensuring an adequate supply to meet the needs of society for minerals;
- to minimise production of waste and to encourage efficient use of materials, including appropriate use of high quality materials, and recycling of wastes;
- to encourage sensitive working practices during mineral extraction and to preserve or enhance the overall quality of the environment once extraction has ceased; and
- to protect areas of designated landscape or nature conservation importance from development, other than in exceptional circumstances where it has been demonstrated that development is in the public interest.

2.3.3 The objectives of sustainable development for waste management policy are:

- to move waste management higher up the hierarchy of
 - reduction
 - reuse
 - recovery of value (including material recycling, energy recovery and composting)
 - safe disposal
- to manage and dispose of waste near to where it is generated.
- to achieve regional self-sufficiency by providing enough facilities to manage and dispose of all the waste produced.

- 2.3.4 Government policy on different aspects of planning is set out in Circulars, Planning Policy Guidance Notes (PPGs) and Mineral Planning Guidance Notes (MPGs). Other relevant advice is contained in research reports. These have been taken into account in the preparation of this Plan.
- 2.3.5 The Government has published a White Paper setting out a strategy for sustainable waste management in England and Wales (DOE, 1995, Making Waste Work). This is now under review. A new draft strategy "A Way with Waste" (DETR, June 1999) sets out Government's latest thinking. Government policy on radioactive waste management is contained in the July 1995 White Paper, Review of Radioactive Waste Management Policy - Final Conclusions. The policy is subject to review as set out in Appendix III.

2.4 Regional

- 2.4.1 Cumbria is within the North West Region. Regional Planning Guidance has recently been issued (Government Office for the North West, 1996, RPG13). The Sustainable Regional Economic Strategy for North West England, 1996, recognises the importance of developing a diverse rural economy which is capable of generating income and employment a sustainable manner. The North West Regional Association has developed strategic planning principles for waste management (NWRA, 1995, Strategic Planning Principles). These commit local authorities to play their part in ensuring that the Region is self sufficient. Cumbria County Council was a member of the Northern Region Working Party on Aggregates (NRWPA), which monitors and advises on the supply of aggregates, until 1999 when it transferred to the North West Region. These areas are shown on Figure 2.

2.5 Local

Cumbria Cares For Our Environment

- 2.5.1 This environmental strategy for Cumbria embodies the principle of sustainability and forms the basis of the County Council's environmental policy which this Plan takes into account. The following objectives are relevant:
- to work to achieve a balance in the use of natural resources that is consistent with sustainable development;
 - to seek to conserve the countryside and wherever possible prevent further destruction of the natural environment;
 - to seek to minimise and mitigate water, land and air pollution; and
 - to promote safe, economical and sustainable methods of recycling materials and disposing of waste.

Cumbria and Lake District Joint Structure Plan 1991-2006

- 2.5.2 The approved Structure Plan is the Cumbria and Lake District Joint Structure Plan 1991-2006.
- 2.5.3 This is founded on the principle of ensuring that all development is sustainable in the long term. Cumbria has many high quality landscapes and areas of natural and built heritage and the utmost importance is attached to their protection and enhancement. But it also recognises that change is inevitable and seeks to accommodate it in a manner which works to the advantage rather than the disadvantage of people living and working in or visiting Cumbria.
- 2.5.4 For minerals and waste development the aims of the Structure Plan are to:
- make adequate provision for waste development;
 - favourably consider proposals which minimise, recycle, reuse or otherwise utilise waste materials;

- safeguard mineral resources from unnecessary sterilisation by other development
- ensure an adequate supply of minerals to meet local, regional and national needs, taking into account the opportunities for the use of waste materials as a practicable alternative;
- ensure that minerals and waste development does not have an unacceptable impact on local amenities and the environment; and
- ensure that mineral and waste disposal sites are restored at the earliest opportunity and that diverse and attractive landscapes are created where possible.

Cumbria Waste Disposal Plan

- 2.5.5 Prior to the setting up of the Environment Agency the County Council prepared and adopted this plan setting out policies regarding the discharge of waste regulation functions. It also considered the types and quantities of waste arising in Cumbria, the availability of disposal, handling and treatment facilities and the need for further provision. It took into account pollution controls needed and future methods of disposal. It recognises that landfill would probably continue to be the main disposal option in Cumbria for the next ten years.
- 2.5.6 This Local Plan takes account of the Waste Disposal Plan in framing land use policies for waste development. A list of the relevant Waste Disposal Plan policies is included at Appendix II.

Economic Strategy for Cumbria 1999-2004

- 2.5.7 This sets out the County Council's vision for the Cumbrian economy. It aims to promote growth within the local economy whilst ensuring the benefits of that growth can be of benefit to the whole community and that the type of growth is environmentally and economically acceptable.

District Plans

- 2.5.8 All District and Borough Councils have prepared, or are in the process of preparing, district local plans. These plans must not include specific policies on mineral and waste matters but their general environmental and land use policies may be relevant, particularly with regard to the potential afteruse of sites. The District Councils have also prepared Recycling Plans for their area.

Catchment Management Plans

- 2.5.9 Catchment Management Plans, prepared by the Environment Agency, bring together the management of all water based interests within individual catchment areas. They identify and explore a range of issues, including water and sewage infrastructure, waste management, fisheries, floodplain and sea defence planning and make proposals for action. They are progressively being replaced by Local Environment Agency Plans (LEAPs) which reflect the Environment Agency's wider role of protecting and improving the environment as a whole, i.e. air, land and water.

3 GUIDING PRINCIPLES

3.1 Sustainability

3.1.1 The County Council is committed to ensuring that development and growth are sustainable. This Plan contributes to this aim. A more rigorous and questioning approach than hitherto is required as to why development is required. This does not mean a negative approach. A more rigorous examination has to recognise realistic environmental targets and economic constraints. Sustainability requires a commitment to conserving, protecting, enhancing and making the best use of resources. It should however be borne in mind that some sustainable goals cannot be greatly influenced by the land use planning system and the County Council can only encourage and support their achievement.

3.2 Principles

The following principles have guided the preparation of the Plan.

Minerals are finite and they should only be used where there is a demonstrable need. Otherwise they should be conserved for the future.

A sustainable approach means making the most efficient and environmentally acceptable use of mineral resources. This involves the management of their use. Primary minerals should not be used where waste or recycled materials which meet the required specification are available at a realistic cost. Higher grade minerals should be conserved for those uses for which they are particularly suited.

Waste should be avoided wherever possible. Waste produced should be reused or value recovered from it where that is feasible and desirable.

Waste uses land and energy and can cause pollution. Waste contains valuable resources which can be recovered.

An adequate and steady supply of minerals should be provided.

This is essential to the economic development and the social well being of the County. An appropriate contribution should also be made to the national and regional need for minerals.

Adequate provision should be made for the handling, processing and treatment of waste arising in the County and where unavoidable/necessary, its disposal.

Cumbria should take responsibility for the waste it produces. A network of waste facilities is essential to cater for the range of wastes arising in the County.

The employment and economic benefits provided by the minerals and waste industry are highly valued by the County Council.

The industries provide and maintain both direct and indirect employment and investment. These benefits will be taken into account in considering planning applications.

Mineral resources and potential waste sites should be protected from development that will prevent their use.

Built and other development can sterilise these important limited resources which should be protected for future use.

In making provision for minerals and waste sites consideration should be given to minimising traffic. Provision should be made, where possible, close to the areas of demand (the proximity principle).

Transport uses energy and contributes to pollution, global warming, congestion and accidents and disturbs local communities. The County Council will seek to secure an appropriate level and

distribution of minerals and waste sites to serve the local markets and local areas. The County Council will also seek to minimise lorry traffic wherever possible by encouraging the use of rail or water transport.

Cumbria is generously endowed with fine landscapes and areas of natural and built heritage, many of which are of national or international importance. These areas should be protected and enhanced for the benefit of present and future generations. Proposals which have an unacceptable effect on local communities will be resisted.

Minerals and waste disposal sites normally have to be located in the countryside but they will be directed away from sensitive areas. The short term nature of some sites will also be taken into account in deciding their acceptability. Proposals which would have an unacceptable impact upon the environment or local communities will be resisted.

The County Council will expect minerals and waste operators to adopt the best environmental practice, be considerate towards their neighbours and restore sites to a high standard and beneficial after use. Opportunities to enhance the overall quality of the environment should be taken wherever possible.

The County Council places great emphasis on high standards of operation and securing positive benefits in restoration and the afteruse of sites. The restoration of mineral workings often offers scope to provide greater diversity than existed previously. Where appropriate, the opportunities to enhance the landscape, create wildlife habitats and provide greater public access should be maximised.

4 CARE OF THE ENVIRONMENT AND COMMUNITIES

4.1 Introduction

- 4.1.1 The County Council, in its environmental strategy *Cumbria Cares for the Environment*, has adopted an overall aim which recognises that if we do not act responsibly towards the environment our way of life will be affected, our health damaged and, most importantly, the delicate balance of the earth upset:

"For the benefit of current and future generations the County Council will endeavour to protect and enhance the natural and built environment of Cumbria and avoid actions which damage the global environment."

- 4.1.2 The guiding principles of this Plan emphasise the importance of conserving resources while meeting the need for minerals or waste facilities. The principles also recognise the employment and economic benefits of such developments. This chapter sets out the issues and the County Council's policies for the care of the environment, for the benefit of current and future generations, in relation to the assessment of proposals for minerals and waste development. It also includes assessment of their employment and economic benefits.

4.2 Strategic Context

- 4.2.1 The strategic context is provided by the Structure Plan which sets out the broad planning strategy and policies to guide development in the County. Relevant Structure Plan policies are inset into the text in italics.
- 4.2.2 Minerals and waste development is necessary to sustain the lives and living standards of the people of Cumbria. The use of resources and the aspiration for economic growth have to be reconciled and quality of life ensured.
- 4.2.3 Minerals and waste development, in common with virtually all development, generally has some impact upon the environment and the people living in it. It also makes an important contribution to the economy locally and nationally.
- 4.2.4 The Structure Plan is founded on the principle of ensuring all development is sustainable in the long term and embodies a proper concern for the environment.

Structure Plan Policy 1 - Development and the Environment

New development will be provided, mainly in the towns, to meet the social and economic needs of the County's population, but in a manner which, through appropriate location, scale, design or use, does not diminish the quality of the environment within the County or beyond, or for future generations.

Structure Plan Policy 2 - Conserving the Natural and Built Environment

The County's scenic beauty, natural resources and the quality of its built environment will be protected from inappropriate development, especially those areas and features of international or national conservation importance where harmful development will not be permitted.

- 4.2.5 The utmost importance is placed upon the protection of these key areas and features of international and national significance. A footnote to Structure Plan Policy 2 defines them.

TABLE 1: FOOTNOTE TO STRUCTURE PLAN POLICY 2

'Areas and features of international or national conservation importance' are defined for the purposes of Policies 2, 9, 54, 55 and 56 as:

- *World Heritage Sites recognised by the World Heritage Committee of UNESCO;*
- *National Parks;*
- *Areas of Outstanding Natural Beauty;*
- *Special Protection Areas (SPAs);*
- *RAMSAR Sites;*
- *Special Areas of Conservation (SACs);*
- *Limestone Pavements protected by Order;*
- *National Nature Reserves;*
- *Other areas of national nature conservation importance as defined by the Nature Conservation Planning Policy Guidance Note PPG9. (This notes that Biological SSSIs collectively form a national series of sites; those SSSIs identified under the Nature Conservation Review and Geological Conservation Review criteria are key sites of national importance.);*
- *Buildings or Groups of Buildings listed as of Grade 1 architectural or historic merit under the Planning (Listed Buildings and Conservation Areas) Act, 1990;*
- *Sites of Archaeological or Historic interest which are Scheduled Ancient Monuments under the Ancient Monuments and Archaeological Sites Act, 1979; and*
- *St Bees Heritage Coast.*

- 4.2.6 A realistic view must be taken of the inevitable pressures for change in the countryside. It is necessary to accommodate change in a manner which works to the advantage rather than disadvantage of rural communities. Minerals and waste developments can have significant benefits for rural communities in terms of employment and through sustaining local services and facilities.

Structure Plan Policy 3 - Maintaining Rural Communities

The diversification of the rural economy and the maintenance of the vitality of rural life will be assisted through a favourable response to developments which provide local benefits and are sensitive to the local environment.

- 4.2.7 The strategy for mineral extraction, waste disposal and recycling is based upon making adequate provision. However, even where a need is demonstrated, planning permission will not be granted where there would be an unacceptable impact upon local communities or on the environment. The matters which will be taken into account in assessing the impact are set out in this chapter.

Structure Plan Policy 58 - Extraction of Minerals

Land will be made available outside National Parks and AONBs for mineral working to maintain an adequate supply of minerals to contribute to local, regional and national needs, taking into account the opportunities for the use of waste materials as a practicable alternative. Planning permission for mineral extraction will not be granted where there would be a significant adverse effect on local communities and the environment. For non-energy minerals the need for the mineral will also normally be considered. For aggregates a landbank of permitted reserves will be maintained for the whole County in accordance with national guidance and the advice of the Northern Region Working Party on Aggregates unless exceptional circumstances prevail.

Structure Plan Policy 60 - Disposal of Waste

Adequate sites should be provided for the disposal of wastes arising within the County. Planning permission for waste disposal facilities will not be granted where the proposal has adverse effects on local communities or on the environment, or where the infill and restoration of existing sites would be seriously prejudiced.

Structure Plan Policy 61 - Recycling of Waste

Proposals for developments which minimise waste production or which recycle, re-use or otherwise utilise waste materials will be favourably considered in appropriate locations subject to the criteria in Policy 60.

- 4.2.8 The Structure Plan recognises that pollution can directly or indirectly damage human health and affect the climate and natural ecosystems, yet it can be avoided or minimised. Pollution controls are exercised by a range of bodies under various powers. Planning authorities have an important role to play. In determining planning applications the County Council will consult the relevant pollution control authorities and where appropriate in complex cases may obtain specialist advice.
- 4.2.9 The planning and pollution control systems are separate but complementary. It is national guidance (DOE, 1994, PPG23) that the planning system should not be operated so as to duplicate controls which are the statutory responsibility of other bodies. It advises that the planning interest must focus on any potential for pollution but only to the extent that it may affect the current and future uses of land.
- 4.2.10 The Structure Plan provides the policy framework for the assessment of development which may be polluting or hazardous. The matters of particular relevance to minerals and waste development are set out in this chapter.

Structure Plan Policy 21 - Hazards and Emissions

Development will not be permitted which, through emissions to land, water or the atmosphere or by noise, vibration or risk of accident, exposes workers or the public to undue hazards, nuisance or has an effect on health, or has a significant adverse effect on the natural environment.

4.3 Transport

- 4.3.1 The potentially significant environmental impacts arising from the transport of minerals is recognised in national guidance (DOE, 1994, PPG13). The proportions of materials moved by rail or water should be maximised.
- 4.3.2 In Cumbria most of the minerals and waste are transported by road. The only significant movement of minerals produced in the County by rail is from British Steel's quarry at Shapfell. The size of the quarries, their location and the distribution of markets limits the potential for use of rail. With the exception of radioactive waste imported to Sellafield, no waste in the County is moved by rail, principally because it is normally disposed of relatively close to where it arises.
- 4.3.3 Structure Plan Policy 70 sets out the County Council's desire to see more heavy goods taken by rail wherever possible. The County Council recently secured the agreement of British Gypsum to import desulphogypsum by rail from Drax Power Station in North Yorkshire to their Kirkby Thore works. A small number of quarries in the County have existing railway sidings. The County Council strongly supports the movement of material by rail and wishes to ensure the rail transport option is retained.

Structure Plan Policy 70 - Rail Freight

Large flows of bulk commodities and all dangerous materials should be transported by rail wherever possible in order to reduce the growth in heavy goods haulage by road and to reduce the possibility of serious damage to the environment. Steps to facilitate this should include:

- i. the location of new development generating such movements on sites where this traffic can be handled by rail freight services, and*
- ii. the favourable consideration of proposals for interchange facilities between road and rail and for the rail freight servicing of existing industry.*

- 4.3.4 The County Council will also support the transport of minerals by ship wherever this is feasible. Barrow, Workington, Whitehaven and Millom have been used to a limited extent for exporting minerals from Cumbria. Opportunities to expand this method of transporting minerals will be encouraged.
- 4.3.5 Some development proposals could result in the capacity of transport infrastructure being exceeded. It is Structure Plan policy that development will not normally be permitted where there is insufficient capacity in the transport infrastructure.

Structure Plan Policy 36 - Development and Infrastructure

Development will not normally be permitted where there is insufficient capacity in the service or transport infrastructure. Permission may be granted where satisfactory improvements can be made at the developer's expense.

- 4.3.6 Structure Plan policy recognises that improvements to the transport infrastructure through new or improved roads can have a far reaching impact on the environment.

Structure Plan Policy 65 – Design of New Roads

New and improved roads will be integrated into their surroundings by means of:

- i. a choice of route which minimises the impact on the environment and property, and;*
- ii. a standard of design appropriate to the principal function and environment of the road in question, and*
- iii. the use of materials and planting appropriate to the character of the surrounding areas, and*
- iv. keeping permanent land take to the minimum consistent with good landscape design.*

- 4.3.7 The transport of minerals and waste by road can have a range of impacts. It can add to the number and size of vehicles using the road, cause damage to the road or verges and spill material onto the road. These factors can adversely affect highway safety and convenience. Additionally, areas adjacent to routes can suffer from visual intrusion, fumes and dust, noise and vibration caused by heavy vehicles.
- 4.3.8 It is important that the potential traffic impact of development proposals is properly assessed. This applies to the immediate highway connection into a development site and, particularly for major proposals, the wider effects on the local and strategic highway network. Traffic Impact Assessments will be required in appropriate circumstances (see Chapter 7 for guidance).
- 4.3.9 In the event that a proposal would be acceptable if works were carried out to an existing highway, in order to safely and efficiently accommodate traffic which would be created by the development, a Grampian type condition could be imposed upon the planning permission. These conditions require that development should not be commenced until the obstacle to the development has been surmounted.
- 4.3.10 Costs for road works associated with minerals and waste developments, either at, or remote from, the site, will be borne by the developer. Construction will often require agreement under Section 278 of the Highways Act 1980.
- 4.3.11 The type of access provided should reflect the type of road involved and the volume and character of traffic likely to use the access and the road. Where permission is granted the County Council will seek to ensure that roads, junctions and the access are to the appropriate standard or can be improved in an environmentally acceptable manner without causing irreversible damage to the character of the road, and that measures such as wheel cleaning, sheeting of lorries and specified working hours or lorry numbers are in place to protect local amenity.
- 4.3.12 The highway authority for all purpose trunk roads and most motorways is the Secretary of State for Transport. The County Council is the local highway authority for other roads.
- 4.3.13 Development control policy for trunk roads is set out in a national guidance (DOT, 1988, Circular 4/88 and DOT, 1991, Circular 6/91). The Secretary of State for Transport has a strict policy of not allowing direct access from private development onto motorways and of restricting the formation of new accesses

onto trunk roads. This is in order to allow them to continue to perform their function as routes for the safe and expeditious movement of long distance through traffic. The Secretary of State has the power to direct the local planning authority to refuse an application for planning permission or to apply specified conditions.

- 4.3.14 The Structure Plan defines a strategic route network for the County which is reproduced as Appendix I of this Plan. Much of the minor road network in Cumbria is unsuitable for heavy goods vehicles. The County Council will favour the location of minerals and waste sites with good links to the strategic route network. Where the roads are not suitable for the traffic generated and they cannot be upgraded in an environmentally acceptable manner or there would be unacceptable disturbance along the route, proposals will be resisted.

POLICY 1

Proposals for minerals and waste development which generate road traffic will only be permitted where:

- i. the roads, junctions and site access are to the appropriate standard, or they can be upgraded without causing irreversible damage to the character of the road, so that the road network is capable of accommodating the type and volume of traffic without having an unacceptable impact on highway safety or the convenience of other road users; and***
- ii. the increase in traffic would not have an unacceptable impact on local communities by reason of visual intrusion, fumes, dust, noise and vibration.***

Proposals for sites with good links to the strategic route network will be favoured.

4.4 Noise

- 4.4.1 Minerals and waste facilities can generate noise from a variety of sources, with different levels and characteristics and may cause disturbance, particularly in quiet rural areas. National guidance (DOE, 1994, PPG24) recognises that noise can have a significant effect upon the environment and the quality of life enjoyed by individuals and communities, but that there are various measures available to mitigate the impact of noise:

| | |
|----------------|--|
| engineering | reduction of noise at point of generation, containment of noise generated and protection of noise sensitive buildings. |
| lay-out | dequate distance between source and noise sensitive building or area, screening by natural or other barriers. |
| administrative | limiting operating time of source, restricting activities allowed on site, specifying an acceptable noise limit. |

- 4.4.2 National guidance (DOE, 1993, MPG11) provides advice upon the control of noise at surface mineral workings. The Government is concerned to ensure that noise levels are kept to the minimum practicable level consistent with good environmental practice and the efficient and economic working of sites. Waste disposal operations can share common features with surface mineral workings and the advice recognises that the guidelines will be appropriate to such operations.

- 4.4.3 Wherever possible noisy activities should be sited away from noise sensitive land uses such as housing, hospitals and schools. Where it is not possible to achieve separation the County Council will consider whether it is practicable to control or reduce noise levels or mitigate the impact of noise.

POLICY 2

Proposals for minerals and waste development will only be permitted where they will not subject surrounding land uses to unacceptable noise.

4.5 Blasting

- 4.5.1 Blasting is necessary at some mineral workings to loosen and fragment rock. Good blasting aims to achieve the desired fragmentation safely and economically. However, blasting also causes ground vibration, noise and vibration caused by air overpressure and very occasionally flyrock (DOE, 1991, Environmental Effects).
- 4.5.2 Enforcement of safety legislation on blasting (Health and Safety Executive, 1988) is carried out by the Health and Safety Executive (HSE). The HSE is concerned with safeguarding people who could be affected by mineral operations, including stability and safety generally. The County Council will seek the advice of the HSE in appropriate cases.
- 4.5.3 National guidance (DOE, 1998, MPG2) recognises that blasting often gives rise to public concern and that it is desirable to regulate the time when it is permitted, and set limits on ground vibration and air overpressure which can be measured. In those circumstances, for example in close proximity to sensitive land uses, where it may not be possible to adequately safeguard those interests from the adverse effects of blasting, permission will be refused or blasting prohibited.

POLICY 3

Blasting will only be permitted where it will not cause unacceptable disturbance to surrounding land uses.

4.6 Dust and Odour

- 4.6.1 Dust and odour can have a significant impact upon surrounding land uses. Dust impacts are common to both minerals and waste development where similar operations such as soil spreading, use of haul roads and crushing and screening are involved.
- 4.6.2 Dust can cause a significant nuisance through visible plumes, soiling surfaces, contaminating sensitive items, coating vegetation and affecting health. The County Council will seek to avoid or minimise problems, through a stand off distance or suppression, and impose planning controls where appropriate to protect surrounding land uses.
- 4.6.3 Without proper management certain types of minerals and waste sites can create smells. No measurable physical criteria exists for odour (DOE, 1991, Environmental Effects). Odour nuisance is subjective and the type of smell and the source is often difficult to establish. There have been odour problems from landfill sites in the County. The County Council will need to be satisfied that there are appropriate safeguards, for instance through waste management licences, or will impose planning controls where appropriate.

POLICY 4

Proposals for minerals and waste development will only be permitted where surrounding land uses can be adequately safeguarded from dust and odour.

4.7 Water Resources

- 4.7.1 Minerals and waste development can have significant effects upon the water environment. Without proper controls they can alter surface and groundwater levels, flows and quality, cause flood risk and erosion and affect aquatic habitats and the function of flood plains.

Flooding

- 4.7.2 Planning applications for mineral extraction and waste disposal which could give rise to flood risk or have an adverse impact on the function of flood plains will be determined in accordance with Structure Plan Policy 24. Flood prevention schemes should be incorporated into proposals where increased surface water run-off would cause or exacerbate flooding problems.

Structure Plan Policy 24 - Flood Risk

The erection of buildings or the raising of land, will not normally be permitted where there would be a direct risk from erosion or flooding, or be likely to increase the risk of flooding elsewhere.

Surface and Groundwater

- 4.7.3 Minerals and waste developments may, without proper control, pollute watercourses and groundwater. Planning permission will only be granted where adequate controls are available to prevent water pollution. Proposals which are likely to have an adverse effect on water quality will be determined in accordance with Structure Plan policy:

Structure Plan Policy 22 - Water Pollution

Development and other land use changes will not be permitted which results in the discharge of inadequately treated sewage or effluents which have a damaging impact on the water quality of watercourses, groundwater, lakes or sea.

- 4.7.4 The County Council is concerned that proposals and any attempts to mitigate their impact do not adversely affect surface and ground water levels and flows as this can affect nature habitats, water abstraction, or the future use of these resources. Dewatering adjacent to the coast could result in seawater being drawn into the aquifer. The impact of proposals upon natural habitats will be determined in accordance with the policies on nature conservation. Proposals for minerals and waste development in vulnerable aquifer areas for abstraction source protection zones will be carefully examined to ensure that the resource is safeguarded.

POLICY 5

Proposals for minerals and waste development will only be permitted where any change in surface and groundwater levels and flows will not have an unacceptable impact on water abstractions or the future use of the water resource.

Mineral Extraction from Rivers and Beaches

- 4.7.5 In the past sand and gravel has been extracted on a commercial basis from a number of rivers in the County. These operations can have a considerable adverse impact on the amenity of the river and on fisheries interests. The County Council considers that there is no justification for the commercial extraction of sand and gravel from watercourses given there are adequate land won reserves of sand and gravel.
- 4.7.6 Beach working can critically reduce beach levels at the point of extraction and elsewhere along the coastline and increase the risk of coastal erosion. Coastal areas are often also valuable as a nature conservation habitat and for their amenity and landscape value. Given the adequacy of sand and gravel reserves in the County and national guidance on coastal planning (DOE, 1992, PPG20), the County Council considers there is no justification for the extraction of beach deposits.

POLICY 6

Proposals for the extraction of minerals from watercourses or beaches will not be permitted.

4.8 Visual Impact

- 4.8.1 Minerals and waste developments can introduce features into the landscape which may be visually intrusive. Quarry and tipping faces, plant and buildings, artificial lighting, soil and materials storage and even screening mounds and fences can appear alien to the surroundings or disrupt views. Potential problems can often be avoided through sensitive siting and design. Where appropriate this should include sympathetic advance screening and progressive restoration.

POLICY 7

Proposals for minerals and waste development will only be permitted where any visual impact can be reduced to an acceptable level through sensitive siting and design including phasing of operations, progressive restoration, screening or other measures.

4.9 Landscape

- 4.9.1 National guidance (DOE, 1997, PPG7) recognises that the countryside should be safeguarded for its own sake and natural resources afforded protection. In those parts of the countryside where special designations apply policies and development control decisions should take full account of the qualities which justified designation. Some landscapes are of National Importance, others are of County Importance. The Rest of the Countryside also has landscape significance.

Landscapes of National Importance

- 4.9.2 The National Parks, Areas of Outstanding Natural Beauty (AONBs) and Heritage Coast are landscapes of national importance. Structure Plan Policy 11 provides a strong basis for their protection and enhancement.

Structure Plan Policy 11 - Landscapes of National Importance

Development and other land use changes detrimental to the present characteristics and qualities of the landscape of the National Parks, AONBs and the Heritage Coast will not normally be permitted. Particular regard will be paid to the protection and enhancement of undeveloped open countryside and coast, the lakes and other sensitive locations, and in addition in National Parks the character of land identified on Section 3 Conservation Maps. Development required to meet local infrastructure needs which cannot be located elsewhere, will normally be permitted provided it is sited to minimise environmental impacts and meets high standards of design.

- 4.9.3 There are no National Parks in the Plan area. Proposals for mining and quarrying within AONBs will be rigorously examined in accordance with Structure Plan Policy 59. It requires that new developments are considered against the stringent tests of Structure Plan Policy 54. There are also clear tests which would have to be satisfied to permit the expansion of existing facilities.

Structure Plan Policy 59 - Mining and Quarrying in National Parks and AONBs

In National Parks and AONBs proposals for the development of new mines or quarries will be considered under Policy 54. Expansion of existing facilities or reworking of spoil will only be permitted where it is clear the development can be achieved without adverse impacts on the landscape or surrounding area and there are demonstrable benefits arising from the continued working. In any developments the production of waste should be minimised, and that produced dealt with in an environmentally acceptable manner.

Structure Plan Policy 54 - Major Projects

Major developments which are more national than local in character and have significant environmental effects will only be permitted where:

- i. the sum of national, regional and local benefits is shown to clearly outweigh any harm or risks to the local or wider environment, and*
- ii. the proposed scheme will be carried out in such a manner as to cause the least practicable harm, and*
- iii. direct and indirect adverse impacts during construction and during operation (including those from the winning and working of construction materials, the disposal of waste and their transportation) are minimised, and*

iv. *they do not harm areas or features of international or national conservation importance except where it can be demonstrated that the value of the benefits that would arise clearly outweigh the international or national conservation value of the interest affected, and in addition:*

- *in National Parks a case can be made in the national interest and all reasonable alternative locations and methods of satisfying the need have been explored and shown to be unacceptable;*
- *in AONBs a case can be made in the national interest and all reasonable alternative locations have been explored and shown to be unacceptable.*

4.9.4 The consideration of minerals development proposals in AONBs is fundamentally different from the consideration of waste proposals in such areas. Minerals can only be worked where they occur. There is no such justification for waste proposals, which ought to be located where they contribute to providing an integrated and adequate network of facilities to satisfy the proximity principle. The AONBs are relatively sparsely populated rural areas. It cannot be envisaged that sufficient justification could be made to set aside the impact of a large scale waste development in an area whose landscape is designated as of national importance. There are settlements within the AONBs, notably Alston, which may benefit from small scale waste developments such as civic amenity sites and facilities to allow the reuse or recycling of waste materials. There may also be opportunities to use inert waste arising in these areas for reclamation of despoiled sites with landscape or environmental benefits. It is considered that where they meet identified local requirements and would not adversely affect the landscape small scale waste developments may be permitted.

POLICY 8

Proposals for waste development in AONBs will not be permitted other than where there would be no adverse impact on the landscape.

County Landscapes

4.9.5 County Landscapes are of County importance for their particular topographical, visual, cultural or historical characteristics. They cover large areas of the County. Structure Plan Policy 12 aims to conserve their distinctive character.

Structure Plan Policy 12 - Landscapes of County Importance

Development and other land use changes detrimental to the distinctive character of designated County Landscapes, will not normally be permitted. Development required to meet local infrastructure needs which cannot be located elsewhere, will normally be permitted, provided it is sited to minimise environmental impacts and meets high standards of design.

4.9.6 The precise boundaries of County Landscapes are defined in District Local Plans. They are shown on the Proposals Map accompanying this Plan.

4.9.7 The County Council recognises that some minerals and waste development may have to take place in County Landscapes to ensure the adequate supply of minerals and waste facilities. Many minerals and some waste developments are temporary and may be capable of being carried out without unacceptable permanent detriment to the overall landscape character. It is important that they do not damage the particular characteristics which make the landscape distinctive. Proposals may be acceptable for the life of temporary minerals and waste developments, but they must be capable of appropriate restoration.

POLICY 9

Proposals for minerals and waste development which would be detrimental to the distinctive character of a designated County Landscape will only be permitted where the detriment will be temporary.

The Rest of the Countryside

- 4.9.8 In the rest of the countryside Structure Plan Policy 13 aims to allow necessary rural change to be accommodated whilst protecting the undeveloped open countryside from non-essential development.

Structure Plan Policy 13 - The Rest of the Countryside

In the areas not covered by Policies 11 and 12, development will normally be permitted which in its use, siting, scale and design is well related to existing developed areas of the countryside and does not harm distinctive features of local landscape significance. In the undeveloped open countryside development will not normally be permitted except when it is required to meet local infrastructure needs which cannot be located elsewhere, and provided it is sited to minimise environmental impacts and meets high standards of design.

- 4.9.9 Minerals and waste facilities should be developed, operated and restored in a manner that minimises impact upon the landscape or enhances the quality of the landscape. Outside designated areas the landscape should still be protected from inappropriate development. Local topography and other features of landscape interest or significance such as boundary patterns can contribute considerably to the variety and attractiveness of the countryside. Nevertheless minerals and waste proposals will often need to be located in the undeveloped open countryside. In some cases a stand off distance from developed areas could be preferable to safeguard local amenity. Landscape change can be acceptable if there is no significant permanent harm.

POLICY 10

Proposals for minerals and waste development outside AONBs, the Heritage Coast and County Landscapes will be permitted provided there will not be unacceptable permanent harm to features of local landscape significance.

4.10 Agricultural Land

- 4.10.1 Agricultural land is a significant and important part of the landscape and farming contributes to the rural economy. Even in a time of surplus agricultural production the best and most versatile agricultural land is a resource which it is important to protect for future generations. Structure Plan Policy 19 seeks to protect this land from development. It is defined as comprising Grades 1, 2 and 3A of the Ministry of Agriculture, Fisheries and Food's agricultural land classification.

Structure Plan Policy 19 - Agricultural Land

The best and most versatile agricultural land will normally be protected from development.

- 4.10.2 Many mineral and some waste developments are temporary uses of land. It is possible to restore land to agricultural use. However, some types of development and site conditions make this difficult or impossible. The restoration of sites following the extraction of sand and gravel from below the water table where there is insufficient material for infilling and the disposal of waste through landraise present particular problems. It is recognised to be in the national interest to protect the best and most versatile agricultural land (DOE, 1997, PPG7). Development of the best and most versatile agricultural land will only be permitted where the agricultural resource will not be permanently lost and it can be demonstrated that the land can be restored to at least its original quality.

POLICY 11

Proposals for minerals and waste development on the best and most versatile agricultural land will only be permitted where the site can be restored to a condition equivalent to at least the original quality of the agricultural land within five years from the completion of the restoration.

4.11 Archaeology and Heritage

- 4.11.1 National guidance states that a fundamental aspect of environmental stewardship is effective protection of all aspects of the historic environment (DOE, 1994, PPG15). These features are to be valued and protected for their own sake as a part of our cultural heritage and sense of national identity.
- 4.11.2 Structure Plan Policy 2 aims to protect the quality of the built environment from inappropriate development. It places importance upon areas and features of international or national conservation importance. These are defined for the purposes of the policy and are set out in Table 1 of this Plan.
- 4.11.3 Cumbria's built and historic heritage is an important part of the County's character. The County Council recognises that sites and buildings of architectural, historic or archaeological importance are important in their own right and for their contribution to the variety of the landscape. Proposals for minerals and waste development which would be likely to affect these interests will be determined in accordance with Structure Plan Policy 26.

Structure Plan Policy 26 - Sites and Buildings of Architectural, Historic or Archaeological Importance

Development and other land use changes which fail to preserve or enhance the character or appearance of Conservation Areas or which damage, obscure or remove important archaeological sites or other historic features, or are detrimental to the character or setting of a Listed Building or Ancient Monument will not normally be permitted.

- 4.11.4 Archaeological remains are irreplaceable evidence of the past development of our society. The County Sites and Monuments Record currently lists about 18,500 historic sites and finds, and there are about 1000 Scheduled Ancient Monuments in the County.
- 4.11.5 Minerals and waste developments frequently take 'greenfield' sites which may be of archaeological interest. National guidance recognises that archaeological remains are a finite, non renewable resource, in many cases highly fragile and vulnerable to damage and destruction (DOE, 1990, PPG16). The County Council places great emphasis on the protection of this unique heritage.
- 4.11.6 In PPG16 it is advised that not all nationally important remains meriting preservation will necessarily be scheduled. These remains, and other unscheduled archaeological remains of more local importance, may still be worthy of protection.

POLICY 12

Proposals for minerals and waste development which would adversely affect a nationally important archaeological site or monument, whether scheduled or not, or its setting, will not be permitted unless the site can be preserved in situ.

- 4.11.7 The full value and importance of all archaeological sites is not necessarily apparent or known. For that reason on sites where there is good reason to believe there are remains of archaeological importance, for instance from records and features on site, but where their importance is not fully understood, the County Council may require an archaeological evaluation in advance of determining an application.
- 4.11.8 In addition, not all archaeological sites and features are known or recorded at all. For that reason in most cases the County Council will require evaluations of 'greenfield' sites from which no archaeological or historic remains are specifically known, but these sites by virtue of their setting and topography may have attracted earlier activity. In these cases proposals may be permitted subject to a condition requiring evaluation prior to the development commencing.

POLICY 13

Proposals for minerals and waste development on sites where there is good reason to believe there are remains of archaeological importance will only be permitted where evaluation is carried out prior to determination.

Proposals for minerals and waste development on other sites will require an evaluation and, where necessary, provision for an appropriate field investigation prior to the development commencing.

In all cases an archaeological evaluation will comprise a documentary search and normally a detailed site inspection and/or systematic prospecting trenching, carried out by a suitably qualified and experienced person or organisation.

- 4.11.9 Where remains are identified which are not of sufficient importance to warrant physical preservation in situ an appropriate archaeological field investigation may be required by conditions on the planning permission or through a voluntary agreement with the operator. The County Council will seek to ensure that adequate archaeological investigation is carried out bearing in mind the relative importance of the remains, the nature of the remains and the type of development proposed. In some cases a watching brief of soil stripping operations supervised by a suitably qualified person may be sufficient. Where the evidence indicates a more significant interest the developer will be expected to make provision for carrying out more detailed investigation and recording.

POLICY 14

Proposals for minerals and waste development where there is evidence of archaeological remains, but which do not warrant preservation, will only be permitted if provision is made for an appropriate field investigation to be carried out.

The type of archaeological field investigation required will be determined by the nature and importance of the remains and the type and impact of the proposed development.

4.12 Nature Conservation

- 4.12.1 There is a national framework of conservation and planning legislation to safeguard the natural heritage. International obligations underlie much of this legislation. The conservation designations are shown in Table 2. The interests can be broadly considered as International, National and Local.
- 4.12.2 The land use planning system has a key role to play in meeting nature conservation objectives. National guidance (DOE, 1994, PPG9) recognises that nature conservation interest is not confined to designated sites, but occurs throughout the countryside. Designated sites together with countryside features which provide wildlife corridors, links or stepping stones from one habitat to another, all help form a network necessary to ensure the maintenance of the current range and diversity of our flora, fauna, geological and landform features and the survival of important species. Minerals and waste developments can offer the opportunity to create interest and/or enhance value.
- 4.12.3 Structure Plan Policy 17 seeks to protect important nature conservation interests, which may or may not have been designated as sites of importance.

Structure Plan Policy 17 - Nature Conservation Interests

Development and other land use changes which are detrimental to important nature conservation interests will not be permitted unless the harm caused to the value of those interests is clearly outweighed by the need for the development. Where development is permitted the loss of conservation interest should, where practicable, be minimised.

Nature Conservation Interests of International Importance

- 4.12.4 The Ramsar Convention requires the protection of wetlands that are of international importance, particularly as waterfowl habitats. SPAs and SACs are intended to protect the habitats of threatened species of wildlife. They have broad aims and specific requirements for the conservation of habitats, contributing towards bio-diversity and preventing the deterioration of habitats and disturbance of species.
- 4.12.5 Structure Plan Policy 18 seeks to protect features of international nature conservation interest. Development which is detrimental to these interests will only be permitted where there is a compelling

and proven need in the public interest which cannot be met in other locations or by reasonable alternative means.

Structure Plan Policy 18 - Nature Conservation Interests of International Importance

Development and other land use changes which are detrimental to nature conservation interests of international importance will not normally be permitted. Exceptions will be made only:

- a. Where an overriding public interest can be demonstrated to outweigh the international conservation interest, and*
- b. where the need for the development or land use change cannot be met in other locations where they would be less damaging or by reasonable alternative means.*

TABLE 2: NATURE CONSERVATION DESIGNATIONS

| IMPORTANCE | SITE DESIGNATION AND EXPLANATION | UK STATUTORY DESIGNATION |
|-------------------------------------|--|--------------------------|
| SITES OF INTERNATIONAL IMPORTANCE | Ramsar Sites listed under the Convention on Wetlands of International Importance | SSSI |
| | Special Protection Areas (SPAs) classified under the EC Directive on the Conservation of Wild Birds | SSSI, SPA |
| | Special Areas of Conservation (SACs) to be designated under the EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (the Habitats Directive) | SSSI, SAC |
| SITES OF NATIONAL IMPORTANCE | National Nature Reserves (NNRs) declared under the National Parks and Access to the Countryside Act 1949 or the Wildlife and Countryside Act 1981 | SSSI |
| | Sites of Special Scientific Interest (SSSIs) notified under the Wildlife and Countryside Act 1981 | SSSI |
| SITES OF REGIONAL/ LOCAL IMPORTANCE | Local Nature Reserves (LNRs) designated by local authorities under the National Parks and Access to the Countryside Act 1949 | LNR |
| | Non-statutory Nature Reserves established and managed by a variety of public and private bodies eg county wildlife trusts, Royal Society for the Protection of Birds | |
| | Wildlife Sites In Cumbria these are designated by Cumbria Wildlife Trust | |
| | Regionally Important Geological and Geomorphological Sites (RIGS) Sites of importance for earth sciences. In Cumbria these are designated by Cumbria RIGS Group | |

- 4.12.6 The Government attaches great importance to the various international obligations it has assumed and wishes to ensure they are fully met. Proposals for minerals and waste development which may affect an existing or proposed international site will be subject to the most rigorous examination in accordance with the guidance set out in Annex C of PPG9. The Habitats Directive gives special consideration to sites which host priority natural habitat types or priority species which are particularly at risk. The County Council will take this into account in considering proposals affecting nature conservation interests of international importance.

POLICY 15

Proposals for minerals and waste development which would have an adverse effect on the nature conservation interests of a site of international nature conservation importance (either individually or in combination with other plans or projects), will not be permitted unless:

- i. there is no alternative solution; and*
- ii. there are imperative reasons of overriding public interest for the development.*

Where the site hosts a priority natural habitat type and/or a priority species, as listed in the EC Habitats Directive, the proposal will only be permitted if required for reasons of human health or public safety or for beneficial consequences of primary importance for nature conservation.

- 4.12.7 Limestone pavements are of physiographical and biological interest and are identified as a priority habitat in the Habitats Directive. Section 5.21 of the Plan explains the nature of the interest and the importance the County Council attaches to their protection. Similarly section 5.15 of the Plan sets out the County Council's policy on peat extraction, which recognises the importance of peatland habitats in Cumbria.

Nature Conservation Interests of National Importance

- 4.12.8 NNRs are controlled by English Nature through ownership, lease or management agreements. The essential characteristic of NNRs is that they are primarily used for nature conservation. Biological SSSIs are selected by English Nature in accordance with published guidelines. Within the SSSI series there are certain key areas of particular importance. These embody the principle that adequate examples of all major semi natural and natural ecosystems in Britain should be managed to maintain their environment and characteristic communities of plants and animals. They are selected in accordance with published guidance on the main habitat types in Britain and are known as Nature Conservation Review (NCR) sites. Similar principles apply to the notification of Geological Conservation Review (GCR) sites as SSSIs. These are geological and geomorphological areas where conservation is essential for education and research in the earth sciences.
- 4.12.9 Development which affects SSSIs will be subject to special scrutiny. Where it may have a significant adverse effect, directly or indirectly, on the interest it will not be permitted unless the need for the development clearly outweighs the value of the site and the national policy to safeguard the intrinsic nature conservation value of the SSSI network. Where the site is a NNR or a site identified under the NCR or GCR, particular regard will be given to the individual site's national importance.

POLICY 16

Proposals for minerals and waste development which would have an adverse effect on the nature conservation interests of a Site of Special Scientific Interest will not be permitted unless the harm caused to the value of those interests and the nature conservation value of the national network of such sites, is clearly outweighed by the need for, and/or benefits of, the development.

Where the site concerned is a National Nature Reserve or a site identified under the Nature Conservation Review or Geological Conservation Review, particular regard will be paid to the individual site's national importance.

Nature Conservation Interests of Local Importance

- 4.12.10 LNRs are habitats of local significance which can make an important contribution both to nature conservation and education. Non statutory Nature Reserves rely upon the arrangements between the managing body and the landowner to safeguard their protection.
- 4.12.11 Wildlife Sites are designated by Cumbria Wildlife Trust. The stated aim of Wildlife Sites is to protect, maintain and enhance the wildlife resource of the County, conserving important habitats, communities, natural features and populations of notable species. They have no formal protection unless included in district local plans.
- 4.12.12 Wildlife Sites can be locally important and provide links in the network of habitats necessary to maintain diversity. In the past they have been designated for various reasons as a result of surveys or local information. Cumbria Wildlife Trust are developing specific criteria for the assessment of the value of existing, and designation of new, Wildlife Sites. In order to avoid unnecessary constraints on development the County Council must ascertain whether they are of substantive nature conservation value.
- 4.12.13 In addition to SSSIs notified for their geological interest a programme of designating RIGS is being carried out by the Cumbria RIGS Group supported by the County Council and others. RIGS are considered worthy of protection for their educational, research, historical or aesthetic importance.
- 4.12.14 RIGS may or may not be a constraint on development. At some sites there may be potential to integrate development and conservation. Mineral working may offer the opportunity to enhance the interest of the site or create an interest. Where the proposal cannot be designed to safeguard the interest permission may be refused.

POLICY 17

Proposals for minerals and waste development which would have an adverse effect on important nature conservation interests within a Wildlife Site or Regionally Important Geological and Geomorphological Site will only be permitted where the need for, and/or benefits, of the development clearly outweighs the harm to the value of those interests.

Protected Species

- 4.12.15 The presence of a species protected by law is a material consideration when considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat (DOE, 1994, PPG9). The County Council recognises that protected species and their habitats should be afforded appropriate protection when determining proposals for minerals and waste development.

POLICY 18

Proposals for minerals and waste development which would have an adverse effect on species protected by law will only be permitted where harm to the species can be avoided by reducing disturbance to a minimum or providing adequate alternative habitats or by other means.

4.13 Public Access

- 4.13.1 The effect of development on a public right of way is a material consideration in determining planning applications. There are two main issues; the loss of rights of way and the impacts upon the amenity of the users of them.
- 4.13.2 The grant of planning permission does not entitle the diversion or closing of a public right of way. The Town and Country Planning Act 1990 empowers local planning authorities to authorise the stopping up or diversion of any footpath or bridleway if they are satisfied that it is necessary to do so to enable development for which they have granted planning permission to be carried out. It is important to adequately consider the right of way before a decision is taken. The right of way must be kept open and unobstructed until the statutory procedures for closure or diversion have been completed. It is an offence to obstruct, close or divert a public right of way without obtaining the relevant order.

- 4.13.3 Where minerals and waste development proposals would result in the loss of a route the acceptability of diverting it via a satisfactory alternative will be considered. If proposals are likely to adversely affect users of a route through noise, dust or traffic hazard for instance appropriate safeguards will be required.

POLICY 19

Proposals for minerals and waste development which would affect a public right of way will only be permitted where:

- i. users of the route can be adequately protected from the adverse effects of the development through screening, segregation or other measures as appropriate; and***
 - ii. in the event that the route would be lost, either temporarily or permanently, a satisfactory alternative can be established or can be shown to be unnecessary.***
- 4.13.4 The County Council will also seek within restoration schemes to improve public access for the benefit of local communities by requiring, where appropriate, the provision of public rights of way and cycleways to improve links in the existing network or to provide access where there is none at present.

POLICY 20

The County Council will seek, where appropriate, the provision of public access including new public rights of way within restoration schemes.

4.14 Despoiled and Unstable Land

- 4.14.1 National guidance (DOE, 1994, PPG23) states that a principle of sustainable development is that sites affected by contamination should, where practicable, be reclaimed for new uses. Advice on unstable land (DOE, 1990, PPG14) is that local planning authorities should ensure that the proposed development is suitable and that any precautionary or preventative measures necessary are taken. Enforcement of legislation in respect of quarry faces and tips rests with HM Inspector of Quarries whom the County Council consult on such applications.
- 4.14.2 Minerals and waste development can offer opportunities to bring despoiled land back into beneficial use. For instance, the extraction of slag or reclamation through landfill can bring about significant environmental improvement. Applications will be determined in accordance with Structure Plan Policy 28.

Structure Plan Policy 28 - Derelict and Run-Down Land

Proposals for the reuse or improvement of derelict land or other unsightly or contaminated areas will normally be encouraged and, where appropriate, proposals for development or the use of land for amenity, nature conservation, or other socially beneficial purposes will normally be permitted.

- 4.14.3 Such opportunities must take into account any possible effects from previous activities on the land. Proposals for minerals and waste development on potentially unstable or contaminated land will be determined in accordance with Structure Plan Policy 23.

Structure Plan Policy 23 - Development of Unstable or Contaminated Land

Proposals for the development of potentially unstable or contaminated land will normally not be considered without a satisfactory site investigation and appropriate measures to remedy any identified hazards.

4.15 Restoration and Aftercare

- 4.15.1 National Guidance (DOE, 1996, MPG1) identifies one of the aims of mineral planning as the need to ensure that land taken for mineral operations is reclaimed at the earliest opportunity and is capable of an acceptable use after working has come to an end.
- 4.15.2 Also in meeting the requirements for sustainable development restoration and aftercare schemes must either maintain or enhance the land taken for mineral extraction so that future generations are not left with a degraded landscape. These comments are equally applicable to landfill developments.
- 4.15.3 Many mineral and some waste developments are temporary uses of the land. High quality restoration and aftercare proposals are a prerequisite of such minerals and waste proposals. Proposals will be determined in accordance Structure Plan Policy 62.

Structure Plan Policy 62 - Restoration of Minerals and Waste Disposal Sites

Strict conditions will be imposed on all permissions for mineral extraction and waste disposal to ensure their full restoration to an acceptable use. A progressive scheme to restore land at the earliest opportunity will be required wherever practicable. The creation of diverse and attractive landscapes, including water areas and woodland to enhance nature conservation and recreation interest will be favourably considered.

- 4.15.4 Minerals and waste developments can enhance landscapes using sensitive and imaginative restoration. Such proposals will be supported in accordance with Structure Plan Policy 15.

Structure Plan Policy 15 - Landscape Enhancement

Measures which encourage the enhancement of landscapes and their wildlife and historic features will normally be supported.

- 4.15.5 The Structure Plan also recognises that well designed planting of forests and woodlands can enhance the landscape and wildlife value depending upon how and where it takes place. Minerals and waste proposals can offer these opportunities and will be judged against Structure Plan Policy 16.

Structure Plan Policy 16 - New Forests and Woodlands

Within the National Parks and AONBs additional plantations and woodlands will normally be acceptable where they will enhance the characteristic landscape beauty of the area and not prejudice conservation and public access. Wherever appropriate and feasible schemes should be designed to achieve a final hardwood crop. Elsewhere in Cumbria, forests, plantations and woodlands will normally be acceptable where there is no material conflict with agriculture, landscape, historic features, conservation and public access, and should usually provide positive benefits to these interests.

- 4.15.6 Great emphasis will be placed on securing schemes which enhance the local landscape character of an area, create nature conservation habitats and encourage the recreational use of land. The ability to reshape land, provide water areas and large woodland areas allows the creation of more varied and interesting landscapes. Restoration to agriculture will be required for proposals on the best and most versatile agricultural land (Policy 11) or where the economic viability of the farm holding is affected. Amenity after uses may include the following: open grassland for informal recreation, basic preparation for more formal sports facilities, amenity woodland, lagoons for water recreation and the conservation of landscape and wildlife. Proposed amenity uses should be in accordance with development plan policies. Where restoration to forestry is proposed, proposals should be in accordance with Structure Plan Policy 16. Restoration to other after uses is not precluded, but will be considered on their merits.

POLICY 21

There will be a presumption in favour of restoring mineral and waste sites to agricultural, forestry and amenity (including nature conservation) afteruses following temporary developments.

Restoration to agriculture will be required where the loss of agricultural land would adversely affect the economic viability of the farm holding.

- 4.15.7 Practical proposals for the restoration and aftercare of sites must form part of appropriate planning applications. To assist in this the County Council welcomes pre-application discussions on the appropriateness of afteruses and encourages applicants to involve landowners and statutory consultees such as MAFF, the Forestry Authority or English Nature when drawing up restoration proposals.
- 4.15.8 Once restoration is completed aftercare will be required on land which is to be used for agriculture, forestry or amenity purposes.
- 4.15.9 Aftercare conditions can currently be imposed for a maximum of five years. An operator is required to draw up an aftercare scheme which sets out the operations they propose to carry out over that period. Consultation with MAFF or the Forestry Authority is required before an aftercare scheme for agriculture or forestry is approved and the County Council will continue to consult these bodies during the aftercare period, inviting them to attend the annual meeting which is held on each site. No such consultation is required for amenity aftercare schemes but the County Council will consult English Nature, the Forestry Authority, local Wildlife Trusts or the regional councils for sport and recreation if appropriate.
- 4.15.10 A further period of management is often needed to satisfactorily establish and maintain areas restored to a nature conservation or woodland use. In such circumstances the County Council will wish to secure management by seeking planning obligations or by the operator leasing or handing over the site to a voluntary body such as a local wildlife trust.

POLICY 22

The County Council will require a scheme of aftercare, for up to five years, for land being restored to amenity, forestry or agricultural afteruses. For proposals where a further period of management is considered to be necessary the County Council will need to be satisfied that this will be provided.

4.16 Employment and the Economy

- 4.16.1 Development by the minerals and waste industries provide much needed local employment and investment, thereby making a significant contribution to the economy of local communities. Minerals development in particular can help maintain services and facilities in rural areas of Cumbria. However, care must be taken to ensure that such development does not work against County Council environmental policies, economic development initiatives, or lead to a loss of investment and employment at other local businesses, such as tourism.
- 4.16.2 When assessing minerals and waste proposals the County Council will balance the net local and economic benefits against any adverse effects such proposals may have on local communities or the environment. This is in line with Structure Plan Policies 1 and 3. Although developers cannot be required to use local labour and businesses, proposals to do so will be viewed favourably.

POLICY 23

In assessing the extent to which proposals for minerals and waste development meet the social and economic needs of the County's population and help maintain rural communities, the following will be taken into account:

- i. the number, type and duration of direct and indirect jobs to be generated or maintained and how many will be or are occupied by local people; and***
- ii. the opportunities for the development of skills of locally employed people; and***
- iii. the level and nature of investment in the local economy from wages and use of local businesses; and***
- iv. the impact on economic development initiatives and neighbouring businesses, including tourism.***

5 MEETING THE NEED FOR MINERALS

5.1 Introduction

- 5.1.1 This chapter sets out the issues and the County Council's policies relating to mineral resources including their conservation, exploration, extraction and processing.

5.2 Conserving Mineral Resources

- 5.2.1 It is national and County Council policy (Structure Plan Policy 20) that development should not normally be permitted which would sterilise finite and irreplaceable mineral resources.

Structure Plan Policy 20 - Mineral Resources

Development will not normally be permitted which sterilises mineral resources that may need to be worked in the future.

- 5.2.2 The County Council will shortly renotify district planning authorities of the areas in which it wishes to be consulted on planning applications because development is likely to affect or be affected by the winning and working of minerals, other than coal (the Coal Authority is consulted on development proposals in notified areas of interest). These Mineral Consultation Areas have been defined on the best information available and will be updated regularly. For most parts of the County the information is not sufficiently detailed to determine whether the mineral is likely to be economically workable. Mineral Consultation Areas therefore indicate mineral resource potential. They do not take account of planning constraints and do not imply that planning permission for mineral working will be granted.

POLICY 24

Mineral resources will be safeguarded from sterilisation. The County Council will oppose development proposals within Mineral Consultation Areas which would prevent or prejudice potential future mineral extraction unless it is satisfied that the area affected does not contain a workable mineral deposit; or there is an overriding need for the development and the mineral cannot be extracted in advance.

- 5.2.3 Proposals to extract minerals prior to some other more permanent development will be encouraged by the County Council unless the future development of the land would be prejudiced or the extraction would not take place within a reasonable timescale.

POLICY 25

Proposals for the extraction of minerals prior to development which would otherwise sterilise proven mineral deposits will be permitted except where prior extraction would prejudice the development of the land or would not take place within a reasonable timescale.

- 5.2.4 It is wasteful to use high grade minerals where lower grade minerals or waste materials would suffice. Where lower grade and waste materials can be used this has the dual benefit of conserving minerals and recycling waste. In most cases planning permission will be needed to import materials to be processed at a mineral site.

POLICY 26

Proposals for the importation and processing of waste or low grade materials to produce mineral products will be permitted at active quarries for a temporary period not exceeding the permitted life of the quarry, where this can be accommodated without prejudicing the operation or restoration of the quarry.

5.3 Mineral Exploration

- 5.3.1 The County Council supports mineral exploration as it increases the knowledge and understanding of the mineral resources. Except for oil and gas, mineral exploration operations of less than six months duration may be permitted development. In all other cases planning permission must be obtained before commencing development. The grant of planning permission for exploratory boreholes will not commit the County Council to approve subsequent applications for appraisal and production development.

5.4 The Need for Mineral Working

- 5.4.1 A principle which has guided preparation of this Plan is that minerals are finite and they should only be worked where it can be demonstrated that the need for the mineral is sufficient to outweigh any material planning objections. Proposals accompanied by an Environmental Statement or which give rise to planning objections or where policies require need to be demonstrated, will be assessed against Policy 27. This more restrictive approach is necessary in Cumbria because of the very high aggregate landbanks that currently exist and the need for the Plan to take into account the objectives for sustainable development in minerals planning, including the encouragement to be given to meeting the Government targets for other sources of supply such as secondary aggregates and recycled materials. Also the Plan needs to address the prolonged environmental and amenity impacts and subsequent delays in restoration which would be caused by having too many sites operating in the County.

POLICY 27

In assessing proposals for the extraction of minerals which are accompanied by an Environmental Statement or where there are material planning objections or where Local Plan Policies 29, 30, 31, 33, 34, 36 and 43 apply, the following will be taken into account in determining the need for the mineral to be worked:

- i. national, regional and local need as appropriate; and*
- ii. the location, amount, quality and type of existing permitted reserves and the rate at which they are likely to be worked; and*
- iii. the availability of less damaging alternative sites or sources of supply.*

The particular needs of an individual mineral operator will not be taken into account unless it can be demonstrated that special considerations should apply.

5.5 Primary Aggregates - Background

- 5.5.1 With the exception of a small proportion of building and armour stone, all the rock worked in the County is crushed for aggregate or non aggregate use. All the sand and gravel is used as aggregate.
- 5.5.2 Aggregates are bulk materials used in the construction of roads, houses, schools and commercial and industrial buildings etc. Aggregates may be naturally occurring sand and gravel or crushed rock (primary aggregates) or manufactured or waste materials such as slate waste, blast furnace slag and demolition arisings (secondary and recycled aggregates). The main products are coated and uncoated roadstone, concreting aggregate, building and asphaltting sand and construction fill material. A small amount goes for rail ballast.
- 5.5.3 There are currently 16 active sand and gravel pits in the County, two with permission expected to started working shortly at Low Gelt and Low Plains, and Stangrah Sand Pit which is dormant (Figure 3). The majority work glacial deposits. The exceptions are Cardewmires, near Dalston (river terrace) and Walney Island (beach).
- 5.5.4 Over the last six years sand and gravel sales have remained reasonably stable, briefly exceeding one million tonnes in 1989 and 1994 (Table 4). It is anticipated that production will be maintained at the higher level. Movement of sand and gravel into and out of the County is limited. Some is exported to

the North East, other parts of the North West and Scotland. A very limited amount is imported from North Lancashire and Scotland. 95% of the sand and gravel produced is utilised within the County.

- 5.5.5 There were over 15 million tonnes of sand and gravel reserves with planning permission (permitted reserves) in 1995 (Table 4).
- 5.5.6 The principal source of crushed rock in the County is limestone but hornfels, andesitic tuff and gritstone are also worked. In 1995 there were 17 active quarries and five dormant quarries (Blencowe, Helbeck, Shap Pink, Kendal Fell and Goldmire) which are expected to be re-opened during the Plan period (Figures 4 and 6). Blencowe North Quarry is expected to open shortly. Approximately 7% of the crushed rock aggregate reserves are contained within dormant sites. The limestone quarries work the Carboniferous Limestone which encircles the Lake District and forms much of the North Pennines. The properties of the scarcer andesitic tuff and gritstone make them suitable for high quality roadstone. Hornfels is worked at Shap mainly for rail ballast and the production of concrete products
- 5.5.7 4.4 million tonnes of aggregates were sold from these sites in 1995 (Table 8). Cumbria is a net exporter of crushed rock aggregates with small amounts going into Scotland and the North East and a more significant quantity, 1.5 to 2 million tonnes a year, going south into Lancashire and Greater Manchester.
- 5.5.8 There were 235 million tonnes of permitted crushed rock aggregate reserves in 1995 (Table 4).

5.6 Primary Aggregates Provision - General

- 5.6.1 Guidance on the amount of aggregates to be provided (aggregates provision) in the Northern Region to 2006 is set out in MPG6. The Northern Region Working Party on Aggregates (NRWPA) has apportioned this provision between the counties of the region (NRWPA, 1995, Annual Report). Table 3 shows Cumbria's share.

TABLE 3 : PROVISION OF PRIMARY AGGREGATES (LAND WON) IN CUMBRIA 1992 - 2006 (M TONNES)

| | 1992 - 2006 | Annual Apportionment |
|-----------------|-------------|----------------------|
| Sand and Gravel | 15.5 | 1.05 |
| Crushed Rock | 68.2 | 4.55 |
| Total | 83.7 | 5.60 |

- 5.6.2 Cumbria is committed to seeking to provide, through the granting of planning permissions, for the annual extraction of 1.05 million tonnes of sand and gravel and 4.55 million tonnes of crushed rock. This provision includes production from sites in the Lake District National Park and borrow pits but excludes the contribution from secondary and recycled aggregates which, although expected to increase, has already been accounted for in determining the apportionment figure.

POLICY 28

The County Council will aim to grant planning permissions for sufficient land to enable the production of sand and gravel at an average rate of 1.05 million tonnes per annum and the production of crushed rock aggregate at an average rate of 4.55 million tonnes per annum.

- 5.6.3 The provision of a sufficient stock of land with planning permission to maintain production of minerals for a specified period, a landbank, is an important feature of aggregates planning. Landbanks are necessary to ensure continuity of supply. The period of the landbank reflects the lead time that is involved in obtaining planning permission for new reserves and bringing a site into full production. It is calculated by multiplying the annual provision in this Plan by the appropriate number of years. The NRWPA monitors permitted aggregates reserves annually.
- 5.6.4 Structure Plan Policy 58 states that a landbank of permitted reserves will be maintained for the whole County in accordance with national guidance and the advice of the NRWPA unless exceptional circumstances prevail.

- 5.6.5 MPG6 advises that, for sand and gravel, mineral planning authorities should aim to maintain a landbank for an appropriate local area, sufficient for at least seven years extraction. A longer period may be appropriate for crushed rock. The County Council takes the view that for crushed rock 15 years is appropriate. The County Council will seek to avoid too large a landbank being established to encourage the use of secondary and recycled aggregates and to avoid delays in restoring sites. Applications which are otherwise acceptable but where a proven need cannot be demonstrated will be regarded as premature and refused, unless significant benefits would accrue.
- 5.6.6 To ensure an adequate landbank at the end of the Plan period (2006) it will be necessary before then to grant permissions to provide sand and gravel until 2013 and crushed rock until 2021.
- 5.6.7 Table 4 compares the current level of permitted aggregates reserves with the total required to maintain an appropriate landbank for the Plan period and beyond. The current permitted reserves of sand and gravel and crushed rock aggregates represent a landbank of 15 years and 48 years respectively.

TABLE 4: RESERVES REQUIRED IN CUMBRIA 1994 - 2006 (MILLION TONNES)

| | Reserves Required | | Total | Current Permitted + Reserves (1.1.96) |
|------------------|-------------------|---------|---------------|--|
| | 1995 - 2006 | >2006 | | |
| Sand & Gravel | 12.60 | 7.35* | 19.95 | 14.10 |
| Crushed Rock | 54.40 | 68.00** | 122.40 | 218.50 [#] |

+ Source NRWPA, includes reserves at dormant sites expected to be worked

Excludes reserves of crushed rock for non aggregates uses.

* 7 year landbank for sand and gravel at the end of Plan period

** 15 year landbank for crushed rock at end of Plan period.

- 5.6.8 The County Council recognises that these Countywide total figures may conceal an uneven distribution of reserves at individual sites and in different parts of the County. The quality of deposits may also vary significantly and there may be shortages for specific uses. Whilst there may be an adequate County landbank there may be local shortages. These factors will be taken into account when assessing the need for new permissions.
- 5.6.9 To maintain the appropriate level of permitted reserves the County Council will depend upon industry bringing forward applications in the right place at the right time. Planning permission will not be granted for the extraction of aggregates from unacceptable sites even if the landbank is below the required level.

POLICY 29

The County Council will aim to grant sufficient permissions to maintain throughout, and at the end of the Plan period, a landbank of permitted reserves for at least seven years extraction of sand and gravel and at least fifteen years extraction of crushed rock aggregate unless exceptional circumstances prevail.

5.7 Sand and Gravel Provision

- 5.7.1 For the purposes of this Plan, the County has been divided into four sand and gravel production areas (Figure 5) based on the existing supply patterns. An adequate local supply is important to ensure provision is made in the most sustainable way, particularly in minimising the distance material is transported. In considering proposals for sand and gravel extraction the County Council accepts that maintaining supply in each of the production areas is a material consideration.
- 5.7.2 Of the 18 sand and gravel production sites currently active or expected to be worked during the Plan period, seven lie within West Cumbria, six within North Cumbria, three within East Cumbria and two within South Cumbria.

5.7.3 The production and proportion of sand and gravel supplied from each production area for recent years, is shown in Table 5.

TABLE 5 : RECENT PRODUCTION AND PROPORTION OF SAND AND GRAVEL SUPPLY BY PRODUCTION AREA (MILLION TONNES)

| Area | Production and Proportion of Supply (%) | | | | | |
|------------------------------|---|----------|----------|----------|----------|----------|
| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
| West Cumbria | 0.42(41) | 0.33(36) | 0.34(39) | 0.34(43) | 0.40(43) | 0.51(44) |
| North, South & East Cumbria* | 0.58(59) | 0.60(64) | 0.53(61) | 0.45(57) | 0.52(57) | 0.64(56) |
| Total | 1.00 | 0.94 | 0.87 | 0.79 | 0.91 | 1.14 |

Figures may not sum due to rounding

Figures combined for reasons of commercial confidentiality

Source: NRWPA

5.7.4 The annual provision proposed by Policy 28 is 1.05 million tonnes. The proposed (average) level of provision to be met by each production area over the Plan period, based on the recent supply pattern, is shown in Table 6.

TABLE 6: PROPOSED ANNUAL PROVISION OF SAND AND GRAVEL BY PRODUCTION AREA (THOUSAND TONNES)

| | |
|-------------------------------|-------------|
| West Cumbria | 425 |
| North, South and East Cumbria | 625 |
| Total | 1050 |

5.7.5 Table 7 sets out the level of permitted reserves required to sustain these levels of production and shows the current permitted reserves and the additional reserves which will need to be permitted to meet this requirement.

TABLE 7: RESERVES OF SAND AND GRAVEL REQUIRED BY PRODUCTION AREA 1994 - 2013 (MILLION TONNES)

| Production Areas | Reserves Required 1996-2006 | Reserves Required 2007-2013* | Reserves Required 1996-2013 | Current+ Permitted Reserves 1.1.1996 | Additional Permitted Reserves Needed |
|-------------------------------|-----------------------------|------------------------------|-----------------------------|--------------------------------------|--------------------------------------|
| West Cumbria | 4.70 | 3.00 | 7.70 | 4.30 | 3.40 |
| North, East # & South Cumbria | 6.90 | 4.35 | 11.25 | 9.80 | 1.45 |
| Total | 11.60 | 7.35 | 18.95 | 14.1 | 4.85 |

* To provide for seven year landbank at the end of the Plan period

Combined for reasons of confidentiality

+ Source: NRWPA; including reserves at dormant sites expected to be worked.

5.7.6 The following sections consider how these area requirements will be met. Although the North, East and South Cumbria areas have had to be combined for reasons of confidentiality, the situation in each area is described separately.

West Cumbria

5.7.7 There are seven operational sites in the West Cumbria production area. Four of these sites are closely grouped together in the Aldoth area and the remaining sites are at Bullgill, Holmrook and Cardewmires.

5.7.8 There are adequate permitted sand and gravel reserves in West Cumbria for the Plan period (Table 7), but, as with the North production area, they are insufficient to maintain a seven year landbank at the end of the Plan period. A further 1.6 million tonnes of sand and gravel reserves has been permitted since 1 January 1996 at Overby and Holmrook and areas for future sand and gravel extraction to maintain the landbank have been identified in Policy 30.

5.7.9 A substantial proportion of existing permitted reserves is in the Aldoth area. These reserves are mainly suitable for use as concreting and general building sand, although a small amount of asphaltting sand is produced. Substantial deposits of sand and gravel occur within a well defined area covering some 800 hectares, making the Aldoth deposit of strategic importance. Constraints to future working include the road network and the impact on the landscape, nature conservation and local residents. Nevertheless, the County Council recognises that most of the need for additional reserves will have to be met from this area. To guide industry, the County Council has delineated an area of search (Proposals Map Inset 1) within which it is considered that acceptable sites can be identified and where proposals for future extraction should be confined. It is estimated that workable resources of at least 4 million tonnes exist in this Area of Search.

5.7.10 The identification of such a large area does not imply that it is all acceptable for extraction; it allows for the variability of the resource and ownership and environmental constraints, within which acceptable sites can be identified. Proposals which would have an unacceptable impact will be refused. Given the limitations of the local highway network and other environmental constraints the County Council regards the recent maximum production level of about 215,000 tonnes as a maximum for the Aldoth area.

5.7.11 Additional sand and gravel reserves exist adjacent to the existing Bullgill site. Bullgill is an important source of coarser material in the area and an extension to meet demand is appropriate given the absence of any known more acceptable alternative sites. A preferred area for future working, within which it should be possible to design an acceptable scheme, has therefore been identified at Bullgill (Proposals Map Inset 2).

5.7.12 The Cardewmires deposit is good quality river terrace material and is an important long term reserve. A minor extension to this site has been identified by the operator which would enable reserves that would otherwise be sterilised to be extracted. The site, which is well located and has a low environmental impact, has been included as a preferred area (Proposals Map Inset 3).

5.7.13 The identification of these areas should adequately provide for the needs of this production area for the Plan period and beyond.

POLICY 30

In the West Cumbria production area proposals for the extraction of sand and gravel from land within the Aldoth area of search and the Bullgill and Cardewmires preferred areas will be permitted subject to there being a demonstrable need. Planning permission will not be granted elsewhere unless a need can be demonstrated which cannot be met from the area of search, the preferred areas or existing sites, or unless significant benefits would accrue to local communities or the environment.

North, South and East Cumbria

- 5.7.14 Current permitted reserves for the North, South and East production areas combined stand at 10 million tonnes and the reserves required for the Plan period (1994-2006) are 7.55 million tonnes. A further 1.6 million tonnes will need to be permitted towards the end of the Plan period to maintain a seven year landbank. This shortfall is expected to be in the northern production area and to this end a preferred area at Kirkhouse, near Brampton containing 500,000 tonnes of sand (Proposals Map Inset 4) has been identified. The site would be worked as a follow on site to the existing Kirkhouse sandpit. No other acceptable sites have been identified so no further provision has been made at this time. This is in accordance with advice in MPG6 and the situation will be kept under review.
- 5.7.15 The main source of supply of sand and gravel in North Cumbria is the extensive fluvioglacial deposit in the Brampton area currently worked at five sites, principally for sand. This deposit can produce a good quality asphaltting sand, which is utilised in North East England and Lancashire as well as Cumbria, and building and concreting sand. Another site at Low Gelt has planning permission but working has not yet started.
- 5.7.16 Sand and gravel resources also occur in the Longtown area although the last site in this area ceased production in the early 1980s. The deposit here consists of good quality gravels and concreting sand.
- 5.7.17 Production is currently concentrated in the Brampton area, much of which is subject to highways and landscape constraints. Deposits also exist in the flood plain of the River Esk which are subject to agricultural, flooding, ecological and water quality constraints.
- 5.7.18 There are two operational sites in the East Cumbria production area. Low Plains, Lazonby has sufficient reserves and potential production capacity to meet the needs of the East production area for the Plan period and beyond.
- 5.7.19 Sand and gravel resources in East Cumbria are limited and landscape and highways constraints restrict the identification of acceptable sites, particularly in the Eden Valley. It also includes the highest proportion of the best and most versatile agricultural land in the County which may impose a further constraint. The County Council therefore recognises the strategic importance of the Low Plains site.
- 5.7.20 The two active sites in the South Cumbria production area are situated in the Barrow area and are operated by the same company. Roose Sand Pit has substantial reserves which are expected to last beyond 2006. The other site is a small wet coastal working at South Walney which produces concreting sand, gravel and cobbles. No additional reserves are expected to be required in this area during the Plan period.

POLICY 31

Proposals for the extraction of sand and gravel in the North, East and South Cumbria production areas will only be permitted where there is a demonstrable need unless significant benefits would accrue to local communities or the environment.

5.8 Crushed Rock Aggregates Provision

- 5.8.1 General aggregates account for most of Cumbria's crushed rock production. High specification aggregates (HSA) provision is considered separately (see below).
- 5.8.2 For general aggregates, the County has been divided into the same production areas as for sand and gravel (Figure 5). The quarries which have been included in the assessment of crushed rock aggregates provision are shown in Figure 4.
- 5.8.3 Three sites at Shap and one at Kendal are either wholly or partly within the National Park but for the purpose of calculating the County's landbank their production and reserves are included.
- 5.8.4 Production of crushed rock aggregate, including HSA, is set by Policy 11 at 4.55 million tonnes a year. This represents a small reduction on recent rates of production (Table 8).

**TABLE 8: PRODUCTION OF CRUSHED ROCK AGGREGATE IN CUMBRIA
(MILLION TONNES)**

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| North & West Cumbria | 1.14 | 1.23 | 0.94 | 1.12 | 0.91 | 1.22 |
| East Cumbria | 0.88 | 0.76 | 1.02 | 1.08 | 1.19 | 0.98 |
| South Cumbria | 2.58 | 2.42 | 2.04 | 2.21 | 2.23 | 2.28 |
| Total General Aggregates | 4.60 | 4.41 | 4.01 | 4.42 | 4.34 | 3.88 |
| HSA | 0.39 | 0.42 | 0.36 | 0.46 | 0.32 | 0.55 |
| TOTAL | 4.99 | 4.84 | 4.37 | 4.87 | 4.65 | 4.43 |

Note: Figures may not sum due to rounding.

* combined for reasons of commercial confidentiality

Source: NRWPA

- 5.8.5 The annual level of provision proposed for HSA is 0.65 million tonnes, which leaves 3.9 million tonnes to be provided from general aggregates quarries.
- 5.8.6 The Regional Guidelines figure in MPG6 is based on a NRWPA assessment (NRWPA, 1991, Regional Commentary). This assumed that annual exports to the North West from South Cumbria would reduce by 0.5 million tonnes between 2002 and 2011. Therefore, the South Cumbria provision has been reduced by this amount. For the purposes of this Plan it has been assumed Middlebarrow Quarry will close in 2002. It is considered that half the shortfall resulting from its closure can be met from other quarries in South Cumbria and the remainder can be met from East Cumbria.
- 5.8.7 On the basis of the existing supply pattern and an adjustment to take account of the above factors, Table 9 sets out the provision over the Plan period (plus 15 years) for each production area and for HSA, and compares it to current permitted reserves.

**TABLE 9: PROVISION OF CRUSHED ROCK AGGREGATES IN CUMBRIA 1995-2021
(MILLION TONNES)**

| | Reserves Required 1996-2006 | Reserves Required 2007-2021 | Total Reserves Required 1996-2021 | Current + Permitted Reserves (1.1.96) | Additional Permitted Reserves Needed |
|--------------|-----------------------------------|-----------------------------------|--|--|---|
| North & West | 10.1 | 14.3 | 24.4 | 37.2 | Nil |
| South | 19.5 | 24.4 | 43.9 | 42.1 | 1.8 |
| East | 13.3 | 19.5 | 32.8 | 119.4 # | Nil |
| HSA | 7.2 | 9.8 | 17.0 | 19.8 | Nil |
| Total | 50.1 | 68.0 | 118.1 | 218.5 | Nil |

Note: # Excludes Lower Bed Limestone reserves at Shapfell Quarry

+ Source NRWPA; excludes non-aggregates; includes reserves at dormant sites expected to be worked.

- 5.8.8 Table 9 and the following assessment by production area shows that other than for the South Cumbria area, no further provision is needed to maintain an appropriate landbank for at least 15 years beyond the

Plan period. However, additional reserves may need to be permitted at individual quarries to maintain production levels. There may also be a case for granting extensions to existing quarries to secure environmental improvements.

- 5.8.9 Despite the high level of permitted reserves of crushed rock aggregates within Cumbria it may in exceptional circumstances be more beneficial to allow the development of a new quarry rather than extend an existing one. An example of such a circumstance would be where the revocation of an environmentally sensitive quarry could be achieved by granting consent for a new quarry.

North and West Cumbria

- 5.8.10 Table 9 shows that for the North and West Cumbria production area crushed rock reserves are in excess of the level needed to meet its requirements. An application has been submitted for the modest extension and visual enhancement of Moota Quarry. In the latter half of the Plan period Eskett/Rowrah, Tendley and Silvertop Quarries will have most of the permitted reserves but may not be able to meet all the production area's requirements for the remainder of the Plan period. If this situation does develop it may be necessary for additional reserves to be released.

South Cumbria

- 5.8.11 The South Cumbria production area has permitted reserves in excess of the level needed to meet its requirements for the Plan period but additional reserves will be required to maintain a 15 year landbank after about 2004 (Table 9).
- 5.8.12 Each year, about two million tonnes of crushed rock aggregates go to markets in Lancashire and Greater Manchester although this is expected to reduce towards the end of the Plan period. The majority of this material comes from Sandside and Middlebarrow Quarries in the Arnside and Silverdale AONB and Holme Park Quarry.
- 5.8.13 It is anticipated that without further permissions production at Middlebarrow will cease by 2002 and at Sandside in 25 years time. Middlebarrow and Sandside Quarries generate substantial volumes of heavy traffic which cause a significant environmental and highway impact locally. Environmental constraints dictate that any further lateral extension of these quarries would be unacceptable. The operator at Middlebarrow has recently applied to work below the water table. If permitted, the reserves would be exhausted by 2005, and the operator has offered to ensure, through legal agreements, that no further quarrying will take place beyond that date.
- 5.8.14 Holme Park and Stainton Quarries are capable of increasing their productive capacity to meet about half the shortfall arising from the anticipated closure of Middlebarrow Quarry, especially when account is taken of the reduction in exports to the North West referred to above. The remainder could be met from East Cumbria. Further reserves could be released at Holme Park Quarry subject to the submission of an acceptable scheme. An application for deepening and extending the quarry is currently being considered.

East Cumbria

- 5.8.15 In the East Cumbria production area, each of the four main quarries (Shap Beck, Shap Blue, Shap Pink and Hartley) contain extensive permitted reserves which will last well beyond the Plan period. It is assumed that the East Cumbria production area will meet the anticipated shortfall in the South area. With the level of permitted reserves approximately three times the level required to meet the expected demand the County Council does not consider it necessary to allocate additional areas for working. Any extensions to the three Shap sites would be in the Lake District National Park outside the area of this Plan.
- 5.8.16 Excluded from Table 9 are over 10 million tonnes of permitted reserves of general aggregate quality limestone below the existing floor of Shapfell Quarry which do not meet the specification for the steel industry. The County Council would favour the extraction of this lower quality limestone as it would take the pressure off more environmentally sensitive sites elsewhere in the County.

POLICY 32

Proposals for the development of new quarries for the extraction of general crushed rock aggregates will not be permitted unless there is a demonstrable need and significant benefits would accrue to local communities or the environment.

POLICY 33

Proposals for quarry extensions to provide general crushed rock aggregates will not be permitted unless there is a demonstrable need or significant benefits would accrue to local communities or the environment.

High Specification Aggregate for Road Surfacing Material

- 5.8.17 HSA has a polished stone value (psv) of at least 58 and is used to surface roads where there are high volumes of commercial traffic and wherever road conditions are likely to give a high risk of skidding related accidents. There are three active sites which produce HSA: Ghyll Scaur at Millom works Andesitic Tuff; Holmescales and Roan Edge near Kendal work gritstone (Figure 6). HSA quarries near Ingleton and in Ribblesdale, North Yorkshire supply some of the same markets and the reserves at these quarries are sufficient for well beyond the Plan period.
- 5.8.18 Annual production in Cumbria is about 500,000 tonnes (Table 8) and permitted reserves stand at 19.7 million tonnes.
- 5.8.19 A substantial amount of HSA is used outside the County because of its national scarcity. In 1991, total GB production of HSA was four million tonnes (Travers Morgan Ltd, 1993, HSA for Road Surfacing) which represents less than 3% of the total crushed rock aggregate production. The demand for HSA is projected to increase by between 15 and 20% over the next 10 to 20 years.
- 5.8.20 Given the importance and limited occurrence of this material, Cumbria should continue to make a contribution to meeting regional and national demand over the Plan period. Indeed with Roan Edge Quarry starting production in 1994 Cumbria's productive capacity for HSA has increased.
- 5.8.21 It is considered that an average annual provision of 650,000 tonnes strikes a reasonable balance between meeting the need for HSA and avoiding oversupply and this scarce resource being used for low grade applications. On this basis permitted reserves would last for 30 years and it is not necessary to identify future areas for extraction in this Plan.

POLICY 34

Proposals for the extraction of High Specification Aggregates will not be permitted unless there is a demonstrable national or regional need or significant benefits would accrue to local communities or the environment.

5.9 Secondary Aggregates and Recycled Materials

- 5.9.1 Structure Plan Policies 58 and 61 encourage the use and recycling of waste materials and Policy 26 of this Plan supports the importation and processing of waste or low grade materials at active mineral sites. The reserves of secondary aggregates in Cumbria are considerable and include, slate waste, blast furnace slag, iron ore waste and colliery spoil. In addition, the recycling of construction and demolition waste and road planings is increasing.
- 5.9.2 Slate waste and blast furnace slag comprise the large majority of the 25 million tonnes of reserves of secondary aggregates estimated to be available in Cumbria. Slag is or has been worked at Barrow, Workington and Millom. Large quantities of slate waste are located at Burlington Slate Quarry, Kirkby in Furness. The majority of colliery spoil and iron ore waste tips in the County have been worked and restored or have regenerated naturally. However there are a few waste tips, principally in West Cumbria, where there may be potential for using this material. Where these sites have become part of the landscape character, are of heritage interest or may have other environmental constraints such as high pollution potential, their disturbance will be unacceptable.

- 5.9.3 The recorded sales of secondary aggregates in Cumbria in 1993 were about 250,000 tonnes (5% of the County's overall aggregates production) but this excluded some demolition and construction waste for which no returns were received. MPG6 sees the use of alternative aggregates nationally doubling to 20% by 2006. Given the widespread availability of relatively low cost primary aggregates and the location of suitable alternative materials away from the major market areas it is not considered likely that utilisation will approach the 20% level in Cumbria. The greatest potential lies in their use as bulk fill for major construction projects which are within economic hauling distance. The risk of leaching out of contaminants from some sources of alternative materials may preclude or restrict their use.
- 5.9.4 The Government (DOE, 1987, Circular 20/87) asks planning authorities to identify alternative potential sources of suitable fill for trunk road schemes. The County Council urges contractors undertaking large development projects, not just road schemes, to discuss at an early stage their aggregates and waste tipping requirements in order that the best practicable environmental option can be decided.
- 5.9.5 Although not a secondary aggregate, limestone fines are produced at all active limestone quarries in the County. Although about 400,000 tonnes was sold in 1993, much is presently not utilised. It can be used directly or blended with fine sand to produce an acceptable concreting sand and the County Council strongly supports this use to conserve reserves of primary concreting sand. The County Council see this becoming increasingly important as concreting sand reserves become depleted.
- 5.9.6 Of growing importance recently has been the utilisation of crushed concrete and road planings from construction and demolition works. This can take place at the construction site using mobile plant or at a more permanent location where the materials can be brought in, processed and subsequently sold on (See Section 6.6).

5.10 Borrow Pits

- 5.10.1 A borrow pit is a mineral working required to supply material, usually bulk construction fill, solely for a specific construction project such as a road scheme. The resultant void is then normally backfilled with waste from the project and restored. Borrow pits are invariably adjacent to the project. There are often significant benefits from supplying aggregates from a borrow pit rather than a local quarry because traffic may not need to use public roads. This is particularly important as the daily tonnages of minerals transported can often be considerable. Also, a borrow pit will help conserve permitted reserves at existing quarries. On the debit side additional business opportunities will be denied local quarries.
- 5.10.2 Developers should give full consideration at the design stage to the quantities of bulk materials required on site and their movement implications and discuss them with the County Council. This and other good practice on borrow pits is set out in a local authority Code of Practice (County Planning Officers' Society, 1995. Use of Borrow Pits), which developers are encouraged to follow.

POLICY 35

Proposals for the extraction of minerals from borrow pits will be permitted provided there are net environmental and economic benefits compared with supplying the minerals from existing quarries.

5.11 Marine Aggregates, Wharves and Rail Depots

- 5.11.1 No marine aggregates have been landed in Cumbria in recent years. However a recent survey (BGS, 1992, Marine Aggregates Survey) has identified potential aggregate resources in the Solway Firth, Morecambe Bay and the Irish Sea.
- 5.11.2 The Crown Estate Commissioners are responsible for the granting of prospecting and production licences. However, onshore facilities to enable the dredged material to be landed and processed require planning permission from the County Council. A research report (DOE, 1986, Marine Dredging) identified Barrow, Workington, Whitehaven and Silloth as potential landing sites. There is no indication that material will be landed in Cumbria during the Plan period. Given the aggregates resources in Cumbria it is unlikely that material will be imported from coastal super quarries.

- 5.11.3 Rail depots for receiving aggregates also require planning permission from the County Council. There are currently no depots in Cumbria. Given the existing levels of permitted reserves it is unlikely that there will be a need during the Plan period for the establishment of rail depots.

5.12 Crushed Rock Non Aggregate Provision

- 5.12.1 Approximately 1.4 million tonnes of crushed rock is sold annually from quarries in Cumbria for non aggregate uses. Permitted reserves are at least 32 million tonnes, which are additional to the 220 million tonnes reserves of crushed rock for aggregates use. 95% of this production is high purity limestone for use in the iron and steel industry and for fillers, pigments and other chemical and industrial products. Small quantities of building stone, armour stone and agricultural limestone are also produced from crushed rock quarries.
- 5.12.2 For the purposes of this Plan, high purity limestone is defined as limestone with a minimum calcium carbonate content of 97%. This is the definition, adopted by the British Geological Survey (BGS) (DOE, 1991, Appraisal of high purity limestones).
- 5.12.3 Part of the reserves at Stainton, Shap Beck, Hartley, Eskett and Tendley Quarries is high purity limestone suitable for industrial purposes. The largest producer is Shapfell Quarry which produces lime for steelmaking. The industrial limestone from these sites is produced in conjunction with aggregates.
- 5.12.4 BGS have identified substantial deposits of high purity limestone in Cumbria, between Furness and Carnforth and between Shap and Kirkby Stephen. These areas are generally of high landscape and nature conservation value and with a few exceptions, remote from the primary road network.
- 5.12.5 Shapfell Quarry supplies 60% of the needs of British Steel's major steelworks and is an important local employer. Permitted reserves of high purity stone at the existing quarry are expected to last 8 to 10 years. The further extension of the quarry is not possible due to geological and environmental constraints. British Steel are considering using imported limestone as well as looking locally for alternative reserves. The feasibility of altering the lime quality parameters to enable lower purity limestone to be used is also being investigated.
- 5.12.6 The continued production of high purity limestone at other sites in the County is expected to continue in tandem with the production of aggregates.

POLICY 36

Proposals for the extraction of high purity limestone will only be permitted where there is a demonstrable national or regional need and it will be used primarily for non aggregate uses or where significant benefits would accrue to local communities or the environment.

5.13 Coal

- 5.13.1 The County Council adopted the Cumbria Coal Local Plan in 1991. Since then a number of changes have taken place within the coal industry which has resulted in a need to modify the policies. These include the decision by British Coal to pull out of West Cumbria, the privatisation of British Coal and a reduction in the use of coal for power generation. Revised national planning guidance in 1994 (DOE 1994, MPG3) reflected the greater environmental concerns about opencast coal extraction. New national planning guidance on coal is expected in the next 12 months. This Plan, when adopted, will replace the Coal Local Plan.
- 5.13.2 The exposed coalfields and permitted coal sites are shown in Figure 7. West Cumbria was a significant supplier of coal from the late eighteenth century but the last deep mine closed in 1986 and opencast mining activity has contracted markedly since 1992 with production falling from around 900,000 tonnes per year to 154,000 tonnes in 1994. However, the privatisation of British Coal has led to a renewed interest in opencasting in Cumbria with output amounting to 313,000 tonnes in 1995, 299,000 tonnes in 1996 and 209,000 tonnes in 1997 (Source: The Coal Authority).

- 5.13.3 Planning permission has recently been granted for an opencast coal site at Keekle Head, Pica and there is a small dormant private drift mine near Whitehaven. Limited drift mining of semi-anthracite coal takes place in the Alston area.
- 5.13.4 The coal in West Cumbria is generally a high volatile general purpose bituminous coal. Most is burnt in power stations but some is used to supply the domestic and industrial markets.
- 5.13.5 There is no national guidance on the appropriate level of coal provision. In line with the Structure Plan Policy 58, the County Council recognises that Cumbria should play its part in meeting a share of national supply provided this can be achieved in an environmentally acceptable way. The County Council accepts the continuation of a modest opencast coal industry in West Cumbria because of the investment and jobs it brings to an area of relatively high unemployment, but only on the basis that modern day environmental standards are met, the aspirations of local communities are fully respected and practical local benefits are derived from the opencast operations.
- 5.13.6 The general environmental considerations to be taken into account are set out in Chapter 4 of this Plan. However, opencast mining, unlike most other forms of mineral working, can change the environmental character of large tracts of land in a relatively short timescale and this can become a matter of particular concern in West Cumbria where the enhancement of environmental quality is now a major objective in many areas of public policy. For these reasons, and notwithstanding their temporary nature, opencast proposals are likely to be unacceptable in designated landscapes (ie landscapes designated for special protection in the Structure Plan or District Local Plans) or in other highly visible tracts of countryside which if opencasted would harm the image of the area and its attractiveness for economic development and tourism.
- 5.13.7 The County Council is particularly concerned to protect the amenity of local communities and to encourage their aspirations for change in their environmental and economic circumstances. Historically some communities have suffered continuous blight created by a sequence of opencast sites, sometimes for decades. Therefore, approval for opencast coal extraction will not be granted where there would be a material adverse impact on local communities. When assessing the impact, that arising from other permitted and previous opencast operations will also be taken into account.
- 5.13.8 Opencast operations by their very nature, even if they satisfy the above requirements, will still have impacts and these will only be acceptable for a limited period. It is considered that the maximum acceptable working life from the commencement of site preparation works to the cessation of coaling is 10 years.
- 5.13.9 Where a proposal has a material adverse impact the County Council will take into account any significant benefits to the local community and the environment in deciding whether to grant planning permission. These benefits may include significant local employment and investment benefiting the local economy, the improvement of derelict or despoiled land, providing for afteruses beneficial to the local community and the enhancement of the local environment. (In addition, in accordance with Policy 25 opencasting may also be considered a benefit where coal would otherwise be sterilised by other permitted development).
- 5.13.10 As a consequence of adopting the above approach the County Council does not expect to see a significant expansion in the size of the industry during the Plan period. A continued steady output from the coalfield of the size of recent years would maintain the current opencast workforce and investment in Cumbria. When considering the need for a proposed site the County Council will take into account the contribution that the Keekle Head site, with an estimated reserve of 1.5 million tonnes of coal and a seven year life, will make to national supply for the plan period.

POLICY 37

Unless there would be significant benefits to local communities and the environment sufficient to outweigh any non-compliance with the following criteria, opencast coal extraction will only be permitted where:

- (i) *there would be no material adverse impact on local communities, including that arising from the cumulative impact from other permitted and previous opencast coal operations; and*
- (ii) *there would be no material adverse impact on a designated landscape; and*
- (iii) *it would not inhibit the ability of West Cumbria to attract inward investment, economic development and tourism; and*
- (iv) *the working life to the cessation of coaling has been minimised commensurate with the environmental and amenity impacts and the market place, and in any event should not exceed ten years.*

5.13.11 In the Alston/Nenthead and East Fellside areas of East Cumbria the coal reserves capable of being extracted by opencasting are limited. The seams are thin, overlain by considerable depths of overburden and generally occur at high altitude where the harsh climate makes the working and restoration of sites more difficult. The road network is generally unsatisfactory. In the unlikely event that opencast coal extraction is proposed it will be strongly opposed because of the harm it would cause to this part of the North Pennines AONB.

POLICY 38

Planning permission will not be granted for opencast coal extraction in the Alston/Nenthead and East Fellside areas.

5.13.12 In West Cumbria the resumption of deep mining is unlikely, other than possibly small output drift mining. In the Alston/Nenthead area there are sufficient permitted reserves to meet market needs beyond the Plan period. The County Council supports the development of new mines in West Cumbria which will provide employment benefits and use local expertise, provided they are developed in an acceptable manner.

POLICY 39

Proposals for underground coal mines will be permitted subject to adequate precautions being taken to avoid subsidence damage that would cause significant land use problems.

5.14 On Shore Oil and Gas

5.14.1 Government policy (DOE, 1985, Circular 2/85) is to encourage the maximum economic exploitation of oil and gas reserves, consistent with good oilfield practice and the protection of the environment.

5.14.2 Oil and gas is subject to a national licensing system. It identifies three phases of oil and gas development; exploration, appraisal and production, each requiring a separate licence. However, in 1995 a new 'one shot' single licence covering all stages of development was introduced by the Department of Trade and Industry. In addition, planning permission is required from the County Council for onshore drilling and production development that is above the low water mark.

5.14.3 Potential resources of oil and gas occur in Cumbria within geological structures known as the Solway and Irish Sea basins. Deep exploratory boreholes have been drilled on Walney Island and near Aspatria and Longtown, following seismic surveys, but none have progressed to the appraisal stage. There are currently two onshore oil and gas exploration licenses, for the areas to the north of Carlisle and around Whitehaven shown on Figure 8.

5.14.4 The County Council recognises the importance of establishing the extent of the nation's energy resources and will normally permit the drilling of exploratory boreholes.

5.14.5 Appraisal boreholes are required to prove the commercial viability of a resource. These could be used as production wells. In considering planning applications for appraisal or production development a scheme for the appraisal or development of the whole resource will be required. This is to control the number and arrangement of surface installations and minimise disturbance. A development scheme

covering adjoining resources may be required to prevent their piecemeal development. Where practicable, the County Council will expect oil and gas to be transported by pipeline, the routing and construction of which shall be such as to minimise the environmental impact.

POLICY 40

Proposals for the appraisal, drilling and testing of oil and gas will be permitted provided the proposals are consistent with an overall scheme for the appraisal of the resource.

POLICY 41

Proposals for the commercial production, processing and transporting of oil or gas will be permitted provided the proposals are consistent with an overall scheme for the optimum development of the resource (and where appropriate any other adjoining oil or gas resources).

5.15 Peat

- 5.15.1 Blanket bog comprises 75% of the peatland in Cumbria but is not currently worked. Raised bogs that principally form in the lowlands are worked for peat. Their accessibility, high quality deep peat and more favourable climatic conditions for harvesting have encouraged their exploitation.
- 5.15.2 Cumbria retains only 33% of its former area of lowland raised bog and this remaining area is all damaged to some extent. Raised bogs mainly occur on the level areas of glacial till which flank the Solway Firth and Morecambe Bay. Blanket bog occurs on the hills around Shap and more extensively in the North Pennines. Both blanket and lowland raised bogs are a wildlife habitat of considerable importance with a number of sites being of national and international importance.
- 5.15.3 Protecting the hydrological integrity of peat bogs is crucial to maintain active growth and prevent them drying out. The operations which are most damaging are draining, burning and peat extraction. Peat extraction and the reclamation of lowland raised bogs to agriculture and forestry has reduced the extent of this resource to critical levels nationally.

The Peat Industry in Cumbria

- 5.15.4 Peat has been worked on a significant scale in Cumbria since the end of the last century. Production methods require a large landtake and the opportunities for progressive restoration are limited.
- 5.15.5 There are three large sites, all in the north of the County, at Bolton Fell, Solway Moss and Wedholme Flow, producing peat on a commercial scale for the horticultural market (Figure 9). The principal horticultural use of peat is as a growing medium for plants. A small amount is used as a soil improver.
- 5.15.6 These three sites contribute around 20% to the UK national production total of 1.5 million cubic metres. They also contribute significantly to the local economy and are important local employers.
- 5.15.7 Environmental groups and local authorities have voiced considerable concern at the continued loss of lowland peat bog, a nationally rare and endangered habitat. In response to this concern, the Department of the Environment convened a Working Group in 1992, to consider the key issues in the balance between nature conservation and mineral extraction interests affecting peatlands. In July 1995 the DOE published mineral planning guidance on peat provision in England (MPG13).
- 5.15.8 The Government policy for peatlands has two main strands. To conserve a sufficient range and number of all peatland habitats, representing part of the critical natural capital of the Country. To enable the horticultural industry to continue to be supplied with peat; but to also encourage the development and use of suitable alternatives so that market needs can be met in different ways.
- 5.15.9 Whilst encouraging the development of alternatives to peat, the Government takes the view that in order to meet a share of the anticipated market demand for growing media based on peat in the medium to long term, the UK peat extraction industry will require some new areas for extraction. It is predicted that approximately 1,000 hectares may be needed over the next 10-20 years. This takes into account an increased market share taken by peat substitutes. The MPG indicates that future extraction should be

restricted to areas which have been significantly damaged by recent human activity and are of limited or no current nature conservation or archaeological value.

- 5.15.10 Permitted reserves at each of the working sites in Cumbria are sufficient to maintain current production levels well beyond the Plan period. It is however possible that applications for working peat on new sites may be submitted in the Plan period to meet national requirements.
- 5.15.11 Given the limited remaining raised bog habitat in the UK and the importance of Cumbria's examples, there is no justification for new peat extraction sites affecting any lowland bogs of high nature conservation interest (MPG13 advises on what constitutes high nature conservation interest). Blanket bogs of high nature conservation interest should be similarly protected.
- 5.15.12 There is no need or justification for landfilling or other waste management operations taking place on peatland of high nature conservation interest.
- 5.15.13 Peat working can change distinctive landscapes. Some peatland areas are of landscape importance because of their historic relevance and their wilderness appeal. The working of such sites will be resisted. The County Council will also expect the archaeological interest of peat bogs to be safeguarded.
- 5.15.14 Should new sites be sought for peat extraction the County Council will normally expect the site to be restored to appropriate nature conservation afteruses. Wherever practicable sites should be restored to their former bog habitat.
- 5.15.15 The County Council will seek to ensure the drainage of peat extraction sites does not adversely affect adjacent peatland areas or land uses by reducing watertable levels or discharging high levels of suspended solids.

POLICY 42

Planning permission will not be granted for minerals and waste development which would adversely affect peatlands of high nature conservation or archaeological value.

POLICY 43

Proposals for peat extraction will only be permitted where:

- i. there is a demonstrable national requirement for the peat to be worked; and***
- ii. where the site has already been significantly damaged by recent human activity and is of limited or no current nature conservation or archaeological value; and***
- iii. the restoration scheme, wherever practicable, gives priority to wetland rehabilitation and to the enhancement of the nature conservation resource.***

Review of Existing Peat Permissions

- 5.15.16 The planning permissions at the three active sites in Cumbria were granted before the nature conservation importance of lowland peat bogs was fully appreciated. These permissions have few, if any, conditions to control working practices, or to secure the rehabilitation and longer term management of worked out areas.
- 5.15.17 A significant part of the area of planning permission on Wedholme Flow is the subject of a legal agreement between English Nature and the operator, Levington Horticulture. The agreement specifies consultation arrangements on working areas, agrees a nature conservation area within the area of planning permission, and specifies that on completion of extraction a minimum of half a metre of peat should be left to enable initiation of a restoration plan. Part of the peat extraction area is in a different ownership and is not covered by this agreement.

- 5.15.18 DOE has published detailed guidance on the rehabilitation of cut over peat bogs (DOE, 1995, Restoration of Damaged Peatlands). This indicates that it is not possible to recreate a bog to its original standard. It may be possible with appropriate working and management measures to restore conditions to those under which the bog originally developed and to encourage the return of typical raised bog species.
- 5.15.19 The Environment Act 1995 introduces new requirements for the initial review and updating of old mineral planning permissions and the periodic review of all mineral permissions thereafter. The Wedholme and Bolton Fell sites will be reviewed in 1997 and Solway Moss in the second phase of the review. The County Council will seek to agree working, restoration and afteruse schemes that protect areas of high quality bog and allow the rehabilitation of the sites to a nature conservation afteruse.

POLICY 44

Schemes of working, restoration and afteruse will be sought at existing peat working sites to safeguard areas of important nature conservation interest and to maximise the potential for restoration of the sites to appropriate nature conservation afteruses.

5.16 Gypsum and Anhydrite

- 5.16.1 Gypsum and anhydrite are the naturally occurring forms of calcium sulphate, formed as a result of the evaporation of saline water. The predominant use of gypsum is in the production of plaster and plasterboard for the building industry. Small quantities of powdered gypsum are used in a wide range of products, ranging from soil conditioners and fertilisers, to fillers in the cement, paint, paper, pharmaceutical and food industries. Anhydrite is now only used in the production of specialised cement and in glass manufacturing.
- 5.16.2 Extensive reserves of gypsum and anhydrite occur in the Eden Valley and between St Bees and Whitehaven in West Cumbria but are now only worked in the Kirkby Thore area in the Eden Valley.
- 5.16.3 The underground mines at Kirkby Thore provide some of the raw material for the large British Gypsum plasterboard plant. The area with permission for underground working is 1400 hectares. This gypsum has to be blended with higher quality material to meet required specifications. The sources of high quality material are desulphogypsum (DSG), a residue from the cleaning of flue gases from coal fired power stations, and imported or locally quarried gypsum. Planning permission for a new quarry at Stamp Hill, near Long Marton to supply the works was granted in 1991 but was not implemented and has since lapsed.
- 5.16.4 British Gypsum has recently invested heavily at Kirkby Thore to modify the plant to accept DSG imported by rail from Drax Power Station in North Yorkshire. If Drax was operated to capacity 350,000 tonnes of DSG a year would be available to Kirkby Thore. Recent changes in the electricity generation industry have cast doubts about the reliability of future DSG supplies.

Future Supply of Gypsum to Kirkby Thore Works

- 5.16.5 The County Council recognises that the Kirkby Thore plant is an important local industry. The existing underground reserves will be sufficient to provide British Gypsum's need for lower quality material for the Plan period. The uncertainty over the supply of DSG means that there could be a shortfall in the supply of higher quality gypsum. This shortfall will need to be met locally or by importing material. An application for a smaller site at Stamp Hill may be submitted within the Plan period.
- 5.16.6 Maximum use should be made of DSG as it is a more sustainable option. However, given the doubts over its supply, alternative sources of high grade gypsum may be required. There are no significant known reserves of high quality gypsum in the area that could be won by underground working. The County Council therefore recognises the importance of the Stamp Hill site and has identified a preferred area within which gypsum extraction will be permitted (Proposals Map Inset 5).

POLICY 45

Planning permission will only be granted for the extraction of gypsum from the Stamp Hill preferred area if it can be demonstrated that the supply of desulphogypsum is insufficient to meet the production requirements of the Kirkby Thore works and the gypsum is:

- i. only to be used at the Kirkby Thore Works; and*
- ii. transported to the works by conveyor.*

5.16.7 The Newbiggin mine provides small quantities of anhydrite. An extension of the underground workings may be sought within the Plan period. A limited extension to maintain production is likely to be acceptable within the preferred area identified in Proposals Map Inset 6. Appropriate restrictions to guard against the risk of subsidence damage and disturbance from blasting would be imposed on any permission granted.

POLICY 46

Planning permission will be granted for an extension of the underground anhydrite workings within the Newbiggin Mine preferred area subject to appropriate safeguards against subsidence.

5.17 Salt

- 5.17.1 A salt deposit as shown in Proposals Inset Map 7 lies between 90m and 300m beneath the Walney Channel, Barrow. Some solution mining of the deposit took place at the end of the 19th Century. Within this deposit a preferred area for salt extraction with estimated recoverable reserve in excess of 100 million tonnes has been identified. Preliminary sampling has indicated that 70% of the salt is of exceptionally high grade. Exploratory drilling would be required to determine the working parameters. Extraction could be by room and pillar mining, with access from an inclined drift or vertical shaft, but is more likely to be by solution mining.
- 5.17.2 Land at or near Barrow Docks could accommodate the surface mine installations and associated industrial processes. Up to 100 direct jobs could be created if processing took place on site and further jobs would be generated indirectly.
- 5.17.3 Any proposal would need to satisfy the relevant policies in Chapter 4, in particular the nature conservation interest as the preferred area lies within an SSSI, SPA and candidate SAC. In addition, any proposals would need to demonstrate that the operation of the Port of Barrow would not be adversely affected and there would be appropriate safeguards against subsidence. The County Council would require an application for mining to be subject to Environmental Assessment.

POLICY 47

Proposals for the extraction of salt from the Walney Channel preferred area will only be permitted if it can be demonstrated that there will be no adverse effects on the operation of the Port of Barrow and there are adequate safeguards against subsidence.

5.18 Mudstone

- 5.18.1 Askam in Furness brickworks manufactures a range of traditional clay bricks which are marketed nationally. The brickworks is an important local employer. High quality mudstone to make bricks is supplied from the Company's nearby quarry. The quarrying operations are low key, reasonably well screened and do not have a great impact on the surrounding area.
- 5.18.2 Planning permission has recently been granted (in 1997) for an extension and deepening of the existing quarry. The additional permitted reserves should, at current estimates of production, supply the brickworks until 2013. Therefore no further areas for mudstone extraction need to be identified in this Plan.

5.19 Building Stone

- 5.19.1 A variety of stone from Cumbrian quarries is supplied for constructing, renovating or cladding buildings and for use as ornamental stone in Cumbria, elsewhere in the UK and abroad.
- 5.19.2 There were 12 active building stone quarries in the County in 1995 (Figure 10). Kirkby Slate Quarry also supplies specialised slate products. Some of the major aggregate quarries supply small quantities of building stone. There are also many small disused building stone quarries scattered around the County.
- 5.19.3 These operations provide specialist products, contributing to the quality of the built environment. They provide a small but important level of employment in rural areas and keep alive traditional skills. Many of the quarries are operated intermittently with the stone processed off site.
- 5.19.4 Building stone quarries are generally small scale and unobtrusive and the County Council supports the quarrying of such stone by traditional methods. Any new provision should be capable of being accommodated by extending existing sites or re-opening disused sites which are not of significant nature conservation or landscape value.

POLICY 48

Proposals for new building stone quarries which raise significant planning objections may be permitted only where it can be demonstrated that the material cannot be adequately supplied from existing sources.

5.20 Slate

- 5.20.1 Slate has been quarried in Cumbria for over 300 years. The number of quarries and total output has reduced in the latter half of this century due to the availability of cheaper alternatives. Although the demand for roofing slate has declined the use of slate as a decorative cladding and for ornamental purposes has increased. Slate from Cumbria is distributed worldwide.
- 5.20.2 Burlington Quarry at Kirkby in Furness is the only operational slate quarry in the Plan area but the works processes slate from quarries in the Lake District National Park. It is an important local employer and contributes to the local economy.
- 5.20.3 Planning permission has been recently granted for a comprehensive quarrying, tipping and restoration scheme for the Burlington Slate Quarry and Works complex which updated the previous permissions at the site and reduced their area. The scheme will provide for the more systematic working of slate and tipping of quarry waste and improve the appearance of some of the waste tips. At current production levels the quarry should continue to supply the works for over 50 years.

5.21 Limestone Pavement

- 5.21.1 Limestone pavements form striking landscape features comprising large expanses of weathered rock. They have developed over thousands of years by the solution action of water on beds of limestone. They occur in exposed upland areas like Orton and Farleton, where they are the predominant landscape feature, or under a cover of woodland as in the Arnside area.
- 5.21.2 There are 2,150 ha of limestone pavement in Britain. In Cumbria, only 350 ha of the 595 ha remain intact, 40% having been removed or badly damaged.
- 5.21.3 The pavements form areas of considerable biological and physiographical interest and are identified as a priority habitat under the EC Habitats Directive.
- 5.21.4 With the agreement of the landowner, and the assistance of English Nature the County Council has recently paid compensation to revoke a planning permission granted in the 1950s for the removal of limestone pavement for Orton Scar. There is now no extant permission in the County, solely for the removal of limestone pavement.

- 5.21.5 Limestone pavement is under threat from unauthorised removal and once destroyed it can never be replaced. To counter this threat the County Council has made 44 Limestone Pavement Orders, under the Wildlife and Countryside Act, covering all the important areas of pavement. The effect of an Order is to make it a criminal offence to remove or disturb any limestone within the area covered by an Order. The only exception is where planning permission has been granted for its removal, and there are a small number of limestone quarries in Cumbria where this is the case. The County Council is committed to taking all possible steps to safeguard the remaining limestone pavements including seeking voluntary revocation if opportunities arise.

POLICY 49

Proposals for minerals and waste development which would adversely affect limestone pavement will not be permitted.

5.22 Other Minerals

- 5.22.1 Vein minerals occur in the Carboniferous rocks of the Lake District margins and Northern Pennines. The veins carry the ores of lead, zinc, copper and manganese accompanied by non-metalliferous minerals, typically quartz, fluorite and baryte.
- 5.22.2 Baryte is naturally occurring barium sulphate. In Cumbria baryte has been recovered from old lead mine dumps and mined by both underground and opencast methods. Small amounts are still extracted by opencast methods at Silverband Mine on Great Dun Fell where recent permissions have resulted in the restoration of previously disturbed workings. The current permission does not expire until 2006.
- 5.22.3 Workable deposits of the other vein minerals generally occur in the remoter upland areas of the County, especially the North Pennines AONB. Major mining activity in this area would be unacceptable.
- 5.22.4 The working of iron ore was a major industry in West and South Cumbria. Florence Mine, near Egremont, still produces small quantities of haematite and has extensive permitted reserves.

5.23 Other Development at Mineral Sites

- 5.23.1 Processing plant for crushing, washing and screening may be required to make minerals saleable. Plant is also needed to manufacture products such as ready mixed concrete and coated roadstone. Other development such as weighbridges, site offices and vehicle maintenance workshops may also be required.
- 5.23.2 Operators have the rights to erect certain buildings and plant at or adjoining a mineral working provided specific requirements are satisfied. At some sites these rights have been withdrawn because the environmental, traffic or other effects of such development were considered to be unacceptable. When granting planning permission for mineral working the County Council will only withdraw such rights where there are compelling planning reasons to do so.

6 PLANNING FOR THE MANAGEMENT OF WASTE

6.1 Introduction

6.1.1 This chapter considers the need for waste management provision in the Plan period. It sets out the County Council's waste planning policies and proposals for the provision of sites.

6.2 Background

6.2.1 The Government's White Paper, Making Waste Work, sets out a strategy for sustainable waste management in England and Wales. This is based on a waste hierarchy which, in order of preference, states that waste should be reduced, reused, recovered and disposed of safely. The White Paper also sets out a number of targets aimed at reducing the amount of waste going for final disposal, mainly to landfill, and increasing the rate of recovery.

6.2.2 Primary targets seek to reduce the proportion of waste going to landfill from the present level nationally of 70% to 60% and to recover 40% of municipal waste by 2005. The Government is committed to reducing its own waste. To help achieve the primary targets a number of secondary targets for particular waste streams have been set.

6.2.3 Implementation of the strategy calls for action by all - Government, industry and the public. Local authorities have a number of duties in connection with waste which makes them key players in implementing the strategy. The District Councils as Waste Collection Authorities arrange for the collection of household waste and if requested, commercial waste. They also have a duty to prepare recycling plans. The County Council as the Waste Disposal Authority (WDA) arranges contracts for the disposal of waste which has been collected by the District Councils. The County Council also provides Civic Amenity Sites and encourages recycling by the payment of credits for materials taken out of the waste stream. The private sector plays a major role through operating waste treatment and disposal facilities. The public too are involved, reusing items rather than throwing them away, separating materials for recycling and composting their green waste for use in their gardens.

6.2.4 The Government recognises that the choice of how and where waste is managed lies with the producer or holder of the waste. However, the role of the planning system is crucial, not only to prevent development taking place where it will cause harm but also to ensure that there is adequate scope for provision of the right facilities in the right places, and at the right time.

6.2.5 The County Council has had regard to the White Paper in drawing up this Plan. It has also had regard to the County's Waste Disposal Plan published in 1993. This contains information on the quantities and types of waste arising in the County and the options for their disposal. The Waste Disposal Plan concluded that landfill would probably continue to be the major waste management option in Cumbria over the next ten years.

6.2.6 Formulation of waste policies in the Plan has been guided by four principles agreed by the North West Regional Association of which the County Council is a member. Firstly, provision should reflect the waste hierarchy. Secondly, the proximity principle requires that, if possible, waste be recovered or disposed of close to where it arises. Thirdly, the aim overall is to achieve regional self sufficiency, that is to ensure that all waste arising in the North West is recovered or disposed of within the region. Finally, waste developments should not have significant adverse effects on local communities or the environment.

6.2.7 Based on these principles the Plan seeks to make provision for the establishment of an integrated and adequate network of waste management facilities to enable all waste arising in Cumbria, other than waste requiring specialised facilities, to be recovered or disposed of safely within the County. This commitment meets an objective of the EC Framework Directive on Waste.

Existing Provision

6.2.8 The extent to which existing provision fulfils the objective of providing a network of facilities varies between the north and south of the County. In the north, which includes the districts of Carlisle, Eden,

Allerdale and most of Copeland, there are a range of waste management facilities and options for future provision. Capacity for the disposal of non-inert waste to landfill is considered to be sufficient for the period of this Plan up to 2006 and capacity at sites for inert waste is also adequate in most of the area. It would however be desirable to provide facilities for recycling construction waste, in Carlisle and Eden in particular. Additional capacity will be required for the disposal of industrial waste in Copeland. The provision of small scale facilities in Eden (transfer stations and small inert landfill sites) would reduce the environmental impacts associated with transporting wastes over long distances.

- 6.2.9 The southern area comprises the districts of South Lakeland and Barrow and the southern part of Copeland around Millom. The area has few waste management facilities and landfill capacity is limited. Future options are constrained by the limited land area available outside the National Parks, environmental constraints and the generally poor road network. Additional facilities of all types will be required during the Plan period in the south of the County.

6.3 Type and Volumes of Waste to be Managed

- 6.3.1 The Government (DOE, 1995, Making Waste Work) recognises that information on waste arisings is inadequate for waste planning purposes and has charged the Environment Agency with undertaking a national waste survey. A survey of waste producers, undertaken in 1990 as part of preparing the County's Waste Disposal Plan, provided a snapshot of waste arisings in that year. However much has changed in waste management since then and 1990 may not have been representative of the normal annual arisings in Cumbria. For the purposes of this Plan figures on waste have been taken from the Waste Regulation Authority Annual Reports for the last three years. The advantage of this approach is that it enables average figures for waste disposal over a three year period to be obtained, providing a better basis on which to plan. Its disadvantage is that these figures do not include all waste recycled and reused, and under-represent waste disposed of by methods other than landfill and landspreading.

- 6.3.2 This section describes recent levels of waste disposal. Wastes can be divided into those that are mainly inactive and non polluting (inert waste) and those that contain putrescible material and therefore may pollute land, water and air (non-inert waste).

- 6.3.3 In Cumbria waste is mainly disposed of to landfill. In 1994/95 over 1.4 million tonnes of controlled waste was disposed of by this method and a further 0.25 million tonnes by landspreading. Much smaller quantities of waste were incinerated or went for recycling and energy recovery. The total waste arisings were in fact greater. Some waste will have been recovered and reused or recycled at source and does not appear in disposals returns. Table 10 shows the quantities of controlled waste disposed of to landfill in 1994/5.

Table 10: TYPES OF CONTROLLED WASTE LANDFILLED IN CUMBRIA 1994/95 (TONNES) TAKEN FROM WASTE REGULATION AUTHORITY ANNUAL REPORTS

| | Allerdale | Barrow | Carlisle | Copeland | Eden | South Lakeland | Total |
|---------------|----------------|----------------|----------------|----------------|----------------|-------------------|------------------|
| Inert | 105,990 | 64,040 | 98,080 | 161,250 | 235,980 | 46,150 | 711,490 |
| Cons/Dem/Bldg | 30,150 | 16,270 | 3,620 | 11,690 | 3840 | | 65,570 |
| Ho/Ind/Comm | 66,970 | 95,460 | 90,310 | 264,410 | 58,200 | 50,970 | 626,320 |
| Clinical | 160 | | | | | | 160 |
| Special | 4,910 | 3,900 | | 4,030 | | | 12,855 |
| Totals | 207,710 | 176,390 | 192,010 | 442,720 | 298,020 | 97,120 | 1,415,470 |
| (93/94) | 191,040 | 439,900 | 199,770 | 483,850 | 143,160 | 183,790 | 1,596,190 |
| (94/95) | 282,790 | 287,930 | 208,500 | 434,650 | 143,160 | 165,320 | 1,522,350 |

- 6.3.4 Almost 50% of the waste landfilled in the last three years has been inert waste. The remainder was non-inert waste.

- 6.3.5 The figures for 1994/95 show a decrease of nearly 13% from the figures for 1993/94, which in turn represented an increase of 5% over totals for 1992/93. The change over the three year period can be mainly accounted for by a reduction in the amount of inert waste deposited in 1994/95 and by

fluctuations in the levels of construction, demolition and building wastes over the period. The amount of household, commercial and industrial waste landfilled appears much more consistent at about 620,000 tonnes per annum.

- 6.3.6 Future disposals of waste to landfill are difficult to forecast as amounts will be affected by a number of factors. These include levels of recycling, changes in technology, the general level of economic activity and increased costs of disposal.

Household Waste

- 6.3.7 The Waste Disposal Plan forecast that household waste arising in Cumbria would increase by 12% by the year 2001 (from 161,000 tonnes in 1990 to 181,000 tonnes in 2001). However, about 225,000 tonnes of household waste was disposed of in 1994/95. This increase is mainly attributable to the improved collection of statistics since 1990. In addition some 12,865 tonnes was recycled, mainly through District Council managed schemes. This equates to about 5% of the total, which is about the current average nationally.
- 6.3.8 For the Plan period it is expected that annual household waste arisings will be at or around the 1994/95 levels, that is about 230,000 tonnes. The Government has set a target of recycling or composting 25% of household waste by the year 2000. If achieved this could reduce the amount of waste requiring disposal by 60-65,000 tonnes per annum. This would still leave 170-180,000 tonnes annually requiring disposal.

Commercial and Industrial Waste

- 6.3.9 The Waste Disposal Plan concluded that commercial and industrial waste was unlikely to increase significantly over the next 10 years and that there was a high probability that quantities would decrease. For the purposes of this Plan it is assumed that it will be necessary to dispose of approximately 500,000 tonnes of other non-inert wastes per annum, including construction, demolition and building wastes, based on levels disposed of to landfill in the last three years.

Special Wastes

- 6.3.10 Special wastes are toxic and a danger to human health. Arisings within the County over the last five years have been 7-12,000 tonnes per annum. Imports over the same period have risen from a few hundred tonnes to over 25,000 tonnes in 1994/95.

TABLE 11: SPECIAL WASTE STATISTICS IN CUMBRIA 1990-1995 (TONNES) TAKEN FROM WASTE REGULATION ANNUAL REPORTS

| | 1990 | 1991 | 1992 | 1993/94 | 1994/95 |
|-------------------------|-------------|-------------|-------------|----------------|----------------|
| Arising within County | 7944 | 7309 | 10,620 | 8530 | 12,103 |
| Exported from County | 4343 | 4782 | 8634 | 5776 | 8,416 |
| Imported into County | 464 | 165 | 3157 | 11,087 | 25,570 |
| Deposited within County | 4065 | 2692 | 5143 | 13,841 | 29,357 |

Note: Figures for deposits also include material transfer loaded, 1510 tonnes in 1994/95. There is also an element of double counting since waste imported into the County may also be re-exported and appear in the export figures as well as that for imports.

- 6.3.11 This type of waste is produced by industries in the County and the availability of sites for its disposal is important. Three non-inert landfill sites in the County accept a limited range of special wastes. The volume of special waste deposited at these sites is relatively small. In recent years the quantity of special waste imported for disposal has increased significantly and is now more than double the amount arising within the County. The increase in special waste imports to the County is likely to continue as the disposal of special waste commands a premium price and waste management companies actively seek contracts.
- 6.3.12 Special waste is often a cause of concern to the public, particularly when it is imported from outside Cumbria. Under existing legislation the import of special waste cannot be prevented. Some movement

of special wastes over longer distances may be justified where it is going for specialised treatment or disposal. Cumbria exported 8,416 tonnes in 1994/95.

Clinical Waste

- 6.3.13 The majority of clinical waste arises at hospitals, where, traditionally, it has been incinerated. Due to the statutory requirement to meet new process and emission standards, all the hospital incinerators in Cumbria closed in October 1995. A consortium of the National Health Service Trusts in the region has arranged a clinical waste disposal contract. This involves the disposal of waste at a facility outside Cumbria.
- 6.3.14 Clinical waste also arises from dental surgeries, general practitioners, residential and nursing homes and veterinary practices. Specialist contractors collect the waste and the majority is exported from the County for incineration. Four landfill sites in the County are licensed to take some types of clinical wastes but in practice very rarely do so. The remainder is disposed of at three small incinerators within the County which accept veterinary waste.

Sewage Sludge and Screenings

- 6.3.15 A total of 7600 tonnes of sewage sludge and 1100 tonnes of screenings, material such as paper, rags, wood and sanitary items removed by preliminary treatment, were produced by North West Water in Cumbria in 1990. All the screenings and 42% of the sewage sludge were landfilled, with the remainder being landspread (41%) or disposed of at sea (17%). Nearly half of the screenings and about a quarter of the sewage sludge were disposed of outside the County.
- 6.3.16 North West Water have indicated that as a result of new wastewater treatment facilities being brought into use and an end to sea disposal after 1998, the amount of material disposed of to land is expected to approximately double. They envisage that this will be by a combination of landspreading and landfill. Their preferred option for sludge would be landspreading where the material is suitable and there is sufficient agricultural land available. The increase in sewage sludge to be disposed of by landfill will not significantly influence the need for landfill capacity. However, particular problems of disposal have been identified in the Furness area where there is insufficient agricultural land to permit all-year round landspreading and landfill capacity is limited.

Radioactive Waste

- 6.3.17 Radioactive waste is an important issue in Cumbria because of the operations at Sellafield and Drigg.
- 6.3.18 Very Low Level Waste (VLLW) is currently disposed of with ordinary refuse as no special precautions are required. Its disposal does not raise any particular issues for this Plan to consider.
- 6.3.19 In 1990 Low Level Waste (LLW) arisings in Cumbria were 11,200 tonnes and total disposals 16,000 tonnes. Drigg is now the principal site nationally for the disposal of LLW. British Nuclear Fuels (BNFL) estimates that there is adequate capacity both in terms of volume and radioactivity, to handle all LLW arisings until the middle of the next century (2050/60). This presumes that beyond the Plan period some long lived LLW might be placed in a proposed deep repository. It is not necessary to make any additional provision for LLW disposal during the Plan period.
- 6.3.20 Intermediate Level Waste (ILW) is currently stored on the surface at nuclear facilities around the country, although approximately 60% of the UK arisings are at Sellafield.
- 6.3.21 The House of Lords Select Committee on Science and Technology carried out an inquiry on the management of nuclear waste and reported in Spring 1999. In their response in October 1999 the Government have stated that they are committed to a fully comprehensive policy for managing long-lived radioactive waste. The policy must be developed in the most transparent and open-minded way, to ensure maximum possible public acceptance, before final conclusions are reached on whether to continue storage above ground or to move to storage deep underground

- 6.3.22 Given the current uncertainty, the long term nature of the provision being considered and the adequacy of current provision no extra provision is proposed. Any proposals will be considered against Structure Plan policy. The County Council's position on radioactive waste is set out in Appendix III.

6.4 The Waste Hierarchy

- 6.4.1 The first priority of this Plan is to encourage, as far as it is able through land use planning policy, the re-use of waste and the recovery of value from it where this is both economic and makes sense environmentally. The second priority is to ensure the safe disposal of residual waste in an environmentally acceptable manner. This accords with the Government's hierarchy for waste management set out in Sustainable Development - The UK Strategy (1994).

POLICY 50

Proposals for waste development will be considered in accordance with the hierarchy of options in the following order of preference:

- i. reduction in the amount of waste produced*
- ii. re-use of waste without significant processing*
- iii. recovery of value from the waste and volume reduction by any of the following:*
 - a. recycling of material*
 - b. composting or landspreading*
 - c. energy recovery*
- iv. disposal of waste by landfill and incineration without energy recovery.*

Proposals which move the management of waste up the hierarchy will be favoured.

- 6.4.2 Waste should be treated or disposed of close to the point at which it is generated. This is known as the proximity principle and it is desirable for two reasons. First, it encourages communities to take more responsibility for their own waste which they - either themselves as householders, or their local industries - produce. It is their problem, not someone else's. Second, it aims to limit the environmental impact of transporting waste. Ensuring that waste is managed close to where it arises also contributes to achieving regional self-sufficiency in waste management in the North West Region. These principles are already embodied in Structure Plan Policy 60 which states that adequate sites should be provided for the disposal of wastes arising within Cumbria.

Structure Plan Policy 60 - Disposal of Waste

Adequate sites should be provided for the disposal of wastes arising within the County. Planning permission for waste disposal facilities will not be granted where the proposal has adverse effects on local communities or on the environment or where the infill and restoration of existing sites would be seriously prejudiced.

- 6.4.3 The requirement to make provision contained in the Structure Plan has been developed in line with the objective of the EC Framework Directive on Waste to seek to provide an integrated and adequate network of facilities. This network can be considered as requiring the provision of a range of waste management facilities across the County thus ensuring that not only are there sites for the disposal of waste but also for its treatment and recovery close to where waste arises. This ensures that a shortage of facilities does not constrain moving waste management practice up the hierarchy, meets the proximity principle and ensures that Cumbria contributes to regional self-sufficiency. Cumbria is remote from the major population centres in the North West Region. Large scale waste imports are considered unlikely and no specific provision is made in this Plan for sites to cater for wastes imported into the County.

POLICY 51

Proposals for waste development which contribute to providing an integrated and adequate network of waste management facilities to cater for wastes arising in the County will be permitted in appropriate locations.

6.5 Waste Minimisation

- 6.5.1 Waste minimisation or reduction is at the top of the hierarchy of waste management options. Making Waste Work indicates that it is concerned with two types of reduction; reducing the total quantity of solid waste produced which would otherwise need to be processed or disposed of and also with reducing the degree of hazard associated with such waste. Structure Plan Policy 61 supports this approach:

Structure Plan Policy 61 - Recycling of Waste

Proposals for developments which minimise waste production or which recycle, re-use or otherwise utilise waste materials will be favourably considered in appropriate locations subject to the criteria in Policy 60

- 6.5.2 The role of the planning authority in bringing about waste minimisation is a limited one. The Government is pursuing a range of initiatives aimed primarily at bringing home to businesses the financial benefits available from waste reduction, a point which has been given further emphasis by the introduction of the Landfill Tax in October 1996. The County Council can assist this process by helping to ensure that waste facilities are developed and operated to a high standard, so that the cost of protecting local communities and the environment is properly reflected in the charges made to waste producers.
- 6.5.3 Planning permission may be sought for schemes which, through treatment, aim to reduce the hazardous nature of waste. For example, chemical and biological treatment of waste may not reduce the volume for disposal but it can reduce the risk associated with its final disposal. These are dealt with in the section on Waste Treatment.

6.6 Materials Re-use and Recycling

- 6.6.1 Structure Plan 61 states that proposals which minimise waste production or which recycle, re-use or otherwise utilise waste materials, will be favourably considered in appropriate locations. To meet this objective and encourage the development of waste management facilities higher up the hierarchy of options it is important to guide proposals to appropriate locations.
- 6.6.2 The re-use and recycling of materials covers a wide range of activities. The following list outlines the types of land uses where these take place and their availability in the County.

- Scrapyards and Vehicle Dismantlers

The recovery of metals for recycling and components for re-use is a well established trade which is carried out at a large number of premises throughout the County.

- Construction and Demolition Waste Recycling Facilities

The appropriate re-use of excavated materials or crushed demolition waste within large construction projects is a recognised and integral part of many developments. There is increasing interest from firms, who contract to dispose of such wastes, for permanent facilities where suitable materials such as concrete, brick and stone can be stockpiled, or recycled by crushing and screening, for re-use.

- Materials Recovery Facilities (MRF)

These facilities are used to sort mixed wastes, usually commercial and industrial, to enable materials to be recovered for re-use and recycling. Residues are sent for disposal. There have been recent proposals for this type of facility where paper, cardboard and plastics will be recovered from waste, baled, and sent for recycling.

- Transfer Facilities

Often also known as Transfer Stations, these facilities enable waste to be bulked up and transferred to large vehicles to reduce costs for transport to disposal sites. They range from drained concrete pads for bulking skip waste to enclosed buildings where chemical wastes are handled. In contrast to MRFs, their primary purpose is not material recovery although some sorting of waste and recovery of materials may take place.

- Single Waste Storage Facilities

The bulk storage of individual waste types prior to despatch for either re-use or recycling is fairly common and covers a wide range of operations. Typical wastes are tyres, glass, paper or food waste such as biscuits. They generally form the raw materials to a manufacturing process.

- Civic Amenity Sites (CAS)

These are facilities provided by the County Council to receive waste delivered by householders. They typically include a range of skips and containers which allow wastes to be separated. Materials such as glass, oil, textiles and green waste can be collected for recycling.

6.6.3 Each of these different facilities plays a role in contributing to the range of waste management options for the re-use and recycling of materials. The fairly limited amount of recycling to date has been attributed primarily to the lack of stable markets for recycled materials and the generally low price which is paid for them. However, there is increased interest in providing facilities in response to Government guidance and due to higher costs arising from the landfill tax and other legislative changes.

6.6.4 Whilst the County Council favours the development of further facilities of these types it also recognises that they have potential impacts. The various facilities are considered below.

Scrapyards, Vehicle Dismantlers, Materials Recovery Facilities, Transfer and Storage Facilities

6.6.5 Materials Recovery Facilities and Transfer and Storage Facilities are generally enclosed and involve the use of machinery such as conveyors and baling plant typical of manufacturing industry. The emptying of containers can be noisy. They are generally capable of being located on industrial sites, often re-using existing buildings or redeveloping disused premises. It is important that proposals are appropriately designed and include measures to safeguard the occupants of surrounding properties from potential impacts such as noise. Because of the large numbers of heavy goods vehicles which use them they also require good access to the highway network. It is important to ensure that proposals are in character with the surroundings and would not prejudice overall development of the area. These developments may be incompatible with certain sensitive land uses such as business parks, clean industries and food manufacturing. Scrapyards and Vehicle Dismantlers can also require fairly large areas of open storage and may involve the external processing of metal using a shear or other means. Such proposals can have a visual impact and will be carefully scrutinised in accordance with the policies of this Plan.

POLICY 52

Proposals for Scrapyards, Vehicle Dismantlers, Materials Recovery Facilities, Transfer and Storage Facilities to facilitate materials re-use and recycling will be permitted on industrial sites provided that they do not have an adverse impact on surrounding landuses and do not prejudice the overall development of the area.

Construction and Demolition Waste Recycling Facilities

- 6.6.6 The Government has set a target for the increased use of secondary aggregates from the present level of 30 million tonnes per annum to 55 million tonnes per annum by 2006. The recycling of construction wastes will contribute to meeting this target.
- 6.6.7 Construction and demolition waste recycling involves the use of heavy machinery such as loading shovels, crushers, screens and conveyors. The material can arise in large quantities. It is therefore desirable that material is processed close to the site on which it arises in order to minimise heavy vehicle movements. However, a substantial operational area is often required. The activities also generate noise and dust and usually involve open stockpiles of material. They may therefore be incompatible with some industrial locations. These types of processing and storage activities are similar to those being carried out at active quarries. In order to reclaim suitable material from the waste stream there is also scope for this type of facility in conjunction with landfilling.
- 6.6.8 Quarries and landfill sites are temporary developments which are generally situated in the open countryside where non-essential development is restricted. A permanent construction and demolition waste recycling facility at these sites would be contrary to policies to protect the countryside and therefore unacceptable. Suitable sites must be able to satisfactorily accommodate facilities for a temporary period and not prejudice the operation and restoration of the quarry or landfill site.

POLICY 53

Proposals for Construction and Demolition Waste Recycling Facilities will be permitted at active quarries and landfill sites for a temporary period not exceeding the permitted life of the quarry or landfill site, where they can be accommodated without prejudicing the operation or restoration of the site.

- 6.6.9 Consideration of waste management provision has identified a lack of facilities for construction and demolition waste recycling, in particular around Carlisle and Penrith and throughout the south of the County.
- 6.6.10 It has been possible to identify some preferred areas for the recycling of construction and demolition waste. Landfill sites at Hespian Wood and Todhills, near Carlisle, have direct access from the A74 (Proposals Map Inset 8). Tendley and Moota Quarries, near Cockermouth, are also considered suitable for construction waste recycling in association with quarrying (Proposals Map Insets 9 and 10).
- 6.6.11 A further site at Blencowe Quarry has been identified for industry in the Eden District Local Plan. The site has permission for limestone extraction but is not currently working. It is considered suitable for a permanent facility for construction waste recycling (Proposals Map Inset 11).
- 6.6.12 A planning permission has been granted for crushing and screening of inert waste at Roan Edge Landfill site, near Kendal for a temporary period expiring in June 2001.
- 6.6.13 However, it has not been possible to identify a site around Kendal for the longer term at the existing mineral workings and landfill sites or on industrial land. Around Barrow a site at Roose Sand Pit is considered to be suitable on a temporary basis (Proposals Map Inset 12).

POLICY 54

Proposals for temporary Construction and Demolition Waste Recycling Facilities will be permitted, subject to the submission of a satisfactory scheme, at:

*Hespian Wood Landfill Site, Carlisle
Todhills Landfill Site, Carlisle
Tendley Quarry, Cockermouth
Moota Quarry, Cockermouth
Roose Sandpit, Barrow in Furness*

A proposal for a permanent Construction and Demolition Waste Recycling Facility at Blencowe Quarry, Penrith will be permitted subject to the submission of a satisfactory scheme and it not prejudicing the overall development of the area.

Civic Amenity Sites

- 6.6.14 Government has set a target of recycling or composting 25% of all household waste by the year 2000. The primary responsibility for deciding how this should be met has been given to District Councils who have a duty to produce and implement recycling plans. The County Council also contributes to this effort by its payment of recycling credits and by the provision of Civic Amenity Sites.
- 6.6.15 These facilities are already well used and offer potential for further material recovery by the provision of a wider variety of recycling containers to encourage more segregation of wastes brought to these sites. Contracts for the operation of the sites encourage material recovery. Waste Disposal Plan Policy WDP7 aims to provide a CAS within 5 miles of 90% of the County's population. To meet this objective the County Council has drawn up a priority list of sites on the basis of providing sites which will benefit the largest number of householders first. Since 1994 new sites at Ulverston, Millom and Kirkby Stephen have come into operation. A number of other sites are under consideration. The County Council is also exploring the possibility of a series of recycling centres across the County, to supplement existing civic amenity sites and as an alternative to new sites. Due to the high numbers of vehicle movements generated by these facilities the preferred location is industrial sites with good access to the highway network. Some landfill sites may also be acceptable temporary locations for CAS's where they can be accommodated as part of the scheme and have good road access.

POLICY 55

Proposals for Civic Amenity Sites will be permitted at industrial sites and non-inert landfill sites.

At non-inert landfill sites they will only be permitted for a temporary period not exceeding the permitted life of the landfill site where this can be accommodated without prejudicing the operation or restoration of the site.

6.7 Composting

- 6.7.1 Composting involves the biological degradation of organic wastes. It is suitable for a range of wastes such as garden and kitchen wastes but can also treat industrial sludge, sewage sludge and household waste. The compost produced can be applied to land to improve soil structure and enrich the nutrient content of the soil.
- 6.7.2 In Making Waste Work, the Government sets a target for 40% of domestic properties with a garden to carry out home composting by the year 2000 and for waste disposal authorities to cost and consider the potential for establishing centralised composting schemes by the end of 1997.
- 6.7.3 Composting is seen as having a number of potential advantages. It can remove organic waste from landfill, so reducing methane emissions and the threat of groundwater contamination. It may also reduce the use of natural resources, such as peat, and return organic matter to the soil.
- 6.7.4 Composting is identified in all the District Council Recycling Plans as one method of raising the overall level of recycling. A number of schemes, involving both home composting and the centralised composting of green waste, are being carried out in the County. It offers a means of significantly reducing the amount of household waste going to landfill.
- 6.7.5 Home composting by householders utilising their own waste does not require planning permission. The main advantage of home composting is that it eliminates the impacts associated with transportation and there is no need to find a market as the compost is used in the garden. Whilst it is to be encouraged to actively do so is beyond the scope of this Plan.
- 6.7.6 Centralised schemes are seen as having potential to contribute to the aim of moving waste management higher up the hierarchy by recovering value from waste. The main difficulty is ensuring the quality of

the product given the variability in the content of the waste being composted. As a consequence, markets for waste derived compost are limited.

- 6.7.7 Large scale composting has other drawbacks. These include potential problems with odours, spores and fungi and with the generation of liquid effluent. Emissions from composting are difficult to control and monitor. Composting can be carried out inside a suitable building with air extraction and cleaning. However, such operations have higher emission risks to workers than those carried out in the open. Outdoor waste composting needs to be situated where emissions will not adversely affect surrounding land uses. The types of waste it is proposed to compost will have a significant bearing upon whether a location is suitable. Certain wastes, such as sewage sludge, food wastes and some industrial sludges, can be malodorous. Proposals will be carefully scrutinised to ensure that the development would not cause pollution to water or air. Properly managed botanical waste only schemes have considerably less potential to cause odour.
- 6.7.8 There is a potential conflict between the need for outdoor centralised composting facilities to be located away from sensitive receptors, such as houses, schools and hospitals, and policies to prevent sporadic development in the open countryside.

POLICY 56

Proposals for the composting of waste will be permitted where surrounding landuses can be adequately safeguarded from odours and emissions by one of the following methods:

- i. the composting of appropriate types of waste;*
- ii. an acceptable stand off distance;*
- iii. enclosure of the composting within a building or other methods of enclosure;*
- iv. the use of other techniques to control harmful or noxious emissions to atmosphere.*

6.8 Landspreading

- 6.8.1 Landspreading enables agricultural benefit to be derived from organic wastes, either from their value as fertiliser or as soil conditioners. It has provided the traditional route through which the nutrient value in most agricultural waste has been returned to the soil and provides an important method for the disposal of industrial wastes such as effluent from milk processing, paper waste and sewage sludge. In 1990, 22% of the County's waste was disposed of in this manner. The introduction of the landfill tax will make this an increasingly attractive disposal option for suitable waste types.
- 6.8.2 Where landspreading forms part of normal agricultural practice it is not subject to planning control. It is however subject to control by the Environment Agency when the spreading of industrial waste and sewage sludge is involved. Only where the disposal of waste is the primary landuse will planning permission be required. Proposals for landspreading development will be required to establish that the type and amount of waste and regularity of such operations will not prejudice the future use of the land. Proposals will also have to demonstrate that landspreading waste will not cause pollution to surface or groundwaters or adversely affect surrounding land uses.

POLICY 57

Proposals for the landspreading of waste will be permitted where there will be no significant degradation of land quality through the build up of contaminants.

6.9 Energy Recovery

- 6.9.1 Energy recovery is a by-product of waste management rather than a means of dealing with waste itself. Energy derived from waste material is regarded as renewable energy. The recovery of energy from waste represents an important opportunity. It can help to increase the diversity of energy supplies thus

reducing dependence on non-renewable sources of energy and offers environmental benefits, particularly in terms of reducing emissions of methane.

6.9.2 Energy can be recovered from waste by:

- the collection and utilisation of landfill gas

Landfill gas derives from the breakdown of non-inert putrescible waste. Its main constituent is methane which is a potent greenhouse gas and can cause explosions if not properly managed. It can be used as a fuel, either as a direct source of heat, for example for firing kilns, or to power an electricity generator usually supplying electricity to the grid.

- incineration with energy recovery

Waste can be incinerated, either by using the calorific value of the waste itself to support combustion or for lower calorific value wastes by using a support fuel. Waste heat can be utilised both to generate electricity and as a direct heat source.

- anaerobic digestion

Anaerobic digestion is a form of biodegradation which produces methane. As with landfill gas this can be used as a fuel. The process is suitable for any organic waste, including agricultural wastes and sewage sludge. It is a method which has potential for the future.

- pyrolysis

Pyrolysis involves the anaerobic gasification of waste utilising an external heat source. Planning permission was granted in 1993 for a tyre pyrolysis plant at Lillyhall to process 5000 tonnes of tyres and other scrap rubber each year. Carbon, steel and oil would be produced. The oil could be burnt on site to generate electricity or used directly as a fuel. Whilst the permission was not implemented this process may provide a suitable option for the disposal of tyres.

- the production of refuse derived fuels (RDF)

A number of plants in the UK have produced fuel pellets by processing household waste (refuse derived fuel), usually with associated material recovery, particularly of glass and metal. They do, however, require waste inputs of around 250,000 tonnes per annum to be economically viable and are therefore not considered a likely waste management option for Cumbria.

6.9.3 Proposals for waste developments which facilitate the recovery of energy from waste will be assessed against Structure Plan Policy 56. Structure Plan Policy 54 sets out the stringent tests for major developments.

Structure Plan Policy 56 - Renewable Energy Proposals

Renewable energy developments which will have no significant adverse impact on the environment, landscape or local communities will normally be permitted.

Renewable energy developments which will have significant adverse impacts will only be permitted if this impact is outweighed by the energy contribution and other benefits including reducing pollution.

Large scale proposals for renewable energy developments within or affecting the National Parks and other areas and features of international or national conservation importance will be considered under Policy 54.

Any proposal for a tidal barrage will only be acceptable if it can be demonstrated that there are such substantial economic or other benefits that they clearly outweigh damage to internationally or nationally designated habitats and to the landscape of the affected estuary.

- 6.9.4 The potential for energy recovery from waste in Cumbria is set out in Planning and Renewable Energy in Cumbria published in 1994. This indicated that there is the potential to generate 3 MW of electricity from landfill gas and a further 2 MW from the digestion of sewage sludge. Hespin Wood and Distington sites have landfill gas generators producing about 1.5 MW of electricity and permission has been granted to install a generator at Bennett Bank. Kendal Fell and Flusco Landfill Sites are considered to have potential for power generation within the Plan period.

POLICY 58

Proposals to recover energy from waste through the utilisation of landfill gas will be permitted at the Flusco and Kendal Fell Quarry Landfill Sites, subject to the submission of a satisfactory scheme.

6.10 Waste Treatment

- 6.10.1 In addition to the treatment of waste to recover resources there are other forms of waste treatment which are primarily to render it suitable for disposal. In the County, to date, these have involved treatments associated with landfilling and wastewater. A waste treatment facility at Lillyhall treats a variety of waste streams to render them more stable and suitable for disposal to landfill. This type of facility will become more important if EC legislation reduces the range of wastes which can be landfilled together. At the Marchon Works a single acid waste stream, formerly discharged to the sea, is treated with lime to produce a solid waste which is landfilled next to the works.
- 6.10.2 The physical, chemical and biological treatment of waste is an industrial type process and facilities are capable of being located on industrial sites. The provision of some facilities of this type with non-inert landfill may reduce the potential of wastes to pollute. Landfill sites are temporary developments and suitable sites may be able to accommodate appropriate facilities for a temporary period where they would not prejudice the operation and restoration of the site. Because they will be temporary, and would be unlikely to justify the investment required for a permanent plant, it is expected that these would be relatively small scale.
- 6.10.3 Most non-inert landfill sites generate leachate. Increasingly this liquid waste is treated on site, usually in lagoons, through biological means prior to discharge to sewer or tankering to a wastewater treatment works. The treatment of leachate may need to continue for a period after cessation of landfilling.
- 6.10.4 These types of waste treatment often do not reduce the volume of waste to be disposed of. However treatments designed to reduce the potential of waste to pollute the environment will be supported in appropriate locations.

POLICY 59

Proposals for the physical, chemical or biological treatments of waste will be permitted where:

- i they reduce the potential of waste to pollute the environment; and*
 - ii they are situated on an industrial site provided that they do not have an adverse impact on surrounding land uses and do not prejudice the overall development of the area; or*
 - iii at a non-inert landfill site where required for pre-treatment of waste or treatment of leachate, where they can be accommodated without prejudicing the operation or restoration of the site.*
- 6.10.5 Most homes, commercial premises, and many industrial processes are connected to the mains sewerage system for the disposal of wastewater. Domestic wastewater arises from kitchen, bathroom and lavatory and often includes rainfall runoff from the roof and hard surfaces. Industrial wastewater is often discharged to the sewer and must accord with an authorisation from the sewerage undertaker.

- 6.10.6 North West Water is responsible for the treatment of the majority of wastewater produced in the County. There is an extensive infrastructure of treatment works, sewers, pumping stations and associated control equipment.
- 6.10.7 The County Council recognises that improvements to the wastewater treatment system will be required during the Plan period to meet the requirements of EC Directives on bathing water and urban wastewater. New facilities will also be needed to serve new development. Wastewater treatment facilities often have specific locational requirements in relation to the wastewater collection system. Although this strong locational need is recognised, proposals which would have a significant adverse impact will be expected to demonstrate that they represent the best practicable environmental option (BPEO). The BPEO procedure establishes the option that provides the most benefit or least damage to the environment at acceptable cost in the long term as well as the short term. In determining the BPEO the County Council recognises, that in accordance with advice in PPG23, the role of the planning system focuses on whether the development itself is an acceptable use of the land rather than the control of the processes or substances themselves.

POLICY 60

Planning permission will be granted for wastewater treatment facilities. Proposals which are likely to have significant adverse effects on the environment or communities will only be permitted where they represent the best practicable environmental option.

6.11 Incineration

- 6.11.1 This represents the main alternative disposal option to landfill for combustible household, commercial and industrial waste (municipal waste). It may also represent the best practicable environmental option for other waste streams, such as clinical waste and some chemical wastes. Incineration cannot wholly replace landfill since in most cases it leaves a solid residue which needs to be disposed of.
- 6.11.2 Incineration can significantly reduce the volume of waste requiring final disposal to landfill, and destroy material which would otherwise produce methane, a potent greenhouse gas. Waste to energy plants can also generate electricity and heat which can be utilised where there is an appropriate use in close proximity to the plant.
- 6.11.3 Incinerators can be divided into two broad categories, mass burn and specialised. The former is applicable to municipal waste and can accept most types of non-hazardous waste, provided that the calorific value of the waste is sufficient to support combustion. Specialised incinerators are dedicated to a single waste stream.
- 6.11.4 The County Council is of the view that conditions which might support the incineration of municipal waste do not exist in Cumbria at present. There are no population centres large enough to produce the volume of waste necessary to support a viable plant nor, given the present network of landfill sites, would there be any advantage in terms of reduced transport costs. There are also capacity constraints in the electricity transmission grid which prevent the export of any significant quantity of power from West Cumbria and Barrow. The sale of power generated would be essential to the economic viability of mass burn incinerators in Cumbria.
- 6.11.5 Specialised incinerators operating in the County include a waste solvent incinerator at Ulverston, and a number of small plants for animal carcasses.
- 6.11.6 The proximity principle calls for the disposal of waste close to the point of arising. The County Council would more favourably consider proposals for additional specialised incinerators for the disposal of waste arising predominantly in the County.
- 6.11.7 The potential impact of emissions on the environment is predominantly the concern of the pollution control authorities. PPG23 advises that the impact of these emissions should be taken into account in deciding planning applications to the extent that they have land use implications.
- 6.11.8 Larger incinerators share a number of characteristics with industrial development. Industrial estates which provide an adequate highway access are generally suitable for this type of development. Smaller

incinerators may deal with an individual waste stream and may be capable of being situated at the premises where the waste arises. In both cases, it is important that buildings to accommodate the incinerator are of an appropriate design.

POLICY 61

Proposals for incinerators will only be permitted where:

- i. the waste arises solely or mainly from within Cumbria; and*
- ii. the residues can be disposed of safely; and*
- iii. the proposed plant would be located on an industrial site or at the premises where the waste arises provided that it would not have an adverse impact on surrounding land uses and will not prejudice the overall development of the area.*

Proposals for incinerators which include energy recovery, including the utilisation of waste heat, will be more favourably considered.

6.12 Landfill

- 6.12.1 The Government has set a national target to reduce the proportion of controlled waste going to landfill from 70% to 60% by 2005. It recognises, however, that landfill will continue to play an important role for the foreseeable future and that it is not incompatible with the principles of sustainable development.
- 6.12.2 Landfill has traditionally been an inexpensive method of waste disposal. The introduction of a landfill tax in October 1996 and improved environmental standards will lead to a rise in landfill prices but it is predicted to remain cheaper in most parts of the country than other waste management options.
- 6.12.3 A sustainable approach to landfill means not leaving problems for future generations. Much of the pollution potential of landfill comes from the breakdown of wastes into polluting liquids and gases. The pollution risk can be reduced if the time taken to stabilise the waste in the site can be reduced. This can be achieved either by treating the waste to stabilise it prior to deposit or operating the landfill site in such a way that the rate of breakdown of waste is enhanced and stabilisation occurs within a generation, that is within 30 years. The Government considers that the technology required to treat waste prior to deposit is not yet fully developed and it will be many years before a significant proportion of waste could be satisfactorily treated. It will therefore be necessary for the foreseeable future to carry out landfill operations in a manner which ensures that stabilisation of waste in situ takes place as quickly as possible.
- 6.12.4 The situation in Cumbria reflects the national dependence on landfill. In 1990 69% of the County's waste went to landfill for final disposal. As a result, Cumbria is likely to require a network of sites distributed throughout the County to be maintained for the Plan period and beyond.
- 6.12.5 The proportion of waste, both inert and non-inert, disposed of to landfill will however reduce. It is already clear that the introduction of the landfill tax and other legislative changes have resulted in increased interest in providing waste recovery facilities, particularly in the north and west of the County. This trend can be expected to continue in the construction, commercial and industrial waste sectors and complement the efforts of local authorities to achieve the target set for household waste recycling.
- 6.12.6 It is difficult to predict to what extent the annual disposals to landfill in the County will reduce. However, assuming the Government's target for reduction is met in Cumbria, this would equate to a reduction of about 200-225,000 tonnes of waste disposed of to landfill by 2006, a total of 1.3 million tonnes per annum as opposed to the average of 1.5 million tonnes over the last three years. If achieved this would be equivalent to reducing the need for landfill capacity by about 1 million cubic metres over that ten year period.
- 6.12.7 Structure Plan Policy 60 requires the County Council to balance its commitment to making adequate sites available for the disposal of waste arising within the County against the need to avoid

overprovision which might prejudice the restoration of existing sites. In deciding whether there is a need to release additional landfill capacity the County Council will have regard to the nature of the waste to be landfilled, the availability of alternative facilities and existing landfill capacity.

- 6.12.8 Whilst recognising that landfill will continue to play an important role in providing an integrated and adequate network of facilities, the County Council has set out policies to encourage alternative waste management options and favour those higher up the hierarchy. Most landfill proposals will have adverse effects. Although applicants do not normally have to prove need for their proposals, in these circumstances there is considered to be a strong justification for need to be demonstrated.
- 6.12.9 In considering whether there is a demonstrable need to release additional landfill capacity, only arisings from within the County or which satisfy the proximity principle, will be taken into account. Existing landfill capacity can readily be assessed. In order to allow for continuity of provision and provide clear guidance to applicants it is recognised that a landfill capacity bank is required.
- 6.12.10 In respect of proposals for the landfilling of non-inert waste it will have to be demonstrated that existing provision within the area to be served by the site is only sufficient for seven years or less. This period has been selected to reflect the time required to identify, authorise and prepare a site to accept non-inert waste. It will also provide a safety margin so that lack of capacity does not result in waste being transported unnecessarily long distances for disposal or being disposed of in an illegal manner.
- 6.12.11 Levels of inert waste generation can fluctuate considerably year by year and be significantly influenced by arisings from major construction projects which frequently exceed other arisings many times over. In addition, sites which accept non-inert wastes also take significant amounts of inert material, particularly for use as cover and for site engineering works. However, the disposal of solely inert waste does not give rise to many of the environmental impacts of non-inert disposal. A wider range of sites may therefore be suitable and the time required to authorise and prepare them is much shorter. Therefore, in assessing the need for additional inert landfill capacity it will be necessary to demonstrate that existing provision is only sufficient for four years or less, excluding consideration of major contracts.
- 6.12.12 Large scale construction projects such as road schemes and civil engineering works can generate large amounts of material over a relatively short period of time. Waste arising is either surplus to fill requirements or unsuitable for reuse. There are often significant benefits from disposing of the waste close by because traffic may not have to use public roads. This is important, as the daily volume of waste arising can be considerable. The provision of dedicated sites also helps to ensure that existing sites remain available to cater for the regular day to day arisings from smaller scale projects.

POLICY 62

Proposals for the disposal of waste by landfill will only be permitted where there is a demonstrable need for additional landfill capacity.

In assessing whether there is a demonstrable need for additional landfill capacity the following will be taken into account:

- i. the availability of facilities to manage the waste higher up the hierarchy of options (Local Plan Policy 50); and*
- ii. how the proposal contributes to providing an integrated and adequate network of waste management facilities to cater for wastes arising in the County (Local Plan Policy 51); and*
- iii. whether the proposal would seriously prejudice the infill and restoration of existing sites (Structure Plan Policy 60) and whether permitted landfill capacity comprises an adequate landfill capacity bank. It will be necessary to show that permitted landfill capacity is only sufficient for seven years or less for non-inert waste or four years or less for inert waste, or in the case of proposals to dispose of inert waste arisings from major construction projects at dedicated sites that there are net environmental and economic benefits compared with disposing of the waste at existing sites.*

- 6.12.13 Landfill can provide environmental benefits. It can restore disused mineral workings and derelict or degraded land. The County Council places great emphasis on securing the dual benefit of restoring mineral voids whilst disposing of waste. It can allow the return of land to beneficial use and avoid the disturbance of greenfield sites or the loss of areas of landscape and nature conservation value. Some inert waste can have positive benefits for the reclamation of despoiled land.
- 6.12.14 Landfill also includes landraising, the deposit of waste above the land surface and not in natural or man made voids. The principal disadvantage of such schemes is that they are often difficult to assimilate into the landscape. However they can provide opportunities to release disposal capacity in areas where suitable voids are not available. They also have some technical advantages. Landraise can improve leachate control. It is easier to check the containment and remedy any problems but gas collection is more difficult.

POLICY 63

Where there is a demonstrable need for additional landfill capacity, proposals which will satisfactorily restore mineral workings and other derelict land will be favoured.

Proposals involving landraising will only be permitted where the landform to be created reflects the character and scale of the surrounding topography and on restoration will fit naturally into the landscape of the area.

- 6.12.15 The breakdown of non-inert putrescible waste produces landfill gas whose main constituent is methane. Uncontrolled gas migration can cause explosions and poses a risk to people and property. It is also a harmful greenhouse gas. If it cannot be utilised it must be controlled. Proposals which recover energy from landfill gas will be encouraged at appropriate sites in accordance with Structure Plan Policy 56. In addition the landfill of non-inert waste can give rise to problems of odour, birds, vermin and overblown litter. In order to minimise the risk from landfill gas migration and prevent nuisance planning permission for the landfilling of non-inert waste will not normally be granted within 250 metres of residential properties and other sensitive receptors such as schools, hospitals and offices.

POLICY 64

Proposals for the disposal of non-inert waste by landfill will only be permitted where surrounding landuses can be adequately safeguarded from potential nuisance and hazard. Proposals which do not include the provision of a standoff of 250 metres from residential properties and other sensitive receptors will require special justification.

Landfill Provision in Cumbria

- 6.12.16 This section considers the extent of existing landfill provisions. It will be necessary in all areas to release additional landfill capacity within the Plan period. Even where existing capacity is sufficient for waste disposed to landfill in the Plan period, additional air space will be required in order to ensure adequate landfill capacity banks, as defined by Policy 62, are available to meet the needs of Cumbria after 2006.

Carlisle

- 6.12.17 Three landfill sites close to the city have permission to accept non-inert wastes, Hespin Wood, Thackwood (in Eden) and Boaterby, which is not currently operational. Together they have a capacity of 3.5 million m³. This could be reduced to about 2.5 million m³ by the construction of the M6 extension but remains sufficient to cater for arisings for the Plan period and beyond.
- 6.12.18 There are five operational sites that only accept inert wastes, Durranhill, Todhills, Warren House Farm, Rome Street and Willowholme. Present capacity is estimated to be 420,000m³. In addition three further sites have planning permission for inert waste but are not currently in use (Peth, Grinsdale Bridge and Cummersdale). Together these would provide a further 75,000m³ of capacity. Overall there is sufficient capacity for about seven years based on the average of the last three years disposals. There will be a requirement for additional capacity to accommodate waste arising from M6 extensions and in the latter part of the Plan period to maintain provision.

Eden

- 6.12.19 Flusco Quarry is the only site in the area with permission to accept non-inert waste. The capacity of this site is about 2.8 million m³, although not all this will be available for non-inert waste. Nevertheless the site is expected to accommodate non-inert waste arisings for the Plan period.
- 6.12.20 A site at Kirkby Thore accepts gypsum waste from the adjoining British Gypsum Works and has sufficient capacity for the Plan period and beyond.
- 6.12.21 Two small inert waste landfill sites, Culgaith and Keepers House are likely to be completed in the next two years.
- 6.12.22 The provision of small inert landfill sites is desirable in a large rural district like Eden as a means of reducing the environmental impacts associated with transporting wastes over long distances.

Allerdale and Copeland (excluding Millom)

- 6.12.23 Three landfill sites within the area accept a wide range of wastes. Sites at Distington and Lillyhall are also licensed to accept a range of special wastes. The third site is situated at Aldoth. In addition to these active sites a further site at Aikshaw has planning permission. Overall these sites provide approximately 3.5 million m³ of airspace, which is considered sufficient to accommodate the current levels of waste for the Plan period.
- 6.12.24 A site at Albright and Wilson's Whitehaven Works accepts waste from the production of phosphoric acid (Ufex Raffinate waste). At the present rate of infilling additional capacity will be required by 1999. The company are investigating options for a follow on site.
- 6.12.25 There are six operational inert sites in Allerdale, West Woodside, Brocklebank, New Cowper, Whinbarrow Lane, Broughton Craggs and Overby. Their total capacity is about 1.0 million m³.
- 6.12.26 In addition, sites at Lillyhall and Derwent Howe will provide 900,000 m³ of inert capacity. A permission has also been granted at Clints Quarry within the Lake District National Park. There is therefore, sufficient approved capacity to meet arisings for the Plan period and beyond, based on levels of disposal for the last three years.
- 6.12.27 There are seven operational inert sites in Copeland including two works sites at Sellafield. Three of the sites should be completed in the next two years, Grange Road, Peel Place and Scursgill, near Egremont. Larger sites are situated at Drigg and Galemire.
- 6.12.28 In addition to the active sites there are large permitted sites at Woodhouse Quarry, Whitehaven and adjacent to the Sellafield works.
- 6.12.29 The permitted capacity in Copeland is about 1.1m³. Arisings in Copeland are dominated by waste produced from developments at Sellafield. Assuming this pattern continues existing sites should be adequate for most of the Plan period.

Kendal Area

- 6.12.30 Kendal Fell Quarry is the major landfill site within the area. It accepts a range of waste types but not including special waste. It has been operating for about five years and at the present rate of infilling has a future life of approximately five years. There is potential to extend the landfill but much of the potential extension area is within the Lake District National Park.
- 6.12.31 Policy W2 of the Lake District National Park Local Plan states that favourable consideration will be given to proposals for the development or extension of landfill facilities in the quarry provided criteria relating to restoration, nature conservation, residential amenity and pollution are met. There is a clear need for additional non-inert capacity in this area. The County Council supports this approach providing the appropriate environmental safeguards are met.

POLICY 65

The County Council supports the extension of landfilling at Kendal Fell Quarry subject to appropriate safeguards to protect the environment and the amenity of local residents.

- 6.12.32 A site at Burnside Mill accepts paper wastes arising from the operator's business. The site is expected to last beyond the end of the Plan period.
- 6.12.33 There are four sites which accept inert waste only, Fairthorns Road, Crag House, Docker Fell and Roan Edge. Together they have capacity of about 320,000 m³. Two small sites at Burnside and Burton have recently been granted planning permission.
- 6.12.34 In addition to inert waste required for operational purposes at Kendal Fell a further area is allocated for inert fill to satisfactorily finish off the landfill area east of Boundary Lane (Proposals Map Inset 13).

POLICY 66

Planning permission will be granted for the disposal of inert waste to landfill at Kendal Fell Quarry subject to the submission of a satisfactory scheme.

- 6.12.35 For the Plan period inert waste arisings will be largely accommodated at Roan Edge and at Kendal Fell Quarry.

Furness Area

- 6.12.36 The area includes the Furness peninsular, the towns of Barrow, Dalton and Ulverston and also the southern part of Copeland around Millom.
- 6.12.37 There are two landfill sites in this area, Bennett Bank and South Walney, which accept a range of non-inert wastes. They provide sufficient non-inert waste capacity within the area for about seven years, from September 1996.
- 6.12.38 Planning permission was granted for a large landfill site at Roose Sand Pit in 1992. British Gas, who own the adjacent gas terminal site, have since acquired the land. Whilst sand will continue to be extracted, British Gas have stated that the site will not now be landfilled.
- 6.12.39 Recognising the seriousness of the problem, a study of the future options for waste management in the Furness area was jointly funded by the County Council, Furness Waste Consortium, Furness Enterprise and the European Regional Development Fund and was completed in June 1996. The overall objective was to develop a sustainable, integrated waste management strategy for the Furness area.
- 6.12.40 The recommended strategy stresses the need to move the management of waste in the Furness area higher up the waste hierarchy in accordance with national policy. It promotes greater waste minimisation, recycling, composting and the importance of landspreading waste where appropriate. There is potential for the development of new facilities for all these options, to reduce the amount of waste going to landfill. The policies of this Plan will facilitate these developments and appropriate sites for a range of facilities in Furness should be available. Nevertheless, landfilling will continue to play a significant role and it is this component of the waste management strategy which is restricted by environmental constraints.
- 6.12.41 Despite a need for additional landfill capacity, no satisfactory sites have been identified. The County Council will continue to encourage identification of a suitable site or sites but should a satisfactory site not be found the result will be a dependence on transfer loading to landfill sites elsewhere in the County, or outside, with the associated financial and environmental costs.
- 6.12.42 An important conclusion of the study was that unless some of the environmental constraints can be relaxed, the opportunities to develop new landfill sites are limited. Whilst it will be for the private sector to select a satisfactory site, obtain planning permission and develop a non-inert landfill facility, the County Council will, at the same time, maintain a dialogue with the industry, to respond

constructively and flexibly, within the overall objectives of this Plan, to suggestions and proposals for an appropriate site.

- 6.12.43 Capacity for the disposal of inert waste only is limited to one small site near Dalton. Bennett Bank and South Walney landfill sites accept inert waste for cover and Bennett Bank includes a separate inert phase of about 180,000 cubic metres.
- 6.12.44 Additional provision will be necessary. The former sand and gravel workings at Roose sandpit would benefit from inert waste disposal to help restoration. A preferred area within which a scheme for inert waste disposal will be permitted is shown on Proposals Map Inset 12. A large void at Mouzel Farm has potential to accept about 100,000 m³ of inert material providing access to the site can be obtained from the A595, north of Dalton. . The preferred area is shown on Proposals Inset Map 14.

POLICY 67

Planning permission will be granted for the disposal of inert waste to landfill at Roose Sand Pit and Mouzel Farm subject to the submission of a satisfactory scheme.

7 THE PLANNING PROCESS AND OPERATION OF SITES

7.1 Introduction

7.1.1 The purpose of this chapter is to provide guidance on the type of information required to accompany planning applications for minerals and waste development so that the County Council can properly assess the impact of proposals. It is also to emphasise that the involvement of the County Council does not stop with the granting of planning permission. Standards of operation and restoration, liaison committees and the monitoring and enforcement of conditions and agreements will be ongoing matters through the life of many mineral and waste developments. As well as providing the appropriate level of information at the planning application stage the subsequent commitment of the operator to working and restoring the site in an acceptable manner is equally important.

7.2 Information in Support of Planning Applications

7.2.1 The submission of accurate, appropriately detailed and complete planning applications is essential to allow prompt and properly informed decisions to be made. Inadequately documented planning applications will result in requests for supplementary information which, if not forthcoming, will result in planning permission being refused. Guidance notes for applicants are available from the County Council to assist in the preparation of minerals and waste planning applications. Pre-application discussions between applicants and the County Council's planning officers are encouraged to clarify issues and requirements and, where relevant, applicants are encouraged to discuss their proposals with other consultees, local groups and residents prior to submitting their applications.

7.2.2 Many proposals for minerals and waste development will require an Environmental Impact Assessment (EIA). The Town and Country Planning (Environmental Impact Assessment) Regulations 1999 and the accompanying national guidance (DETR, 1999, Circular 2/99) set out the circumstances when an EIA will be necessary. A potential developer may formally request an opinion from the County Council as to whether an EIA would be required. If an EIA is required the County Council has a duty to specify its scope.

7.2.3 The County Council also require that a Traffic Impact Assessment (TIA), prepared in accordance with the guidelines published by the Institution of Highways and Transportation, is submitted with any mineral or waste development proposal which exceeds any of the following thresholds:

development which will generate more than 100 vehicle movements per day by heavy goods vehicles;

development which would generate 100 movements or more in the peak hours;

development where the generated movements will exceed 10% of the flow on the adjacent highway;

development where the generated movements will exceed 5% of the flow on the adjoining highway where traffic congestion exists or will exist within the assessment period or in other sensitive areas.

7.2.4 It is the Highways Agency's policy that direct access to trunk roads should continue to be rigorously controlled with no direct access permitted to motorways other than for service areas, maintenance compounds and at junctions. The Agency has a strong presumption against the creation of new accesses to high standard all purpose trunk roads with a clear strategic importance.

7.2.5 On the less important trunk roads and the majority of trunk roads in urban areas, the policy may be relaxed provided that road safety is not compromised. In particular the Highways Agency does not normally issue a direction of refusal to developments within a 40 mph speed limit.

7.2.6 The Highways Agency will require a Traffic Impact Assessment (TIA) prepared in accordance with the guidelines published by the Institution of Highways and Transportation to be submitted with any development proposal where:

- i. the generated movements will exceed 50 vehicles on a trunk road in the peak hour;

- ii. the generated turning movements would increase by 5% or more. Where the capacity of the junction is or is near to being exceeded a smaller percentage increase would trigger the requirement for a TIA.

POLICY 68

Planning applications for minerals and waste development which have inadequate information to enable the proposals to be properly assessed will be refused.

7.3 Consultation

- 7.3.1 The County Council will publicise applications, consult relevant bodies and take account of all views received.

7.4 Planning Conditions and Legal Agreements

- 7.4.1 It is normally necessary for conditions to be attached to planning permissions to allow development proposals to proceed which otherwise would not be acceptable. Planning conditions will only be applied when they meet strict tests; being necessary, relevant, precise, enforceable and reasonable. The scope of matters that may be covered by planning conditions is listed in Table 12 and the County Council also maintains a list of model conditions which are available to applicants. It should be noted, however, that model conditions will need to be adapted, where appropriate, to suit the particular circumstances of a site. The County Council welcomes informal discussions on conditions to help ensure that they are reasonable and relevant to the proposed development.
- 7.4.2 National guidance on conditions is contained with the Mineral Planning Guidance Note series for mineral sites and for waste in PPG23. More general guidance is contained within DOE (1995) Circular 11/95. The County Council will have regard to this guidance when imposing conditions.
- 7.4.3 In some circumstances it will not be possible to achieve the necessary control through the use of planning conditions alone and the County Council will seek a planning obligation or other legal agreement. These may cover:
- the undertaking of landscaping, road improvement or other works on land not under the applicant's control;
 - the long term management of and public access to, sites restored for amenity purposes including nature conservation;
 - the revocation without compensation of a superseded planning permission;
 - the provision and maintenance of rights of way;
 - the off site monitoring of groundwater levels and water supply abstractions;
 - the provision of facilities to compensate local communities for the loss of amenity; or
 - financial guarantees.
- 7.4.4 Planning obligations should be relevant to planning and directly related to the proposed development if they are to influence a decision on a planning application. Also they should only be sought where they are necessary to make a proposal acceptable in planning terms. Obligations should not be sought when there is no relationship between what is being sought and the proposed development.

POLICY 69

Where it is not possible to achieve the necessary control through the use of planning conditions alone the County Council will, where appropriate, seek a planning obligation or other legal agreement.

7.5 Financial Guarantees

- 7.5.1 Financial guarantees to ensure the restoration of mineral and waste sites should not normally be required as properly worded conditions will, in the majority of circumstances, be able to secure restoration. However, there is sometimes concern, at the application stage, as to whether a developer may be able to fulfil all the restoration. In addition, in the case of licensed waste sites, the Waste Management Licensing Regulations require that operators make financial provision in order to ensure the provisions of the Waste Management License can be met.
- 7.5.2 The County Council may have justifiable concern that financial or technical failure of an otherwise acceptable project may occur, particularly where a company is taking on a large mining project and where the markets are speculative. This may be the case for opencast coal extraction where, with the privatisation of British Coal, new companies are now involved in the development of sites. Opencast mining can open up very large areas very quickly and it is important that the County Council has adequate guarantees that the site will be restored in the event of the failure of the project. The County Council has negotiated financial guarantees at the two opencast sites that have been developed in West Cumbria since the privatisation of the coal industry.
- 7.5.3 As well as evidence that financial or technical failure may occur national guidance (DOE, 1996, MPG7) also indicates that financial guarantees may be appropriate where a new longterm project such as a super quarry or the mining of metalliferous ores is proposed or where a new technique or approach is to be used.
- 7.5.4 In all the above cases the developers themselves may wish to offer a financial guarantee in order to allay concerns and demonstrate confidence in their proposals or provide evidence that they are members of a recognised restoration guarantee fund such as that operated by the Sand and Gravel Association.

POLICY 70

The County Council will require applicants to demonstrate with their application what the likely financial and material budgets for restoration, aftercare and after-use will be, and how they propose to make provision for such work during the operational life of the site, including where appropriate, any necessary financial guarantees.

Where the County Council considers that adequate provision has not been made to fulfil the proposed restoration and aftercare works, planning permission will be refused.

7.6 Standards of Operation

- 7.6.1 The County Council places great emphasis on high standards of site operation and restoration. The requirements of planning permissions and the operational performance of operators are monitored.
- 7.6.2 Mineral working and waste management operations may be complex and technical and it is therefore important that operators have the commitment and expertise to implement their proposals. When seeking planning permission operators will be expected to demonstrate that they are capable of operating the site to an acceptable standard and regard will be had to the past performance of operators in complying with planning conditions and in achieving high quality site working and restoration practices. If not currently operating in Cumbria the County Council will seek information on an applicants past performance. Membership of relevant trade organisations and evidence of appropriate professional experience will be taken into account.

7.7 Liaison Committees

- 7.7.1 The County Council supports the establishment of liaison committees for major mineral and waste sites, such as hard rock quarries, opencast coal sites, large sand and gravel sites, incinerators and non-inert landfills. These committees are normally set up and run by the site operator with a locally elected representative as a chairman, and local council representatives and local resident representatives are invited to attend. Officers from the County Council will attend when there are specific issues which require their involvement. Experience of these committees suggests that they provide a useful forum for discussion which can resolve problems, improve community relations and aid mutual understanding. Whilst it would not be possible to require the establishment of these committees by condition or legal agreement, operators are strongly recommended to establish them when opening a major new mineral or waste site, provided they are wanted by the local community.

7.8 Monitoring

- 7.8.1 Conditions attached to planning permissions will have little effect unless they are effectively implemented by the operator and monitored by the planning authority. MPG7 recommends that copies of the permission and approved documents are kept on site and the County Council will impose a condition on new permissions to require this as it is vital that site operatives are fully aware of all the requirements of the planning permission. In addition, where conditions require an operator to undertake monitoring or other ongoing works, such as progressive restoration, the County Council will seek, where appropriate, an annual report from the operator setting out how they have monitored and complied with these conditions.

7.9 Enforcement

- 7.9.1 National guidance (DOE, 1992, PPG18) emphasises that the integrity of the development control system depends on planning authorities taking effective enforcement action. Recent legislation (Planning and Compensation Act 1991) has strengthened enforcement powers. The introduction of planning contravention notices for requiring information when a breach of planning control is suspected and breach of condition notices where there is a failure to comply with any condition imposed on a grant of planning permission, should enable planning authorities to respond quickly and effectively to breaches of planning control. However, when in the opinion of the planning authority it is likely that permission would have been granted for the unauthorised development, the correct approach is for a retrospective planning application to be submitted to bring the development within planning control.
- 7.9.2 In respect of mineral and waste developments, PPG18 recognises that there are particular problems given the speed of change and the irreversible nature of some development. Close liaison with operators is therefore very important to prevent breaches of planning permission occurring and the County Council encourages a co-operative approach with site operators. However, enforcement action will be taken if this approach fails to remedy any breaches that may occur. In respect of unauthorised waste developments there will be close liaison with the waste management section of the Environment Agency as they may be better able to take remedial action with their powers under the Environmental Protection Act 1990.

7.10 Minerals Review

- 7.10.1 The Environment Act 1995 requires an initial review and updating of all minerals sites where the predominant planning permissions were granted before 22 February 1982 and for the periodic review of all mineral permissions thereafter. The purpose of the review is to ensure that all mineral planning permissions have an up to date set of working and restoration conditions. National guidance (DOE, 1995, MPG14) provides further advice on how these provisions are to be implemented.
- 7.10.2 The initial review is being carried out in two consecutive phases, each of three years. A distinction is made between 'dormant' and 'active' sites. From January 1996 no working may be lawfully carried out at dormant sites until a new scheme of conditions has been approved by the County Council.

- 7.10.3 The County had 24 active Phase 1 sites of which only 13 have or are being reviewed because permissions have lapsed or have been granted new permissions, and two Phase 2 sites. There are also 45 dormant sites which have valid planning permissions. There is also a rolling programme of reviewing all sites every 15 years where the main permissions were granted from 1982 onwards.
- 7.10.4 When sites are reviewed, any conditions which could be imposed on new permissions for the winning and working of minerals or the depositing of mineral waste can be added or substituted for any conditions on the original permission. However, the Government urges against the use of conditions that would fundamentally affect the economic structure of the operation or significantly affect the asset value. The imposition of this sort of condition, without the agreement of the operator, would make the County Council liable to pay compensation. Compensation is not payable for dormant sites.
- 7.10.5 In carrying out the review, the County Council will give positive consideration to alternative planning proposals which offer significant benefits compared to those that can be achieved under the review.

TABLE 12: SCOPE OF MATTERS COVERED BY PLANNING CONDITIONS

| | |
|------------------------------------|--|
| Time Limits | <ul style="list-style-type: none">- The commencement and duration of the planning permission. |
| Operational Programme | <ul style="list-style-type: none">- The carrying out of the development in accordance with an approved scheme of working, including phasing.- The siting, design and appearance of buildings, plant and machinery and their removal.- The regulation of the maximum rate of output in the interests of conserving resources, protecting the local environment or reducing the impact on the local highway network.- A requirement for a revised scheme in the event that operations cease prior to the completion of the approved scheme. |
| Waste Types | <ul style="list-style-type: none">- The range of wastes acceptable. |
| Hours of Working | <ul style="list-style-type: none">- The hours and days during which site operations may take place, including transportation. |
| Access and Traffic | <ul style="list-style-type: none">- The arrangements for traffic routing, vehicle type and traffic restrictions. The standard of access layout, road improvements, construction, maintenance and measures to prevent mud and dirt fouling the public highway, including wheel-washing. |
| Control of Blasting | <ul style="list-style-type: none">- The permitted hours and frequency, ground vibration limits and monitoring requirements. |
| Control of Noise | <ul style="list-style-type: none">- The operational noise limits and monitoring requirements including the type of vehicle reversing safety system. |
| Control of Dust | <ul style="list-style-type: none">- The suppression methods, cleaning and sheeting of lorries. |
| Control of Lighting | <ul style="list-style-type: none">- Direction and shielding. |
| Water Resources | <ul style="list-style-type: none">- The protection of watercourses, land drainage systems, floodplains, and groundwater resources. |
| Archaeology | <ul style="list-style-type: none">- The investigation, protection or recording of features. |
| Soil Stripping | <ul style="list-style-type: none">- Timing/condition of the soil.- Machinery used/routing of vehicles.- Separation of different soil types/horizons. |
| Soil and overburden storage | <ul style="list-style-type: none">- Separation of different soil types/horizons;- Overburden storage- Location of storage mounds, height, shape- Methods of construction; including environmental safeguards for dust and noise suppression.- Maintenance requirements. |
| Care of Boundaries | <ul style="list-style-type: none">- The retention and protection of trees, woodlands, hedgerows, walls and fences and other landscape features.- The replacement and repair of features affected by the development. |

| | |
|-------------------------------------|--|
| Landscape | <ul style="list-style-type: none"> - The arrangements for landscaping and screening the site before and during operations. - Details for the planting, protection and management of trees and hedges. - The retention, translocation and enhancement of features of wildlife or scientific importance. |
| Permitted Development Rights | <ul style="list-style-type: none"> - The removal of permitted development rights in environmentally sensitive locations. |
| Restoration | <ul style="list-style-type: none"> - Contouring of final landform. - Placement of fill or overburden. - sequence, phasing, method, order, depth; environmental safeguards. - Final levels/gradients. - Soil placement. - methods, order, thickness of topsoil, subsoil or soil making materials. - Timing and methods of placement. - Routing of vehicles during soil placement (as for storage - environmental safeguards) - Relief of compaction - For controlled landfills, installation of gas and leachate control systems (spacing, location, compatibility with reclamation objectives, including vegetation establishment and management) - Ditches and drainage work. - Erection of fences. - The removal of plant, buildings, machinery, roads and hardstandings. |
| Aftercare | <ul style="list-style-type: none"> - The arrangements for the aftercare of the site, including schemes and reviews, to cover: timing and pattern of vegetation establishment, cultivation practices, secondary treatments, drainage, fertilisers, weed control, and irrigation. |
| Monitoring | <ul style="list-style-type: none"> - The submission of annual reports by the operator to demonstrate their compliance with conditions that require self-monitoring. |
| Approved Plans | <ul style="list-style-type: none"> - The maintenance of an up to date set of approved plans and documents on site. |

APPENDIX I

REPRODUCED FROM CUMBRIA AND LAKE DISTRICT JOINT STRUCTURE PLAN 1991-2006

Strategic Route Network

The Strategic Route Network of Cumbria consists of the Primary Route Network (Motorways and Trunk Roads and other Primary Routes) and other Strategic Routes.

- *Motorways and Trunk Roads*

M6/A74 Lancashire County Boundary – Scottish Border
A7 M6 Junction 44 – Scottish Border
A65 M6 Junction 36 – Lancashire County Boundary
A66 A595 Workington Northside – Durham County Boundary
A69 M6 Junction 43 – Northumberland County Boundary
A590 M6 Junction 36 – Barrow in Furness
A595 Lillyhall – Grizebeck
A596 A595 Thursby – Workington – A595 Lillyhall
A5092 Grizebeck – A590 Greenodd

- *Other Primary Routes*

A6 A591 south of Kendal – M6 Junction 39
A591 A590 near Levens – A66 Keswick
A595 A66 near Little Clifton – A596 Lillyhall
A595 Grizebeck – A590 Dalton in Furness
A595 Thursby – A66 near Cockermouth
A684 Kendal – M6 Junction 37
A685 M6 Junction 38 – A66 Brough
A689 A69 Brampton – M6 Junction 44
A5284 Kendal – A591 Plumgarths
A6, A7, A69 and **A595** urban connections in Carlisle

- *Other Strategic Routes*

A6 A590 Levens – Lancashire County Boundary
A592 A590 Newby Bridge – A591 Windermere
A594 A595 Cockermouth – A596 Maryport
A597 A66 Workington Northside – A595 south of Lillyhall
A684 M6 Junction 37 – North Yorkshire County Boundary
A689 A69 Brampton – A686 Alston
A686 A66 Penrith – Northumberland County Boundary
A5086 A595 Egremont – Frizington
A5093 A595 Whicham – Millom – A595 Hallthwaites
B5277 A590 Meathop – Grange over Sands
B5295 A595 Hensingham – A5086 Cleator Moor
B5302 A596 Wigton – Silloth
B5305 M6 Junction 41 – A596 Wigton
B5344 A595 Gosforth – Seascale
C2001 A66 Workington – Seaton
C4034/5 A595 Mirehouse – Sandwith
C4037 A595 Black Beck - Sellafield

APPENDIX II

Policies of the County Council's Waste Disposal Plan (November 1993)

The Waste Regulation function of the County Council has transferred to the Environment Agency. The Waste Regulation Policies of the Plan are not listed.

WDP1

Waste Disposal Options

The County Council will consider all proposed waste disposal options before deciding upon contracts for the disposal of waste. This decision will be taken only after full investigation of the environmental and financial costs involved.

WDP2

Minimising Pollution to the Environment

The County Council will ensure that its waste management contracts take full account of contractors' proposals for minimising pollution to the environments.

WDP3

Environmental Monitoring

The County Council will continue to undertake both environmental monitoring and any necessary remedial action regarding landfill sites it has operated.

WDP4

Recycling and Energy Recovery

All County Council waste management contracts will seek to encourage recycling of waste whenever possible.

WDP5

Recycling Credits

The County Council will encourage the recycling of waste through the payment of household waste recycling credits, the maintenance of an industrial and commercial waste recycling information exchange and wherever possible the provision of information and assistance.

WDP6

Civic Amenity Site Standards

The County Council will review and upgrade where necessary civic amenity site facilities so that they are all manned, secure, designed and operated to the highest practical environmental standards and meet the general requirements of the people who use them.

WDP7

The Provision of Civic Amenity Sites

The County Council will endeavour to provide civic amenity sites throughout the County so that 90% of the resident population live within 5 miles of a facility.

APPENDIX III

RADIOACTIVE WASTE

Introduction

The House of Lords Select Committee on Science and Technology carried out an inquiry on the management of nuclear waste and reported in Spring 1999. In their response in October 1999 the Government have stated that they are committed to a fully comprehensive policy for managing long-lived radioactive waste. The policy must be developed in the most transparent and open-minded way, to ensure maximum possible public acceptance, before final conclusions are reached on whether to continue storage above ground or to move to storage deep underground

County Council policy for development concerned with nuclear waste reprocessing and disposal is contained in Policy 57 of the Cumbria and Lake District Joint Structure Plan 1991-2006.

This appendix looks at the different types of radioactive waste, and outlines the County Council's current understanding of the planning issues associated with them.

Very Low Level Waste (VLLW)

VLLW is currently disposed of with ordinary refuse as no special precautions are necessary. As such no separate information is available and no policies are required.

Low Level Waste (LLW)

The disposal of LLW to landfill requires authorisation from the Environment Agency (EA). Operational landfill sites in Cumbria which currently have EA authorisation are at Drigg and South Tip, Sellafield both operated by BNFL.

South Tip at Sellafield takes mainly excavation spoil from the Sellafield works and is almost full. It is understood that upon its completion BNFL may seek an authorisation from EA to dispose of LLW at its Calder Extension Tip which currently only takes VLLW. Policy 57 of the Structure Plan seeks to ensure that all future LLW disposal takes place at Drigg but because of the type of waste involved (excavation spoil) and the relatively low levels of radioactivity (3000-37000 Bq per kilo) it would appear appropriate to retain such a disposal facility on the Sellafield site rather than using up expensively engineered space at Drigg. The planning permission for Calder Extension Tip expires in 1997. The renewal of permission as a replacement for South Tip might be acceptable although this use will also be dependent upon receiving the necessary authorisation from EA.

Deposit of LLW at Drigg has taken place since 1959 within a 36 hectare area at the northern end of the site. Until recently waste was tipped in open trenches before being progressively covered with soil. The last trench (Trench 7) was closed in Spring 1995, at which time it and the other six trenches contained about 860,000m³ of waste and covered approximately half the consented area of the site.

Future disposal will be within concrete lined vaults. Vault 8, with a capacity of 180,000m³, has been constructed and is in use. Where appropriate waste to be deposited is subject to high force compaction at Sellafield before being grouted into ISO containers at a grouting facility recently constructed at Drigg. There is indicated to be space for a further 500 to 750,000m³ of vault space within the current consented area.

The majority of the country's LLW is disposed of at Drigg, and on current estimates, supplied by BNFL, there is adequate capacity both in terms of volume and radiologically to handle all LLW arisings until the middle of the next century (2050/2060). There is therefore no requirement for further LLW disposal provision within the Plan period.

Controlled burial for some LLW also takes place at suitable landfill sites. This form of disposal is used by non-nuclear industries which process raw materials containing natural radioactivity and by major hospitals and universities.

This continuation of current practice in respect of controlled burial is not considered to have any land use implications in Cumbria, as the majority of LLW produced in the County is at Sellafield which has its own disposal facilities on site and at Drigg. Therefore no policies are proposed.

Hospitals and industry in the County also dispose of small quantities of LLW into the sewerage system. This is also controlled by EA authorisations and North West Water Ltd who monitor their wastewater treatment plants. No planning issues are raised by this and no policies are proposed.

Intermediate Level Waste (ILW)

The previous Government's statement of policy on radioactive waste management was contained in the 1995 White Paper "Review of Radioactive Waste Management Policy – Final Conclusions", which indicated that further consideration would be given to the suggestion in the consultation paper that short lived ILW might be disposed of at Drigg, provided that the overall safety case for the site was not jeopardised. A decision will be taken in the light of Government research, any relevant IAEA and European Commission studies and advice which the Government intends to seek from the Radioactive Waste Management Advisory Committee (RWMAC). The County Council has already raised concerns over what impact this may have on the radiological life of Drigg and would not wish to see any alterations which would reduce the life of the site or increase the risk to public health and safety.

The House of Lords Select Committee on Science and Technology conducted an enquiry into the management of nuclear waste in the UK. Part of the Committee's remit was future options for the long term disposal of intermediate level waste. The Committee considered evidence from interested parties and concluded that deep disposal remained the preferred option. In their response in October 1999 the Government have stated that they are committed to a fully comprehensive policy for managing long-lived radioactive waste. The policy must be developed in the most transparent and open-minded way, to ensure maximum possible public acceptance, before final conclusions are reached on whether to continue storage above ground or to move to storage deep underground.

The Government will issue a consultation paper on radioactive waste management issues towards the end of 1999.

Currently, approximately 45,000m³ of ILW is stored at Sellafield. In a BNFL report - Intermediate Level Waste Management at Sellafield, February 1995, future arisings of ILW from operations at Sellafield were estimated at 55,000m³ in their raw state (the figure would rise to 100,000m³ after the waste has been treated and packaged) with a further 50,000m³ arising from decommissioning. BNFL intend that all future ILW arisings will be encapsulated or containerised as they arise. Existing ILW, currently stored in its raw state, will be retrieved and similarly treated. The material will then be held in interim stores at Sellafield until a repository is available. The implementation of this strategy will require the building of further stores for which Copeland Borough Council are the relevant local planning authority. BNFL consider this strategy to be robust and have said, since the dismissal of the Rock Characterisation Facility appeal, that they already have plans for additional storage to cover the delayed anticipated start date for a repository. Decommissioning plans could also be deferred where safety was not an issue.

Policy 57 of the Structure Plan was written to deal with a repository proposal and further policies are not proposed in this Plan.

High Level Waste (HLW)

The previous Government's 1995 White Paper confirmed that HLW should be stored in a vitrified form for at least 50 years to allow for cooling, but said that the Government had now decided that it was time to take more positive steps to consider the ultimate destination of the waste.

To this end the Department of the Environment, Transport and the Regions has commissioned work on a research for the disposal of HLW and spent fuel. The favoured disposal option would be to deep geological formations on land.

The research group published a project status report upon reaching the halfway point. RWMAC published their advice to the Government regarding the status report in November 1998.

Given the timescales involved it is not expected that planning permission would be sought for a HLW repository within the life of this Plan. A specific policy on HLW disposal is not therefore proposed at this stage.

Should research result in proposals coming forward within the Plan period the County Council will rely on Policy 57 of the Cumbria and Lake District Joint Structure Plan 1991-2006.

APPENDIX IV

Cumbria Minerals and Waste Local Plan: Full Lists of Policies

POLICY 1

Proposals for minerals and waste development which generate road traffic will only be permitted where:

- iv. the roads, junctions and site access are to the appropriate standard, or they can be upgraded without causing irreversible damage to the character of the road, so that the road network is capable of accommodating the type and volume of traffic without having an unacceptable impact on highway safety or the convenience of other road users; and*
- ii. the increase in traffic would not have an unacceptable impact on local communities by reason of visual intrusion, fumes, dust, noise and vibration.*

Proposals for sites with good links to the strategic route network will be favoured.

POLICY 2

Proposals for minerals and waste development will only be permitted where they will not subject surrounding land uses to unacceptable noise.

POLICY 3

Blasting will only be permitted where it will not cause unacceptable disturbance to surrounding land uses.

POLICY 4

Proposals for minerals and waste development will only be permitted where surrounding land uses can be adequately safeguarded from dust and odour.

POLICY 5

Proposals for minerals and waste development will only be permitted where any change in surface and groundwater levels and flows will not have an unacceptable impact on water abstractions or the future use of the water resource.

POLICY 6

Proposals for the extraction of minerals from watercourses or beaches will not be permitted.

POLICY 7

Proposals for minerals and waste development will only be permitted where any visual impact can be reduced to an acceptable level through sensitive siting and design including phasing of operations, progressive restoration, screening or other measures.

POLICY 8

Proposals for waste development in AONBs will not be permitted other than where there would be no adverse impact on the landscape.

POLICY 9

Proposals for minerals and waste development which would be detrimental to the distinctive character of a designated County Landscape will only be permitted where the detriment will be temporary.

POLICY 10

Proposals for minerals and waste development outside AONBs, the Heritage Coast and County Landscapes will be permitted provided there will not be unacceptable permanent harm to features of local landscape significance.

POLICY 11

Proposals for minerals and waste development on the best and most versatile agricultural land will only be permitted where the site can be restored to a condition equivalent to at least the original quality of the agricultural land within five years from the completion of the restoration.

POLICY 12

Proposals for minerals and waste development which would adversely affect a nationally important archaeological site or monument, whether scheduled or not, or its setting, will not be permitted unless the site can be preserved in situ.

POLICY 13

Proposals for minerals and waste development on sites where there is good reason to believe there are remains of archaeological importance will only be permitted where evaluation is carried out prior to determination.

Proposals for minerals and waste development on other sites will require an evaluation and, where necessary, provision for an appropriate field investigation prior to the development commencing.

In all cases an archaeological evaluation will comprise a documentary search and normally a detailed site inspection and/or systematic prospecting trenching, carried out by a suitably qualified and experienced person or organisation.

POLICY 14

Proposals for minerals and waste development where there is evidence of archaeological remains, but which do not warrant preservation, will only be permitted if provision is made for an appropriate field investigation to be carried out.

The type of archaeological field investigation required will be determined by the nature and importance of the remains and the type and impact of the proposed development.

POLICY 15

Proposals for minerals and waste development which would have an adverse effect on the nature conservation interests of a site of international nature conservation importance (either individually or in combination with other plans or projects), will not be permitted unless:

- i. there is no alternative solution; and*
- ii. there are imperative reasons of overriding public interest for the development.*

Where the site hosts a priority natural habitat type and/or a priority species, as listed in the EC Habitats Directive, the proposal will only be permitted if required for reasons of human health or public safety or for beneficial consequences of primary importance for nature conservation.

POLICY 16

Proposals for minerals and waste development which would have an adverse effect on the nature conservation interests of a Site of Special Scientific Interest will not be permitted unless the harm caused to the value of those interests and the nature conservation value of the national network of such sites, is clearly outweighed by the need for, and/or benefits of, the development.

Where the site concerned is a National Nature Reserve or a site identified under the Nature Conservation Review or Geological Conservation Review, particular regard will be paid to the individual site's national importance.

POLICY 17

Proposals for minerals and waste development which would have an adverse effect on important nature conservation interests within a Wildlife Site or Regionally Important Geological and Geomorphological Site will only be permitted where the need for, and/or benefits, of the development clearly outweighs the harm to the value of those interests.

POLICY 18

Proposals for minerals and waste development which would have an adverse effect on species protected by law will only be permitted where harm to the species can be avoided by reducing disturbance to a minimum or providing adequate alternative habitats or by other means.

POLICY 19

Proposals for minerals and waste development which would affect a public right of way will only be permitted where:

- i. users of the route can be adequately protected from the adverse effects of the development through screening, segregation or other measures as appropriate; and*
- ii. in the event that the route would be lost, either temporarily or permanently, a satisfactory alternative can be established or can be shown to be unnecessary.*

POLICY 20

The County Council will seek, where appropriate, the provision of public access including new public rights of way within restoration schemes.

POLICY 21

There will be a presumption in favour of restoring mineral and waste sites to agricultural, forestry and amenity (including nature conservation) afteruses following temporary developments. Restoration to agriculture will be required where the loss of agricultural land would adversely affect the economic viability of the farm holding.

POLICY 22

The County Council will require a scheme of aftercare, for up to five years, for land being restored to amenity, forestry or agricultural afteruses. For proposals where a further period of management is considered to be necessary the County Council will need to be satisfied that this will be provided.

POLICY 23

In assessing the extent to which proposals for minerals and waste development meet the social and economic needs of the County's population and help maintain rural communities, the following will be taken into account:

- i. the number, type and duration of direct and indirect jobs to be generated or maintained and how many will be or are occupied by local people; and*
- ii. the opportunities for the development of skills of locally employed people; and*
- iii. the level and nature of investment in the local economy from wages and use of local businesses; and*
- iv. the impact on economic development initiatives and neighbouring businesses, including tourism.*

POLICY 24

Mineral resources will be safeguarded from sterilisation. The County Council will oppose development proposals within Mineral Consultation Areas which would prevent or prejudice potential future mineral extraction unless it is satisfied that the area affected does not contain a workable mineral deposit; or there is an overriding need for the development and the mineral cannot be extracted in advance.

POLICY 25

Proposals for the extraction of minerals prior to development which would otherwise sterilise proven mineral deposits will be permitted except where prior extraction would prejudice the development of the land or would not take place within a reasonable timescale.

POLICY 26

Proposals for the importation and processing of waste or low grade materials to produce mineral products will be permitted at active quarries for a temporary period not exceeding the permitted life of the quarry, where this can be accommodated without prejudicing the operation or restoration of the quarry.

POLICY 27

In assessing proposals for the extraction of minerals which are accompanied by an Environmental Statement or where there are material planning objections or where Local Plan Policies 29, 30, 31, 33, 34, 36 and 43 apply, the following will be taken into account in determining the need for the mineral to be worked:

- i. national, regional and local need as appropriate; and*
- ii. the location, amount, quality and type of existing permitted reserves and the rate at which they are likely to be worked; and*
- iii. the availability of less damaging alternative sites or sources of supply.*

The particular needs of an individual mineral operator will not be taken into account unless it can be demonstrated that special considerations should apply.

POLICY 28

The County Council will aim to grant planning permissions for sufficient land to enable the production of sand and gravel at an average rate of 1.05 million tonnes per annum and the production of crushed rock aggregate at an average rate of 4.55 million tonnes per annum.

POLICY 29

The County Council will aim to grant sufficient permissions to maintain throughout, and at the end of the Plan period, a landbank of permitted reserves for at least seven years extraction of sand and gravel and at least fifteen years extraction of crushed rock aggregate unless exceptional circumstances prevail.

POLICY 30

In the West Cumbria production area proposals for the extraction of sand and gravel from land within the Aldoth area of search and the Bullgill and Cardewmires preferred areas will be permitted subject to there being a demonstrable need. Planning permission will not be granted elsewhere unless a need can be demonstrated which cannot be met from the area of search, the preferred areas or existing sites, or unless significant benefits would accrue to local communities or the environment.

POLICY 31

Proposals for the extraction of sand and gravel in the North, East and South Cumbria production areas will only be permitted where there is a demonstrable need unless significant benefits would accrue to local communities or the environment.

POLICY 32

Proposals for the development of new quarries for the extraction of general crushed rock aggregates will not be permitted, unless there is a demonstrable need and significant benefits would accrue to local communities or the environment.

POLICY 33

Proposals for quarry extensions to provide general crushed rock aggregates will not be permitted unless there is a demonstrable need or significant benefits would accrue to local communities or the environment.

POLICY 34

Proposals for the extraction of High Specification Aggregates will not be permitted unless there is a demonstrable national or regional need or significant benefits would accrue to local communities or the environment.

POLICY 35

Proposals for the extraction of minerals from borrow pits will be permitted provided there are net environmental and economic benefits compared with supplying the minerals from existing quarries.

POLICY 36

Proposals for the extraction of high purity limestone will only be permitted where there is a demonstrable national or regional need and it will be used primarily for non aggregate uses or where significant benefits would accrue to local communities or the environment.

POLICY 37

Unless there would be significant benefits to local communities and the environment sufficient to outweigh any non-compliance with the following criteria, opencast coal extraction will only be permitted where:

- (i) there would be no material adverse impact on local communities, including that arising from the cumulative impact from other permitted and previous opencast coal operations; and*
- (ii) there would be no material adverse impact on a designated landscape; and*
- (iii) it would not inhibit the ability of West Cumbria to attract inward investment, economic development and tourism; and*
- (iv) the working life to the cessation of coaling has been minimised commensurate with the environmental and amenity impacts and the market place, and in any event should not exceed ten years.*

POLICY 38

Planning permission will not be granted for opencast coal extraction in the Alston/Nenthead and East Fellside areas.

POLICY 39

Proposals for underground coal mines will be permitted subject to adequate precautions being taken to avoid subsidence damage that would cause significant land use problems.

POLICY 40

Proposals for the appraisal, drilling and testing of oil and gas will be permitted provided the proposals are consistent with an overall scheme for the appraisal of the resource.

POLICY 41

Proposals for the commercial production, processing and transporting of oil or gas will be permitted provided the proposals are consistent with an overall scheme for the optimum development of the resource (and where appropriate any other adjoining oil or gas resources).

POLICY 42

Planning permission will not be granted for minerals and waste development which would adversely affect peatlands of high nature conservation or archaeological value.

POLICY 43

Proposals for peat extraction will only be permitted where:

- i. there is a demonstrable national requirement for the peat to be worked; and*
- ii. where the site has already been significantly damaged by recent human activity and is of limited or no current nature conservation or archaeological value; and*
- iii. the restoration scheme, wherever practicable, gives priority to wetland rehabilitation and to the enhancement of the nature conservation resource.*

POLICY 44

Schemes of working, restoration and afteruse will be sought at existing peat working sites to safeguard areas of important nature conservation interest and to maximise the potential for restoration of the sites to appropriate nature conservation afteruses.

POLICY 45

Planning permission will only be granted for the extraction of gypsum from the Stamp Hill preferred area if it can be demonstrated that the supply of desulphogypsum is insufficient to meet the production requirements of the Kirkby Thore works and the gypsum is:

- i. only to be used at the Kirkby Thore Works; and*
- ii. transported to the works by conveyor.*

POLICY 46

Planning permission will be granted for an extension of the underground anhydrite workings within the Newbiggin Mine preferred area subject to appropriate safeguards against subsidence.

POLICY 47

Proposals for the extraction of salt from the Walney Channel preferred area will only be permitted if it can be demonstrated that there will be no adverse effects on the operation of the Port of Barrow and there are adequate safeguards against subsidence.

POLICY 48

Proposals for new building stone quarries which raise significant planning objections may be permitted only where it can be demonstrated that the material cannot be adequately supplied from existing sources.

POLICY 49

Proposals for minerals and waste development which would adversely affect limestone pavement will not be permitted.

POLICY 50

Proposals for waste development will be considered in accordance with the hierarchy of options in the following order of preference:

- i. reduction in the amount of waste produced*
- v. re-use of waste without significant processing*
- vi. recovery of value from the waste and volume reduction by any of the following:*
 - a. recycling of material*
 - b. composting or landspreading*
 - c. energy recovery*
- iv. disposal of waste by landfill and incineration without energy recovery.*

Proposals which move the management of waste up the hierarchy will be favoured.

POLICY 51

Proposals for waste development which contribute to providing an integrated and adequate network of waste management facilities to cater for wastes arising in the County will be permitted in appropriate locations.

POLICY 52

Proposals for Scrapyards, Vehicle Dismantlers, Materials Recovery Facilities, Transfer and Storage Facilities to facilitate materials re-use and recycling will be permitted on industrial sites provided that they do not have an adverse impact on surrounding landuses and do not prejudice the overall development of the area.

POLICY 53

Proposals for Construction and Demolition Waste Recycling Facilities will be permitted at active quarries and landfill sites for a temporary period not exceeding the permitted life of the quarry or landfill site, where they can be accommodated without prejudicing the operation or restoration of the site.

POLICY 54

Proposals for temporary Construction and Demolition Waste Recycling Facilities will be permitted, subject to the submission of a satisfactory scheme, at:

*Hespin Wood Landfill Site, Carlisle
Todhills Landfill Site, Carlisle
Tendley Quarry, Cockermouth
Moota Quarry, Cockermouth
Roose Sandpit, Barrow in Furness*

A proposal for a permanent Construction and Demolition Waste Recycling Facility at Blencowe Quarry, Penrith will be permitted subject to the submission of a satisfactory scheme and it not prejudicing the overall development of the area.

POLICY 55

Proposals for Civic Amenity Sites will be permitted at industrial sites and non-inert landfill sites.

At non-inert landfill sites they will only be permitted for a temporary period not exceeding the permitted life of the landfill site where this can be accommodated without prejudicing the operation or restoration of the site.

POLICY 56

Proposals for the composting of waste will be permitted where surrounding landuses can be adequately safeguarded from odours and emissions by one of the following methods:

- i. the composting of appropriate types of waste;*
- ii. an acceptable stand off distance;*
- iii. enclosure of the composting within a building or other methods of enclosure;*
- iv. the use of other techniques to control harmful or noxious emissions to atmosphere.*

POLICY 57

Proposals for the landspreading of waste will be permitted where there will be no significant degradation of land quality through the build up of contaminants.

POLICY 58

Proposals to recover energy from waste through the utilisation of landfill gas will be permitted at the Flusco and Kendal Fell Quarry Landfill Sites, subject to the submission of a satisfactory scheme.

POLICY 59

Proposals for the physical, chemical or biological treatments of waste will be permitted where:

- iv they reduce the potential of waste to pollute the environment; and*
- v they are situated on an industrial site provided that they do not have an adverse impact on surrounding land uses and do not prejudice the overall development of the area; or*
- vi at a non-inert landfill site where required for pre-treatment of waste or treatment of leachate, where they can be accommodated without prejudicing the operation or restoration of the site.*

POLICY 60

Planning permission will be granted for wastewater treatment facilities. Proposals which are likely to have significant adverse effects on the environment or communities will only be permitted where they represent the best practicable environmental option.

POLICY 61

Proposals for incinerators will only be permitted where:

- i. the waste arises solely or mainly from within Cumbria; and*
- ii. the residues can be disposed of safely; and*
- iii. the proposed plant would be located on an industrial site or at the premises where the waste arises provided that it would not have an adverse impact on surrounding land uses and will not prejudice the overall development of the area.*

Proposals for incinerators which include energy recovery, including the utilisation of waste heat, will be more favourably considered.

POLICY 62

Proposals for the disposal of waste by landfill will only be permitted where there is a demonstrable need for additional landfill capacity.

In assessing whether there is a demonstrable need for additional landfill capacity the following will be taken into account:

- i. the availability of facilities to manage the waste higher up the hierarchy of options (Local Plan Policy 50); and*
- ii. how the proposal contributes to providing an integrated and adequate network of waste management facilities to cater for wastes arising in the County (Local Plan Policy 51); and*
- iii. whether the proposal would seriously prejudice the infill and restoration of existing sites (Structure Plan Policy 60) and whether permitted landfill capacity comprises an adequate landfill capacity bank. It will be necessary to show that permitted landfill capacity is only sufficient for seven years or less for non-inert waste or four years or less for inert waste, or in the case of proposals to dispose of inert waste arisings from major construction projects at dedicated sites that there are net environmental and economic benefits compared with disposing of the waste at existing sites.*

POLICY 63

Where there is a demonstrable need for additional landfill capacity, proposals which will satisfactorily restore mineral workings and other derelict land will be favoured.

Proposals involving landraising will only be permitted where the landform to be created reflects the character and scale of the surrounding topography and on restoration will fit naturally into the landscape of the area.

POLICY 64

Proposals for the disposal of non-inert waste by landfill will only be permitted where surrounding landuses can be adequately safeguarded from potential nuisance and hazard. Proposals which do not include the provision of a standoff of 250 metres from residential properties and other sensitive receptors will require special justification.

POLICY 65

The County Council supports the extension of landfilling at Kendal Fell Quarry subject to appropriate safeguards to protect the environment and the amenity of local residents.

POLICY 66

Planning permission will be granted for the disposal of inert waste to landfill at Kendal Fell Quarry subject to the submission of a satisfactory scheme.

POLICY 67

Planning permission will be granted for the disposal of inert waste to landfill at Roose Sand Pit and Mouzel Farm subject to the submission of a satisfactory scheme.

POLICY 68

Planning applications for minerals and waste development which have inadequate information to enable the proposals to be properly assessed will be refused.

POLICY 69

Where it is not possible to achieve the necessary control through the use of planning conditions alone the County Council will, where appropriate, seek a planning obligation or other legal agreement.

POLICY 70

The County Council will require applicants to demonstrate with their application what the likely financial and material budgets for restoration, aftercare and after-use will be, and how they propose to make provision for such work during the operational life of the site, including where appropriate, any necessary financial guarantees.

Where the County Council considers that adequate provision has not been made to fulfil the proposed restoration and aftercare works, planning permission will be refused.

GLOSSARY

After-care - the management and treatment of land after it has been restored to agriculture, forestry or amenity with the object of bringing it to a satisfactory standard for the proposed after use.

Aggregates - sand, gravel, crushed rock and other bulk materials used in the construction industry for purposes such as the making of concrete, mortar asphalt or for roadstone, drainage or bulk filling materials.

Airspace - the area (volume) with potential for filling with waste.

Andesitic tuff - a type of volcanic rock.

Borrow pit - a mineral working providing aggregates or other bulk filling minerals solely for use in a particular construction project and normally close to the project.

Buffer zone - an area to remain generally undisturbed adjoining mineral and waste activities to give protection to properties and other features sensitive to disturbance.

Building sand - fine sand suitable for use in such products as mortar, asphalt and plaster.

Building stone - rock which is quarried and generally cut and dressed to produce blocks of stone for use as a building material.

Bund - an embankment, formed of natural material, used either to screen a site from view, reduce noise emission from a site or to contain waste within a site.

Clinical waste - includes human or animal tissue, blood or other body fluids, excretions, drugs or other pharmaceutical products, swabs, dressings, syringes, needles or other sharp instruments, which may prove hazardous to any person coming into contact with it; and any other waste arising from medical, nursing, dental, veterinary, pharmaceutical or similar practice which may cause infection to any person coming into contact with it.

Coated roadstone - crushed rock used in road construction which is bound by bitumen. A wide range of specifications are available for various uses.

Co-disposal - a process whereby industrial waste, particularly liquid and sludge, is landfilled in conjunction with household and commercial waste.

Commercial waste - waste from premises used wholly or mainly for the purposes of a trade or business, eg shops, offices and places of entertainment.

Compaction - increasing the density of solid waste in landfill by the repeated passage of heavy machinery over its surface. Also refers to baling machines and stationary compactors for use in compacting waste into containers.

Compost - organic matter (eg from household waste or sewage sludge) decomposed aerobically for use as a fertilizer or soil conditioner.

Concrete batching plant - plant which delivers mixes of cement, aggregate and water into mixer trucks for transport as ready mixed concrete to construction sites.

Concreting aggregate - aggregates suitable for use in making concrete.

Concreting sand - coarse sand suitable for use in making concrete.

Construction and demolition waste - waste, generally inert, arising from the construction, maintenance or demolition of buildings or other civil engineering structures.

Containment site - a landfill site designed and engineered to contain waste and prevent the ingress of water, escape of any leachate and uncontrolled releases of landfill gases.

Controlled waste - household, industrial (including construction and demolition) and commercial waste or any such waste which is subject to control under the provisions of the Environmental Protection Act 1990.

Crushed rock - hard rock which has been quarried, fragmented and graded for aggregate and non-aggregate uses.

Decomposition - breakdown of matter into more simple chemical forms. Decomposition may be caused by physical, chemical or micro-biological action.

Effluent - fluid discharged or emitted to the external environment.

Emission - a material which is expelled or released to the environment. Usually applied to gaseous or odorous discharges to the atmosphere.

Energy from waste - the burning of waste to create heat which can be used directly or used to generate electricity.

Environmental appraisal - the evaluation by the planning authority of the significance and likely impact of the predicted effects of a proposed development and of the scope for modifying or mitigating them.

Environmental Assessment - a formal process by which the impact of a proposed development on the environment can be assessed.

Environmental impact - the total effect of any operation on the surrounding environment.

Environmental Statement - the presentation of the findings of the Environmental Assessment in a form understandable for public scrutiny.

Fill - material used in construction or land reclamation works to create required levels.

Fly tipping - the unregulated and hence illegal dumping of waste.

Glacial deposits - deposits laid down by glaciers or glacial meltwater.

General Permitted Development Order - This Order provides a detailed list of types of development which do not require planning permission, ie are permitted development and sets out statutory planning procedures.

Global warming - possible changes to the Earth's climate by the effect of emissions to the atmosphere.

Gritstone - a type of coarse sandstone.

Hard rock - consolidated rock, for example limestone or granite, which generally has to be removed by blasting and crushed for use in the construction industry.

Hornfels - a medium or fine grained granular rock which has been altered by heat.

Household Waste - waste from a private dwelling or residential house or other such specified premises.

Hydrocarbons - compounds consisting wholly of hydrogen and carbon which form the bulk of oil and natural gas.

Hydrogeology - the study of water below the ground surface.

Hydrology - the study of the way water behaves within an area.

Impervious - used to describe materials, natural or synthetic, which have the ability to resist the passage of fluid through them.

Incinerator residue - the solid remains of waste burnt at an incinerator, together with some cooling water.

Incinerators - industrial plants where combustible waste materials are burnt in order to reduce their volume, weight and pollution potential prior to their disposal at landfill sites.

Industrial waste - waste from any factory within the meaning of the Factories Act 1961 or such other specified premises.

Inert waste - waste that does not normally undergo any significant physical, chemical or biological changes when deposited at a landfill site.

Land bank - a stock of planning permissions within an appropriate local area sufficient to provide for continued extraction of sand and gravel or crushed rock over a given period.

Landfill gas - a by-product from the digestion by anaerobic bacteria of putrescible matter present in waste deposited at landfill sites. The gas is predominantly methane (65%) together with carbon dioxide (35%) and trace concentrations of a range of vapours and gases.

Landfilling - the disposal of waste by its permanent deposition in or on the ground. It can involve the filling of man-made voids, or the construction of features above ground level (often referred to as land raising).

Landspreading - the spreading of liquid waste on land.

Leachate - contaminated liquor which can seep from a landfill site.

Legal (planning) agreement - an agreement (before 25 October 1991) between the local planning authority and any person interested in land in their area for the purpose of restricting or regulating the development or use of land (see also planning obligation).

Liner - a natural or synthetic membrane material, used to line the base and sides of a landfill site to prevent leachate or landfill gas seeping into surrounding geological strata.

Local plan - a detailed land-use plan concerned with the implementation of the policies of a structure plan, and prepared and adopted by a local planning authority.

Marine-dredged sand and gravel - sand and gravel dredged from deposits on the seabed and landed at wharfs for use as aggregates.

Mineral Consultation Areas - areas where mineral deposits are believed to exist, within which the District Council should consult the County Council, as mineral planning authority, on any development proposed which might sterilise or prejudice the working of that deposit.

Monitoring - a continuous or regular periodic check to determine the environmental impact of mineral and waste operations to ensure compliance with planning permissions, disposal licence conditions and other statutory environmental safety requirements, and to ascertain the effectiveness of planning policies.

Non renewable resources - naturally occurring resources which once used cannot be replaced.

Northern Region Working Party on Aggregates - established in 1976, the Working Party has representatives from the County Councils of Cleveland, Cumbria, Durham and Northumberland, Unitary Authorities Tyne and Wear, the Lake District National Park and from BACMI and SAGA, trade organisations representing the minerals industry. It assesses the demand for and supply of aggregates in the region and provides advice and guidance on aggregates provision.

Opencast working - a form of surface mining to win minerals where the overburden is returned to the void, literally cast from the working face to the rear, as the mineral is exposed.

Overburden - material that overlies a mineral deposit of economic value, which must be removed in order to extract the mineral.

Planning obligation - an enforceable bilateral or unilateral agreement (after 25 October 1991) introduced by the Town and Country Planning Act 1990 for the purpose of restricting or regulating the development or use of land (see also legal agreement).

Primary aggregates - aggregates won from naturally occurring deposits, whether on land or from the seabed.

Processing plant - mechanical equipment that may be used for the purposes of washing, crushing, dewatering, screening, grading and weighing of minerals.

Progressive restoration - the method of restoring a site or area in phase with working so that the minimum area practicable is disturbed at any one time.

Putrescible - readily able to be decomposed by bacterial action. Landfill gas and leachate can occur as by-products of this decomposition.

Radioactive Waste -

Very Low Level Waste (VLLW) - wastes which can be safely disposed of with ordinary refuse, each 0.1m³ of material containing less than 400 KBq beta/gamma activity or single items containing less than 40 KBq beta/gamma activity. This type of waste does not require a HMIP authorisation to be disposed of. Examples of VLLW include old luminous watch dials and hypodermic needles from medical treatments.

Low Level Waste (LLW) - wastes containing radioactive materials other than those acceptable for disposal with ordinary refuse, but not exceeding 4 GBq/t alpha or 12 GBQ/t beta/gamma (ie wastes which can be accepted for authorised disposal at Drigg, Dounreay or other landfill sites by controlled burial.) This forms the bulk of all radioactive waste (80%).

LLW going to landfill sites (other than Drigg and Dounreay) is known as special precautions waste and requires HMIP authorisation. Appropriate precautions are specified in the authorisation for disposal.

LLW consists mainly of general rubbish (such as paper towels and laboratory clothing) and other lightly contaminated items from the operation of nuclear facilities. It includes paper, plastics, metal and glass.

Intermediate Level Waste (ILW) - waste with radioactivity levels exceeding the upper boundaries of LLW but which do not require heating to be taken into account in their disposal. They form about 20 percent of the total waste arisings. Examples of ILW include plutonium contaminated material (PCM), spent fuel cladding and irradiated and activated components.

High Level Waste (HLW) - wastes in which the temperature may rise significantly as a result of their radioactivity so that this factor has to be taken into account in their disposal. They represent only 0.2 percent of the total radioactive waste arisings. HLW consists of hot fission steam liquor from reprocessing.

Rail depot - a reception point for aggregates moved in bulk by rail (normally over comparatively long distances) for onward distribution, normally by road. A depot normally comprises a railway siding, off-loading and storage facilities.

Railway ballast - aggregates used to form the bed of a railway.

Recycling - the recovery of re-usable materials from waste before it becomes mixed and contaminated in the waste stream.

Reserves - mineral deposits which have been tested to establish the quality and quantity of material present and which could be economically exploited. Permitted reserves are reserves having the benefit of planning permission for extraction.

Resources - mineral deposits where the quality and quantity of material present has not been tested or which could not currently be economically exploited.

Restoration - the process of returning a site or area to a beneficial use following mineral extraction and/or waste disposal.

Scheduled Ancient Monument - a nationally important archaeological site included in the Schedule of Ancient Monuments maintained by the Secretary of State for the Environment under the Ancient Monuments and Archaeological Areas Act 1979.

Secondary aggregates - aggregates other than primary aggregates which are produced as by-products of other processes and used instead of primary aggregates, eg blast furnace slag and slate waste.

Sewage sludge - sludge resulting from the treatment of raw sewage. It typically contains 70-90 percent water, prior to dewatering.

Sludge - an intimate mixture of solid and liquid.

Special Waste - waste, meeting criteria set down in regulations as being dangerous or hazardous, requiring special care in its transport and disposal.

Sterilisation - permanent development on a site or area which would prevent working of a mineral deposit identified as likely to be of commercial interest.

Structure plan - a written statement, approved by the Secretary of State for the Environment, of the County Planning Authority's general policies and main proposals for change over a period of up to 15 years.

Subsoil - the less well-structured and less biologically active layer below topsoil which acts as a reserve of nutrients and water for plant growth in the topsoil.

Surcharge - the addition of waste material to a landfill site above approved final levels to allow for calculated settlement of the waste.

Sustainable development - development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Transfer station - a site at which collected waste is transferred to bulk transport for delivery by road, rail or water to a final disposal site.

Uncoated roadstone - uncoated crushed rock used in road construction.

Waste - in this Plan includes any substance which constitutes a scrap material or an effluent arising from the application of any process; and any substance or article which requires to be disposed of as being broken, worn out, contaminated or otherwise spoiled.

Waste disposal - the process of getting rid of unwanted, broken, worn out, contaminated or spoiled materials in an orderly, regulated fashion.

Waste Disposal Authority - the local authority (the County Council) responsible for implementing the provisions of the Environmental Protection Act 1990 with regard to the disposal of waste.

Waste Management Licence - a licence granted by the Waste Regulation Authority under the provisions of the Environmental Protection Act 1990, which authorises the holder to deposit, or to use equipment to dispose of, controlled waste on a particular site.

Waste Regulation Authority - the local authority (the County Council) responsible for implementing the provisions of the Environmental Protection Act 1990 with regard to the issuing and monitoring of waste management licences and the registration of waste carriers.

Waste treatment - the process of making waste materials easier to handle, transport and dispose of by chemical, physical or biological means.

Water table - the level of water below the surface of the ground in porous rocks which rises and falls with changes in rainfall.

Wet working - the extraction of minerals from the ground below the level of the water table.

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