



CUMBRIA MINERALS AND WASTE DEVELOPMENT FRAMEWORK

CORE STRATEGY

**FURTHER POST SUBMISSION CHANGES AS DISCUSSED AT THE
HEARING IN PUBLIC 11 TO 21 NOVEMBER 2008**

(Without track changes)

PREFACE

This document is the Core Strategy of the Cumbria Minerals and Waste Development Framework. The document sets out the County Council's policies for minerals and waste management developments up until 2020 and relate to those parts of Cumbria that are outside the Lake District and Yorkshire Dales National Parks. There will be further consultations in 2009 about sites that may be needed for mineral working and waste management facilities.

A web-based version of this document is available on the web site www.cumbria.gov.uk

Contents

Contents

1 INTRODUCTION	1
2 OVERALL STRATEGY	3
PURPOSE	3
VISION	5
STRATEGIC OBJECTIVES	6
3 DELIVERING THE OVERALL STRATEGY	8
CLIMATE CHANGE	8
ECONOMIC & COMMUNITY BENEFITS	13
CUMBRIA'S ENVIRONMENTAL ASSETS	16
PLANNING OBLIGATIONS	21
4 STRATEGIC AREAS FOR NEW DEVELOPMENTS	24
5 RELATIONSHIP TO OTHER STRATEGIES	27
6 WASTE CORE STRATEGY	29
PURPOSE	29
STRATEGY	35
7 DELIVERING THE WASTE STRATEGY	37
8 RADIOACTIVE WASTES	45
HIGHER ACTIVITY WASTES	45
LOW LEVEL WASTE	49
9 MINERALS CORE STRATEGY	53
PURPOSE	53
STRATEGY	55
10 DELIVERING THE MINERALS CORE STRATEGY	56
PROVIDING FOR AND SAFEGUARDING MINERALS	56
AGGREGATES	57
GYPSUM AND ANHYDRITE	61
BRICKMAKING MUDSTONES	62
INDUSTRIAL LIMESTONES	62

ZINC MINING	62
BUILDING STONES	63
OTHER MINERALS	63
POLICIES	64
11 MONITORING AND IMPLEMENTATION	67

ANNEXES

I GLOSSARY	i
II KEY DIAGRAM	vi

CORE STRATEGY POLICIES

Core Strategy Policy 1 - SUSTAINABLE LOCATION AND DESIGN	13
Core Strategy Policy 2 - ECONOMIC BENEFIT	15
Core Strategy Policy 3 - COMMUNITY BENEFITS	16
Core Strategy Policy 4 - ENVIRONMENTAL ASSETS	20
Core Strategy Policy 5 - AFTERUSE AND RESTORATION	21
Core Strategy Policy 6 - PLANNING OBLIGATIONS	22
Core Strategy Policy 7 - STRATEGIC AREAS FOR NEW DEVELOPMENTS	25
Core Strategy Policy 8 - PROVISION FOR WASTE	38
Core Strategy Policy 9 - WASTE CAPACITY	42
Core Strategy Policy 10 - HIGH AND INTERMEDIATE LEVEL RADIOACTIVE WASTES STORAGE	48
Core Strategy Policy 11 - HIGH AND INTERMEDIATE LEVEL RADIOACTIVE WASTE GEOLOGICAL DISPOSAL	49
Core Strategy Policy 12 - LOW LEVEL RADIOACTIVE WASTE	51
Core Strategy Policy 13 - SUPPLY OF MINERALS	64
Core Strategy Policy 14 - MINERALS SAFEGUARDING	65
Core Strategy Policy 15 - MARINE DREDGED AGGREGATES	65
Core Strategy Policy 16 - INDUSTRIAL LIMESTONES	66
Core Strategy Policy 17 - BUILDING STONES	66
Core Strategy Policy 18 - OIL AND GAS and COAL BED METHANE	66

CHAPTER 1: INTRODUCTION

- 1.1** The Minerals and Waste Development Framework is part of a new development plan system that was introduced in 2004. The Framework comprises a folder of different documents. The first of these is the Core Strategy which sets out what the plan will do. It has to comprise a spatial vision and strategic objectives for the area; a spatial strategy; core policies and a monitoring and implementation framework. It indicates what minerals and waste developments are likely to be needed, and broad locations for some of these developments.
- 1.2** The other Development Plan Documents must conform to the Core Strategy once it has been adopted. Those other Documents are the Generic Development Control Policies, which are proposed to be adopted at the same time as the Core Strategy and also the Site Allocations Policies and Proposals Map which will be published for consultation early 2009.
- 1.3** The purpose of this new type of plan is to secure spatial planning rather than just the regulation and control of land uses. The difference is seen to be that, with increased and earlier engagement with communities and stakeholders, the plan will be able to take account of the wider range of the economic, social and environmental factors that matter to people.
- 1.4** It is considered that, for its spatial context, this Minerals and Waste Development Framework needs to take account of the:-
- climate change agenda.
 - County Council Plan (previously the Corporate Strategy).
 - Cumbria Local Area Agreement

 - six Cumbria Community Strategies
 - District Council Local Plans and Local Development Frameworks
 - Cumbria Economic Plan
 - Joint Municipal Waste Management Strategy
 - Local Transport Plan.
 - UK and Cumbria Bio-diversity Action Plans.
 - West Cumbria Spatial Masterplan.
 - decommissioning of nuclear sites and the Nuclear Decommissioning Authority's strategies.
 - Government policies and guidance on radioactive wastes management.
 - United Utilities' Asset Management Plans.
 - Regional Economic Strategy.
 - Regional Spatial Strategy.
 - Government's performance indicators for local authorities.
 - Defra and Local Government Association's Joint Environmental Prospectus.
- 1.5** Having had regard to all of these, the challenge for this plan is to provide for the sustainable minerals and waste management developments that will be needed in Cumbria by 2020 and beyond, whilst,
- helping to achieve sustainable consumption and production,
 - living within environmental limits,

INTRODUCTION

- protecting the quality of life of present and future generations, and
- ensuring the prudent use of natural resources.

1.6 Meeting this challenge raises a number of questions about what we should be planning for, in order to help deliver sustainable development. These questions are summarised below:

Achieving a sustainable economy

- what types of minerals and wastes?
- what quantities of them over the plan period?
- how many and what type of sites and facilities?
- what contribution can be made to securing / enhancing economic viability and vitality?

Living within environmental limits

- how to protect, maintain and enhance the environment?
- where should sites and facilities be located?
- how to ensure the environmental impacts of development are acceptable?

Sustainability Appraisal

1.7 Throughout the preparation of the plan, the process has been informed by Sustainability Appraisal that has been undertaken by Land Use Consultants Ltd .

Earlier consultations

1.8 During June to September 2006 the County Council consulted upon the issues and options for the Minerals and Waste Development Framework. The comments that were made then, about the matters that face us in planning for minerals and waste management developments, helped to identify Preferred Options. These were published in March 2007 and were the first draft of the plan. We then had to make changes and repeat the consultations in November/December 2007 for the "Proposed Changes to the Preferred Options Core Strategy". Comments about those were taken into account in preparing the final draft version of the Core Strategy which was submitted to the Secretary of State.

Further stages

1.9 Sites will be identified in the Site Allocations Policies and associated maps. Consultations on these documents are programmed for early 2009. They are having to be revised because some sites are no longer available and alternative or additional sites are needed.

CHAPTER 2: OVERALL STRATEGY

PURPOSE

Where we are now

- 2.1** The minerals and waste management industries are essential and indispensable to the county. Without them other sectors of the economy could not function properly and the basic infrastructure of roads, buildings and other facilities could not be maintained or improved. Both industries also provide important direct local economic benefits including jobs.
- 2.2** The industries fit within a county of contrasts and very serious challenges. Whilst we have some of the country's best environments, these contrast with major industrial landscapes and there are also some of the most deprived wards in Europe. Some areas have had soaring house prices, others have experienced housing market collapse. Whilst the population has increased, it is ageing and many young people are leaving.
- 2.3** The industrial sectors on which the Cumbrian economy is most reliant are those with the greatest proportionate decline. Whilst, since 2000, all Cumbria's districts, except Eden, have matched or outperformed the national average economic growth, Cumbria has been the slowest growing sub-region in the UK since the mid-1990's. It needs to grow its economy faster than anywhere else simply to achieve the average Gross Value Added (GVA) per head. This has to be achieved without damaging the County's fragile environment.
- 2.4** Cumbria is the second largest county in England with a relatively small number of people. Its main towns are dispersed around the edges of the county, whilst in the centre are the mountains and lakes of the Lake District National Park. There are good north-south communications along the M6 motorway and the west coast main railway line, but east-west communications are less easy with the more congested A65, A66, A69 and A590 routes and limited rail infrastructure. Levels of traffic through its three remaining operational ports, Barrow, Workington and Silloth, have steadily declined over the last ten years. Carlisle airport does not currently operate as a commercial airport although there are plans for its development.
- 2.5** Cumbria is mostly self-sufficient for those minerals that can be worked from its own resources and also supplies regional and national markets for high skid resistance roadstones, industrial lime, specialist bricks and plaster and plasterboard made using gypsum. In general, waste management facilities in the county serve their local areas and most parts of the county have access to the necessary facilities. There is, however, a shortfall in landfill capacity in the south of the county where residual waste is sent to landfill in Lancashire. Within the last few years there has been significant success in reducing the amount of household waste per head and in increasing the rates of recycling and composting. Recyclables are collected, separated and bulked up, but are then sent to major facilities elsewhere; for example, tins are sent to Liverpool, glass to Alloa and paper to Stirling. Very little recycling as such takes place within the county.
- 2.6** The Sellafield/Windscale complex in West Cumbria has one of the world's largest single concentrations of nuclear facilities and the Low Level Radioactive Waste Repository near Drigg village provides a national facility. Planning permission has recently been granted for additional waste storage at the Repository. Employment in the area's traditional

OVERALL STRATEGY

heavy industries declined some years ago and there is now the prospect that nuclear decommissioning could mean the loss of around 8000 jobs from Sellafield over the next ten to fifteen years.

Where we need to be

2.7 This plan has to identify what waste management facilities and minerals developments Cumbria will need by 2020 and to indicate appropriate locations for them. The Core Strategy must cover all of the significant strategic issues that face Cumbria and state what the Development Framework aims to do. It has to demonstrate that it accords with national policies and the Regional Spatial Strategy and relates them to the distinctive context of Cumbria. That context has been summarised in the previous section. A more detailed description of the context, as expressed in Sustainable Cumbria and in the Council Plan 2007-2010, is included in the separate Appendices document⁶.

2.8 The Joint Environmental Prospectus produced by Defra and the Local Government Association identifies three key and overarching aims which are relevant to this Framework. These are :-

- Tackle climate change and adapt to the unavoidable impacts.
- Maintain a healthy natural environment; sustainably manage our precious natural resources and decouple growth in waste from economic growth.
- make the local environment cleaner, safer and greener.

2.9 The role of this Core Strategy is, firstly, to set out the long term spatial vision for minerals and waste management in Cumbria and the strategic direction and objectives of the plan. It then has to set out the clear, concise and monitorable strategic policies and proposals that are needed to deliver that vision and provide certainty for the future. These must provide a cohesive and comprehensive framework against which the appropriateness and soundness of the subsequent Development Plan Documents (DPDs) can be assessed. The Core Strategy must also include a monitoring and implementation framework with clear objectives for achieving delivery.

2.10 The long term spatial vision of the plan must take account of the challenges that have been outlined in the previous section and of the opportunities that have been identified. These opportunities are the quality of the urban and rural environments and the strengths of some sectors of the economy. The vision of the Cumbria Economic Plan is that in twenty years time the Cumbrian economy will enjoy :-

- GVA levels and growth that match or exceed the highest performing regions in the UK.
- a balanced business base, with an appropriate mix of small, medium and large enterprises.
- a world class reputation in nuclear and sustainable energy, science and knowledge based industries.

2.11 West Cumbria faces challenges that are unique in the UK. The West Cumbria Spatial Masterplan was initiated, by Government, in response to the impacts on the economic and social well-being of the area through nuclear decommissioning. The Masterplan has been commissioned by the West Cumbria Strategic Forum and seeks a long term perspective to address the issues and realise the opportunities. The Masterplan's vision is that by 2027 West Cumbria will:-

- be globally recognised as a leading nuclear, energy, environment and related technology business cluster, building on its nuclear assets and its technology and research strengths;
- be a strong, diversified and well connected economy, with a growing, highly skilled population with high employment;
- project a positive image to the world, and be recognised by all as an area of scientific excellence, outstanding natural beauty and vibrant lifestyle, which attracts a diverse population and visitor profile;
- provide opportunities for all its communities, where geography is not a barrier to achievement and where deprivation, inequality and social immobility have been reduced.

2.12 The developments that will be needed in connection with these visions to diversify and expand the economy, to improve transport links and to increase and improve the housing stock, cannot take place without minerals for construction. An adequate and secure supply of crushed rock and sand and gravel from reasonably local sources will be needed to make concrete and tarmac and for other construction operations. Similarly, wastes from Cumbria's municipal and business sectors will not be able to be managed sustainably unless the right types of new waste management facilities are provided in the right places and at the right time. Development and economic growth may be restrained if these facilities are not available.

2.13 European, national and regional policies require that the amounts of waste going to landfill are progressively reduced. This will be, by minimising the amount of waste that is produced in the first place, and then by increasing the rates of re-use, recycling, composting and recovery of value from waste. Other policies require that an increasing proportion of mineral use is met from recycled or re-used materials. The climate change agenda requires that substantial increases in renewable and low carbon energy generation are achieved. In contributing to this, waste management processes now usually produce renewable fuels.

VISION

2.14 The Development Framework's spatial vision takes account of the above matters and is set out in Box 1 below.

BOX 1

The long term **spatial vision** is :-

That by the end of the plan period the right types of **new waste management facilities** needed to reduce the amount of Cumbria's waste going to landfill will have been built on time and in the right places. That everyone in Cumbria will give top priority to **minimising waste**

OVERALL STRATEGY

and take responsibility for regarding it as a **resource**, not something to be thrown away. In particular Cumbria will no longer be recorded as having the highest amounts of household waste per head of population.

That facilities will have been provided to manage the **Low Level radioactive wastes** that arise from the Sellafield/Windscale complex.

That, with an increasing proportion of re-used and recycled materials, **minerals from the County's own resources** will continue to be provided prudently to meet Cumbria's regeneration, renewal and development needs together with those minerals proven to be required to meet regional and national needs.

That the **carbon footprint** of Cumbria's minerals and waste developments will demonstrate that the potential greenhouse gas emissions and fossil energy demand savings have been secured. In addition to design matters, this will include keeping road transport miles to a minimum by maintaining a pattern of local facilities that suits the geographic characteristics of the county. It will also take account of the contribution that **fuels** derived from Cumbria's waste have made to the energy needs of other industries.

That Cumbria's **environmental assets** will have been protected, maintained and enhanced by siting developments in appropriate locations, by high standards of design and by working practices that are recognised to be best practice.

That optimal **economic benefit** will have been gained from minerals and waste developments including new recycling industries based in Cumbria.

That Cumbria's **communities and stakeholders** will have been fully engaged in planning for minerals and waste developments.

STRATEGIC OBJECTIVES

2.15 Following on from the spatial vision, the strategic direction and objectives for minerals and waste management planning need to reflect an integrated spatial approach that accords with the UK's principles of sustainable development⁽ⁱⁱⁱ⁾. These principles are :-

- living within environmental limits.
- ensuring a strong, healthy and just society.
- achieving a sustainable economy.
- using sound science responsibly.
- promoting good governance.

2.16 A careful balance is needed between the Strategic Objectives and those of the Sustainability Framework. There can be tensions between these, for example, between protecting local environmental assets and local aspirations for economic growth. The objectives that are considered to be appropriate and relevant and address a wide range of the Sustainability Appraisal objectives are set out in Box 2.

BOX 2

Objective 1. That minerals and waste management developments will take due account of the issues of climate change, in particular through energy use and transport; that any adverse impacts on the environment and the local economy will be minimised and that potential benefits will be maximised.

Objective 2. That effective waste minimisation measures will be adopted and, following these, that waste, including radioactive waste, will be managed at the highest achievable level within the waste hierarchy. In order to secure this, the right type of waste management facilities that Cumbria needs to increase the amounts of its wastes that are re-used, recycled, or composted will be provided in the right places and at the right time in order to minimise the disposal of waste to landfill.

Objective 3. That waste will be managed as near as possible to where it is produced without endangering people's health and without harming the environment.

Objective 4. That the minerals from Cumbria that are required to meet local, regional and national needs will be supplied from appropriately located and environmentally acceptable sources.

Objective 5. That the need for new mining and quarrying will be minimised by prudent use of resources and by supplies of alternative re-used and recycled materials.

Objective 6. That mineral resources will be identified and safeguarded.

Objective 7. That the economic benefits of minerals and waste management developments will be optimised without harming the environment.

Objective 8. That the overall quality of Cumbria's environment will be protected and, where practicable, enhanced by high standards of design and operation in new developments and high standards of restoration once developments have been completed.

Objective 9. That the environmental impacts of minerals and waste management developments, including traffic, will be kept to a minimum by appropriate siting of facilities and sound working practices and that any unavoidable harmful impacts will be mitigated.

Objective 10. That there will be increased community and stakeholder involvement and ownership of initiatives and planning for sustainable minerals and waste developments.

DELIVERING THE OVERALL STRATEGY

CHAPTER 3: DELIVERING THE OVERALL STRATEGY

3.1 Delivery of the spatial vision can be considered under four constituent parts -

- providing for minerals and waste developments;
- climate change;
- environmental assets; and
- economic benefit.

3.2 Providing for an adequate supply of minerals is addressed in the Minerals Core Strategy, and providing for the new waste management facilities that will be needed is addressed in the Waste Core Strategy. The other three matters are considered below.

CLIMATE CHANGE

Where we are now

3.3 The climate change agenda has only recently begun to impact on planning policy and planning decisions. With regard to minerals and waste developments, the most tangible examples include requirements to collect and burn methane in landfill gas and more recent initiatives by industry trade associations for carbon and energy reduction schemes. Defra has consulted about the priorities for the next round of Aggregates Levy Sustainability Fund projects 2008 to 2011. One of its themes is to reduce carbon emissions from quarries through specific measures.

3.4 In connection with the top climate change priority to reduce energy use, Climate Change Agreements have been negotiated between the Government and certain energy intensive users. Being party to these agreements and meeting their targets allows relevant facilities to claim up to an 80% reduction in the Climate Change Levy. The Agreements that are probably of most relevance to Cumbria are for gypsum products and for lime. British Gypsum was one of the first construction product manufacturers to sign these Agreements. One of its initiatives is a new rail delivery service from Kirkby Thore, which will take the equivalent of 12,000 lorry journeys each year off the roads.

3.5 Many businesses are adopting energy and carbon reduction measures because they can reduce costs rapidly, and improve profitability and viability, sometimes more effectively than increases in output. From a Sustainability Appraisal perspective, such measures, for a profitable low carbon economy, demonstrate a compatibility of economic and environmental objectives and will be encouraged.

3.6 Carbon gases are given off by many natural and artificial processes. In the context of this plan, methane is mainly associated with landfill gas emissions. All operating and most closed non-inert landfill sites are now required to have landfill gas collection and management systems. The gas is used to power electricity generators or, where this is not practicable, is flared off. Less methane will be produced as increasing amounts of bio-degradable wastes are diverted away from landfill. It is difficult to see that much more could be done to reduce methane emissions from landfills. Other minerals and waste management processes inevitably produce carbon dioxide; for example, this accounts for 20% of the loss of weight through composting.

DELIVERING THE OVERALL STRATEGY

3

- 3.7** Sewage treatment also produces methane and the United Utilities Asset Management Plan includes a continued programme for developing combined heat and power (CHP) plants using this renewable fuel source at some of its larger treatment works.
- 3.8** Defra has produced estimates of carbon emissions for local authority areas; the latest estimates are for 2004 and are not comparable with earlier ones because of revised methodology. They are indicative estimates that are acknowledged to stretch the bounds of existing methodologies and have a high level of uncertainty for some sectors. They are based on Department of Trade and Industry (DTI) estimates of local gas, electricity and road fuel consumption, which represent about 80% of energy use in the UK. They also use estimates about land use, land use change and forestry, made by the Centre for Ecology and Hydrology. These estimate emissions from soils and liming of soils and removals of carbon through forest growth. Although nationally they are estimated to secure a net removal of carbon, for Cumbria these land use factors add to the emissions estimates. The Defra⁽ⁱⁱⁱ⁾ figures are included here because the Government proposes that this data should be used to report on its proposed climate change indicators for communities.
- 3.9** The figures for the Cumbria districts are:-

Table 3.1 Local and regional estimates of carbon emissions 2004 in thousands of tonnes CO₂

Region	Industry & Commercial	Domestic	Road Transport	Total not including LULUCF*	LULUCF*	Total including LULUCF*	Population Thousands	Domestic per capita CO ₂ (tonnes)
Allerdale	517	254	258	1029	26	1055	93	2.7
Barrow in Furness	312	162	65	539	4	544	72	2.2
Carlisle	465	264	310	1038	13	1051	101	2.6
Copeland	145	203	113	461	0	461	69	2.9
Eden	496	153	557	1206	24	1230	50	3.1
South Lakeland	467	308	513	1287	15	1302	102	3.0
North West Region	28686	17384	14412	60482	338	60820	6730	2.6

*LULUCF = Land use, land use change and forestry

Where we need to be

- 3.10** National and regional policies on climate change and on renewable energy have been developing rapidly at the same time as this Core Strategy has been prepared. Because of this, further work is going to be needed on the evidence base that is required. Little information is currently available, for example, on the local feasibility and potential for renewable and low-carbon technologies for new minerals and waste management developments. National policy requires appropriate local targets for these but they could not be justified by evidence at the present time. This matter will need to be addressed through the Annual Monitoring Reports as experience is gained of relevant developments.

DELIVERING THE OVERALL STRATEGY

- 3.11** The first objective of this Core Strategy relates to the climate change issues which are significant for minerals and waste management developments. Policies need to be developed to drive changes forward. These have to include both mitigation measures for stabilising climate change and adaptation measures which take account of unavoidable consequences. The Strategic Flood Risk Assessment is particularly relevant to adaptation and takes account of the assumptions that are made in Planning Policy Statement 25 about such matters as rising sea levels.
- 3.12** The Planning and Climate Change Supplement to Planning Policy Statement 1 (PPS 1) sets out how planning should contribute to reducing emissions and stabilising climate change and take into account the unavoidable consequences. Development Frameworks should fully reflect the PPS's ambitions and policies. One of these ambitions is for zero carbon development and the Government will set out proposals for new non-domestic buildings in due course.
- 3.13** All spatial strategies are required to make a full contribution to delivering the Government's Climate Change Programme and energy policies and to secure the highest viable resource and energy efficiency and reduction in carbon emissions in new developments. Core Strategy policies should be designed to promote, and not restrict, renewable and low-carbon energy and supporting infrastructure. Policies should expect that a proportion of the energy supply of new development is secured from decentralised and renewable or low-carbon energy sources.
- 3.14** The Government's stated aim in the Climate Change Bill is to "increase certainty that there will be carbon constraints in the UK and that these will progressively tighten." In addition to Defra's climate change indicators for local authority areas, the Government is also considering developing a greenhouse gas emissions performance indicator for local authority performance on waste (Waste Strategy 2007). A possible implication of such an indicator could be that Framework policies will need to be revised. This is a matter that will be addressed in the Annual Monitoring Reports.
- 3.15** Defra has published proposed performance indicators for local authorities (July 2007). These include:-
- "Climate Change Mitigation" indicators for the percentage reduction in carbon emissions per head of population as well as for the authority's own estate and operations, and
 - "Progress towards a Climate-Resilient Local Area" indicators which measure an authority's capacity to adapt to both the positive and adverse impacts of climate change.
- 3.16** These indicators will relate to the figures in Table 3.1. The policies and proposals in this plan should impact on the emissions figures. It is not yet clear how direct and measurable these impacts will be for Defra's monitoring climate change indicators for local authority areas, but they should be directly relevant for the proposed indicators that would relate to waste management.
- 3.17** The energy hierarchy makes it clear that reduction of energy use is the best way to reduce greenhouse gas emissions. However, the relative merits of different minerals and waste management processes and technologies with regard to greenhouse gases is not clear cut. Evaluating them can raise very complex, and sometimes imponderable, questions

and it is considered that these are beyond the scope of the plan. The purpose of the plan is to identify locations or sites where the most sustainable facilities can be developed rather than to propose the technologies of those facilities.

- 3.18** The plan's efforts to minimise impacts on climate change, and to monitor such impacts, are, therefore, focused on the carbon reduction measures, efficient use of resources and renewable energy use of new developments and on the traffic they would generate. It is important that proposals demonstrate how these have determined their design. It is recognised that this may not be practicable for some small scale proposals.
- 3.19** Wastewater treatment can require high energy inputs, which reductions in water use can help to reduce. Whilst developments for waste water treatment are matters for this plan, it is considered that policies to encourage reductions in water use and waste water are more appropriate for District Local Development Frameworks. United Utilities has experience of installing anaerobic digestion plants at its sewage treatment works and of using the methane gas that is produced for combined heat and power generating plants. Such proposals will be encouraged.
- 3.20** There are examples of policies in development plans about new developments gaining a significant proportion of their energy needs from renewable sources in accordance with PPS 1. Policy EM 18 in the North West Regional Spatial Strategy (RSS), requires that non-residential developments over 1000 m² should secure at least 10% of their predicted energy requirements from decentralised and renewable or low-carbon sources, unless this is not feasible or viable.
- 3.21** The policies in other development plans have been, understandably, worded more for the context of housing, industrial and commercial developments than for minerals and waste management proposals. With regard to proposed waste management developments, the County Council considers that it is more appropriate to take into account the purpose of a particular proposal and how it would fit into the overall integrated waste management process rather than just consider one particular building. Using just a simple threshold of the size of a proposed building would not have taken into account that one of its purposes could be to contribute to carbon reduction by managing waste more sustainably. Examples include re-use and recycling and that one of the end products of Mechanical and Biological Treatment is a fuel that can be used for energy generation.
- 3.22** Such renewable fuels, derived from waste, and renewable energy generation fuelled by landfill gas, can be part of the decentralised renewable energy supply system that is required by national and regional policies. A consequence of policies that require waste management facilities to meet a proportion of their energy needs from decentralised and renewable sources could be to steer them to sites where, for a long period of time, 100% of their energy supply can be seen to be, in effect, provided by on-site landfill gas powered electricity generators. Whilst this could accord with policy requirements it would not secure increased renewable or low carbon energy generation.
- 3.23** No information is available yet to suggest that this Framework should adopt local targets that are different from the proportion of 10% or the floor area threshold of 1000 m². It is also not known if, or to what extent, this type of policy could affect the viability of waste re-use and recycling initiatives. If their viability is prejudiced the policy could be counter-productive in respect of overall carbon reduction. These are matters that will be reviewed with experience of how the policy performs and will be reported in the Annual Monitoring Reports. A contingency would be to focus more on overall carbon reduction measures rather than just the use of renewable or low carbon energy supply.

DELIVERING THE OVERALL STRATEGY

- 3.24** For proposed mineral working and processing developments, it is considered that the whole life cycle of the product and its purpose will need to be taken into account rather than just a particular proposed development. There would appear to be considerable potential for effective actions since the Stern Report lists mining and quarrying and concrete production in the 25 most energy intensive UK industrial sectors (out of 123). One of the considerations may involve the respective merits of extending an existing quarry compared with the development of a new one.
- 3.25** The Quarry Products Association estimates that carbon emissions from the aggregates and quarry products sector are around 1 million tonnes, 0.7% of the UK total. It has adopted a Carbon Reduction Statement of Intent and has made a number of recommendations to its members for useful action. Work is underway, in discussion with Cumbria mineral operators, to examine the relevant planning policy considerations and these will be reported in the Annual Monitoring Reports.
- 3.26** This Framework also focuses on the emissions from traffic that would be generated by minerals and waste developments. Minerals can only be worked where they occur and the approach, that will be developed in the Site Allocations Policies, is to seek to minimise "mineral road miles" by meeting local demand from the nearest geological source. Similarly, optimum locations will be sought for waste management facilities related to the area they serve. The approach has the added advantage of reducing the impacts of minerals and waste traffic on the Cumbria road network. For the siting of waste management facilities, a sequential approach will be adopted, in accordance with Regional Spatial Strategy Policy DP 4, that gives preference to using existing buildings and previously developed land and employment land allocated in District Local Plans and Local Development Frameworks over green field and non-allocated sites.
- 3.27** Further work relating to "waste miles" and "minerals miles" and associated advice for applicants will be undertaken, but conclusions about strategic locations for some developments are put forward in Chapter 4. With regard to non-road transport, the Site Allocations Policies Development Plan Document will assess the need to safeguard existing or potential railheads or wharf facilities. Further information will be sought on the potential of different afteruses in restoration schemes to lock up carbon.

Policy

- 3.28** It is proposed that the MWDF should contribute to securing overall reductions in greenhouse gas emissions by policies that:
- a. Continue to require landfill gas collection and management systems that, wherever practicable, use the gas to generate electricity (in the development control policies);
 - b. Identify sufficient sites in suitable locations for bio-degradable waste streams to be diverted from landfill in order to reduce the amount of methane that is produced (in the Site Allocations Policies and the Proposals Map);
 - c. Identify sufficient sites in suitable locations for recyclable wastes (including construction and demolition waste) to be sorted and processed close to their point of origin, and for minerals to be worked or recycled/reused close to their main markets (in the Site Allocations Policies and the Proposals Map);
 - d. Protect, maintain and seek to regenerate peat bogs;
 - e. Secure woodland planting as a long term source of bio-fuel and/or, where appropriate, as "carbon sinks" in mineral working and landfill site restoration schemes;

- f. Encourage combined heat and power energy generation from waste products, and developments that would enable fossil fuels to be replaced by refuse derived fuels.
- g. Require a proportion of decentralised and renewable/low-carbon energy generation in new waste management developments and carbon emissions reduction measures in new mineral working proposals;
- h. Encourage increased energy efficiency in plant, buildings and operations including transport;
- i. Safeguard existing and potential rail and wharf facilities (a Site Allocations policy).

Core Strategy Policy 1

SUSTAINABLE LOCATION AND DESIGN

Proposals for minerals and waste management developments should demonstrate that :-

- energy management, environmental performance and carbon reduction have been determining design factors.
- their location will minimise, as far as is practicable, the "minerals or waste road miles" involved in supplying the minerals or managing the wastes unless other environmental/sustainability and, for minerals, geological considerations override this aim.
- all proposed waste management developments with gross floor space of over 1000 square metres gain at least 10% of energy supply, annually or over the design life of the development, from decentralised and renewable or low carbon energy supplies. Any exceptions to this should demonstrate that this would not be feasible or viable for the specific development and that the development would form part of an integrated process for reducing greenhouse gas emissions or for carbon-offsetting measures.
- where appropriate, the restoration proposals have a role in helping to combat climate change.
- mineral working proposals should demonstrate a life cycle ("cradle to grave") analysis of product and process carbon emissions.
- construction of buildings minimises waste production and use of primary aggregates and makes best use of products made from recycled/re-used materials.

Work will be undertaken, in conjunction with stakeholders, to develop life cycle analysis criteria that are relevant for minerals developments.

ECONOMIC & COMMUNITY BENEFITS

Where we are now

- 3.29** The essential importance of the minerals and waste management industries to the county has already been mentioned. In addition to the jobs they provide directly and indirectly, the county's communities and economy could not function without them and the environment would be degraded. With regard to the county's economy, the waste management industry is likely to be investing more in Cumbria over the next few years than any other industry.

DELIVERING THE OVERALL STRATEGY

Where we need to be

- 3.30** Bearing in mind the very serious social and economic problems experienced by large parts of Cumbria, it is particularly important that best local advantage is taken of investments in minerals and waste management developments. This can include jobs in the construction/development stage as well as when a development is operational.
- 3.31** Very little actual waste recycling takes place within Cumbria; this should present development opportunities. Research carried out by NorthWest Remade has demonstrated the potential to "add value" to the Cumbria economy by handling and processing recyclables and compost. The County Council is considering whether a "Materials Marketing Organisation" should be set up, which would be responsible for marketing all recyclables, with a view to maximising the economic benefit to Cumbria. The Joint Municipal Waste Management Strategy includes an initiative with the private and voluntary sectors to establish a Resource Recovery Park. At this park, materials would be reprocessed on site, producing Cumbrian products for sale made from recycled materials.
- 3.32** One of the problems with regard to waste management is that some of the technologies that are likely to be used are new to this country. This can mean that waste management facilities are purchased as complete modules that have been manufactured in other countries rather than locally. There is limited scope for this plan to influence purchasing decisions, but it is within the power of other stakeholders to require local sourcing where practicable.
- 3.33** There is also scope for local industries to take advantage of reduced energy costs through combined heat and power plants using fuel that has been derived from waste. Several companies have already expressed interest in using fuel that would be produced as an end product of the management of the county's municipal waste. So much of the solid recovered fuel could be taken by these companies that it seems unlikely that a purpose built Energy from Waste plant will be needed for the municipal waste stream.
- 3.34** For some major facilities, it is appropriate for planning policies to seek planning contributions or other packages of benefits which offset their implications for local communities. This is particularly relevant to developments by the nuclear industry. West Cumbria's role in hosting the Low Level Radioactive Waste Repository has been recognised by the provision of a Community Fund by the Nuclear Decommissioning Authority.
- 3.35** Economic and community benefits could, therefore, include :-
- jobs provided in, or supported by, mineral extraction, processing and utilisation;
 - jobs provided at waste management facilities;
 - jobs provided during the construction or lead-in stages of minerals and waste management developments;
 - enhanced viability of local industries through supply chain benefits and due to reduced fuel costs by using combined heat and power energy from waste plants;
 - off-set packages of community benefits related to major developments and their host communities.

Policy

- 3.36** The policy seeks to optimise economic and community benefits, which implies a balancing exercise with other interests. This approach has been used for the Waste and Minerals Core Strategies.

Core Strategy Policy 2

ECONOMIC BENEFIT

Proposals for new minerals and waste developments should demonstrate that they would realise their potential to provide economic benefit. This will include such matters as the number of jobs directly or indirectly created or safeguarded and the support that proposals give to other industries and developments. It will also be important to ensure that minerals and waste developments would not prejudice other regeneration and development initiatives.

- 3.37** It is acknowledged that measuring the success of this policy may be difficult. The Annual Monitoring Reports will be able to record the details relating to employment and support for other industries that are given in planning applications and assess any need to review the policy. At this stage no alternative contingency policy has been identified that would achieve the same strategic objective.

Community benefits

- 3.38** Community benefits packages will be expected to contribute to the sustainable development of an area and the well-being of its local communities. They can be secured through the provisions of the Local Government Acts, the Planning Acts or other legislation. An example of one that has been delivered through the planning system is the unilateral undertaking for a Community Fund that was negotiated in relation to development at the Low Level Radioactive Waste Repository near Drigg.
- 3.39** At the present time such off-setting packages of community benefits have been considered only in the context of the nuclear industry but could become relevant for other regional or national waste management facilities. It seems unlikely that any mineral development within Cumbria would be of such a scale as to merit such packages, even at those sites that supply regional or national markets. This situation will be kept under review.
- 3.40** The West Cumbria Spatial Masterplan highlights the problems that the area's concentration of nuclear facilities causes, and will continue to cause in the future. Two main impacts can be demonstrated, the over-reliance on one industry and the effect that the negative perception of that industry has on other investment.
- 3.41** There will be considerable increases in radioactive wastes management associated with nuclear decommissioning, and this will have social and economic impacts that need to be mitigated. In these circumstances the Cumbria local authorities consider it is reasonable to expect that proportionate benefits packages should be secured in order to offset the consequences of hosting such a large proportion of the country's nuclear legacy. The authorities will continue to work jointly on such matters.

DELIVERING THE OVERALL STRATEGY

Core Strategy Policy 3**COMMUNITY BENEFITS**

Where large national or regional waste management facilities are proposed, particularly for the nuclear industry, the County Council will expect that packages of community benefits will be provided to help to offset the impacts of hosting such facilities.

- 3.42** The numbers of off-setting benefits packages that are secured will be set out in the Annual Monitoring Reports. The more important matter, however, is how successful these are in achieving their objectives. Details of this should be available from the monitoring reports that the individual "delivery vehicles" produce. Any need to review the policy would take account of the relative success that the different ways of providing and managing the packages may demonstrate and of any additional opportunities provided by new legislation.

CUMBRIA'S ENVIRONMENTAL ASSETS**Where we are now**

- 3.43** Cumbria's environmental assets include the normal residential and work place amenities, or quality of life, that people enjoy and the natural and man made features for which the county is renowned. As stated in the Structure Plan, "Cumbria is richly endowed with fine landscapes, wildlife, buildings and features of archaeological and historic importance. These resources are valuable assets that underpin the tourism industry, attract business and investment into the area, and contribute to the quality of life of local communities. Environmental conservation can also generate significant economic activity." The health of the eco-system is of vital importance to everyone, it provides outputs or outcomes that directly and indirectly affect human well-being. These services that benefit people, which are provided by the natural environment, are known as ecosystem services. The Economic Plan and the West Cumbria Spatial Masterplan also highlight the economic importance and potential of the urban and rural environments.
- 3.44** The environmental assets are listed in the Boxes below. They include ones that have been formally designated in accordance with European and national legislation and others that are identified for their regional or local importance. The international and national sites are shown on the Key Diagram. Some of these extend into adjacent counties; for example, nearly half of Moorhouse and Upper Teesdale SAC is within County Durham.

BOX 3

The areas and features within Cumbria (outside the Lake District and Yorkshire Dales National Parks) which are formally identified as being of national and international importance are:-

- **Areas of Outstanding Natural Beauty** - Solway Coast; North Pennines; and Arnside and Silverdale.
- **Ramsar sites and/or Special Areas of Conservation and Special Protection Areas** - Upper Solway Flats and Marshes/Solway Firth; South Solway Mosses; Border Mires,

Kielder and Butterburn; Irthington Mires; Duddon Estuary; Duddon Mosses; Drigg Coast; Asby Complex; North Pennine Moors; Morecambe Bay; Morecambe Bay Pavements; Walton Moss; Clints Quarry; Cumbria Marsh Fritillary Site; Helbeck and Swindale Woods; Lake District High Fells (part); Moorhouse and Upper Teesdale; River Derwent; River Ehen; River Eden; River Kent; Tyne and Nent; Roudsea Wood and Mosses.

- **The World Heritage Site** "Frontiers of the Roman Empire: Hadrian's Wall";
- **Heritage Coast** - St Bees Head .
- National Nature Reserves; Sites of Special Scientific Interest; statutorily protected wildlife species; Limestone Pavements protected by Orders; nationally important archaeological sites whether Scheduled or not; a Registered Historic Battlefield; Registered Parks and Gardens of Historic Interest; and listed buildings.

BOX 4

Wildlife, geological, geomorphological, landscape and historic environment areas and features which are of particular County importance, or which make a contribution to biodiversity and geological conservation include:-

- Local Nature Reserves;
- Local Sites (these are County Wildlife Sites and Regionally Important Geological and Geomorphological Sites);
- Species and habitats listed as of principal importance for the conservation of biodiversity in the UK (Section 74 of the CROW Act 2000).
- UK list of priority habitats and species;
- Cumbria Biodiversity Action Plan species and additional species of conservation importance for the North West Region that occur within Cumbria (to be reviewed);
- Cumbria Geodiversity Action Plan sites;
- Listed Buildings, Conservation Areas and their settings;
- the settings of the Lake District, Yorkshire Dales and Northumberland National Parks, of the Areas of Outstanding Natural Beauty, of the World Heritage Site, of Heritage Coast, of Registered Historic Parks and Gardens and of Scheduled Ancient Monuments;
- Landscapes of County Importance (in the interim until the work on landscape characterisation has been completed);
- landscape features of major importance for wildlife that are essential for migration, dispersal and genetic exchange and which encourage the protection, conservation and expansion of the general ecological fabric;
- lakes, tarns and rivers.

3.45 Work has recently (July 2008) been completed on a detailed representation of current knowledge of Cumbria's biodiversity. The Cumbria Biological Data Network (CBDN) has produced the Cumbria Biodiversity Evidence Base which includes species and habitat statements, habitat targets, planning considerations and enhancement opportunities. Further work for the biodiversity evidence base will include identifying the networks of natural habitats required by national and regional policies, mapping biodiversity opportunities and defining the landscape features that are of major importance for migration, dispersal and genetic exchange. Extensive lengths of rivers and of coast

DELIVERING THE OVERALL STRATEGY

comprise some of the most important wildlife sites within the county. A characteristic of these is that the notified site does not include crucial areas of adjacent land. The above work on habitat networks will be particularly important to address this issue.

- 3.46** There is a Key Species list for Cumbria of around 300 wildlife species. These are species that have the status of being specifically protected or are UK Priority and/or Cumbria Biodiversity Action Plan species. Further work is being undertaken to relate these species to appropriate habitat types, functional ecological networks and to geographic areas of the county. An initial list is included in the separate Appendices document of those species that, potentially, could be most likely to be at risk from minerals and waste developments within the Plan area.
- 3.47** Quarries and landfill sites can offer significant opportunities to deliver sustainability objectives. It is not just former workings that are important, some of the working quarries in Cumbria have demonstrated very successful enhancement of wildlife habitats. Several active quarries are particularly important as habitats for great crested newts and botanically rich vegetation has naturally regenerated on some of their quarry waste tips. Successful maintenance and further enhancement of some of these habitats is much easier and more likely to happen whilst a quarry is working than when it is closed.

Where we need to be

- 3.48** National and European legislation place duties on the County Council to protect and enhance the environment which need to be reflected in this plan. In the context of minerals and waste management developments, it is vital that people's quality of life and the other environmental assets and their settings are protected. Policies are needed that attach appropriate levels of protection to them.
- 3.49** The Generic Development Control Policies document includes policies relating to amenity issues. In relation to traffic impacts, the Highways Design Guide will provide guidance on highway and transport infrastructure. The Landscape Character Guidance will provide detailed advice, for all the Cumbria Local Development Frameworks, on applying the Cumbria Landscape Characterisation Assessment.
- 3.50** Regional Spatial Strategy Policy EM1 requires an integrated approach to conserving and enhancing the landscape, natural environment, historic environment and woodlands of the region. Its spatial objectives and priorities, will mainly be delivered through the District Local Development Frameworks, which have a wider remit than this Framework. Aspects relating to conserving and enhancing areas, sites, features and species are relevant to this plan.
- 3.51** RSS Policy includes EM1(A): Landscape; EM1(B): Natural Environment; EM1(C): Historic Environment and EM1(D): Trees, woodlands and forests. The focus of all of these is on enhancement and not just protection. EM1(B), in particular, seeks a "step-change" increase in the region's biodiversity resources. Cumbria is already favoured with an exceptionally high quality natural environment. Nevertheless, there are still many opportunities for enhancing, expanding and linking wildlife sites and enhancing the general ecological fabric.
- 3.52** The regional policy refers to its Indicative Biodiversity Resource and Opportunities Diagram as showing the broad locations of greatest opportunity. In Cumbria the main rivers are shown as Strategic River Corridors and most of the plan area is shown as a Biodiversity

DELIVERING THE OVERALL STRATEGY

Enhancement Area either for "Expansion and Reconnection" or for "Expansion and Buffers". A more detailed representation of the spatial information on the natural environment will be developed for use in Local Development Frameworks, in accordance with this policy. This work will need to be undertaken jointly with Natural England, all the Cumbria planning authorities and other stakeholders.

- 3.53** Having taken account of the above matters, the focus of this plan's policy, in addition to protection, will be to maintain and enhance landscape character, the historic environment, biodiversity and geological conservation interests. Many of these assets do not, however, need protection policies in this plan.
- 3.54** There are national policies for protecting Areas of Outstanding Natural Beauty, Scheduled Ancient Monuments and listed buildings. The most important sites for biodiversity are those identified through international conventions and European Directives. Whilst these sites will be identified on the Proposals Map, they already have statutory protection. Similarly Planning Policy Statement 9 - Biodiversity and Geological Conservation - sets out national policies for protecting those Sites of Special Scientific Interest that are not covered by international designation. Many individual wildlife species receive statutory protection under a range of legislative provisions. The MWDF should not repeat these national policies which are set out in the Appendices document.
- 3.55** In conjunction with the protection given by other legislation, the main focus for this plan is for enhancement measures. This will include expanding important habitats, reconnecting them and buffering them in accordance with Regional Spatial Strategy policy, and adapting and mitigating for climate change impacts.
- 3.56** With regard to heritage sites, the recent white paper - Heritage Protection for the 21st Century - proposes a single designation regime and uses the term "historic asset"; wording of policies may need to be revised to take account of the new regime when it is introduced. This will be reviewed in the Annual Monitoring Reports.

Policy

- 3.57** Structure Plan Policies ST 12, E 34, 35, 36, 37, 38 and 39 were considered to be appropriate as the basis for a Core Strategy policy that reflects the overall strategy and objectives. Criteria based policies for protecting the environment of people living or working near minerals and waste sites, and for biodiversity and geodiversity, flood risk and water resources; landscape and design; land quality and soil resources and historic environment, are included in the Generic Development Control Policies Development Plan Document.
- 3.58** The scale of the minerals and waste management developments that are likely to be needed in Cumbria is relatively small. It should, therefore, be possible in most cases to avoid major adverse impacts on environmental assets and to focus on enhancement. There may be exceptions with some minerals where the geological resource is a major contributing factor to the environmental interest. The Habitats Regulations Assessment identifies potentially sensitive locations in relation to Framework policies.
- 3.59** The policy is that development should not result in significant harm to Cumbria's environmental assets. If a particular proposal cannot reasonably be located on any alternative sites that would result in less or no harm, adequate mitigation measures should be put in place before development is started. Where significant harm to biodiversity and geological interests cannot be prevented, or adequately mitigated against, appropriate

DELIVERING THE OVERALL STRATEGY

compensation measures will be sought. If significant harm cannot be prevented, adequately mitigated against or compensated for, then planning permission will be refused. The environmental assets include the normal residential and workplace amenities for quality of life and those areas and features listed in Boxes 3 and 4.

Core Strategy Policy 4

ENVIRONMENTAL ASSETS

Minerals and waste management developments should aim to:

- protect, maintain and enhance overall quality of life and the natural, historic and other distinctive features that contribute to the environment of Cumbria and to the character of its landscapes and places.
- improve the settings of the features and,
- the linkages between them and buffer zones around them, where this is appropriate;
- realise the opportunities for expanding and increasing environmental resources, including adapting and mitigating for climate change.

Areas and features identified to be of international or national importance.

Planning application proposals within these, or that could affect them, must demonstrate that they comply with the relevant national policies as set out in Planning Policy Statements. Wherever practicable, they should also demonstrate that they would enhance the environmental assets.

Environmental assets not protected by national or European legislation

Planning permission will not be granted for development that would have an unacceptable impact on these environmental assets, on its own or in combination with other developments, unless:-

- it is demonstrated that there is an overriding need for the development, and
- that it cannot reasonably be located on any alternative site that would result in less or no harm, and then,
- that the effects can be adequately mitigated, or if not,
- that the effects can be adequately and realistically compensated for through offsetting actions.

All proposals would also be expected to demonstrate that they include reasonable measures to secure the opportunities that they present for enhancing Cumbria's environmental assets.

Guidance on implementing parts of this policy will be provided by the Landscape Character and Highway Design Guidance Documents and by the Cumbria Biodiversity Evidence Base.

- 3.60** The Annual Monitoring Reports can include details of measures that have been secured through planning permissions. If these identify failings in achieving the objectives of the policy it is considered that action would focus initially on improving guidance for applicants before the policy itself is reviewed.

DELIVERING THE OVERALL STRATEGY

- 3.61** Restoration and aftercare schemes for mineral working and waste management sites such as landfills, provide opportunities to secure the step-change increase in biodiversity resources that is required by emerging regional policy. Such schemes should help to deliver Biodiversity Action Plan objectives; should take account of the Cumbria key species list; the Cumbria Landscape Strategy; RSS Policy EM1(B)'s Biodiversity Resource and Opportunities Diagram and functional ecological networks and of associated guidance. Examples of the opportunities were highlighted in a recent research report for the RSPB. The ecological frameworks and networks will be developed in district Local Development Frameworks.
- 3.62** In addition to biodiversity there can be other important restoration objectives such as landscape enhancement and retention of best and most versatile agricultural land. There may also be opportunities where built development is an appropriate and practicable afteruse which can deliver social and economic benefits. The sustainability objectives referred to in the policy are set out in Section 5.3 and Tables 5.1 and 5.2 of the submitted Sustainability Appraisal Report. Appropriate and thorough restoration may also be needed for some sites in order to reduce future liability for public safety arising from previous mineral and waste developments and land instability.

Core Strategy Policy 5

AFTERUSE AND RESTORATION

Restoration and aftercare schemes for mineral working and waste management sites should demonstrate that best practicable measures have been taken to secure full advantage of their potential to help deliver sustainability objectives relating to the environment and the economy of the county.

- 3.63** Details of measures that have been secured through planning permissions can be given in the Annual Monitoring Reports. If these show that the objectives of the policy are not being achieved then the need for additional advice for applicants will be considered.

PLANNING OBLIGATIONS

Where we are now

- 3.64** Proposed developments may not be acceptable because they would have adverse impacts that cannot be mitigated by planning conditions. In some cases planning obligations can be used to secure the necessary mitigation measures that would make the development acceptable. These obligations or unilateral undertakings, usually known as Section 106 agreements, are legally binding between the planning authority, landowners and developers. The latest guidance on the use of planning obligations is given in ODPM Circular 05/2005. This Circular sets out the Secretary of State's five tests for a planning obligation, one of these is that it must be directly related to the proposed development.
- 3.65** For minerals and waste developments planning obligations have most commonly been used to secure long term aftercare of restored sites and contributions to road improvements. Minerals and Waste Local Plan Policy 69 provides the context - "Where

DELIVERING THE OVERALL STRATEGY

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."

Where we need to be

- 3.66** The planning obligations Circular advises that Development Frameworks should include high level policies that set out the matters to be covered by planning obligations and factors to be taken into account when considering the scale and form of contributions. More detailed policies applying these principles ought to be set out in a Supplementary Planning Document. Where mitigation measures are required, planning obligations policies should be based on a clear and up to date assessment of the impacts likely to be created by development, including any disproportionate impacts on different sectors, groups or areas. A policy is included in the Generic Development Control Policies but because this Framework only deals with minerals and waste developments it is not considered that a Supplementary Planning Document is necessary.
- 3.67** Local planning authorities are encouraged to employ formulae and standard charges where appropriate for negotiating and securing contributions. However, it is for the planning authorities to decide whether these are appropriate. Although a consistent approach needs to be demonstrated, the County Council does not consider that, for minerals and waste developments, such standard charges or formulae can be used, each case has to be considered on its merits.
- 3.68** The Circular concerns improvements to the current system in the interim period before further reforms are brought forward. These changes are set out in Sections 46 and 47 of the Planning and Compulsory Purchase Act 2004. These give the Secretary of State the power to make Regulations to replace the present system but it is not known when these powers will be taken. Further changes are set out in the Planning Bill.

Policy

- 3.69** Core Strategy policies provide the context for two types of planning obligation or for the planning contributions system that may be introduced by new Regulations or new legislation. Policy 3 relates to offsetting measures to mitigate the effects of hosting large national or regional waste management facilities. The following policy relates to the usual requirements for securing detailed mitigation measures for particular aspects of general minerals and waste management developments where these are directly related to the proposed development.

Core Strategy Policy 6

PLANNING OBLIGATIONS

Where it is not possible to achieve the necessary control through the use of planning conditions, the County Council will seek to negotiate planning obligations that ensure that development proposals :-

1. Meet the reasonable costs of new infrastructure made necessary by the proposal including transport, utilities and community facilities.
2. Secure long term management of environmental assets.
3. Provide financial guarantees where appropriate for restoration works, except where a national industry guarantee fund is already in place.
4. Make a positive contribution to enhancing, maintaining or promoting sustainable communities.

3.70 Details of planning obligations and their benefits to the local community will be given in the Annual Monitoring Reports, which will assess the performance of the policy. The policy may need to be reviewed in the light of changes in legislation, for example in the current Planning Bill. If the policy is not successful in securing the measures that are needed this may have implications for the acceptability of development proposals.

STRATEGIC AREAS FOR NEW DEVELOPMENTS

CHAPTER 4: STRATEGIC AREAS FOR NEW DEVELOPMENT

- 4.1** The Core Strategy sets out how areas and sites will be identified that are suitable for the developments that are needed to deliver the strategy's vision. The proposed pattern of waste management facilities should accord with broad locations that have been identified in the Regional Spatial Strategy. There is less flexibility of locations for mineral workings because they can only be worked where they occur in viable quantities.
- 4.2** The Core Strategy includes the criteria for identifying broad locations and for allocating sites that would be in accordance with its policies. One of the main principles is that minerals supplies or waste management facilities should be located near to the communities or local market areas that they would serve. For mineral developments, this can only be where it is practicable and feasible in terms of geology.
- 4.3** The preferred bidder for the municipal waste management contract has set out its proposals. These are for two Mechanical and Biological Treatment plants, one in the south and one in the north, and three transfer stations, one in the north, one in the south and one to serve Eden. The strategic locations for these are :-
- **North** - Carlisle and the Workington/Whitehaven area (i.e. if the MBT plant was near Carlisle, the Transfer Station would be in the west or vice versa);
 - **South** - Kendal and Barrow in Furness (i.e. if the MBT plant was near Kendal, the Transfer Station would be near Barrow and vice versa);
 - near **Penrith** for a Transfer Station serving Eden.

Note : It now seems unlikely that an Energy from Waste plant within Cumbria will be needed for the preferred solution for managing municipal waste (see paragraphs 3.33 and 7.26).

- 4.4** These details supercede an earlier appraisal of waste collection systems that looked at options for joint working between waste collection authorities and the most efficient locations for new facilities.^(iv) In accordance with Regional Spatial Strategy Policy EM 13, existing landfill facilities should be the first ones to be considered for additional capacity, subject to considerations of matters such as cumulative impact. The existing landfills are within the above strategic locations.
- 4.5** Strategic areas can be identified for sand and gravel and for crushed rock. The Key Diagram at the end of this document shows their existing Mineral Consultation Areas. Detailed assessments of supply areas, quarry outputs and remaining permitted reserves will be undertaken in connection with the Site Allocations Policies Development Plan Document. This work will take into account the present pattern of quarries and other indicative resource areas identified on the geology map.^(v)
- 4.6** Because of geology, there are very few hard rock quarries in the north of the county and only one sand and gravel quarry in the south. Traditional supply patterns have been that the Carlisle area is supplied with sand and gravel from the "Brampton Kames" glacial deposits (Kirkhouse, Low Gelt and Faugh quarries) and from Cardewmires quarry river sands.

iv WRAP ROTATE Programme - Appraisal of Collection Systems, August 2005

v Mineral Resource Information for development plans - Cumbria and the Lake District: Resources and Constraints, British Geological Survey 2001.

STRATEGIC AREAS FOR NEW DEVELOPMENTS

- 4.7** Allerdale and north Copeland have been supplied with sand and gravel from the Abbeytown ridge (Aldoth, High House, Overby and New Cowper quarries); and with crushed rock from Moota, Tendley and Eskett quarries. Parts of Copeland have been supplied with sand and gravel from Peel Place quarry. The County Council has granted planning permission for a total of 6 million tonnes of additional sand and gravel reserves at Overby and High House quarries.
- 4.8** Roosecote is the only sand and gravel quarry in the south of the county and it mainly supplies the Barrow area, as do Goldmire and Stainton crushed rock quarries. Low Plains and Bonnie Mount quarries supply Eden with sand and gravel; Hartley, Helbeck and the Shap quarries supply crushed rock. Holme Park and Sandside quarries supply crushed rock in South Lakeland.
- 4.9** Workable gypsum deposits are only found in the Kirkby Thore area, and the mudstones needed for Askam in Furness brickworks are only found near the brickworks. The extrusive igneous rocks that are quarried at Ghyll Scaur, for very high skid resistance roadstones, also have very limited occurrence outside the Lake District National Park and North Pennines Area of Outstanding Natural Beauty. Holmescales and Roan Edge quarries supply high skid resistance roadstones. It is not considered that provision for these, other than safeguarding, needs to be made in this plan at the present time. The County Council has granted planning permission for a major extension to Roan Edge quarry.
- 4.10** Further provision for sand and gravel will be needed during the plan period. It is also possible that shortfalls of crushed rock supply in some local areas may be identified in the work for the Site Allocations Policies; the County Council is not aware of such circumstances at the moment.

Core Strategy Policy 7

STRATEGIC AREAS FOR NEW DEVELOPMENTS

The **Carlisle and the Workington/Whitehaven** areas in the north, and the **Barrow in Furness and Kendal** areas in the south are identified as the strategic locations for major new Mechanical and Biological Treatment plants or Transfer Stations, and the **Penrith** area for a Transfer Station for the Municipal Waste Management Strategy's preferred solution for managing municipal waste.

The **Kirkby Thore/Long Marton** area is identified as the only location for further supplies of gypsum.

Land next to **High Greenscoe Quarry** is identified as the only location for further supplies of mudstones for the Askam in Furness brickworks.

The igneous rocks near **Ghyll Scaur Quarry** are identified as the only location for further supplies of nationally important very high specification roadstone.

Supply and production areas, strategic locations and preferred sites for further supplies of sand and gravel and crushed rock for general aggregate use will be identified in the Site Allocations Policies Development Plan Document and Proposals Map.

STRATEGIC AREAS FOR NEW DEVELOPMENTS

- 4.11** The strategic locations that are identified are for the preferred solution for the municipal waste contract. If that is not implemented then this policy will need to be reviewed. The County Council's specific preferred sites will be identified in the Site Allocations Policies, which are programmed for publication in early 2009. However, it is likely that planning applications for some of the new municipal waste management facilities will need to be submitted before then. If it is not possible to find and secure suitable sites then this Core Strategy policy will need to be reviewed, this may include further examination of the potential for larger, more centralised facilities.
- 4.12** Cumbria has extensive coal and associated fireclay resources, although the last deep mine closed several years ago and there are now no active opencast sites. There are no current proposals for further coal and fireclay mining, but the situation will need to be kept under review. The Coal Authority has now (October 2008) provided revised maps of the areas of coal working that it notifies to local planning authorities under the provisions of Article 10 of the Town and Country Planning (General Development Procedure) Order 1995 together with revised Standing Advice. There has also been interest in appraising Cumbria's oil and gas resources. A Minerals Core Strategy policy is proposed for coal bed methane and for oil and gas.

CHAPTER 5: RELATIONSHIPS TO OTHER STRATEGIES

Community Strategies

- 5.1** The Core Strategy integrates the objectives of a range of other plans and programmes. In particular, it is a key component in helping to deliver the spatial elements of the Community Strategies. There are six of these for the strategic partnerships in the county. The five Local Strategic Partnerships have developed or are developing their own local Sustainable Community Strategies within the framework set out by the county-wide Cumbria Strategic Partnership. Descriptions of them and their links with this Framework are set out in the separate Appendices document.
- 5.2** The county-wide Community Strategy has been reviewed to take account, among other things, of a Sustainability Appraisal compatibility test. This had identified that it was strong in addressing the needs of the Cumbrian economy; fair to weak in addressing the needs of Cumbria's communities and weak in addressing the needs of the Cumbrian environment and of natural resource issues. These matters are directly relevant to this Development Framework. A second round of consultations on the revised County Community Strategy has taken place in January/February 2008.
- 5.3** The Cumbria Strategic Partnership's Sub-regional Spatial Strategy has been more directly relevant to this Framework than the original Community Strategy itself. This is because it describes "the spatial planning framework to enable actions to achieve the Community Strategy's sustainable approach to securing economic growth, social progress and environmental protection and enhancement over the next twenty years". The key spatial issues that it describes can be summarised:-
1. Geographic isolation.
 2. Dispersed population and settlements.
 3. Out of date transport infrastructure.
 4. Poor economic growth.
 5. Affordable housing.
 6. The contrast between the county's environmental assets and its legacy from earlier urban development.
 7. Monitoring and review of plans.
- 5.4** Following on from these issues, the Sub-regional Strategy's priority themes are identified as :
- a diversified economy.
 - improved communications.
 - rural regeneration.
 - high quality tourism.
- 5.5** The Sub-regional Strategy's development emphasis is for major development to take place in Barrow, Carlisle and the West Cumbria towns; for moderate development to take place in nineteen smaller towns and for small scale development to take place in local service centres.

RELATIONSHIP TO OTHER STRATEGIES

- 5.6** The most directly relevant matters from the local Strategic Partnerships' Community Strategies are those relating to the waste hierarchy, for reducing, reusing and recycling wastes. Particular mention is made of the West Cumbria Partnership's strategy to be a Centre of Excellence in growth sectors where there are significant strengths and proven capability, including nuclear decommissioning.
- 5.7** There are also several matters that may appear to be less directly relevant, but which could be equally important. The Community Strategy's vision of Cumbria having the fastest growing economy in England, requires that worthwhile jobs be provided, the quality of employment sites be improved to enable diversification of the economy and more employment land opportunities identified, while at the same time, the environment is protected and enhanced.
- 5.8** In helping to deliver the spatial elements of the Community Strategies, their themes and objectives bear on the Minerals and Waste Development Framework in several ways. The planned regeneration schemes, additional employment land and economic diversification and growth, will need adequate supplies of minerals, particularly aggregates, and an adequate network of appropriately located waste management facilities. Without these, economic growth may be restrained. The jobs created or maintained in minerals and waste management developments can be regarded as part of economic regeneration initiatives.
- 5.9** It will be important to build on the strengths of Cumbria's environmental assets by protecting them and enhancing them, where this is appropriate. It will also be important to ensure that minerals and waste management developments do not prejudice regeneration and tourism initiatives. Where there is insufficient land currently identified for employment uses, additional sites may need to be identified specifically for waste management facilities.

Cumbria County Council: Council Plan 2008 - 2011

- 5.10** The County Council, as the largest county-wide organisation, has a leading role in the delivery of the spatial planning framework of the Sub-regional Strategy. The way this is being done is set out in the Council Plan (this was previously called the Corporate Strategy). The council's priorities are presented in interrelated themes around :-
- Better
 - Wealthier
 - Healthier
 - Happier
 - Safer
 - Greener

CHAPTER 6: WASTE CORE STRATEGY

PURPOSE

- 6.1** Changing our attitudes towards waste and how we manage it are big challenges for everybody and are not just issues for this plan. A range of new waste management facilities will be needed if we are to manage waste in more sustainable ways and to deliver the Core Strategy vision. This Waste Core Strategy sets out what 21st century facilities will be needed and the strategy to ensure that the right types of facilities can be provided in the right places and at the right time.

Where we are now

- 6.2** At the present time it is difficult to assess or monitor what is happening for all wastes in Cumbria because some of the published figures on the management of waste arisings are for the North West region as a whole. There are good records of municipal and household wastes because the individual waste disposal and collection authorities are required to report these. There is less reliable information about other waste streams which are mostly managed through the private sector. Because of the deficiencies in this information all of the waste planning authorities in the North West Region commissioned surveys, in 2006/7, of commercial, industrial, construction, demolition and excavation wastes. Details of these surveys are included in the evidence base. There is no information about any waste streams below the level of district council administrative areas. This means that all of the figures that can be used will include wastes from the two National Parks not just for the plan area, this is not considered to be a serious problem.

Municipal and household waste

- 6.3** Household waste comprises the dustbin waste and kerbside separated recyclables that the district councils collect from households together with waste that is taken to Household Waste Recycling Centres. Municipal waste is defined as household waste plus the amounts of commercial and industrial waste that the district councils collect, rubble from Household Waste Recycling Centres and grounds maintenance waste.
- 6.4** Cumbria has had the highest figure of household waste arisings/person for any county in the country. It is unlikely that people in Cumbria produce so much more waste than people elsewhere. The high figures that have been recorded are considered to be mainly due to distortions caused by commercial wastes getting into the household waste stream and because the very large numbers of tourists and holiday makers are not allowed for in the population figures of the statistics.
- 6.5** The Joint Municipal Waste Management Partnership's campaigns and initiatives have demonstrated considerable success over the last two years in reversing what had been long standing year on year rises. The 2006/7 figures show a further fall of more than 6% to 596 Kg/person, the previous year had shown a 2% fall. There are considerable differences between the districts as shown in Table 6.1. However, the Barrow and South Lakeland figures may be inaccurate and liable to change. New arrangements for the management of Household Waste Recycling Centres in these areas were introduced in January 2007.

6 WASTE CORE STRATEGY

6.6 The partnership has had considerable success in raising household waste composting and recycling rates, the latest figures^(vi) are shown in the table below. A particular success is that composting of household waste increased three fold from just over 14,000 tonnes in 2005/6 to 44,000 tonnes in 2006/7. In addition, 12,000 home composting bins were sold in 2006 (5% of Cumbria's households).

Table 6.1 Household waste 2006/7

	Total municipal waste (tonnes)	Household waste / person	Household waste recycled or composted
Allerdale	65,757	567 kg	30.29%
Barrow in Furness	52,165	613 kg	27.3%
Carlisle	59,042	505 kg	33.28%
Copeland	44,296	552 kg	31.01%
Eden	36,619	560 kg	40.92%
South Lakeland	84,213	720 kg	37.6%
Cumbria	345,699	596 kg	34.21%

Other wastes

6.7 The surveys undertaken for the north west authorities show a slight reduction in commercial and industrial waste between 2003 and 2006. This overall decrease reflects a continuing fall for industrial waste (14%) and a concurrent increase (11%) in commercial waste. Retail, commercial and other services now account for 40% of the region's total commercial and industrial waste arisings, with much of the commercial waste stream arising in Greater Manchester, and being paper and card. In Cumbria, industrial waste still accounts for an estimated 60% of total commercial and industrial waste. The survey of construction, demolition and excavation wastes was not able to provide a reliable regional estimate, due to a poor response rate from some types of operator.

6.8 The latest detailed figures for these other waste streams are the Environment Agency's waste returns for 2004/5. The construction industry is the largest single source of waste arisings in England. The Environment Agency's figures show that 315,876 tonnes of inert construction and demolition wastes were managed in Cumbria, of which 227,741 (72%) were landfilled. The amount of commercial and industrial waste managed in Cumbria in 2004/5 was recorded as 541,944 tonnes, of which 291,500 tonnes (54%) were landfilled.

6.9 The Environment Agency figures show that in 2004/5, 24,811 tonnes of consigned special wastes were managed in Cumbria, of which 3,711 tonnes (15%) were landfilled. Special wastes have now been redefined and are referred to as hazardous wastes. Subsequent data will not, therefore, be directly comparable with the 2004/5 figures.

6.10 The Environment Agency has also published details of the amounts of all wastes managed within Cumbria in the calendar year 2005: 506,000 tonnes were managed at transfer stations, which include household waste recycling centres; 114,000 tonnes were treated by material recovery, composting or physical or biological treatment; 66,000 tonnes of metals were recycled; and 744,000 tonnes of wastes were landfilled.

Where we need to be

- 6.11** There are ranges of targets for waste management from different sources, for different waste streams and for different end-dates. These are set out in Table 6.2. In this Development Framework sites will not be identified specifically for managing municipal waste or specifically for commercial and industrial waste. The plan's estimates of requirements for new sites are for all waste streams.
- 6.12** In accordance with the starting point of the waste hierarchy, the highest priority needs to be given to minimising waste. This was raised by people at almost all of the public meetings about the issues and options, in particular the need for Government action to reduce retail packaging waste. It has been necessary to consider whether a specific policy on waste minimisation/reduction should be included in this Core Strategy. Without such a policy, the Sustainability Appraisal identifies possible internal inconsistency with Strategic Objective 2. A policy is not proposed and the reasons for this are explained below.
- 6.13** Most initiatives to reduce waste arisings depend to a large extent on persuading businesses and people to change their behaviour through publicity and education campaigns and Government policies. These initiatives are largely outside the scope of this plan. They can be better addressed by Government action and the campaigns that are already being pursued by the Municipal Waste Management Partnership and bodies such as the Waste and Resources Action Programme (WRAP). Drivers for change include the Landfill Allowance Trading Scheme for waste disposal authorities, with its £150/tonne penalties for exceeding landfill allowances, and, for all types of waste, the increase in Landfill Tax from £24/tonne in 2007/8 to £40/tonne in 2009/10.
- 6.14** Waste Strategy 2007 describes the initiatives that the Government is pursuing with the retail sector and the food industry and the targets for reducing packaging waste and food waste. Other drivers for change are the responsibilities that European Directives are placing on producers who sell products and packaging to bear the costs of collecting, sorting, treating, recycling or recovering the waste.
- 6.15** The Joint Municipal Waste Management Strategy sets out its Waste Prevention Policy and the actions for its waste prevention team; these relate not just to municipal waste but also to the commercial and industrial sectors. The initiatives include working with schools to try to ensure that future generations do not repeat our mistakes.
- 6.16** With regard to commercial and industrial wastes, it is not considered that this plan can have policies that would be effective in minimising the amounts of them that will arise. The reduction in waste arisings from the industrial sector that has been recorded is likely to reflect initiatives taken by most industrial sectors to reduce their waste. Companies continue to make considerable efforts to make more efficient use of raw materials and resources. The financial pressures to do even more will increase as the costs of waste management continue to escalate. Reductions in waste may also have been linked to a reduction in manufacturing capacity.
- 6.17** The Government is encouraging local authorities to develop a wider role in managing commercial and industrial wastes and in developing facilities to cater for them. However, there are difficulties in delivering this approach, particularly in financing new facilities. The Joint Municipal Waste Management Strategy includes a Commercial Waste Policy, which includes optimising commercial waste collection and investigating the potential for offering and promoting recycling services to commercial customers.

6 WASTE CORE STRATEGY

Table 6.2 Waste management targets

	2006/7 baseline	2010	2015	2020
Household waste per person				
Local Area Agreement	596 kg/head	594 kg/head	n/a	n/a
Best Value Performance Indicator Self Assessment		576 kg/head		
House hold waste recycling and composting				
Waste Strategy 2007	34.2%	40%	45%	50% ^(vii)
Regional Spatial Strategy		40%	45%	55%
Municipal Waste Management Strategy			60% (by 2012)	
Municipal waste recycling and composting				
Local Area Agreement	30.63%	40%	n/a	n/a
Municipal waste - recovery of value^(viii)				
Waste Strategy 2007	n/a	53%	67%	75%
Regional Spatial Strategy		53%	67%	75%
Biodegradable municipal waste to landfill				
Waste Strategy 2007	239,822 tonnes	75% of 1995	50% of 1995 (by 2013)	35% of 1995
Landfill Allowance Trading Scheme		110,331 tonnes	73,488 tonnes (by 2013)	35,282 tonnes
Municipal waste growth/year				
Municipal Waste Management Strategy	-3.5%			
Regional Spatial Strategy		0%	0% (by 2014)	
Waste Strategy 2007		Four scenarios of 0%, 0.75%, 1.5% and 2.25% per year		
Commercial and industrial waste landfilled.				
Waste Strategy 2007	291,500 tonnes (2004/5)			
Commercial and industrial waste recycled				
Regional Spatial Strategy		80% of 2004	n/a	n/a
Regional Spatial Strategy				35%

vii WS 2007 also has a target to reduce the amount of waste not re-used, recycled or composted to 225kg/head by 2020

viii Recovery of value includes recycling, composting, recovery of energy and other forms of material recovery.

	2006/7 baseline	2010	2015	2020
Commercial and industrial waste - recovery of value^(ix)				
Regional Spatial Strategy				70%
Commercial and industrial waste growth/year				
Regional Spatial Strategy		0% (from 2007)		
Construction and demolition waste to landfill				
Waste Strategy 2007	227,741 tonnes		Halved by 2012	

ix Includes recycling/composting

6 WASTE CORE STRATEGY

- 6.18** For the largest single source of wastes, the construction industry, the Government proposes a new target of halving the amount of these wastes going to landfill by 2012 (Waste Strategy 2007). This would be achieved as a result of reduction, re-use and recycling which means that new waste management facilities will need to be provided. From April 2008, construction projects costing more than £300,000 will be required to have Site Waste Management Plans that will take account, among other things, of how material recycling, reuse and recovery are maximised.
- 6.19** Construction, demolition and excavation waste streams can also be influenced by the statutory planning process. To achieve this it is considered that measures such as those set out in paragraph 9.24 in the Regional Spatial Strategy (see below) should be reflected in District Local Development Framework Policies. Such policies, together with best practice guidance, are likely to be more effective than policies in this plan. This is because those other development plans deal with the forms of developments that generate these waste streams. The Site Waste Management Plans for construction projects will address some of these matters.

Regional Spatial Strategy paragraph 9.24

Every type of development, redevelopment and regeneration project, including town centres, retail parks and leisure facilities as well as industrial and commercial business parks, should:

- promote the minimisation of waste in site development such as the separation of different waste materials for recycling and reuse;
- maximise the use of recycled materials in construction and encourage developers and contractors to specify these materials wherever possible;
- provide infrastructure that facilitates and meets the needs of local residents, business and industry for segregated storage, collection and recycling of waste materials;
- incorporate sufficient space to separate and store segregated waste streams waste and enable kerbside collection of materials;
- adopt best practice techniques to prevent and minimise waste during the design and construction phases of development; and
- promote the use of site waste management plans.

- 6.20** Mineral wastes are also directly relevant to this plan. It is in mineral companies' commercial interest to minimise wasting their resources. Details required as part of planning applications, through the Generic Development Control Policies, can be relevant and conditions on planning permission can also address this matter.
- 6.21** A consequence of the introduction of the Aggregates Levy, currently £1.60/tonne has been that some crushed rock quarries are having to store increasing amounts of waste. The processes of blasting, crushing and screening stone inevitably produce materials that do not meet product specification. These can be as much as 20% of production. They were previously sold as "scalpings", "hardcore" or as general fill materials, but there have been difficulties in finding markets for them due to their increased price. It is not clear if there is a practicable answer to this problem. This is a matter that will be kept under review in the Annual Monitoring Reports. The reserves and landbank figures could be distorted if there are significant differences between production and sales figures. One advantage of producing more mineral waste may be that it provides additional materials for quarry restoration schemes.

- 6.22** The implications of new controls over agricultural wastes are not yet clear. Previous methods of disposal, such as burning and burial, are no longer legal and disposal sites need to be licenced by the Environment Agency. There are a number of exemptions from licencing, including activities associated with making beneficial use of waste and for re-using packaging and containers. At the moment, insufficient information is available about any provision that would need to be made in this plan for these wastes or the potential for minimising them. These matters will be kept under review in the Annual Monitoring Reports.
- 6.23** There is authorised capacity for treating and landfilling hazardous wastes in Cumbria. Provision for the management of these wastes has to be considered in a regional or national context. No need for additional provision within the county has been identified. This will be kept under review in the Annual Monitoring Reports.
- 6.24** Whilst the delivery of waste minimisation is considered to be more a matter for other agencies and initiatives than for this Development Framework, it will help by identifying sites where facilities can be built that will enable initiatives to be successful. New waste management facilities are often perceived as "bad neighbours" and high standards of design and operation are needed to change this perception. Impacts related to traffic volumes can be difficult to mitigate.
- 6.25** The need for additional planning policy relating to waste minimisation will be kept under review in the Annual Monitoring Reports.

STRATEGY

- 6.26** What all of the targets that have been set out above have in common, is the need to reduce waste and then to reduce the amount and the proportions going to landfill. The waste strategy derives from this.

1

WASTE STRATEGY

By 2020 :-

- Cumbria will have recorded the greatest reduction in household waste per head of population, from 596kg/head in 2006/7.
- That investment in waste management facilities will have made a significant contribution to the county's economy and aided regeneration initiatives.
- That significant enhancement of environmental assets and local amenity, associated with waste management developments, will have been demonstrated.
- The initiatives will have been taken that are needed to change behaviours in order to meet National, Regional and Local Area Agreement targets for recycling, composting, recovery of value and for minimising waste sent to landfill.
- The required waste management facilities will have been provided in the right locations and at the right time.

6 WASTE CORE STRATEGY

- Waste will be managed near to where it is produced, as far as practicable bearing in mind Cumbria's relatively small and dispersed pattern of population.
- Waste will be managed in environmentally sensitive ways, in accordance with the waste hierarchy and wherever possible with the option of rail or sea transport being available.

CHAPTER 7: DELIVERING THE WASTE STRATEGY

- 7.1** In order to deliver this strategy, an expanded network of sustainable waste management and disposal facilities will be needed, that has sufficient capacity for the anticipated amounts of waste. The Waste Core Strategy enables this network of the right types of facilities to be provided in appropriate locations and at the right time. The Core Strategy sets out policies and proposals in line with the Regional Spatial Strategy (RSS) and looks forward to 2020, because that is the date for the RSS's forecasts of the estimated requirements for waste management and disposal facilities. Radioactive wastes are considered separately.
- 7.2** In preparation for the next review of the RSS, 4 North West has published research into the need, and broad locations, for regional waste management facilities. The work has focused on the needs of the Greater Manchester and Merseyside conurbations because they are the 'centres of gravity' of the region's waste arisings.
- 7.3** In connection with the regional research, it is generally agreed that it would be inappropriate to identify broad locations in Cumbria for regional facilities. It is more sensible that they are located nearer to the conurbations. In these circumstances it is not considered that providing for regional facilities in Cumbria is a viable or sustainable alternative for this plan.
- 7.4** The regional research considers the needs for three broad categories of waste management facilities - landfill and other outdoor ones; thermal treatment, including incinerators and gasification plants; and others within modern buildings. The descriptions that are used in this Framework are compatible with those categories.
- 7.5** This Framework makes provision to manage and dispose of all of the wastes that arise within Cumbria, as high as possible up the waste hierarchy. It is recognised that limited amounts of waste will always cross administrative boundaries, the approach is, therefore, one of net self-sufficiency. Although they are outside its plan area it is assumed that this Development Framework should include provision for wastes that arise within those parts of Cumbria that are within the Lake District and Yorkshire Dales National Parks.
- 7.6** At the present time the largest movements across the county boundary are understood to be;-
- Inwards - Low Level Radioactive Wastes that are brought to the Repository near Drigg from sites across the whole of the country, and
 - Outwards - disposals to landfills in Lancashire of wastes from the southern half of Cumbria,
 - Inwards/Outwards - Environment Agency figures indicate a net import of just over 2000 tonnes of hazardous waste from outside the north west region into Cumbria for 2004, but a net export of around 7000 tonnes between Cumbria and the other north west sub-regions.
- 7.7** The policy provides flexibility for imports of waste where this can be justified. This is because of the potential for creating or safeguarding jobs by providing facilities to serve a wider area. An example is that existing high energy-use local industries are seeking to reduce their fossil fuel energy costs by using waste derived fuel. There may be insufficient quantities of such fuel from within Cumbria, and supplementary quantities may need to be brought into the county.

DELIVERING THE WASTE STRATEGY

- 7.8** Any proposal for importing wastes into Cumbria would have to demonstrate Best Practicable Means for managing the waste stream, and that its social and economic benefits, including securing or creating jobs, outweigh the impacts of transporting the waste and other environmental impacts. This may be possible for a proposal based on rail transport or at one of the ports on the west coast and/or the example described above of a major local employer reducing its energy costs. There may also be opportunities for reducing overall "waste miles" through reciprocal arrangements with adjoining authorities.
- 7.9** With regard to managing wastes as high up the waste hierarchy as possible, the hierarchy, as set out in national policy, has been refined in relation to recovery of value by energy from waste plants. This is to acknowledge the benefits of combined heat and power plants over ones that just generate electricity.

Waste hierarchy

- i. waste reduction;
- ii. re-use of products or materials for the same or a different purpose;
- iii. recovery of resources through recycling or composting;
- iv. recovery of value by generating electricity and using heat from energy from waste plants, (including incinerators);
- v. recovery of value by generating electricity from energy from waste plants, (including incinerators) without using the heat;
- vi. if none of the above are appropriate, incineration without energy recovery or disposal of waste by landfill.

Core Strategy Policy 8

PROVISION FOR WASTE

Provision will be made for the management of all of Cumbria's wastes within the county, with the acceptance of limited cross boundary movements (net self sufficiency). Any proposals to manage significant volumes of wastes from outside the county would have to demonstrate that the local, social and economic benefits outweigh other sustainability criteria. These other criteria include the impacts of the additional "waste miles" and the principles of managing waste as close as possible to its source, with each community taking responsibility for its own wastes and taking account of the nearest appropriate facility. Any proposals would have to demonstrate that their environmental impacts are acceptable.

Note: This policy does not relate to radioactive wastes which are considered separately.

- 7.10** An implication of this policy to manage all of Cumbria's waste arisings, is that, in addition to the MBT plant for municipal waste, at least one new waste disposal facility of some kind will need to be provided in the south of the county. This will be addressed in the Site Allocations Policies and the Proposals Map. With regard to communities taking responsibility for their own wastes, it should be made clear that it is not expected that every settlement would have its own facilities.

7.11 It is possible that the regional study of broad locations for waste management facilities for the next review of the Regional Spatial Strategy may have implications for this policy. It seems unlikely that regional facilities will be proposed in Cumbria but it is possible that facilities elsewhere would be anticipated to manage some wastes from Cumbria. In those circumstances the policy would need to be reviewed.

How much waste?

7.12 In working out how much waste we need to plan for, account was taken of the latest figures for waste arisings, and of how they are managed, that are set out in the previous chapter. The amounts of waste will depend on how successful waste reduction measures are and how successful business is in decoupling growth in waste from economic growth. The estimates of waste management capacity requirements were included as Appendix E of the Preferred Options Core Strategy (Feb 2007). However, the adopted Regional Spatial Strategy (September 2008) now forecasts significantly lower amounts of commercial and industrial waste than those estimates.

7.13 Account has also been taken of other information, including revised figures for Cumbria's municipal waste arisings and the targets in the Cumbria Local Area Agreement and in Waste Strategy 2007.

7.14 The initiatives to reduce municipal waste now appear to be working and arisings are expected to peak at around 340,000 tonnes/year and not the 390,000 tonnes that had previously been envisaged.

7.15 In Waste Strategy 2007, the Government sets out four scenarios for municipal waste arisings to 2020. These are for 0% growth and for annual increases of 0.75%, 1.5% and 2.25%. The latter figure reflects recent trends in the growth in consumer spending. It would imply, for Cumbria, an increase from around 346,000 tonnes/year in 2006/7 to 462,000 tonnes/year over thirteen years.

7.16 Irrespective of the above scenarios, the Waste Strategy 2007 target is to reduce the amount of household waste not re-used, recycled or composted to 225kg/person by 2020 (half the 2000 figure). For the higher growth scenarios this would require more recycling, etc, than a 60% target, and it remains to be seen if this could be achievable.

7.17 For commercial and industrial wastes, Waste Strategy 2007 now forecasts an average annual growth of 2.6% for commercial waste and essentially zero growth for industrial wastes. For Cumbria these wastes could be between 659,000 and 750,000 tonnes by 2020. The Regional Spatial Strategy targets are that 35% of all commercial and industrial wastes should be recycled and that there should be recovery of value from at least 70% of these wastes by 2020.

7.18 Whilst there are no problems with availability of information about municipal waste, there are serious difficulties in monitoring the commercial and industrial waste streams. This is because, at the moment, sufficient data is not available and the evidence base needs to be developed. It is considered that any targets for how these wastes should be managed should be determined in a review of this plan. That review would take account of the measures that the Government introduces to help secure Waste Strategy 2007's target for a 20% reduction (2004 to 2010) in the amount of these wastes going to landfill. It would

DELIVERING THE WASTE STRATEGY

also have the benefit of the additional information, which is available from the surveys commissioned by the North West planning authorities, and from improved Environment Agency data collection and reporting procedures, which will be in place from 2008.

7.19 Not all of the targets and figures that have been set out are compatible with each other. Municipal waste is one example. This comprises household waste plus the commercial and industrial wastes that are collected by the Waste Collection Authorities. Whilst RSS policy EM 10 seeks to reduce the growth in municipal waste to zero by 2014, in Waste Strategy 2007 the Government encourages local authorities to offer services for more of the commercial and industrial wastes. This would lead to an increase in the municipal waste figures. The importance of continued monitoring of all waste streams in order to plan for and manage wastes cannot be over-emphasised.

7.20 The targets that are used in this plan for reducing the amounts of waste that are landfilled are a combination of the most challenging ones that are derived from Waste Strategy 2007, Regional Spatial Strategy and the Local Area Agreement as set out below.

REDUCING LANDFILL

	2010	2015	2020
Household waste - re-use, recycling and composting	40% ²	45% ²	55% ^{3,5}
Recovery of value from municipal waste ⁶	53% ⁴	67% ²	75% ⁴
Commercial and industrial waste landfilled	80% of 2004 ⁴ (i.e. of 291,500 tonnes)	n/a	n/a

1. Waste Strategy 2007 and the stretched Local Area Agreement target.
2. Waste Strategy 2007 and the Regional Spatial Strategy target.
3. Regional Spatial Strategy target.
4. Waste Strategy 2007 target.
5. Waste Strategy 2007 also has a target to reduce the amount of household waste not re-used, recycled or composted to 225kg/person by 2020.
6. This includes recycling, composting and energy recovery.

7.21 To ensure the plan is flexible, a range of estimates for waste arisings based on the above figures is being used. All of the figures will be kept under review, for the Annual Monitoring Reports, as better and more up to date information becomes available. Any significant changes could require a review of policy.

An integrated network

7.22 An integrated and adequate network of facilities is needed, which takes account of the characteristics and geography of Cumbria. For waste management facilities a sequential approach will be adopted, in accordance with Regional Spatial Strategy Policy DP 4, which gives preference to the use of existing buildings and previously developed land and land allocated for employment use in District Local Plans and Local Development

Frameworks. In accordance with Regional Spatial Strategy Policy EM 13, existing established waste management sites will be explored first for waste management facilities, including landfill. Proposed exceptions to such preferred types of site would have to demonstrate that no other sites earlier in the sequence have been able to be identified or that they would not accord with other site location criteria. The accessibility principle of the Local Transport Plan, and considerations of the transport implications of waste management facility locations, are at the heart of an integrated approach. This Waste Core Strategy proposes a decentralised network with a preference for sites which could accommodate more than one type of facility, for example, a Household Waste Recycling Centre and a Transfer/Bulking Station. This relates well to the Overall Strategy and Core Strategy Policy for minimising "waste miles".

7.23 The alternative, of a more centralised network of one or two "Green Resource Parks", seems unlikely to be viable. This is because it has not been chosen, or proposed, for the municipal waste stream, but it will be kept under review, as mentioned in paragraph 4.11.

Number of facilities needed

7.24 Account has been taken of the details of the bids for the municipal waste management contract. Two alternative ways of managing municipal waste were proposed by the bidders for the contract. The County Council has chosen the bid based around Mechanical and Biological Treatment, but, to date (October 2008), is still keeping the bid based on Energy from Waste incineration in reserve.

7.25 Details of the two bids for the municipal waste management contract can be summarised:-

1. two new 70,000 tonnes/year Intelligent Transfer Stations incorporating Mechanical and Biological Treatment (MBT) plants and Transfer/Bulking Stations, an additional Transfer/Bulking Station and a gasification plant to recover energy from Solid Recovered Fuel from the MBT plants. (*Note: it is now considered that other industries will take advantage of this renewable energy resource and that a gasification plant will not be needed*), or alternatively,
2. four new Materials Recovery Facilities and two Energy from Waste incinerators. (*Note: At that time the bid was based on higher estimates of municipal waste arisings*).
3. Both bids require improvements to the Household Waste Recycling Centres.

7.26 Negotiations for the municipal waste contract are at an advanced stage and may soon be concluded. However, at this stage (October 2008) the Waste Core Strategy cannot assume that the preferred bid will be implemented and has to retain flexibility for both of the alternatives. It is, therefore, proposed that the following will be identified :-

- four sites which could accommodate Mechanical Biological Treatment plants or Materials Recovery Facilities or Transfer/Bulking stations; (*sites between 2 and 3 ha each are likely to be needed*), and
- two sites which could accommodate Energy from Waste incinerators (*sites between 2 and 4.5 ha will be needed*).

7.27 It is unlikely that proposals will be put forward for an integrated network of facilities for commercial and industrial wastes. This is because there is no one source that could be regarded as a "critical mass" of these, and also because of the way businesses work, which tends not to involve long term waste management contracts.

DELIVERING THE WASTE STRATEGY

- 7.28** The RSS (paragraph 9.38) explains the inadequacies of baseline data about the facilities that are likely to be needed for commercial and industrial wastes. There are a number of drivers for change. It seems likely that, within two or three years, increased landfill costs and, possibly, legislation, together with increased energy costs and companies' own environmental policies, will encourage alternative forms of waste management to be adopted for these wastes. At the moment, it is not clear what these would be, but they may be similar to those for municipal waste and have similar site requirements.
- 7.29** For the purposes of the plan, it has been assumed that half of commercial/industrial waste will be managed in-situ, and, therefore, will not need sites to be identified. On that basis, the plan needs to identify seven sites of around 2 to 3 ha where treatment facilities for these wastes could be built, each with a capacity of around 50,000 tonnes/year. Because of the large volumes of commercial and industrial wastes, it will be important for the Annual Monitoring Reports to monitor the assumption against actual waste arisings and the management methods that are used.
- 7.30** The Site Allocations Policies will try to identify more than the minimum number of sites that has been identified above, on which a decentralised network of facilities could be provided. This will provide flexibility, recognising that some of the sites will be taken up by other developments, and allow for the possibility of managing some waste from outside the county.
- 7.31** The non-inert landfill sites in the county are estimated to have around 5 million cubic metres of remaining capacity with planning permission. This is concentrated in the north of the county. Whilst policies focus on diverting waste away from landfill, it is likely that there will always be residual wastes for which landfill capacity should be provided. The Regional Spatial Strategy (RSS) estimates that around 1.25 million cubic metres of landfill capacity, in addition to the remaining capacity, will be needed by 2020. The actual required capacity may depend on the waste management technologies that are adopted before residual waste needs disposal. For the purposes of this plan it is assumed that landfilling of commercial and industrial wastes will reduce by 10% in each five period between 2010 and 2020, resulting in a need for an additional 2 million cubic metres, slightly higher than the RSS estimate. The NW regional survey of these wastes suggests that the reduction may be greater than this. In accordance with Regional Spatial Strategy EM13, the policy provides for the developments that are needed to deal with Cumbria's wastes.

Core Strategy Policy 9

WASTE CAPACITY

Capacity will be provided for managing and treating between 340,000 and 462,000 tonnes/year of municipal waste and between 659,000 and 750,000 tonnes/year of commercial and industrial waste by the end of the plan period. Around 7 million cubic metres of landfill capacity will be provided, including the void space remaining in sites that have planning permission.

AN INTEGRATED NETWORK

Sufficient sites will be identified for an integrated network of a range of appropriate and necessary waste management facilities across the county, and preference will be given to sites that can accommodate more than one type of facility.

Any proposal for the alternative of a centralised network will be considered in the context of the Generic Development Control Policies.

WASTE FACILITIES

To enable the waste capacity and integrated network to be provided the plan will seek to identify

- eleven sites of between 2 and 3 ha for waste treatment facilities, (these could include Materials Recovery Facilities, Mechanical and Biological Treatment plants or Transfer/Bulking stations), and
- two sites of between 2 and 4.5ha for Energy from Waste incinerators, and
- 2 million cubic metres of landfill capacity in addition to the void space remaining in existing permitted sites, and
- nine new or enlarged Household Waste Recycling Centres, with innovative solutions or alternative sites kept under review for smaller communities.

7.32 It is particularly important that the Annual Monitoring Reports identify whether the assumptions about the amounts of waste and the capacity of facilities are correct. Any significant differences could require the policy to be reviewed. There will also not be a need for the policy to make provision for both solutions for managing municipal waste once the contract has been signed and is being implemented. The development of regional facilities, elsewhere, that would manage some of Cumbria's wastes could also require the policy to be reviewed.

Site location criteria

7.33 In addition to meeting basic requirements such as the size and shape of a site, the following criteria will be used for identifying locations and sites.

Table 7.1 Site location criteria

SITE LOCATION CRITERIA	
Criteria	Characteristics
1. Close to waste arisings	Within 5 miles of the centre of a main town
2. Accessibility	Well related to existing road network, or
	Well related to proposed road network
	Potential for rail or sea transport
3. Sequential approach	Previously developed land (Brownfield)
	Part brownfield
	Allocated for waste management or employment use and at a town or key service centre
	Allocated for waste management or employment use but not at a town or key service centre
	Exceptions (see paragraph 7.22)
4. Deliverable	No owner objection

DELIVERING THE WASTE STRATEGY

SITE LOCATION CRITERIA	
5. Flood risk	Sequential test needed for Zones 2 and 3 ^(x) .
	Possible need for exception test
	Avoid functional floodplain (Zone 3b) ^(xi)
6. Away from houses	Further than 250 metres
	Number of houses
7. Environmental interests	Not within or affecting an international or national site
	Not within or affecting a local site
	Not affecting an identified site with priority species or habitat.
	Offering potential to enhance the environmental interest
8. Visual impact	Not affecting the setting of the National Parks or AONBs or Heritage Coast
9. Other land uses	No likely conflict
10. Economic potential	Likely to be part of, or aid, regeneration or safeguard jobs.
11. Co-location potential	Large enough to be able to accommodate more than one type of facility and complementary activities

7.34 The broad locations of Carlisle and Workington/Whitehaven and Barrow in Furness and Kendal have been identified for strategic municipal waste management facilities in Policy 7. These facilities are two Mechanical and Biological Treatment plants and three Transfer Stations. Planning applications, for at least some of these, are likely to be submitted in the near future, probably before the Site Allocations Policies document is published for consultation.

7.35 In view of the difficulties that are being experienced in identifying suitable, and available, sites the criteria may need to be reviewed. An example is that less emphasis may be able to be given to finding sites on previously developed, brownfield land.

CHAPTER 8: RADIOACTIVE WASTES

- 8.1** The UK has accumulated a substantial legacy of higher activity radioactive wastes and more radioactive material will become waste over the next century or so as nuclear facilities are decommissioned and cleaned-up. The categories of radioactive waste that are defined in the UK^(xii) are set out in the Glossary.
- 8.2** The Nuclear Decommissioning Authority (NDA) is responsible for planning and delivering the management of the country's radioactive wastes and owns most of the nuclear sites and most of the waste. West Cumbria has, by far, the largest concentration of nuclear facilities in the UK. The Sellafield complex covers an area of approximately four square kilometres and comprises more than two hundred nuclear facilities. Actions over the last thirty years have reduced radiation doses, to even the most exposed groups, to a small fraction of that associated with natural background radiation.^(xiii) This process needs to continue to ensure that nuclear decommissioning and other developments do not prejudice this success. Representations have pointed out that radiation doses to local sea food eaters have increased.

HIGHER ACTIVITY WASTES

Where we are now

- 8.3** Liquid High Level Waste (HLW), mostly from reprocessing, is stored to cool at Sellafield and is then subject to a process of vitrification. Most of the UK's Intermediate Level Waste (ILW) from operational activities, arises at Sellafield, where it is being made passively safe. Small amounts of ILW from other UK licenced sites are also transferred for storage at Sellafield. Future decommissioning of all Nuclear Decommissioning Authority and British Energy sites may give rise to ILW. The destination for this is currently not determined.
- 8.4** The regulators and the NDA require organisations that have responsibilities for radioactive wastes to develop plans for their management. These "Integrated Waste Strategies" (IWSs) have to be prepared in a form and to a level of detail that is suitable for consideration by the regulatory bodies. They have implications for the policies in Local Development Frameworks and Regional Spatial Strategies throughout the country, including the Cumbria MWDF. Any need to review the Core Strategy, as a result of the Integrated Waste Strategies, would be identified in the Minerals and Waste Development Scheme (MWDS) Annual Monitoring Reports. Consultations were carried out in 2007 by Sellafield Ltd about its IWS.

Where we need to be

- 8.5** The Core Strategy has been prepared during a period when national policy for the long-term management of radioactive wastes has been evolving. The Government has now published White Papers on managing both higher activity and low level radioactive wastes.^{(xiv) (xv)} However, the detailed means of implementing these policies have not yet been determined. Also, the siting process for implementation of geological disposal of higher activity wastes

xii CM2919 - Review of Radioactive Waste Management Policy: Final Conclusions, July 1995

xiii Sellafield Integrated Waste Strategy Consultation July 2007.

xiv Managing Radioactive Waste Safely - A Framework for Implementing Geological Disposal June 2008.

xv Policy for the Long Term Management of Solid Low Level Radioactive Waste in the UK. March 2007

RADIOACTIVE WASTES

is in its very early stages and the extent of engagement with this process in Cumbria is not yet known. In these circumstances, the policies in the Core Strategy relating to the management of radioactive wastes can only be regarded as interim policies until the situation becomes clearer. Consequently, the policies will be subject to timely review if they are no longer consistent with, or reflect progress on, the detailed implementation of national policy. This will be identified through the Minerals and Waste Development Scheme (MWDS) Annual Monitoring Reports and included in a future MWDS.

- 8.6** The County Council has supported the findings of the Committee on Radioactive Waste Management (CoRWM), that higher activity wastes should be dealt with by geological disposal. However, the Council considers that this should be phased ie keeps open the option of retrievability for as long as is practicable. The principle of such disposal is to place waste in an engineered containment facility, deep inside a suitable rock formation, to ensure that no significant quantity of radioactivity ever reaches the surface. It is anticipated that underground vaults and tunnels would be at depths somewhere between 200 and 1000 metres, depending on geology.
- 8.7** Other countries have already made progress towards implementing geological disposal and it should be possible to benefit from their experience. The Waste Isolation Pilot Plant (WIPP) in New Mexico, USA, is the only geological disposal facility that is known to be operational; it is used for the disposal of ILW. No geological disposal facility for HLW or spent fuel has yet been built and operated.
- 8.8** Disposal would be preceded by safe and secure interim storage until a geological disposal facility can be developed. That storage period could be several decades. The Integrated Waste Strategy for Sellafield includes the Nuclear Decommissioning Authority's assumptions of key dates that the facility will be available by 2040, for Intermediate Level Waste, and 2075 for High Level. Managing Radioactive Waste Safely estimates that it will take until around 2120 for all Intermediate and High Level wastes to be available in packaged form for disposal, following the decommissioning of the existing nuclear plants.
- 8.9** With regard to the size of facility that would be needed, it is estimated that nearly 500,000 cubic metres of packaged wastes, from existing facilities could, possibly, require geological disposal. The inventory of wastes takes the prudent approach that some materials which are not currently classified as wastes, including spent fuel, could, possibly, come to be regarded as waste in the future. Government anticipates that if new nuclear power stations are built, their wastes and spent fuel could be accommodated in the same geological disposal facility(ies). It may be premature to assume this, and such co-disposal could alter the nature of a geological disposal facility and extend the timeline for its completion.
- 8.10** The CoRWM proposals related to legacy wastes. The Committee stressed the uncertainties associated with new build and observed that the public assessment of any proposals should consider a range of issues and build on the CoRWM process. It estimates that extensions to the lives of some existing reactors, and a possible "new build" programme of ten new reactors (the size of any new programme has not yet been determined), would increase the total volume of material for disposal by about 8%, but total radioactivity by a factor of nearly three. The NDA advise Government that the 'footprint' (size) of a geological disposal facility is difficult to predict, but that the addition of new build waste to legacy waste could increase the size of a joint facility by around 50%, depending on design and site issues.

8.11 Government has broadly endorsed the CoRWM recommendations but has reserved its views on the detail of implementation. The UK Government and the devolved administrations for Wales and Northern Ireland have consulted ^(xvi) about proposals for :-

- the technical programme and aspects of design and delivery of a geological disposal facility; and
- the process and criteria to be used to decide the siting of that facility, including:
 - development of a volunteerism/partnership approach; and
 - the assessment and evaluation of potential disposal sites, including the initial screening-out of areas unlikely to be suitable for geological disposal.

8.12 Government policy on the implementation of the siting process is still evolving, it is difficult, therefore, to include detailed policies in this plan. However, it seems reasonable to assume that the planning system will need to make provision for a staged process, involving:-

1. Facilities for storing vitrified High Level Waste for at least fifty years, until it is judged to have cooled sufficiently for emplacement in a geological disposal facility. Stores could be built with a 100-year lifetime.
2. Facilities, with a proposed service life of 100 years or more, for the interim storage of Intermediate Level Wastes.
3. Site(s) characterisation boreholes.
4. Excavation of shafts and tunnels several hundred metres deep for underground investigations and possibly construction of an underground research laboratory.
5. Subject to satisfactory investigations, construction of surface facilities and an underground geological disposal facility(ies) that would remain open for at least 100 years, or longer if provision is made for waste retrieval.
6. Developing transport links between storage and disposal facilities.
7. Engagement with communities beyond the immediate locality about transport and other issues.
8. Closure and restoration.
9. Monitoring facilities.

8.13 The planning system itself is likely to be changed. In the Planning Bill, which was introduced in November 2007, the Government is proposing that decisions on nationally significant facilities should be taken by an Infrastructure Planning Commission and not by local planning authorities. Whether this arrangement would apply for a geological disposal facility proposal is not yet clear. The County Council consider this type of decision should be taken at the local level given the Government's proposal for a local siting partnership to develop a thorough understanding of a proposal in their area. There are different views about the consenting process for a geological disposal facility .

Policy

8.14 The uncertainties about national policy for managing the higher activity wastes, and about who would make the decision to grant or refuse planning permission for any proposed facilities, have been outlined above. In the light of such uncertainties, it has been necessary

RADIOACTIVE WASTES

to consider the appropriateness of including detailed policies, in this plan, for the staged process that is likely to be involved for managing these higher activity wastes. It is likely that further planning applications will be submitted in connection with interim storage of the higher activity wastes at Sellafield. A policy for such proposals is therefore, appropriate and Structure Plan Policy ST4 has been used as the basis for this policy. With regard to community needs, Core Strategy Policy 3 on Community Benefits is also relevant.

Core Strategy Policy 10

HIGH AND INTERMEDIATE LEVEL RADIOACTIVE WASTES STORAGE

Developments involving the interim storage of these wastes at Sellafield will only be permitted where criteria are satisfied relating to :-

- benefit clearly outweighing the detrimental effects;
- compliance with national and international standards and best practice for environment, safety and security, which, if appropriate, are publicly and independently reviewed;
- reasons are explained for rejecting alternative locations and methods that have been considered; and
- that there are no overall adverse impacts on the local economy.

Permission will be granted only if :-

- all practicable measures are taken to minimise the adverse effects of development and associated infrastructure; and
- where appropriate, provision is made to meet local community needs;
- acceptable measures are in place for decommissioning and site restoration; and
- arrangements are made for suitable local community involvement during the development, decommissioning and restoration.

8.15 This plan does not propose the development of a geological disposal facility within Cumbria for the higher level wastes. It is not even known if there are areas of the county where the geology is suitable for such a facility, further research is needed on this critical aspect. However, the Government has published the Managing Radioactive Waste Safely White Paper and commenced the siting programme by inviting expressions of interest. A policy is, therefore, included that relates to that programme and to the procedures that will be involved. The Generic Development Control Policies will also be relevant to the consideration of any proposals. It is recognised that considerable amounts of further research are still needed on issues relating to the geological disposal of radioactive wastes. One particular issue that has been raised in representations is how much radioactivity would dissolve underground and where the contaminated water would go.

8.16 More than one planning permission would be needed during the investigations for, and development of, a geological disposal facility. The following policy relates to the stages of developing such a facility, reflects the stages at which the community would have the opportunity to exercise its Right of Withdrawal and also the stages at which approvals would be needed from the Environment Agency and/or the Nuclear Installations Inspectorate. The policy sets out the criteria which would be used to assess proposals at each of the stages when planning applications would need to be submitted. **The policy**

would only come into play if a community in Cumbria volunteered to participate in the process of finding a site, and, if any possible site(s) passed the initial screening out of areas of unsuitable geology.

Core Strategy Policy 11

HIGH AND INTERMEDIATE LEVEL RADIOACTIVE WASTE GEOLOGICAL DISPOSAL

If an area of suitable geology within Cumbria is volunteered for consideration as a possible geological disposal facility, separate planning applications may be expected to be submitted at three stages:-

1. **Proposals for surface based site investigation including boreholes.** At this stage, the planning criteria will be similar to those for exploratory works for other types of development. These relate to the usual environmental impact considerations including traffic, working hours, noise, visual impact, period of operations, water resources and wildlife.
2. **Proposals for underground rock characterisation shafts and tunnels and an underground research laboratory.** Planning considerations at this stage will need to include not just the environmental impacts of the proposed operations themselves, but also the details of a generic design for a geological disposal facility and of its likely impacts. The planning criteria will relate to the inventory of wastes; environmental impacts; benefits clearly outweighing detrimental impacts; compliance with best international standards and best practice for the environment, safety and security; the offset benefits package; impacts on the local economy; and community needs.
3. **Proposals for a disposal facility and transport links, monitoring, site closure and restoration.** At this stage, there will be a reasonable expectation that planning permission will be granted. That is unless new information or material considerations demonstrate otherwise, or there are material differences from the scheme that has been developed over a considerable period of time up to this stage. Planning criteria will relate to the environmental impacts of the proposed construction and operation of the facility; the inventory of wastes to be brought to the facility; to transport matters; arrangements for local community involvement; monitoring and reporting; contingency and emergency planning issues; the offset benefits package; site decommissioning, clean-up and closure proposals; and restoration/afteruse of the site.

- 8.17** A substantial amount of work is being undertaken in conjunction with the other regulators and the Nuclear Decommissioning Authority in connection with geological disposal. Some of this work relates specifically to the permissioning process and may require the policy to be reviewed.

LOW LEVEL WASTE

Where we are now

- 8.18** Much of the UK's Low Level Waste (LLW) is sent to the Nuclear Decommissioning Authority's Repository near Drigg in West Cumbria. Around two thirds of the LLW emplaced in the Repository is from the Sellafield complex. A very small proportion has been from industries and hospitals within the county, including arisings from nuclear submarine

RADIOACTIVE WASTES

commissioning at Barrow in Furness. The rest of the waste has been from other nuclear sites and radioactive waste producers throughout the UK. The Integrated Waste Strategies mentioned earlier will set out individual sites' proposals for managing the wastes they produce.

8.19 On the basis of recent consignments the sources of waste are:

Table 8.1 Sources of LLW

Sources of Low Level Waste sent to the Repository near Drigg	
• Sellafield	66%
• MoD Faslane, Aldermaston, Devonport	14%
• Nuclear Power Stations	8%
• Hospitals, universities, oil industry	5%
• Radio isotope manufacturing sites, eg GE Healthcare	4%
• Other sites previously owned by British Nuclear Group	3%

8.20 The UK Offshore Producers Association has commented that LLW arisings from drilling operations are likely to increase. This is because, from the end of 2008, new disposal routes will need to be found for the Naturally Occurring Radioactive Materials (NORM) Scales which are an unavoidable by-product of hydro-carbon production. At present, these are macerated and disposed of in the sea. Information has been provided that these may only be around 36 tonnes/year.

8.21 The present facility, Vault 8, is likely to be full by the end of 2008. Temporary planning permission, until the end of 2019, was granted in January 2008 for emplacing wastes in a new Vault 9. This vault was estimated to provide capacity until 2016. However, new methods of managing the waste, greater emphasis on moving waste up the waste hierarchy and more intensive efforts at diverting wastes away from the Repository mean that the permitted capacity is likely to last for a longer period.

Where we need to be

8.22 The Defra policy for the long term management of Low Level Wastes (LLW) was published in March 2007. This states that Government expects the Nuclear Decommissioning Authority to develop and publish a plan for the optimal use of the Low Level Waste Repository near Drigg and to assess the extent to which other Low Level Waste disposal options might be employed. The Defra policy promotes the search for new LLW disposal sites in the UK. The County Council is a member of the National Low Level Waste Strategy Group which will be looking at the options.

8.23 The NDA's strategy and plans, together with the proposals of the operator of the Repository, demonstrate that a very substantial proportion of the wastes that would, in the past, have been consigned to the Repository will be managed elsewhere. In the future it will only be used for those wastes that require management within a multi-barrier containment system. One implication of these initiatives is that less than half of the estimated maximum physical capacity of the Repository site would be likely to be needed

for wastes from Sellafield. Previously it had been understood that an additional Repository would be needed just for those wastes, irrespective of future developments at the existing site.

- 8.24** It seems likely that the recently permitted additional capacity for storing waste at the Repository will last until 2019 or even beyond the plan period. It is possible that proposals for additional capacity may need to be considered towards the end of that period. Other development proposals, not involving additional capacity, are expected to come forward in the next few years associated with the proposed new methods of managing the waste at the Repository. Wastes that do not require multi-barrier containment will continue to arise, including substantial quantities from nuclear decommissioning. The nature of these wastes, their quantities and how much of them will require off-site provision for disposal is not yet clear from the Integrated Waste Strategies. The matter will be kept under review in the MWDS Annual Monitoring Reports.

Policy

- 8.25** Recent practice, where all types of LLW from around the UK were brought to the LLWR near Drigg, is not considered to be sustainable. This is particularly with regard to "waste miles" and the need for communities to take responsibility for their own wastes. That practice has been brought to an end by the NDA. Its strategy for the optimal use of the Repository, in accordance with Government policy, is that it will only be used for those wastes with a higher intrinsic hazard that really have to be managed in this type of engineered facility.
- 8.26** In these circumstances of much reduced projections of waste volumes that would be consigned to the Repository, the County Council accepts that it will continue to be an essential component of the UK's national waste management capability. This accords with national policy and also the aim that West Cumbria should be the centre of excellence for radioactive waste management.
- 8.27** The policy relates to Low Level Waste only, and not to its sub-category of Very Low Level Waste, and provides for the continued role of this Repository, but no other, within Cumbria. The NDA's strategy and plans are, by their nature, aspirational. It is essential that the assessments of the performance of this policy, and the need to review it, take account of performance in achieving the NDA's assumptions regarding moving waste up the waste hierarchy and diverting it away from the Repository. The planning permission for Vault 9 requires that this performance is reported annually to the County Council. The Annual Monitoring Reports will identify any requirement for the policy to be reviewed

Core Strategy Policy 12

LOW LEVEL RADIOACTIVE WASTE

Provision will be made for the Low Level Repository, near Drigg to continue to fulfil a role as a component of the UK's radioactive waste management capability. Proposals for very long term storage or disposal of waste will have to demonstrate that they are feasible in relation to the long term integrity of the site with regard to sea level rise and coastal erosion. Proposals for additional storage or disposal facilities will have to demonstrate that they are within the site's radiological capacity.

RADIOACTIVE WASTES

The acceptance, by the County Council, of a national role for the Repository is on the basis of the NDA's and the site operator's initiatives for reducing the proportions of waste that are consigned to it. The success of those initiatives will be monitored closely, in part through the Council's membership of the national Low Level Waste Strategy Group.

- 8.28** No policy for the Very Low Level Wastes that will arise in Cumbria is included. This is because of the uncertainties relating to their volumes, the way they may need to be managed and what off-site facilities may need to be provided. Any proposals for managing these wastes in the interim, before a review of the Core Strategy, would be considered in the context of the relevant Core Strategy and Generic Development Control Policies. These would include CS Policies 1 and 2 and GDC Policies 1, 2, 3 and 4.

CHAPTER 9: MINERALS CORE STRATEGY

PURPOSE

- 9.1** The Development Framework has to provide a clear guide to the public, and to mineral operators, about the locations where mineral extraction may take place. It has to set out clear and appropriate development control policies. These have to include ones for safeguarding both sensitive environmental features and mineral resources with potential for future extraction. The policies have to cover all aspects of environmental and resource protection as well as extraction.
- 9.2** Within this context, the Minerals Core Strategy makes an appropriate contribution to national, regional and local requirements for minerals. It seeks to ensure that the minerals that need to be provided from Cumbria's mineral resources can be worked in appropriate locations and at acceptable social, environmental and economic cost.

Where we are now

- 9.3** The location and size of Cumbria, its dispersed settlement pattern and its pattern of road and rail networks, have implications for how it meets its needs for minerals. Not only does the county as a whole tend to be self-sufficient, but there are also recognisable areas within the county which have traditionally met their own needs from local sources.
- 9.4** There are fourteen active crushed rock quarries within Cumbria, three of these are partly within the Lake District National Park. Limestone, igneous and sandstone rocks are quarried. In addition to producing aggregates, four of the limestone quarries supply industrial markets, mostly for burnt lime. There are also fourteen active sand and gravel quarries, none of these are within the National Park. Lists of the quarries are included in the Background Information section of the Issues and Options Discussion Paper. All of the sandstone and igneous rock quarries are in the south of the county, whilst the majority of the limestone ones are in the east, relatively few quarries supply the north and west of the county. There are around seven processing plants producing aggregates from recycled or reused materials. There are currently no active surface or underground coal mines in the county, but there are extensive deep and shallow coal resources.
- 9.5** There is a large licenced area for marine dredged aggregates in Morecambe Bay, approximately twenty miles off the coast. Sand from this is landed at Barrow docks, small amounts are also provided by harbour channel maintenance activities at other ports and harbours. There is no demand, at present, for marine dredged gravel. There are an underground gypsum mine near Long Marton, seventeen building stone quarries, a slate quarry near Broughton-in-Furness, a quarry for a brickworks near Askam in Furness and commercial peat workings near the Solway coast.
- 9.6** In addition to meeting Cumbria's own needs, these mineral workings provide high and very high skid resistance roadstones, gypsum, peat, slate and bricks to regional and national markets.
- 9.7** The North West Regional Aggregates Working Party (RAWP) Annual Reports provide details of sales and remaining reserves of sand and gravel and crushed rock. The North West, as a whole, meets only around half of its aggregates consumption from within the

9 MINERALS CORE STRATEGY

region. Cumbria helps to meet the needs of other parts of the region, but most of the shortfall is met from other regions; for example, from quarries in Derbyshire. The figures that the Working Party publishes for Cumbria include the Lake District National Park.

- 9.8** The 2006 Annual RAWP Report indicates annual average sales over the three year period 2002 to 2005 were 3.8 million tonnes/year of crushed rock and 800,000 tonnes/year of sand and gravel. Just over 20,000 tonnes of marine dredged sand were landed at Barrow in 2005. Remaining reserves with planning permission at the end of 2005 were 156.6 million tonnes of crushed rock and 9.18 million tonnes of sand and gravel.
- 9.9** Reserves of gypsum at Birkshead mine in 2005 were estimated to be around 5 to 6 million tonnes, sufficient for around 15 or 16 years. The brick making mudstones quarry had estimated reserves of around 160,000 cubic metres. This would be sufficient for around eight years, but the planning permission runs out in 2013. The two commercial peat sites have reserves that will last until the expiry of their planning permissions in 2042. No reliable or publicly available details are available of the production figures or reserves for the secondary and recycled aggregates plants.

Where we need to be

- 9.10** The main issues for the Minerals Core Strategy concern the provision that should be made for working specific minerals and for safeguarding mineral resources for future generations. The provision that the plan makes for working a mineral are determined by the annual production levels and the appropriate length, in years, of the "landbank" of permitted reserves that will be maintained throughout the plan period. The safeguarding of existing and potential rail and wharf facilities will be addressed in the Site Allocations Policies Development Plan Document.
- 9.11** Broader spatial planning issues that could affect the need for mineral extraction include those of the Cumbria Economic Plan and the West Cumbria Spatial Masterplan. Specific examples are the regeneration schemes that are proposed for Barrow-in-Furness, Whitehaven and Workington, nuclear decommissioning at the Sellafield/Windscale complex, improvements to transport links, housing renewal, pressure for increased house building rates to meet local needs, higher environmental performance standards for buildings and proposals for improved flood defence works. Policies for areas outside the plan area may also have implications. An example is that there could be pressure on Cumbria to make up for shortfalls that would result from policies for reducing quarrying in the Lake District and Yorkshire Dales National Parks.

STRATEGY

9.12 The choices for the minerals strategy involved balancing:-

1. the need to keep the number of operations and permitted reserves to a minimum to reduce environmental damage, with
2. meeting local, regional and national needs without disruption of supply, and
3. maintaining local jobs in a traditional rural industry (rural proofing).

Having taken account of these the Minerals Core Strategy is:-

2

MINERALS STRATEGY

The Minerals Core Strategy of this plan is:-

- to make provision for a steady and adequate supply of minerals, in accordance with national and regional policies;
- to balance the economic potential of its mineral resources with the protection of the environment, and with prudent use of them in environmentally sensitive ways; and
- make provision to enhance the scope for using alternative re-used or recycled materials.

9.13 Site specific assessment work will be undertaken in the Site Allocations Policies.

DELIVERING THE MINERALS CORE STRATEGY

CHAPTER 10: DELIVERING THE MINERALS CORE STRATEGY

PROVIDING FOR AND SAFEGUARDING MINERALS

Where we need to be

- 10.1** In addition to making provision for the minerals that will be needed during the plan period, the Minerals and Waste Development Framework needs to prevent mineral resources being sterilised by other forms of development. This is to ensure that adequate supplies of minerals can continue to be provided for future generations. This safeguarding of resources can be achieved by identifying :-
- **Preferred Areas** these are areas of known resources where planning permission might reasonably be anticipated. This would be subject to the usual tests of environmental acceptability. Planning applications for proposed developments may still require Environmental Impact Assessment.
 - **Areas of Search** are broader areas, where knowledge about mineral resources may be less certain, but within which planning permissions for particular sites could be granted to meet any shortfalls in supply, if suitable planning applications are made. Again, these may require Environmental Impact Assessment.
 - **Mineral Safeguarding Areas** are intended to safeguard proven deposits of minerals which are, or may become, of economic importance within the foreseeable future, from unnecessary sterilisation by surface development.
 - **Mineral Consultation Areas** are for use in two-tier planning areas, to enable county and district councils to co-operate in the exercise of their planning powers over land with potential for mineral extraction. They are a mechanism for consultation between the county and district councils, about development which would be likely to affect the winning and working of minerals, and also about how mineral working could affect other existing or proposed land uses. They can cover all, parts of, or marginally more than a Mineral Safeguarding Area. It is anticipated that they will include the Minerals Safeguarding Areas plus a buffer zone around them.
- 10.2** It is proposed to identify areas in the Site Allocations Policies Development Plan Document and on the Proposals Map, although it may not prove necessary to identify all four different types of areas. Whatever approach is adopted for safeguarding minerals, the County Council is responsible for making sufficient provision to meet anticipated need over the plan period. Except for energy minerals, for which "need" does not have to be established, this involves the sizes of "landbanks" of minerals planning permissions that will be maintained at any one time. Quarry companies have put forward proposals for quarry extension areas to be identified in the Development Framework. The Site Allocations Policies will consider if provision should be made for these areas of land and, if so, what type of safeguarding is appropriate. The proposals for safeguarding are set out in Core Strategy Policies 13 and 14 which can also be relevant to the consideration of planning application proposals. With regard to Preferred Areas, the Site Allocations Policies will need to consider whether the release of these should be related to the landbanks and be phased over the plan period.
- 10.3** In accordance with national policy, an approach that does not include Preferred Areas has to be fully justified. In Cumbria, the existing planning permissions for general crushed rock provide for a landbank of at least fifteen years to be maintained throughout and

beyond the plan period. Because of this, the plan will not identify any Preferred Areas, only Mineral Safeguarding Areas to protect the crushed rock resources (see also paragraph 10.13). Further resources of very high specification roadstone will be safeguarded adjacent to Ghyll Scaur Quarry in the Preferred Options Site Allocations Policies.

- 10.4** Sand and gravel resources will be considered in more detail in the Preferred Options Site Allocations Policies document in 2009. Preferred Areas, Areas of Search and Mineral Safeguarding Areas will be identified to maintain at least a seven year landbank throughout the plan period. For gypsum, there are only two remaining resource areas identified on the geology maps; they will both be safeguarded. The Preferred Options Site Allocations document will consider what type of safeguarding is appropriate for the Stamphill site and for the area of land that would be needed to work the other identified resource.
- 10.5** The present Mineral Consultation Areas maps were produced in 1982, and will be reviewed in the Preferred Options Site Allocations Policies document. This will also look in detail at Minerals Safeguarding Areas.
- 10.6** In addition to the mineral resources themselves, the Site Allocations Policies document will also identify any existing or potential sites for rail heads or wharves that need to be safeguarded. The Defra consultation about the priorities for the Aggregates Levy Sustainability Fund for 2008 to 2011, includes a theme of securing further diversion from lorries to rail and water transport.

AGGREGATES

- 10.7** The Framework sets out policies and proposals in line with the Regional Spatial Strategy (RSS). In the case of crushed rock and sand and gravel, the Regional Spatial Strategy apportions estimates of need to the sub-regions, one of which is Cumbria, including the Lake District National Park. These apportionments of need are updated each year in the Regional Aggregates Working Party (RAWP) Annual Reports and are currently only available for the period up to 2016. In accordance with national policy, the RAWP annual apportionments have taken account of the contribution that secondary or recycled materials, minerals products and marine dredged aggregates make to the supply of materials, before the extraction of land won primary aggregates is considered.
- 10.8** There is a concern, expressed in the Sustainability Appraisal of the Regional Spatial Strategy and in some responses to the issues and options consultation, that the region's assessment of needs for aggregates may not be sufficient to meet the anticipated demand from new developments. Other representations have been made by quarry companies, that the reserves figures for sand and gravel may be overstated because of variations in quality within the deposits. It is considered that these are matters that need to be pursued through the RAWP and that it is not appropriate to seek changes to the regional figures through this plan.
- 10.9** The forecasts of demand in the Regional Spatial Strategy (RSS) were based on the North West Regional Aggregates Working Party's (RAWP) Annual Report 2003, which incorporated the 2002 aggregate monitoring statistics. Its sub-regional apportionments to Cumbria for the period 2001 to 2016 are 11.2 million tonnes of sand and gravel and 66 million tonnes of crushed rock. The annual apportionment figures were 4.55 million tonnes/year of crushed rock and 1.05 million tonnes/year of sand and gravel. The 2003 Report is an exception in recent years, it is the only one that showed a marginal increase in sales over previous years.

10 DELIVERING THE MINERALS CORE STRATEGY

- 10.10** In the 2006 RAWP Annual Report, those average annual apportionments for Cumbria are 4.1 million tonnes/year of crushed rock and 700,000 tonnes/year of sand and gravel. These figures reflect the general trend of declining total aggregate sales since 1997 and increases in the use of alternative materials. Any upturn, in the rolling three year average annual sales, will be monitored by the RAWP and reflected in revised apportionment figures for Cumbria. The RAWP 2007 Annual Report indicates, for Cumbria, an insignificant decline in crushed rock sales and a marginal increase for sand and gravel; it does not alter the apportionment figures.
- 10.11** The national and regional guidelines for aggregates provision are being rolled forward to 2020. The revised national forecasts indicate a continuing reduction in national demand for primary aggregates but marked contrasts between individual regions. For the North West the figures show only marginal changes in demand compared with the previous forecasts. The main changes are for other regions, with the South East and North East showing the largest decline, and London showing a significant increase in demand.
- 10.12** With regard to "landbanks", the long standing policy of the County Council has been to maintain a landbank of at least fifteen years reserves for crushed rock and seven years for sand and gravel. National policy, as stated in Annex 1 of Minerals Policy Statement 1, is that the landbank indicators, of when new permissions are likely to be needed, are at least seven years for sand and gravel and at least ten years for crushed rock. It also states that separate landbank calculations may be appropriate where there are distinct and separate markets for high specification roadstone, asphaltting, building or concreting sands. The County Council is not convinced that there is a need to provide longer landbanks for these markets, no evidence has been provided relating to any specialist sands.

Crushed rock

- 10.13** At the end of 2005, the crushed rock reserves represented a landbank of over 38 years at the apportionment level or over 41 years at recent sales levels. On the basis of these figures, no action is needed to maintain either a ten or fifteen year landbank throughout the plan period. No further provision in this plan for general crushed rock aggregate can be justified. It is possible that a case could be demonstrated for extensions to meet shortfalls in particular supply areas or to meet specific needs as mentioned in Minerals Policy Statement 1 (paragraph 4.1 and paragraphs 71 and 72 of its Practice Guide). The County Council is not aware, at the moment, of such circumstances that would justify further provision but these matters will be taken into account in the Preferred Options Site Allocations document. This work will also assess the supply patterns and needs of concrete batching, concrete products and asphalt plants.
- 10.14** Although national policy suggests action should be taken to reduce landbanks as large as those in Cumbria, it is not considered that revoking permissions is a practicable option, other than through agreements with the landowners/operators that do not involve compensation. The Sustainability Appraisal concluded that, in the absence of a site specific review of consented landbank reserves, no significant adverse impacts of retaining the current landbank could be flagged up that would justify a policy presumption in favour of reducing them, given the difficulties and potential financial costs that could arise. For crushed rock, the main issue for the plan is the need to safeguard resources for future generations from being sterilised by other forms of development.

High specification roadstones

- 10.15** Although the total crushed rock landbank figure is very large, the plan considers the high specification (high skid resistance) roadstones separately from aggregates for general use. For these, the reserves, at the end of 2005, were 9.85 million tonnes, equivalent to around 13 years at annual sales of 740,000 tonnes. The County Council has subsequently granted a planning permission at Roan Edge quarry, which virtually doubles the permitted reserves figure. Taking this into account, the landbank at recent sales levels would not fall below fifteen years until around 2018. Continued monitoring of sales of these special aggregates will be needed by the Regional Aggregates Working Party, and it seems likely that a review of the plan will need to make additional provision for them. An additional factor is that increased production from Cumbria may be needed within the plan period, if high specification roadstone quarries in the Yorkshire Dales National Park close.
- 10.16** The plan makes separate provision for the very high skid resistance roadstones at Ghyll Scaur Quarry. This is the only operating quarry in England that produces roadstone to such high specification, its planning permission expires in 2010. This Minerals Core Strategy proposes that the Site Allocations Policies document will make provision for this quarry to be extended.

Sand and gravel

- 10.17** The strategic choice for sand and gravel, has been whether to plan for the Regional Spatial Strategy's apportionment of 700,000 tonnes/year from Cumbria or what was a long standing average production level of around 900,000 tonnes/year. Sales of sand and gravel have been reducing in recent years. The current policy of maintaining at least seven years reserves with planning permission is in accordance with national policy.
- 10.18** The sand and gravel reserves at the end of 2005 represented a landbank of just over 13 years at the apportionment level or 11.5 years at recent sales levels. Using the sub-regional apportionment figures and the recent sales figures a seven year landbank for Cumbria would be between 4.9 and 5.6 million tonnes. The County Council has resolved to grant permission for an additional 1.5 million tonnes at High House quarry and 4.5 million tonnes at Overby quarry. Even with these, the landbank will fall below seven years within the plan period and all of the existing sand and gravel planning permissions will expire well within the period. Additional planning permissions will be needed to maintain supplies. This may be achieved by extending the life of existing permissions, but is also likely to require new reserves to be released. There may also be opportunities to identify sites which have less landscape or biodiversity impact.
- 10.19** Representations have included objections relating to the environmental impacts, particularly lorry traffic, of the existing pattern of sand and gravel quarries. At the present time, there is insufficient information to answer the question of whether an alternative pattern of these is feasible. The Preferred Options Site Allocations Policies document will assess the remaining reserves and the supply areas for all of the quarries and examine if some of the more difficult problem areas can be resolved. This will depend on the industry agreeing that information about individual units will be publicly available.

DELIVERING THE MINERALS CORE STRATEGY

Local supply patterns

- 10.20** The Region's apportionments of needs for the whole county are not the only figures which this plan takes into account. Because of the distinctive character of Cumbria and its dispersed settlement pattern, the overall reserves and sales figures will be broken down to take account of what is needed for the local patterns of supply. The location of quarries in relation to the areas that they supply will be considered, particularly with regard to reducing "minerals miles" in accordance with the Overall Strategy. An example is Roosecote quarry, which is the only sand and gravel quarry in the south of the county. Its planning permission expires in 2011 and further provision may need to be considered soon. The Site Allocations Policies will address these matters of maintaining appropriate local landbanks related to local patterns of supply.
- 10.21** The Minerals and Waste Local Plan split the county into four production zones; north, west, east and south. It is now proposed that the Site Allocations Policies Development Plan Document should refine these and identify supply areas and the production units that serve them. This is complicated, because the geology of the county means that there are few hard rock quarries in the north and west of the county and few sand and gravel ones in the south.

Alternative materials

- 10.22** The main alternatives are the use of recycled or re-used materials instead of primary land won aggregates. Materials derived from quarry wastes are described as secondary aggregates; those derived from crushing concrete and construction and demolition wastes are called recycled aggregates. National and regional policies are, that approximately one quarter of aggregate supplies should be met from these alternatives to primary aggregates. The Quarry Products Association's second Sustainable Development Report, highlights that for Great Britain this is already happening. That proportion is already built in to the Regional Spatial Strategy's sub-regional apportionment to Cumbria for primary land won aggregates.
- 10.23** At the moment, there is no comprehensive and reliable information about the production levels of these alternative materials at the regional or local level. The North West Regional Aggregates Working Party Annual Report estimates that in 2005 just over 683,000 tonnes of secondary aggregates were reused within the region and that total reserves were around 12.9 million tonnes.
- 10.24** The Minerals and Waste Local Plan includes policies (54 and 55) that 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 site and where they do not prejudice the operation or restoration of the site. Specific references are also made to locations at Hespin Wood and Todhills landfills and Tendley, Moota, Roose and Blencowe quarries. Because of the level of investment that can be involved for some of these recycling facilities this plan will consider whether it is still appropriate to always limit the life of their permissions to that of the life of the main quarry or landfill. This is addressed in Generic Development Control Policy 4. The need to safeguard existing large resources of secondary aggregates, such as slag banks remaining from the iron and steel industry, will be addressed in the Site Allocations Policies Development Plan Document.

Marine Dredged Aggregates

- 10.25** Another issue for the plan, has been whether a greater proportion of sand supplies should be met by marine dredged sand from the current Morecambe Bay licenced area. The regional assessments of need take into account the contribution that marine dredged aggregates can make, before considering the extraction of primary land won materials. This is in accordance with Minerals Policy Statement 1: Planning and Minerals. During 2005, around 669,000 tonnes of marine dredged sand were landed in the North West Region; only 20,200 tonnes of this was landed in Cumbria, at Barrow. The total landings from the authorised area (including landings in Wales) were 716,000 tonnes, compared to the authorised limit of 1.38 million tonnes/year.
- 10.26** The dredging takes place approximately twenty miles off shore. Representations have been made about the environmental impacts of marine dredging and landing, as well as those of land won sand and gravel. Potential impacts through altered flow or sediment transport on Special Protection Areas or other important marine sites have been mentioned. English Heritage expressed concerns about maritime archaeology and refers to its good practice guidance and protocol for identifying and understanding the archaeological issues when developing areas for dredging, and for reporting on unexpected discoveries. Reference has also been made to Marine Minerals Guidance 1 (ODPM 2002). The consultation by Defra about the priorities for the Aggregates Levy Sustainability Fund for 2008 to 2011 includes the theme of reducing the environmental footprint of marine extraction.
- 10.27** The identification and authorisation of sites for marine dredging are not matters for this plan, as the County Council is not the regulatory authority. The existing Morecambe Bay licence is understood to have significant potential for increased supplies of sand. A new marine planning system is being introduced, which may have implications for policies in this Development Framework. The concerns expressed about marine dredging relate to the existing and potential contributions that marine dredged aggregates can make, which are matters for the Regional Aggregates Working Party.
- 10.28** This plan seeks to see the recent reduction in marine dredged sand landings in Cumbria reversed in favour of a modest increase. It may be particularly appropriate for marine dredged materials to be used, where practicable, for regeneration schemes at the coastal towns. Another issue is the need to safeguard wharves that are used, or have potential to be used, for landing aggregates. This is addressed under the Mineral Safeguarding policy and will be examined in more detail in the Site Allocations Policies Development Plan Document.

GYPSUM AND ANHYDRITE

- 10.29** The Newbiggin anhydrite mine has closed and the only issue for this plan is whether it should safeguard the mine entrance, in case it is needed in the future. This is unlikely, but it will be considered in the Preferred Options Site Allocations Policies document, together with other Mineral Safeguarding Areas and Mineral Consultation Areas.
- 10.30** The Birkshead underground gypsum mine has reserves for around fifteen years. These are the only remaining ones within the county that can be worked by underground methods. Gypsum is a national resource for plaster and plasterboard, and the mine, and associated

DELIVERING THE MINERALS CORE STRATEGY

works at Kirkby Thore, are very important local employers. Much of the raw material for the works is provided by desulphogypsum, which is brought in by rail from the coal fired power stations, but supplies of mined gypsum are still needed.

- 10.31** Although the reserves at the underground mine are expected to last until just after the end of the plan period, the plan needs to identify additional resources of gypsum. This is because of the lead in time needed to develop new supplies to ensure that they are available before the underground mine closes. The areas of land that would be needed to work the remaining resources will be identified in the Site Allocations Policies. The new sites would have to be worked by opencast methods. Additional areas would only be permitted if it is demonstrated that supplies of desulphogypsum are insufficient.
- 10.32** Representations stressed the need for stringent environmental safeguards, and that a new site should be phased in with the closure of the underground mine. Those points are accepted.

BRICKMAKING MUDSTONES

- 10.33** It is proposed to make provision for extending High Greenscoe Quarry, which provides raw materials for the nearby Askam in Furness brickworks. Its planning permission, and the estimated reserves within the permitted area, run out towards the end of the plan period. There is no national or regional policy about the appropriate length of a landbank for these materials. National policy points out, that the capital investment in a brick-making plant is larger than for most other mineral related plants, and, that security of supplies over an appropriate period is needed to justify and secure that investment. This matter will be considered in the Site Allocations Policies. Representations have been made related to the environmental interests of the potential areas for extending the quarry.

INDUSTRIAL LIMESTONES

- 10.34** These are primarily high purity limestones, from Shapfell, Shap Beck, Hartley and Stainton quarries, which are required for the iron and steel industry and other non-aggregates uses. It is proposed to incorporate Minerals and Waste Local Plan Policy 36 in this Core Strategy. National policies relating to developments within Areas of Outstanding Natural Beauty are relevant to any proposals at Hartley quarry. Shap Beck quarry is mostly within the Lake District National Park.

ZINC MINING

- 10.35** There are extensive dormant planning permissions for zinc mining near Nenthead and in adjoining areas of Northumberland. There are no planning permissions for the surface developments that would be needed to implement the permissions. The sites are within the North Pennines Area of Outstanding Natural Beauty and partly within European Wildlife Sites. It seems, at present, unlikely that there will be serious interest in resurrecting this industry, but that could change. No policies are proposed in this Core Strategy. National policies that relate to major developments in the North Pennines Area of Outstanding Natural Beauty and European Wildlife Sites are sufficient.

BUILDING STONES

- 10.36** No significant problems have been identified with the current supply of most building stones in the county. There are issues about very specific variations in closely defined areas. For example, the pink sandstones in the north of the county vary significantly, and in the past, small quarries provided the stone for very localised areas. Local distinctiveness and vernacular will be protected as part of Cumbria's environmental assets, and proposals for small scale extraction to meet local needs will be considered on their merits.
- 10.37** Lakeland slate, which is quarried near Kirkby-in-Furness, has a national market. The quarry operator has made representations about the possible need to alter the approved extraction area, for reasons of the stability of the upper quarry faces. Because this relates to land within the existing planning boundary, it is considered to be a matter for a planning application and not for this Core Strategy. The current planning permission for the quarry does not expire until 2042. The plan's provision for slate quarries will be considered in the Site Allocations Policies. At the present time no need to make further provision has been identified.
- 10.38** Policy 17 is in accordance with RSS policy EM7 which states that plans should identify and protect sources of building stone for use in repairing and maintaining historic buildings and public realm improvements. Work to identify potential sites will be undertaken as part of the Preferred Options Site Allocations Policies. Proposals will be considered under the Generic Development Control policies.

OTHER MINERALS

Coal

- 10.39** There are extensive coal and associated fireclay resources within West Cumbria but none of these are being worked. National energy policy and the need to mine coal will be kept under review. That could result in the need for a Core Strategy policy but, for the present time, the Generic Development Control Policies are considered to be adequate. The Coal Authority has now (October 2008) renotified areas of coal workings as Standing Advice and consultation areas under the provisions of the Town and Country Planning (General Development Procedure) Order 1995. These are shown on the Key Diagram. Core Strategy Policy 14 proposes that Mineral Safeguarding Areas for coal will be identified in the Site Allocations Policies,

Oil and gas

- 10.40** The Energy White Paper proposes that UK Continental Shelf and onshore oil and gas reserves should be sustained and exploited in the interests of maintaining security of supplies. The Carboniferous Northumberland/Solway Basin in the north of the county, has gas-generating potential, but oil generating potential has not been proved. The prospects are not encouraging and exploration activity, to date, has not been successful. Onshore drilling has also taken place on Walney Island. Because offshore and inshore areas of Cumbria are potentially rich in these resources a Core Strategy policy is appropriate.

DELIVERING THE MINERALS CORE STRATEGY

Coal bed methane

- 10.41** Coal bed methane is found in association with seams of coal. Whilst a new source of energy for the UK, it provides about 7% of total natural gas production in the United States. It is exploited by drilling into coal seams and can be used directly for power generation. According to the British Geological Survey ^(xvii), the gas content, permeability and total thickness of coal within the West Cumbria coalfield suggests that it could rate amongst the best coalbed methane prospects in England. However, former deep mining operations will have desorbed methane over extensive areas and exploration would need to be focused on virgin strata. The concealed extension of the Canonbie Coalfield appears to have good prospects, but there is no information on coal seam permeability. The artificial voids left in abandoned coal mines are potential sources of coal mine methane gas.
- 10.42** There are four existing petroleum exploration and development licences (PEDL) for coal bed methane, covering parts of Cumbria, and planning permissions have been granted on sites near Whitehaven, and Aspatria and North of Carlisle. Planning permissions for appraisal and production were granted near Longtown in March 2008.

Peat

- 10.43** No need has been identified for any additional sites for peat extraction. Given the limited remaining raised bog habitat in the UK, and the importance of those in Cumbria, there is no justification for new peat extraction sites affecting any lowland bogs of high nature conservation interest. Blanket bogs of high nature conservation interest should be similarly protected.
- 10.44** The nature conservation and carbon capture importance of peat bogs is recognised, restoration to peat generating vegetation will be sought wherever it is practicable.

POLICIES**Core Strategy Policy 13****SUPPLY OF MINERALS**

Provision will be made to:-

- meet the Regional Spatial Strategy's apportionment to Cumbria of primary land won crushed rock and sand and gravel production, but
- further apply that apportionment to take account of Cumbria's pattern of quarries and the areas they supply, and its dispersed settlement pattern and transport routes;
- identify areas sufficient to maintain landbanks of permitted reserves for supply areas equivalent to at least seven years sales (using the rolling three-year annual average sales figure) for sand and gravel and at least ten years for crushed rock for general aggregate use, throughout the plan period, and

- recognise that the high and very high specification roadstone quarries, gypsum resources and High Greenscoe brick making mudstone quarry are regionally or nationally important,
- identify sites for the facilities that will be required to enable at least one quarter of the aggregates used within Cumbria to be met by secondary or recycled aggregates.

10.45 A significant change to the sub-regional apportionment figures could require the policy to be reviewed to take account of environmental capacity and the capability of the county to meet the revised apportionments.

Core Strategy Policy 14

MINERALS SAFEGUARDING

Mineral resources will be safeguarded from being unnecessarily sterilised by other developments by identifying:-

- Preferred Areas and/or Areas of Search to enable a landbank of at least seven years sales at the Regional Spatial Strategy's apportionment level for sand and gravel to be maintained throughout the plan period;
- A Preferred Area or Area of Search for extending Ghyll Scaur quarry for nationally important very high specification roadstone ;
- An Area of Search for extending High Greenscoe quarry for brickmaking mudstones ;
- A Preferred Area and/or Area of Search for working additional gypsum and a Mineral Safeguarding Area for the remaining gypsum resources;
- Mineral Safeguarding Areas, and/or Areas of Search, for the indicative sand and gravel and hard rock resources (including high specification aggregates) and shallow coal resources identified by the British Geological Survey,
- Mineral Safeguarding Areas for resources of local building stones.
- Mineral Consultation Areas, which will include buffer zones around the Preferred Areas, Areas of Search, and Mineral Safeguarding Areas.

The need to safeguard other mineral resources, secondary aggregate resources and potential railheads and wharves, will be considered in the Site Allocations Development Plan Document.

10.46 The definition of safeguarding areas will depend on the accuracy of the geological information that is available. For the more specialised minerals this could involve the level of confidence that the resource would meet specification.

Core Strategy Policy 15

MARINE DREDGED AGGREGATES

Planning permission will be granted for developments at appropriate locations, and which do not have unacceptable environmental impacts, that would enable the increased use of marine dredged aggregates as substitutes for land won ones.

DELIVERING THE MINERALS CORE STRATEGY

10.47 In connection with this policy additional considerations have been raised, given the uncertainty about marine habitats/species and predicted sea level rise. The Annual Monitoring Reports will identify any need for the policy to be reviewed, either to take a more pro-active approach or to give less emphasis to these aggregates.

Core Strategy Policy 16

INDUSTRIAL LIMESTONES

Planning permission for the extraction of high purity limestone will not be granted unless it is primarily for non-aggregate uses, and national or regional need has been demonstrated, or where significant benefits would accrue to local communities and/or the environment.

Core Strategy Policy 17

BUILDING STONES

Planning permission will be granted for proposals that would help to provide the full range of local building stones that are needed to maintain Cumbria's local distinctiveness and that have acceptable environmental impacts.

10.48 At the present time no major problems have been identified with the supply of building stones, the Annual Monitoring Reports will keep this under review and, for example, will identify if a more pro-active policy is needed.

Core Strategy Policy 18

OIL AND GAS and COAL BED METHANE

Planning permission will be granted for proposals associated with the exploration and development of onshore and offshore oil and gas and coal bed methane in appropriate locations, and which do not have unacceptable environmental impacts.

The strategic importance of these resources is not yet clear. Annual Monitoring Reports will keep this under review and, for example, identify if a more pro-active policy is needed.

11.1 CHAPTER 11: MONITORING AND IMPLEMENTATION

11.2 The Core Strategy has to include a monitoring and implementation framework, with clear objectives for delivering the overall vision of the plan, for assessing the performance of its policies and evaluating what significant effects they are having on social, environmental and economic objectives. The monitoring framework has to take account of existing monitoring requirements and not duplicate them.

11.3 The County Council is already required to monitor Core Output Indicators for the Annual Monitoring Reports of the Minerals and Waste Development Scheme (MWDS). The ones that are currently required for waste and minerals are :

5a - Production of primary land won aggregates.

5b - Production of secondary and recycled aggregates.

6a - Capacity of new waste management facilities by type.

6b - Amount of municipal waste arising and managed, by management type and the percentage each management type represents of the waste managed.

11.4 Data for the first of these Indicators is provided by the North West Regional Aggregates Working Party (RAWP) Annual Surveys and Reports. In accordance with agreements with the aggregates industry, the detailed survey results are not available for use in this plan and the figures include quarries within the Lake District National Park. These restrictions cause significant problems for the plan preparation process and the County Council has requested quarry operators to provide relevant information on a non-confidential basis for work on the Site Allocations Policies Development Plan Document. At the present time, it appears that the operators are agreeing to this which will improve the information that is available for monitoring purposes. Conditions can also be included in new planning permissions requiring details of annual sales. A particular issue in relation to Core Strategy Policy 13 is the need to monitor sales of high specification roadstones (HSA) and the consequences for Cumbria of any reduction in output from quarries in the Yorkshire Dales National Park.

11.5 The RAWP Annual Reports also provide a limited amount of information about secondary and recycled aggregates.

11.6 For municipal and household wastes the County Council, as the Waste Disposal Authority, is required to publish data for Best Value Performance Indicators (BVPI) and other purposes. BVPI indicators relevant to the MWDF are :-

82a - Total household waste recycled.

82b - Total household waste composted.

82d - Household waste to landfill.

184 - kg of household waste per head of population.

11 MONITORING AND IMPLEMENTATION

- 11.7** All of those figures are available by district council area and they are, therefore, for the whole of the county including the Lake District and Yorkshire Dales National Parks. The figures for those areas will be a relatively small proportion of the county total and it may not be a serious problem for this plan. In any event it is not considered that this is an issue that can be resolved.
- 11.8** The BVPI figures cannot be used directly for Annual Monitoring Report Core Output Indicator 6b, they have to be revised to take account of the whole municipal waste stream not just household waste.
- 11.9** A new set of national indicators will be used from April 2008 and should replace the BVPI figures in the monitoring framework. The most relevant ones for waste, for which the Joint Municipal Waste Management Partnership will provide the figures are :-

191 : Residual household waste per head - (*for 2006/07 this was 195,752 tonnes/498,900 people or 392 kg/head*)

192 : Household waste recycled or composted

193 : Municipal waste

- 11.10** There is less information about commercial and industrial wastes. In 2006 the County Council joined with the other authorities in the North West to commission surveys of commercial and industrial waste arisings and management and also of construction and demolition wastes. The results are included in the Evidence Base. There were problems in providing reliable estimates due to a poor response rate from some types of operator. Improved data for all waste streams will be available from 2008 onwards from the Environment Agency. The main focus for monitoring the management of all waste streams will continue to be the Annual Monitoring Reports prepared by the Regional Technical Advisory Body.
- 11.11** The County Council is also required to report the following Core Output Indicators in the MWDS Annual Monitoring Report :-
- 7 - Number of planning permissions granted contrary to the advice of the Environment Agency on either flood defence or water quality grounds.
- 8 - Changes in areas and populations of biodiversity importance, including:
- (i) change in priority habitats and species (by type); and
 - (ii) change in areas designated for their intrinsic environmental value, including sites of international, national, regional, sub-regional or local significance.
- 9 - Renewable energy capacity installed, by type.
- 11.12** The indicators that the Development Framework's Sustainability Appraisal Scoping Report proposed are set out in the separate Appendices^(xviii) document.

Table 11.1 Monitoring matrix

Theme	Objectives	Core Strategy policies	Generic D C Policies	Subject	Indicators	Data Source/Responsible body	Baseline	Target or milestones	Target source
Climate Change	1	1	DC1, DC2	Carbon emission reduction. Renewable energy generation	Renewable energy installed CO19	planning applications	0	none set	PPS12
					Carbon reduction strategies, incl. road miles.	CCC	0	none set	MWDF
Waste management	2	8, 9, 10, 11, 12	DC4, DC5	Household waste	CO2 emissions / Cumbria	4NW	5,828,282 tonnes -2004	30% reduction of 1990 level by 2020	NWRA
					residual - Kg/head NI 191	Municipal Waste Management Partnership	392 tonnes/year 2006/7	none set yet	LAA
	3				% recycled or composted NI 192	CCC	34.2% - 2006/7	60% by 2012	MWMS
					annual tonnage NI 193		345, 698t - 2006/07	n/a ^(xix)	
				Municipal waste	recovery of value		34.2% - 2006/07	53% by 2010 67% by 2015 75% by 2020	Waste Strategy 2007
				Bio degradable municipal waste	Tonnes landfilled		239,822t 2006/7	110,331 -2010 73,488 - 2015 35,282 -2020	LATS
				C&I waste	Tonnes landfilled	Environment Agency	291,500t - 2004/05	233,200 - 2010 (80% of 2004)	Waste Strategy 2007
				C D & E waste	Tonnes landfilled		227,741t- 2006/07	113,871 - 2012 (50% of 2006)	Waste Strategy 2007
				Hazardous waste	Waste managed Waste landfilled		24,811t ^(xx) 3,711t		
				Landfill	Non-inert void space		5.5m cu m - end 2005		
			Flytipping	Incidents	Defra -	3,791	none set		
			M & W capacity	Clearance costs		£181,102			
				Meeting national policy	planning applications		NDA - strategy and plans		MWDF

xix A target for reducing municipal waste is not appropriate as it is possible that more commercial waste will be managed by the WPA's in future.

xx Hazardous waste figures provided by Environment Agency to Local Planning Authorities for Strategic Environmental Assessment. (The Agency produces two sets of figures for waste managed and for waste consigned).

11 MONITORING AND IMPLEMENTATION

Theme	Objectives	Core Strategy policies	Generic D C Policies	Subject	Indicators	Data Source/Responsible body	Baseline	Target or milestones	Target source
Minerals	4 5 6	13, 14, 15, 16, 17, 18	DC6, DC7, DC9	Land won aggregate production COI 5a	Capacity consented (by type) COI 6b		Major municipal waste treatment facilities by 2011 see policy 7 Additional landfill capacity for south Cumbria by 2012		
					sand & gravel	RAWP	0.79 MT - 2006	0.7 MT	RSS
					crushed rock		2.97 MT - 2006	4.1 MT	MWDF
				HSA		0.69 MT - 2006		MWDF	
				additional reserves consented	planning applications	n/a		MWDF	
				sand & gravel	CCC	13.1 years	maintain 7 yr	MPS1	
crushed rock		38.2 years	maintain 10yr	MPS1					
HSA			maintain 15yr	MWDF					
Economic and community benefits	7 10	2, 5, 6	DC16, DC17	Secondary aggregates	C,D &E waste landfilled ^(xxi)		see above	maintain recycling capacity	MWDF
				Strategic facilities	Municipal waste management facilities Strategic mineral resources	Direct notification CCC	Municipal waste management facilities identified	2 MBT plants operational by April 2011	LATS
				Benefits secured	planning obligations agreed Jobs created	planning applications CCC	1 ^(xxii) no baseline		MWDF MWDF
				Flood risk and water quality	PP granted contrary to EA advice COI 7	planning applications CCC	0	0	PPS25
Environment	8	3, 4	DC13, DC14, DC1, DC2, DC3, DC8, DC10, DC11, DC12, DC14, DC15, DC16	Significant adverse impacts, or enhancements					

xxi Construction and Demolition and Excavation waste landfilled is a proxy indicator for Core Output Indicator 5b, production of secondary and recycled aggregates which has been impossible to ascertain with any accuracy. No annual target is appropriate as it will fluctuate with development cycles. A watching brief will be kept and any increase in the landfill figure will be investigated. A reduction could indicate increased use of recycled aggregates.

xxii The Section 106 unilateral undertaking for the LLWR near Drigg

MONITORING AND IMPLEMENTATION

Theme	Objectives	Core Strategy policies	Generic D C Policies	Subject	Indicators	Data Source/Responsible body	Baseline	Target or milestones	Target source
	9				Change in priority habitat on plan apps with EIA ^(xxiii) Contribution to BAP targets	planning applications CCC	n/a	n/a	PPS9

xxiii This is a proxy indicator for Core Output Indicators 8a and b, which are expected to be changed. The replacement for 8a and b is not specific to sites for minerals and waste developments and is likely to be reported by Natural England and/or in the Regional Spatial Strategy's Annual Monitoring Report.

11 MONITORING AND IMPLEMENTATION

- 11.13** The monitoring matrix above sets out indicators and targets for the Core Strategy policies. To avoid unnecessary complexity and duplication, it collects the policies into broad themes, based on the strategic objectives. It also shows which of the Generic Development Control Policies will contribute to them. At the present time, some of the indicators will be time consuming to collect given the available development control system software.
- 11.14** Some of the indicators may have to be changed in the near future to accord with other monitoring requirements. These include Defra's proposals for monitoring carbon emissions, by local authority area, for its climate change indicators. There are also the Government's proposals, in Waste Strategy 2007, for developing a greenhouse gas emissions performance indicator for local authority performance on waste. These indicators would be directly relevant to Core Strategy Policy 1.
- 11.15** Defra has also proposed (July 2007) a local authority performance indicator for Improved Local Biodiversity. This would measure the proportion of local sites where a positive biodiversity outcome is delivered against targeted actions within the Biodiversity Action Plan. Such an indicator would be directly relevant to Core Strategy Policy 4 and Core Strategy Policy 5. As mentioned in paragraph 3.46, work is progressing on a clearer definition of Cumbria's biodiversity and on relating species to appropriate habitat types, ecological networks and geographic areas of the county. This work is needed to enable a meaningful monitoring system to be set up for these policies.
- 11.16** Indicators that are already required are used wherever possible, the only additional indicators are ones considered necessary to assess the performance of the plan and its policies. The targets are the most demanding ones that have been identified elsewhere in this Core Strategy.
- 11.17** In addition to the indicators, the County Council's Senior Monitoring and Enforcement officer has a programme of site visits, at which conditions placed on planning applications are checked and action taken where necessary. His reports will provide useful information to assess the performance adequacy of the Framework's policies.
- 11.18** Indicators produced by other regulators, such as fly tipping incidents, will be monitored as a watching brief, with any increases investigated to ensure that it is not as a result of inadequate waste infrastructure in the locality. Others, such as the non-inert landfill void space available and the success of waste minimisation and diversion from landfill are crucial for the plan. If Commercial and Industrial waste growth is checked, and if treatment, re-use and recycling, does succeed in reducing the landfill requirement, then the overall landfill requirement for the plan period will be re-assessed. Further information will be available through the North West Regional Technical Advisory Body over the period of the plan.
- 11.19** The Mechanical and Biological Treatment plants for municipal waste treatment need to be operational by 2011 if the Landfill Allowance Trading Scheme targets are to be met for diverting biodegradable municipal waste from landfill.
- 11.20** The need for minerals extraction, and whether the plan has facilitated sufficient permitted reserves, will be assessed against sub-regional apportionments, which may be amended during the plan period. Such changes will be recorded in Annual Monitoring Reports of the Regional Aggregates Working Party and of this Framework.

Alpha Activity (radioactivity) This takes the form of particles (helium nuclei) ejected from a decaying atom. Alpha particles cause ionisations in biological tissue which may lead to damage; this is more significant if inhaled or swallowed. The particles have a very short range in air, typically about 5 cm.

Annual Monitoring Report (AMR) Part of the Local Development Framework, this assesses the implementation of the Local Development Scheme and the extent to which policies in the Local Development Documents are being successfully applied.

Areas of Coal Working Notified by the Coal Authority These are the areas that have been notified to local planning authorities for the purposes of Article 10 of the Town and Country Planning (General Development Procedure) Order 1995. The Coal Authority has provided Standing Advice about potential hazards for development proposals within these areas and wishes to be consulted about planning applications accompanied by Environmental Impact Assessment or for mineral working.

Area of Outstanding Natural Beauty (AONB) A designation made, under the National Parks and Access to the Countryside Act 1949, to an area of countryside, the natural beauty of which it is desirable to conserve and enhance.

Areas of Search Areas, that are broader than Preferred Areas, where knowledge about mineral resources may be less certain, but within which planning permissions for particular sites could be granted to meet any shortfalls in supply, if suitable planning applications are made.

Becquerels (Bq) This is the standard international unit of radioactivity equal to one radioactive transformation or decay per second. The multiples of becquerels that are commonly used to define radioactive waste activity are - kilobecquerels (kBq) equal to one thousand Bq; megabecquerels (MBq) equal to one million Bq; and gigabecquerels (GBq) equal to one thousand million Bq.

Beta Activity (radioactivity) This takes the form of particles (electrons) emitted during radioactive decay from the nucleus of an atom. Beta particles cause ionisation in biological tissue which may lead to damage. Most beta particles can pass through the skin, but a few millimetres of light material such as aluminium, will generally shield against them.

Biodiversity The range and diversity of life (including plants, animals and microorganisms), ecosystems and ecological processes.

Brownfield Land/Sites Previously developed land which can be redeveloped for other uses.

Carbon offsetting. A net reduction in carbon emissions resulting from a project undertaken to compensate for emissions elsewhere.

Core Strategy A Development Plan Document which sets out the spatial vision and objectives for a specific period, with the strategic policies necessary to deliver that vision.

Cumbria Local Strategic Partnership (LSP) The Cumbria Strategic Partnership (CSP) is made up of all partnerships working in the County towards the Sustainable Community Strategy, overseen by a few key partners.

Development Plan For the Plan area this will comprise the Joint Cumbria and Lake District Structure Plan, the Minerals and Waste Development Framework and the Local Development Frameworks for each district in Cumbria. The North West Regional Spatial Strategy has replaced some of the Joint Structure Plan policies.

GLOSSARY

Evidence Base The Evidence base is a collective term for the documents, studies, reports and community feedback used to support the Framework.

Flood Zone Flood zones refer to the probability of flooding (ignoring the presence of defences).

- Flood Zone 1 = low probability
- Flood Zone 2 = medium probability
- Flood Zone 3a = high probability
- Flood Zone 3b = within functional flood plain.

Front Loading Engaging/consulting with the community at the start of the plan preparation process.

Gamma Activity (radioactivity) An electromagnetic radiation similar in some respects to visible light, but with higher energy. Gamma rays cause ionisation in biological tissue which may lead to damage. These rays are very penetrating and are attenuated only by shields of dense metal or concrete, perhaps some metres thick. Their emission during radioactive decay is usually accompanied by beta or alpha activity.

Government Office for the North West (GONW) The regional office for central government departments.

Greenfield Land/Sites Land or sites which have not previously been developed or which were developed but have been restored and/or now blended back into the landscape.

Greenhouse gas (GHG) Emissions Greenhouse gases "trap" energy radiated by the Earth within the atmosphere. They include carbon dioxide, methane, nitrous oxide and fluorinated gases. Carbon dioxide is the main greenhouse gas in the UK.

High Level Radioactive Waste Radioactive waste that is so active that it is self-heating and requires cooling.

Infrastructure Basic services necessary for development to take place, for example, roads, electricity, sewerage, water, education and health facilities.

Intermediate Level Radioactive Waste Is sufficiently radioactive to require shielding during its handling and transportation.

Ionisation This process occurs when radiation (alpha, beta and gamma activity) interacts with matter, which can cause atoms and molecules to become unstable. Ionisation from radiation is the first stage in possible change or damage within biological tissue.

Life cycle analysis (of greenhouse gas emissions) An approach to measuring the impact on climate change across the supply chain for a product, including those from fossil fuel burnt in extraction, processing, transport, and disposal.

Local Area Agreement LAAs set out the priorities for a local area agreed between central government and a local area (the local authority and local strategic partnership) and other key partners at the local level e.g. Cumbria LAA

Low carbon energy supplies Use technology that can help reduce carbon emissions. They can include combined heat and power plants and the use of heat that would otherwise be wasted. They are usually referred to in conjunction with renewable energy supplies.

Local Development Document A collective term given to the Development Plan Documents and Supplementary Planning Documents.

Local Development Framework (LDF) The name for the portfolio of Local Development Documents. These consist of Development Plan Documents, Supplementary Planning Documents, a Statement of Community Involvement, the Local Development Scheme and Annual Monitoring Reports, produced by the Local Planning Authority. The Minerals and Waste Development Framework is an LDF dealing only with minerals and waste issues.

Local Development Scheme (LDS) This sets out the programme and timetable for the preparation and production of Local Development Documents.

Low Level Radioactive Waste. has activity levels not exceeding 4 gigabecquerels/tonne (GBq/te) of alpha or 12 GBq/te of beta gamma activity. One bequerel is equal to the disintegration of one radionuclide per second. A GBq is 1000,000,000 bequerels.

Mineral Safeguarding Areas Areas intended to safeguard proven deposits of minerals which are, or may become, of economic importance within the foreseeable future, from unnecessary sterilisation by surface development.

Mineral Consultation Areas Land with potential for mineral extraction, where county and district councils in two-tier planning areas need to co-operate in the exercise of their planning powers. They are a mechanism for consultation between the county and district councils, about development which would be likely to affect the winning and working of minerals, and also about how mineral working could affect other existing or proposed land uses. They can cover all, parts of, or marginally more than a Mineral Safeguarding Area. It is anticipated that they will include the Minerals Safeguarding Areas plus a buffer zone around them.

National Park An area designated under the National Parks and Access to the Countryside Act 1949 (as amended). The Cumbria Minerals and Waste Development Framework does not cover land within the county of Cumbria that is within either the Lake District National Park or the Yorkshire Dales National Park.

North West Development Agency (NWDA) The body that oversees the economic development of North West England, and also supports regeneration activity across the Region.

North West Regional Assembly (NWRA) (Now known as 4NW).The Regional Planning Body that considers regionally important planning matters for North West England, and produces the North West Regional Spatial Strategy. It is expected to combine with the NWDA in 2008/9.

Preferred Areas Areas of known mineral resources where planning permission for minerals extraction might reasonably be anticipated, subject to tests of environmental acceptability.

Radioactive Wastes

The categories of radioactive waste that are defined in the UK are:

- High Level Waste (HLW), more than 12,000 Becquerels/gram and significantly heat generating
- Intermediate Level Waste (ILW), more than 12,000 Becquerels/gram but not significantly heat generating

GLOSSARY

- Low Level waste (LLW), having a radioactive content that does not exceed 4,000 Becquerels/gram (4 gigabecquerels per tonne) of alpha or 12,000 Becquerels/gram (12 gigabecquerels per tonne) of beta/gamma radiation
- Very Low level waste (VLLW), is waste at the lower end of the LLW scale that is contaminated with a very small amount of activity (<4Bq/g).

Regional Aggregates Working Partnership (RAWP) A Regional Planning Body organisation which includes representatives of central and local government and the minerals industry that considers the production and need for aggregates in the region. It produces annual reports and a more comprehensive survey is conducted and reported every 4 years.

Regional Spatial Strategy (RSS) This sets out the region's strategic policies, in relation to the development and use of land and forms part of the development plan for each local planning authority area.

Regional Technical Advisory Body (RTAB) A Regional Planning Body organisation that includes representatives of central and local government and industry. It considers waste management in the region, producing a comprehensive report each year to inform planning authorities at all levels.

Renewable Energy/Resources Energy forms/resources that occur naturally and repeatedly in the environment, such as wind, waves and solar power and also bio-mass. Combustible or digestible waste materials are also regarded as renewable sources of energy.

Spatial Planning This moves the focus from a traditional land-use planning approach based on the regulation and control of land to a more inclusive approach which aims to ensure the best use of land by assessing competing demands. To carry this forward social, economic and environmental factors are taken into account in producing policies or decisions which promote sustainable development and influence the nature of places and how they function.

Statement of Community Involvement (SCI) Sets out the standards which local authorities will achieve with regard to involving individuals, communities and other stakeholders in the preparation of Local Development Documents and in development control decisions. The Council's Statement of Community Involvement was adopted in January 2006.

Strategic Environmental Appraisal (SEA) A generic term used to describe environmental assessment, as applied to plans, policies and programmes. The European 'SEA Directive' (2001/42/EC) requires a formal 'environmental assessment of certain plans and programmes, including those in the field of planning and land use'.

Strategic Flood Risk Assessment Highlights the potential level of risk of flooding on land throughout the area.

Sustainable Development There are numerous definitions of sustainable development. The most widely agreed definition comes from the 1987 Brundtland report, namely: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

Sustainability Appraisal (SA) A tool for appraising policies and proposals, to ensure that they reflect sustainable development objectives based on a range of social, economic and environmental factors. This is required for all Local Development Documents.

Sustainable Community Strategy The high level visioning document for an area, dealing with wide social, economic and environmental issues that affect the County or District. In Cumbria the Cumbria Strategic Partnership produces the Cumbria Sustainable Community Strategy, and this builds on the Sustainable Community Strategies produced by Local Strategic Partnerships in each District. These documents guide the direction of all Local Development Frameworks including the Minerals and Waste Development Framework.

KEY DIAGRAM

The Key Diagram identifies strategic locations for major new waste facilities, and key locations for supplying gypsum, brickmaking mudstones and very high specification roadstones. See Core Strategy Policy 7. .

It also highlights areas with a national or international environmental designation, see Core Strategy Policy 4 and the broad areas identified in the current (1982) Mineral Consultation Areas see paragraph 10.5. .

Key Diagram

