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**TOWN AND COUNTRY PLANNING  
(LOCAL PLANNING) (ENGLAND) REGULATIONS 2012**

**REGULATION 19 CONSULTATION**

**DRAFT CUMBRIA MINERALS AND WASTE LOCAL PLAN  
2013 to 2028**

**FEBRUARY 2013**

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## Preface

This is a consultation about the Cumbria Minerals and Waste Local Plan. This plan has to identify what waste management facilities and minerals developments Cumbria will need by 2028 and to indicate appropriate locations for them. It includes strategic policies, policies for assessing planning application proposals, it identifies sites and it includes a Policies Map.

The Local Plan strategic policies should cover all of the significant and relevant strategic issues that face Cumbria and state what the Local Plan aims to do. It has to demonstrate that it accords with national policies and takes account of relevant Regional Spatial Strategy policies, before they are revoked.

The Local Plan applies to those parts of Cumbria that are outside of the Lake District and Yorkshire Dales National Parks.

Comments are being invited on this draft of the Local Plan and should relate to whether it is considered to be “sound”.

The National Planning Policy Framework’s definition of soundness (paragraph 182) is that the Local Plan is:-

- **Positively prepared** – the plan should be prepared based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including unmet requirements from neighbouring authorities where it is reasonable to do so and consistent with achieving sustainable development;
- **Justified** – the plan should be the most appropriate strategy, when considered against the reasonable alternatives, based on proportionate evidence;
- **Effective** – the plan should be deliverable over its period and based on effective joint working on cross-boundary strategic priorities; and
- **Consistent with national policy** – the plan should enable the delivery of sustainable development in accordance with the policies in the National Planning Policy Framework.

Having taken account of comments that are received during this consultation period, the Council will decide whether to submit the draft plan to the Secretary of State or to amend it. If it is amended, there will have to be another round of consultations before it can be submitted. Plans that are submitted to the Secretary of State are examined by an independent Inspector. That examination process usually includes hearing in public sessions at which objectors can make their points directly to the Inspector.

Comments are invited on the draft Local Plan and should be sent in by **Monday 8 April 2013**. Please send comments by email to [mwlp@cumbria.gov.uk](mailto:mwlp@cumbria.gov.uk) or by post to Planning and Sustainability, County Offices, Kendal LA9 4RQ.

Our phone number for further information is 01539 713403.

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# 1. INTRODUCTION

- 1.1 This consultation is about the Cumbria Minerals and Waste Local Plan policies that the County Council currently intends to submit to the Secretary of State.
- 1.2 The County Council is the local planning authority for mineral working and waste management developments. In this role, it is responsible for determining planning applications and also for preparing planning policy for those types of development.
- 1.3 Without the right waste management facilities and adequate supplies of minerals, other sectors of the economy could not function properly. They are essential for the county's development and regeneration initiatives, its low carbon agenda and for maintaining and improving the basic infrastructure of roads, buildings and other facilities. The minerals and waste industries also provide important direct local economic benefits, including jobs.
- 1.4 The potential locations of mineral workings are largely determined by geology and, because of this, other parts of the North West, and of the country, rely on Cumbria for supplies of some minerals.
- 1.5 Until now, the County Council's minerals and waste planning policies have been set out in the Cumbria Minerals and Waste Development Framework documents. These comprise the Core Strategy and Generic Development Control Policies, which were adopted in April 2009, and the draft Site Allocations Policies and Proposals Map, upon which there were consultations in 2009 to 2011.
- 1.6 The latter two documents were adopted by the Council in January 2011, but they were subsequently quashed by the High Court. They were resubmitted to the Secretary of State early in 2012 and were nearing the end of their preparation process when the Government published new national planning policies and changed the development plan system.
- 1.7 In view of the implications of the new national policies and the new system of Local Plans, the Council withdrew the Site Allocations Policies and Proposals Map from their Examination by the Planning Inspectorate. This was to enable work to commence without delay on this Cumbria Minerals and Waste Local Plan.
- 1.8 The National Planning Policy Framework (NPPF) was published in March 2012 and requires Local Plans to be prepared with the objective of contributing to the achievement of sustainable development. They have to be consistent with the principles and policies set out in the NPPF, including the presumption in favour of sustainable development.
- 1.9 For plan making, this presumption in favour of sustainable development is stated, in NPPF paragraph 14, to mean that:-
  - Local planning authorities should positively seek opportunities to meet the development needs of their area;
  - Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless
    - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the NPPF, taken as a whole; or

- specific policies in the Framework indicate development should be restricted.<sup>1</sup>

- 1.10 That paragraph goes on to state that, for decision taking, where the development plan is absent, silent or relevant policies are out of date, planning permission should be granted unless the two criteria set out above apply.
- 1.11 Whilst the Minerals and Waste Development Framework (MWDF) comprised a folder of documents, the Local Plan will be a single document. It has three sections – strategic policies, development control policies and site allocations policies together with a Policies Map. The work on the Local Plan is a natural progression of the earlier work, which will be taken into account and updated as necessary.
- 1.12 One of the main priorities is to update the policies relating to lower activity level radioactive wastes. The MWDF Core Strategy was prepared between 2005 and 2008. This was a time which led up to the development of national policy and strategy relating to these wastes and when local policy was hampered by too many uncertainties about them.
- 1.13 The wider strategic context of the plan as a whole has also changed significantly. There is not only the need to be consistent with NPPF's new national policies, but also the need to assess whether earlier national policies, which have now lost that status, and regional policies, which the Government intends to revoke, need to be reflected in local development plans.
- 1.14 The NPPF does not contain specific waste policies because national waste policy is to be published in 2013 as part of the National Waste Management Plan for England. Until then, Planning Policy Statement 10 – Planning for sustainable waste management, remains in force.
- 1.15 The challenge for this plan is to provide for the sustainable minerals and waste management developments that will be needed in Cumbria by 2028 and beyond, whilst helping to achieve sustainable consumption and production, living within environmental limits, protecting the quality of life of present and future generations, and ensuring the prudent use of natural resources.

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<sup>1</sup> For example, those policies relating to sites protected under the Birds and Habitats Directives (see NPPF paragraph 119) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, Heritage Coast or within a National Park (or the Broads Authority); designated heritage assets; and locations at risk of flooding or coastal erosion

# **PART 1**

## **STRATEGIC POLICIES**

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## 2. OVERALL STRATEGY

### Where we are now

- 2.1 As stated in the Introduction, 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. We have some of the country's best environments which attract 40 million visitors per year. These environments contrast with major industrial landscapes and there are also pockets of the most deprived wards in Europe. Some areas had experienced soaring house prices, others housing market collapse. Whilst the population has increased, it is ageing and many young people are leaving.
- 2.3 Given the scale and depth of economic problems facing economies worldwide, it is inevitable that Cumbria has also experienced economic difficulties over the last few years. To some degree, the structure of Cumbria's economy, with major employers in the defence and nuclear sectors, has provided some insulation from economic shock. However, Cumbria still faces major challenges to achieve its economic potential and to build on its strengths and natural assets. That potential includes the competitive advantage offered by the M6 corridor and West Coast Mainline transport routes, its global reputation and expertise in nuclear and clean technologies, its strengths in the growing advanced manufacturing sector and the county's stunning environment.
- 2.4 Details relating to the economy of Cumbria were set out in Cumbria's Economic Ambition<sup>2</sup>, and are included in Appendix 5.
- 2.5 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.
- 2.6 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 had access to the facilities that were seen to be necessary at the time. There has, however, been a shortfall in landfill capacity in the south of the county, where residual waste has been sent to landfill in Lancashire.
- 2.7 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.
- 2.8 Levels of traffic through its three remaining operational ports of Barrow, Workington and Silloth, have steadily declined. Carlisle airport does not currently operate as a commercial airport, although there are plans for its development.

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<sup>2</sup> Evidence Base document reference LD208

- 2.9 The Sellafield/Windscale complex in West Cumbria has one of the world's largest single concentrations of nuclear facilities. The Low Level Radioactive Waste Repository near Drigg village provides a national facility; its current planning permission is for storage of wastes until 2018. A planning application has been submitted for the construction of additional facilities for disposing of around 1 million cubic metres of Low Level Wastes.
- 2.10 Employment in the area's traditional heavy industries declined some years ago and there is now the prospect that nuclear decommissioning could mean the future loss of many jobs from Sellafield.
- 2.11 The Cumbria Local Economic Assessment (November 2010) brought together and interpreted a single evidence base on the recent, current and (as far as can be reasonably ascertained) the future operations of Cumbria's economy.<sup>3</sup>

### **Where we need to be**

- 2.12 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, transport routes and the strengths of some sectors of the economy.
- 2.13 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.
- 2.14 The Cumbria Economic Strategy 2009 - 2019 (February 2009)<sup>4</sup> provides the vision for Cumbria to be "an energised and healthy environment, and one of the fastest growing economies in the UK. Building on the county's major assets, including its unique landscape and natural resources, skills base in nuclear energy and marine engineering and its attractiveness as a place to live, work and visit; the delivery of a range of innovative and sustainable projects will secure a better quality life for current and future generations."
- 2.15 It is expected that the Cumbria Local Enterprise Partnership (LEP) will produce an updated economic strategy for Cumbria in early 2013, which will align with the County Council's Economic Ambition (September 2012). The LEP are expected to produce a more detailed Local Growth Plan later in 2013.
- 2.16 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 was commissioned by the West Cumbria Strategic Forum and sought a long term perspective to address issues and realise opportunities.

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<sup>3</sup> <http://www.cumbriaobservatory.org.uk/economy/cumbriaeconomicassessment.asp>

<sup>4</sup> Evidence Base document reference LD137

- 2.17 The vision of the Masterplan, which became Britain's Energy Coast<sup>5</sup>, was 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.
- 2.18 The West Cumbria Blueprint<sup>6</sup> aims to provide the framework for the next 15 years, to guide the prioritisation and investment of Britain's Energy Coast West Cumbria, as well as other key partners, to maximise economic diversification and growth.
- 2.19 The Blueprint is an ambitious, aspirational document targeted at gaining the interest of Government and investors and seeks to build on the area's assets to maximise future economic opportunities. In doing so, it aims to contribute to the nation's future energy needs and deliver the Government's low carbon agenda.
- 2.20 The document recognises that for West Cumbria to realise its full economic potential, investment is required in a wide range of complementary activities and infrastructure that contribute to the area's quality of life. However, the Blueprint does not attempt to address these "wider conditions", the focus of the document is economic, it is not intended to be a broad regeneration or community strategy or cover the wider responsibilities of other partners.
- 2.21 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.
- 2.22 European and national policies require that the amounts of waste going to landfill are progressively reduced. The first step in the waste hierarchy is to minimise the amount of waste that is produced in the first place, followed by increasing the rates of re-use, recycling, composting and recovery of value from waste.
- 2.23 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, such as those used for the county's municipal waste, often produce renewable fuels.

### **Vision and overall strategy**

- 2.24 The spatial vision and the overall strategy of the Local Plan take account of the above matters and are set out in Box 2.1 and Box 2.2 overleaf.

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<sup>5</sup> Evidence Base document reference LD65

<sup>6</sup> Evidence Base document reference LD212

## BOX 2.1

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** 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 one of 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 and to make a reasonable contribution to managing ones from elsewhere that require specialist facilities but do not have adverse social and economic impacts.

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 practicable savings in greenhouse gas emissions and fossil energy demand 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 make 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.

## **BOX 2.2**

### **Local Plan overall strategy**

#### **By 2028:-**

- The Local Plan's provisions for waste management facilities and for supplies of minerals will have made a significant contribution to the county's economy and will have aided development and regeneration initiatives.
- Initiatives will have been successful in changing behaviours in order to meet, or exceed, targets for driving wastes up the waste hierarchy and minimising wastes sent to landfill, in accordance with the national zero waste agenda.
- The appropriate waste management facilities will have been provided in the right locations and at the right time, as far as practicable near to where it is produced and with options for non-road transport.
- There will have been a steady and adequate supply of aggregates in accordance with the Local Aggregates Assessments and of other minerals, in accordance with the National Planning Policy Framework.
- Maximum advantage will have been taken of the scope for using alternatives to primary land-won aggregate minerals.
- Waste management and minerals developments will have secured significant enhancement of Cumbria's environmental assets and local amenity.
- Prudent and environmentally sensitive use of Cumbria's minerals and waste management resources will have achieved an appropriate balance between their economic potential and the protection of the environment, in accordance with the principles of sustainable development.

### **Strategic objectives**

2.25 The overarching context of the Local Plan is that it must be consistent with the new national planning policies, which are set out in the National Planning Policy Framework (NPPF, March 2012) and its presumption in favour of sustainable development. It must, therefore, also reflect an integrated spatial approach that accords with the UK's Sustainable Development Strategy "Securing the Future"<sup>7</sup>. That strategy sets out the five guiding principles of sustainable development:-

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

2.26 Local Plans are now required to include a policy that relates to the National Planning Policy Framework:-

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<sup>7</sup> Securing the Future: delivering UK sustainable development strategy, DEFRA, March 2005

### **POLICY SP1 Presumption in favour of sustainable development**

When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will always work proactively with applicants jointly to find solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the policies in this Local Plan (and, where relevant, with policies in Neighbourhood Plans) will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are out of date at the time of making the decision, then the Council will grant permission unless material considerations indicate otherwise – taking into account whether:

- Any adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or
- Specific policies in that Framework indicate that development should be restricted.

2.27 The policies in the NPPF constitute the Government's view of what sustainable development means for the planning system. The three dimensions to sustainable development are stated to give rise to a number of roles for the planning system to perform:-

- **an economic role** – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and co-ordinating development requirements, including the provision of infrastructure;
- **a social role** – supporting strong, vibrant and healthy communities by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and
- **an environmental role** – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

2.28 This Plan can help ensure that these roles can be successfully carried out. This is by making adequate positive provision for the construction materials and the waste management facilities that are needed for the development of identified housing and other land and provision of infrastructure and through its environmental policies.

2.29 Having taken account of the above principles and roles, the strategic objectives that are considered to be appropriate and relevant for the Local Plan are set out in Box 2.3.

### **BOX 2.3 Strategic objectives**

**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 practicable 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.

### 3. STRATEGIC POLICIES FOR WASTE MANAGEMENT

- 3.1 Over recent years, significant progress has been made in changing our attitudes towards waste and how we manage it. A range of new waste management facilities has started to be provided, which manage waste in more sustainable ways and help to deliver the strategic vision of this plan.
- 3.2 The economic report that accompanied the 2011 Government Review of Waste Policy<sup>8</sup> describes the changes in the management of wastes. For local authority collected waste over the decade to 2010/11, the proportion that was landfilled fell from nearly 80% to below 50% and recycling increased from less than 15% to over 40%. There is a similar picture for commercial and industrial waste, with the landfill share falling by around half and recycling increasing from around 30% to nearly 50%.
- 3.3 These strategic policies set out what 21st century facilities are still needed, in accordance with the requirements of national policy and local circumstances. The Local Plan seeks to ensure that there are sufficient opportunities for developing new waste management facilities of the right type, in the right place and at the right time.
- 3.4 The policies include criteria for identifying broad locations and for allocating sites or areas. One of the main principles is that waste management facilities should be located as near as practicable to the communities or local market areas that they would serve.

#### Where we are now

- 3.5 The overarching national policy context is the Government's commitment to working towards a zero waste economy, which includes going further and faster in diverting waste away from landfill towards greater recycling, recovery and re-use.
- 3.6 Defra publishes annual statistics about waste arisings and management methods<sup>9</sup>. The relative proportions of waste arisings in England in 2010, as estimated by Defra, are:-
- |                                     |                           |
|-------------------------------------|---------------------------|
| • Local authority collected waste   | 32.5 Mt. (million tonnes) |
| • Commercial waste                  | 23.8 Mt.                  |
| • Industrial waste                  | 24.1 Mt.                  |
| • Construction and demolition waste | 47.36Mt                   |
| • Excavation waste                  | 30.02Mt                   |
- 3.7 Defra also publishes figures for municipal waste for each local authority. For Cumbria, the figure for 2011/12 is just over 271,000 tonnes. This waste stream includes household waste, plus the relatively small amounts of commercial and industrial wastes that are collected by the local authorities. Nearly 48% was sent for recycling, re-use or composting (129,717 tonnes) and just over 46% was landfilled (125,426 tonnes).
- 3.8 The Defra figures show that 498kg per person of household waste were collected in Cumbria in 2011/12. Residual household waste was 562.29kg/household.

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<sup>8</sup> The economics of waste and waste policy, DEFRA, June 2011

<sup>9</sup> <http://www.defra.gov.uk/statistics/environment/waste/>

- 3.9 Two mechanical and biological treatment (MBT) plants have now been built, as part of the long-term contract for managing Cumbria's municipal waste. The one at Hespin Wood near Carlisle came into operation in 2012 and the other one, at Barrow in Furness, will begin operating in 2013.
- 3.10 Work is continuing to secure further improvements in municipal waste collection and management systems. This has the overall aim of diverting as much waste as possible from landfill. It could involve revised ways of collecting recyclables and food waste and new transfer and Materials Recovery Facilities. At the present time, no decisions have been made about the specific facilities that should be provided or where they should be. This matter will need to be kept under review and may lead to a need for a partial review of the Local Plan.
- 3.11 The most recent figures for commercial and industrial wastes are from the Environment Agency's 2009 sample survey<sup>10</sup>. This recorded arisings in Cumbria, excluding waste water, of 632,600 tonnes of which 48% (305,300 tonnes) were recycled and 16% (99,500 tonnes) were landfilled.
- 3.12 The survey also looked at the opportunities to divert the wastes from landfill. For the north west as a whole, the survey identified that of the 1.43 million tonnes of these wastes that were landfilled:-
- 14% were recyclable,
  - 78% were potentially recyclable after further treatment, such as separation in a Materials Recovery Facility (MRF),
  - 77% were recoverable to be used as a fuel, and
  - 8% were potentially recoverable as a fuel.

There is, obviously, overlap between the recyclable and recoverable materials, but the figures show the considerable potential, that already exists, to divert commercial and industrial wastes away from landfill.

- 3.13 The Environment Agency Waste Data Interrogator indicates a continuing decrease in the amount of waste that is landfilled. For Cumbria, the amount of non-inert, non-hazardous waste that was landfilled virtually halved from 542,000 tonnes in 2006 to 274,000 tonnes in 2011.
- 3.14 An issue with waste statistics, is that figures for arisings are given in tonnes, whilst figures for landfill capacity are given in cubic metres. The Environment Agency's conversion factor for non-inert, non-hazardous wastes is 1.2 tonnes/cubic metre.
- 3.15 The figures that the landfill operators' provided to the Environment Agency for remaining non-inert landfill capacity in 2011 give a total of 6.5 million cubic metres. The Environment Agency assumes that 25% of total void space will be taken up by engineering and cover materials. The capacity that was given for each of the landfills was:-

Bennett Bank	164,809 m <sup>3</sup>
Flusco	3,035,129 m <sup>3</sup>
Hespin Wood	1,924,342 m <sup>3</sup>
Lillyhall	1,375,693 m <sup>3</sup>

<sup>10</sup> Evidence Base document reference LD147

- 3.16 In the immediate future, there will be a significant reduction in landfilling, now that the first of the MBT plants for municipal waste is operational and the other will be in 2013. No household waste will then be sent directly to landfill.

## **Where we need to be**

### **Future waste arisings**

- 3.17 The following paragraphs demonstrate the need for additional treatment facilities to drive wastes up the waste hierarchy, in accordance with Government policy, and that existing landfill capacity far exceeds the volume that will be needed over the plan period. The trends in the management of household, commercial and industrial wastes, that have been described in the previous section, are expected to continue, but the rate of improvement will slow as incremental gains become more difficult and costly to achieve.
- 3.18 It is noted that the date for delivering the new National Waste Plan has been revised to the end of 2013 and that the date for publishing formal projections of waste arisings will be linked to European reporting obligations. The latest available estimates of future waste arisings in England are from the economics report<sup>11</sup> that accompanied the 2011 Government Review of Waste Policy and which was updated in March 2012.
- 3.19 For household waste, the central estimate in that report was based on past events and trends to reflect the effect of the recession and the preceding apparent success in decoupling waste arisings from economic growth. This projection is to 2020 and basically shows a gradual increase in arisings from 2012/13, but only to the levels of 2008/9.
- 3.20 For commercial and industrial waste, the projections are to 2030. There are major uncertainties and gaps in the evidence for these waste streams and the projections are less robust than those for household waste.
- 3.21 The figures show a declining trend in commercial and industrial waste arisings, especially since 2006. This decline was driven initially by sharp declines in industrial waste, although in 2008 and 2009 it was driven entirely by a decrease in commercial waste. The 2009 figures have to be treated with caution because they were recorded in the midst of recession. However, the report also identifies earlier substantial annual increases in the efficiency of resource use by industry, which may be a factor in the decreases in waste and may continue.
- 3.22 The central forecast for these waste streams for the 2010 to 2030 period is of a 0.2%/year decline for commercial arisings and +0.57%/year growth for industrial arisings. The basic conclusion is that these two waste streams combined will remain slightly below the volumes of 2008 over the period 2010 to 2030<sup>12</sup>.
- 3.23 The economic report also looks at possible long term trends using four contrasting world scenarios. These are described as - current trends continuing; a “deep green” behavioural shift to a sustainable approach; a high-tech approach to solving waste and resource problems; and unlimited wastefulness.
- 3.24 As would be expected, these different scenarios produce significantly different projections of waste arisings over the period 2010 to 2030. For household waste, the projections for 2010 to 2020 range from a decrease in arisings of

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<sup>11</sup> The economics of waste and waste policy, DEFRA, June 2011

<sup>12</sup> Figure A.6 in the above report

13.5% to an increase of 7%, and for 2010 to 2030, range from a decrease of 22.4% to an increase of 15.8%.

- 3.25 Similarly, for commercial and industrial wastes, the figures given in these projections range from a decrease 2010 to 2020 of 0.4% in arisings to an increase of 11%, and for 2010 to 2030, range from a decrease of 7% to an increase of 26%.
- 3.26 The report also looked at the implications of the four scenarios for the way commercial and industrial wastes would be managed. The extrapolated data showed that between 5% and 28% of commercial and industrial waste would be likely to be landfilled by 2030<sup>13</sup>.
- 3.27 Conclusions that can be drawn from such uncertainties are the importance of continued monitoring of waste arisings, preferably with improvements in data for the commercial and industrial waste streams. Regular updates will need to be included in the annual reports on the performance of the Local Plan.
- 3.28 For the Local Plan, it is considered that the central estimates/forecasts described in the above paragraphs are the appropriate ones to use, but that trends should be monitored closely. This means planning, until trends demonstrate otherwise, on the basis that volumes of household, commercial and industrial wastes are unlikely to increase significantly during the plan period, but that their management methods will continue to change to reflect the waste hierarchy and national targets. That includes the Government's zero waste commitment, particularly zero waste to landfill.
- 3.29 Population growth in Cumbria has already been taken into account in the long-term municipal waste management contract. The estimates based on Office for National Statistics figures and POPGROUP analysis<sup>14</sup> for 2009 to 2029, range from a decrease of 2.3% to an increase of 8.9%. These are equivalent to a fall of around 11,500 people to an increase of around 44,500. An increase of 4.2% in households, just over 9,100, is estimated for 2010 to 2020.

## Targets

- 3.30 The Landfill Directive targets for reducing the amount of waste sent to landfill sites in the UK, which were repeated in National Waste Strategy 2007<sup>15</sup>, are:
- By 2010, the waste sent to landfills should be 75% of that sent in 1995. (*This target was met*)
  - By 2013, the waste sent to landfills should be 50% of that sent in 1995.
  - By 2015, the waste sent to landfills should be 35% of that sent in 1995.

In order to achieve these, 'Waste Strategy 2007' includes the following targets for recovery of value from municipal waste, this includes recycling, composting, recovery of energy and other forms of material recovery:

- Recover 53% of value from waste by 2010
- Recover 67% of value from waste by 2015
- Recover 75% of value from waste by 2020

The national recycling targets for household waste in Waste Strategy 2007 are:

<sup>13</sup> Figure A.9 in the Defra economic report

<sup>14</sup> [www.cumbriaobservatory.org.uk/Population/populationforecasts.asp](http://www.cumbriaobservatory.org.uk/Population/populationforecasts.asp)

<sup>15</sup> <http://archive.defra.gov.uk/environment/waste/strategy/strategy07/index.htm>

- 40% of household waste should be recycled or composted by 2010
- 45% of household waste should be recycled or composted by 2015
- 50% of household waste should be recycled or composted by 2020

3.31 The national strategy also has a target to reduce the amount of household waste not re-used, recycled or composted to 225kg/head by 2020. This seems likely to be achieved in Cumbria. The figures in paragraphs 3.7 and 3.8 above, of 498kg/person household waste collected and 46% of municipal waste landfilled, equate to 229kg/person not re-used, recycled or composted in 2011/12. That figure will reduce significantly once both of the MBT plants are operating.

### **How much waste and how many facilities?**

- 3.32 At the present time, national policy, as temporarily retained in Planning Policy Statement 10<sup>16</sup>, still requires waste planning authorities to prepare local development plan documents that help to deliver the needs that were identified in the Regional Spatial Strategy (RSS)<sup>17</sup>. However, the Government intends to revoke that Strategy. In any event, its estimates of waste capacity needs were based on 2004 data, which is now significantly out of date, and its projections were only to 2020. It is considered that the capacity estimates included in the RSS tables 9.3, 9.4 and 9.5 are not now relevant for this Local Plan.
- 3.33 For municipal waste, there is a long-term contract in place based around the two Mechanical and Biological Treatment (MBT) plants. With continued efforts at reducing waste arisings, these have an amount of spare capacity of at least 20,000 tonnes/year and there is potential for this to be increased.
- 3.34 For the Household Waste Recycling Centres, the only provision that is considered to be required in this plan is for maintaining a network equivalent to the existing one. This involves identifying sites to replace ones at Workington, Frizington, Kendal and possibly Maryport. Initiatives for increasing the number of Household Waste Recycling Centres have been constrained by austerity measures.
- 3.35 Additional treatment facilities are considered to be needed to drive more of the commercial and industrial waste streams up the waste hierarchy. The 2009 Environment Agency survey, referred to above, indicates that it is reasonable to assume at least 75% of the commercial and industrial wastes, that are currently landfilled, could be diverted. The greatest existing potential is seen to be for energy recovery.
- 3.36 The County Council's recent involvement in the European Union-funded Waste to Energy project<sup>18</sup> has demonstrated the opportunities for regarding discarded materials as a low carbon energy resource rather than waste. A range of energy from waste technologies are available, including anaerobic digestion and the burning of fuels derived or recovered from waste.
- 3.37 The 2008 MWDF Core Strategy<sup>19</sup> used an estimate of commercial and industrial waste arisings in a range between 659,000 and 750,000 tonnes/year. Those figures were not challenged at the time. It now seems clear that recent arisings have been just below that range.

<sup>16</sup> Evidence Base document reference ND40

<sup>17</sup> Evidence Base document reference RD7

<sup>18</sup> INTERREG IVC <http://www.waste-2-energy.eu/>

<sup>19</sup> Evidence Base document reference CSD14

- 3.38 It was also assumed that half of these wastes would be managed in-situ and that the remainder would require sites to be identified for seven treatment facilities with capacities of 50,000 tonnes/year each. As such plants are often built in modules, their capacity has the potential to be increased by additional modules.
- 3.39 It is proposed to base the plan around the bottom end of the range that was used previously for the MWDF Core Strategy - around 650,000 tonnes/year. The plants that manage and treat the wastes can be assumed to have capacities of around 50 to 75,000 tonnes/year. On the basis that around half of the waste will be managed on-site where it arises or at existing facilities, it is considered that this plan needs to identify six sites for managing and treating the remaining half of commercial and industrial waste.
- 3.40 It is proposed to retain the estimate, made in the MWDF Core Strategy, that provision should be made for two energy from waste plants. Four sites in all have been identified in Site Allocations Policy 3. There may be opportunities in Cumbria to make use of the solid recovered fuel from the two Mechanical and Biological Treatment plants for the municipal waste stream. Energy from waste may also be able to contribute to the low carbon agenda (see Diagram 6.2) in chapter 6.
- 3.41 It is intended that more than the minimum number of sites may be identified in the site allocations. It is considered that these assumptions, about numbers of facilities and their capacities, will provide the flexibility that is needed to ensure that demands can be met over the plan period. Taking this flexibility into account, it is not considered that any additional or reduced capacity needs to be included in connection with the range of estimates for population growth (paragraph 3.29).

### **Landfill**

- 3.42 In planning for landfill requirements, a balance has to be made between underprovision, which could cause problems of having nowhere to send residual wastes, and overprovision, which could deter efforts to drive waste up the waste hierarchy.
- 3.43 There is little, if any, doubt that much less landfill capacity will be needed than in the estimates in the Regional Spatial Strategy and which were incorporated into the Minerals and Waste Development Framework Core Strategy. Very few wastes actually require to be landfilled and substantial progress has already been made in diverting them to recycling and recovery.
- 3.44 In assessing need for landfill, account has to be taken of the Government's zero waste to landfill agenda, the success of initiatives to drive waste up the waste hierarchy and the impacts of the recession. Whilst it is considered that some residual wastes will still need to be landfilled throughout the plan period, there appears to be no justification to make provision for existing rates of landfill to continue. It should be noted that, in this Local Plan, references to landfill also include landraise, as this is involved at all of the existing sites in Cumbria.
- 3.45 The estimates of how much landfill capacity will be needed for municipal, commercial and industrial wastes are set out in Appendix 1. It should be noted that the estimates err towards a worst case in which, for commercial and industrial waste, only one small facility which is equivalent to an MBT plant is built within the plan period, compared to the six plants identified in paragraph 3.39 and Policy SP3.

- 3.46 Construction and demolition waste mostly includes brick, concrete, hardcore, subsoil and topsoil, but it can also include quantities of timber, metal and plastics. Most of this waste is easily recyclable; for example, as alternatives to primary aggregates. Defra has recently consulted about restricting the landfilling of wood wastes<sup>20</sup>, in order to drive them up the waste hierarchy.
- 3.47 Construction and demolition wastes are increasingly being treated for recycling at source. There are also recycling operations at some quarries and non-inert landfill sites, where residual wastes can be used for restoration or site engineering. There is an unquantifiable demand for low cost landfill of the inert component of these wastes, which can lead to unauthorised developments. It is not considered to be appropriate to make specific provision in this plan for landfilling these wastes, as there are number of potentially acceptable locations at existing quarries and landfills. The figures that the operators provided to the Environment Agency show that at the end of 2011 the inert waste landfills at Derwent Howe and Roan Edge had nearly 800,000 cubic metres of remaining capacity.

### **Need for landfill**

- 3.48 On the basis of Appendix 1, it would appear that provision need only be made for around 1.6 million tonnes, 1.3 million cubic metres, of landfill capacity over the plan period. That is an average, over the plan period, of nearly 110,000 tonnes/year, 90,000 cubic metres, of non-inert waste.
- 3.49 Those figures for landfill requirements are far less than the capacity that remains in existing permitted landfills. However, the current (February 2013) planning permissions for the landfills will all expire within the plan period. The planning permission for Hespian Wood requires waste inputs to have ceased by 31 October 2020, Flusco is required to have been fully restored by the end of 2015, Lillyhall fully restored by June 2014 and Bennett Bank by 2017.
- 3.50 Overprovision of capacity could discourage the diversion of waste away from landfill and could delay the restoration of landfill sites. This Local Plan needs to set out a new approach to the provision of landfill capacity based on an objective review of need and where the landfills should be.
- 3.51 One factor that has to be taken into account is that it has previously been assumed that further provision will have to be made in the south of the county. Bennett Bank, near Barrow in Furness, is the only landfill in the south. It was granted permission in 2010, on appeal, for 580,000 cubic metres of capacity, but the planning permission is only to 2017. The operator's figure, of nearly 165,000 cubic metres of remaining capacity in 2011, implies that a much smaller scheme is being implemented.
- 3.52 The priority in the Minerals and Waste Development Framework Core Strategy was to identify additional capacity in the south of the county to meet needs throughout the plan period, which was to 2020. To meet this foreseen need, the draft Site Allocations Policies<sup>21</sup> identified Goldmire Quarry as a potential new non-inert landfill. As so little capacity is now estimated to be necessary, it remains to be seen whether this could be a financially viable proposition. The choices for disposing of the volumes of residual waste arising in the south of the county will need to be kept under review.

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<sup>20</sup> Wood Waste Landfill Restrictions in England: call for evidence, DEFRA, July 2012

<sup>21</sup> Evidence Base document reference RSAP1

- 3.53 Another factor to be considered is that, for amenity and safety reasons, existing landfills cannot be left in an uncompleted and unrestored condition. Lillyhall has been a landfill for around 30 years and Flusco for around 20 years. Despite their long operational life to date, neither of them has reached anywhere near their currently approved restoration contours. A planning application has been submitted to extend the life of Flusco and one is expected for Lillyhall. Whilst the planning application for Flusco incorporates a reduced landfill area and much reduced capacity, it would still provide over 1 million cubic metres of void space.
- 3.54 If further permissions are considered necessary, to extend the life of any of the landfills, in order to enable them to be restored, only significantly reduced capacity would be needed. That capacity could be determined by the amount that is needed to achieve an acceptable restoration landform. Lower final contours would reflect the continuing decreases in the need for landfill, the Government's zero waste to landfill agenda and the need to avoid longer periods of cumulative impact.
- 3.55 The only non-inert landfill capacity that is still required, is for the residual wastes that are left over after processing to remove recyclables and recover value, and for the proportion of commercial and industrial waste which has not been processed. It is logical that such capacity should only be located near to the processing plants that are achieving the diversion of waste from landfill. The existing locations for these are the two Mechanical and Biological Treatment (MBT) plants for municipal waste at Hespın Wood near Carlisle and at Barrow in Furness. Apart from sites where it is needed to secure an acceptable landfill restoration, it is proposed that any other locations for non-inert landfill should only be identified where there is an MBT plant, or an equivalent type of facility.
- 3.56 At Hespın Wood, the Minerals and Waste Development Framework draft Site Allocations Policies<sup>22</sup> identified a large area to the north of the existing landfill for additional capacity, but that would not now appear to be needed.
- 3.57 The Regional Spatial Strategy did not identify the need for any regional waste management facilities to be located in Cumbria and there is no evidence to suggest that has changed.
- 3.58 Waste management needs that could cut across the county's administrative boundaries have been explored with other authorities, in accordance with the Duty to Co-operate. No significant needs have been identified, with the exceptions of radioactive wastes, which are dealt with separately in the following chapter.
- 3.59 In accordance with the strategic objectives for other types of waste, this plan makes provision for the wastes that arise within Cumbria. It assumes limited movements both ways across the county boundary – net self-sufficiency. In assessing needs, the latest available Defra and Environment Agency data about waste management in Cumbria are taken as the baseline, together with the 2011 Government review of waste policy.
- 3.60 Hazardous wastes are now managed on a regional or national basis at a limited number of sites. The main reason for this is that the number of landfills receiving such wastes reduced substantially in 2004 when the Landfill Directive banned their co-disposal with non-hazardous wastes. The Flusco, Hespın Wood and Lillyhall landfills have Environmental Permits to dispose of Stable Non-Reactive

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<sup>22</sup> Evidence Base document reference RSAP1

Hazardous Waste (SNRHW). No need has been identified for any additional provision.

### **An integrated network**

- 3.61 An integrated and adequate network of waste management facilities is needed, which takes account of the characteristics and geography of Cumbria. The accessibility principle of the Local Transport Plan<sup>23</sup>, and considerations of the transport implications of waste management facility locations, are important to an integrated approach.
- 3.62 A sequential approach will be adopted, continuing the one set out in Regional Spatial Strategy Policies EM13 and DP4. This means that the potential of existing established waste management sites to accommodate new facilities will be explored first, followed by the use of existing buildings and previously developed land within settlements and land allocated for employment use in District Local Plans and Local Development Frameworks.
- 3.63 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.
- 3.64 There can be advantages in siting complementary facilities together in a "Green Resource Park" although cumulative impacts can be a major consideration. Hespin Wood can be regarded as one of these with the MBT plant, composting and recycling operations and landfill.

#### **POLICY SP2 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.

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<sup>23</sup> Evidence Base document reference LD176

### **POLICY SP3 Waste capacity**

The need for additional facilities in connection with the long-term contract for managing municipal waste will be kept under review.

Sites will be identified for managing and treating around half of the estimated 650,000 tonnes/year of commercial and industrial waste, it is assumed that the remainder will be managed on-site where it arises or at existing facilities.

#### **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 Development Control Policies.

#### **Waste facilities**

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

- 6 sites of between 2 and 3ha for commercial and industrial waste treatment facilities (these could include Materials Recovery Facilities, Mechanical and Biological Treatment plants or Transfer/Bulking stations).
- 2 sites of between 2 and 4.5ha for Energy from Waste plants.
- A total of around 1.3 million cubic metres of landfill capacity will be provided for all waste streams over the plan period\*.
- Alternative sites for those Household Waste Recycling Centres (HWRC) which are required to be replaced.
- Innovative HWRC solutions and/or sites will be kept under review for smaller communities.

*\*This is a much smaller volume than that in existing landfill permissions. Landfill capacity in excess of that total will only be justified if it is necessary to achieve acceptable restoration contours at existing landfills.*

## **POLICY SP4 Strategic areas for new waste management developments**

For additional waste management facilities, the use of existing established sites to meet the county's needs will be preferred to other sites where waste management facilities have not previously been located. This is subject to proposals meeting the requirements of the other policies of this Local Plan, including those relating to environmental impacts, particularly cumulative impacts and traffic. Other appropriate locations are described in the development control policies.

Strategic areas for non-inert landfill capacity will only be provided for residual wastes which remain following all practicable measures to divert wastes from landfill. That capacity should be located in proximity to the Mechanical and Biological Treatment plants for municipal waste **near Carlisle** and **at Barrow in Furness**, or to the location of any equivalent facility that is developed for commercial and industrial waste, or where it is necessary to secure the acceptable restoration of existing landfills.

Priority is given to assessing viable options for disposing of the residual non-inert wastes in the south of the county throughout the plan period, after the expiry of the Bennett Bank landfill planning permission.

West Cumbria is supported as the centre of excellence for national and international expertise relating to the nuclear industry.

For decommissioning of the Sellafield nuclear complex, provision will be made for radioactive waste management facilities within or adjacent to that site.

### **Site location criteria**

- 3.65 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 and in considering planning applications for waste management facilities.

**Table 3.1 Site location criteria**

<b>Criteria</b>	<b>Characteristics</b>
<b>1. Close to waste arisings</b>	<ul style="list-style-type: none"><li>▪ Within 5 miles of the centre of a main town</li></ul>
<b>2. Accessibility</b>	<ul style="list-style-type: none"><li>▪ Well related to existing road network, or</li><li>▪ Well related to proposed road network</li><li>▪ Potential for rail or sea transport</li></ul>
<b>3. Sequential approach</b>	<ul style="list-style-type: none"><li>▪ Previously developed land (brownfield)</li><li>▪ Part brownfield</li><li>▪ Allocated for waste management or employment use and at a town or key service centre</li><li>▪ Allocated for waste management or employment use but not at a town or key service centre</li><li>▪ Exceptions (see paragraph 3.63)</li></ul>
<b>4. Deliverable</b>	<ul style="list-style-type: none"><li>▪ No owner objection</li></ul>
<b>5. Flood risk</b>	<ul style="list-style-type: none"><li>▪ Sequential test needed for Zones 2 and 3<sup>24</sup>.</li><li>▪ Possible need for exception test</li><li>▪ Avoid functional floodplain (Zone 3b)</li></ul>

<sup>24</sup> NPPF Technical Guidance, Table 1

<b>6. Away from houses</b>	<ul style="list-style-type: none"> <li>▪ Further than 250 metres</li> <li>▪ Number of houses</li> </ul>
<b>7. Environmental interests</b>	<ul style="list-style-type: none"> <li>▪ Not within or affecting environmental assets as listed in Boxes 8.1 and 8.2 in this Local Plan</li> </ul>
<b>8. Visual impact</b>	<ul style="list-style-type: none"> <li>▪ Not affecting the setting of the National Parks, AONBs, World Heritage Site, Heritage Coast, Registered Historic Parks and Gardens or Scheduled Ancient Monuments</li> </ul>
<b>9. Other land uses</b>	<ul style="list-style-type: none"> <li>▪ No likely conflict</li> </ul>
<b>10. Economic potential</b>	<ul style="list-style-type: none"> <li>▪ Likely to be part of, or aid, regeneration or safeguard jobs</li> </ul>
<b>11. Co-location potential</b>	<ul style="list-style-type: none"> <li>▪ Large enough to be able to accommodate more than one type of facility and complementary activities</li> </ul>

## **4. RADIOACTIVE WASTES**

### **Background**

- 4.1 Every type of radioactive waste from all over the UK is either already being stored or disposed of in west Cumbria or is already being proposed or has been considered for disposal there. This situation is not regarded by the County Council as being sustainable or acceptable. In accordance with national policy, the Cumbria local authorities expect that communities outside the county must take more responsibility for managing their own wastes and must make appropriate provision for this in their Local Plans.
- 4.2 The UK has accumulated a substantial legacy of higher activity radioactive wastes and more radioactive material will become waste over the next few decades as nuclear facilities are decommissioned and cleaned-up. The categories of radioactive waste that are defined in the UK are set out in the Glossary.
- 4.3 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 waste management facilities in the UK.
- 4.4 The Sellafield complex covers an area of approximately four square kilometres and comprises more than two hundred nuclear facilities. Actions over several decades have reduced radiation doses, to even the most exposed groups, to a small fraction of that associated with natural background radiation. This process needs to continue to ensure that nuclear decommissioning and other developments do not prejudice this success.

### **HIGHER ACTIVITY WASTES**

#### **Where we are now**

#### **Storage**

- 4.5 There is a confusing range of labels given to the different types of radioactive wastes. For this plan, higher activity wastes are defined as the Intermediate Level (ILW) and High Level (HLW) wastes, which, in accordance with the findings of the Committee on Radioactive Waste Management (CoRWM) and endorsed by Government in the Managing Radioactive Waste Safely White Paper<sup>25</sup> (MRWS), are those that will require a deep geological disposal facility (GDF) rather than near surface facilities for disposal. Before a GDF is developed, they will require long periods of secure storage.
- 4.6 High Level Waste is that which generates heat and it arises only at Sellafield; it is stored to cool and is then subject to a process of vitrification. Most of the UK's Intermediate Level Waste (ILW), from operational activities, also arises at Sellafield, where it is being made passively safe. Small amounts of ILW from operations at other UK licenced sites are stored at those sites. Future decommissioning of nuclear power stations and other nuclear licenced sites will give rise to ILW. The destinations for storing this have not yet been determined,

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<sup>25</sup> <sup>25</sup> Managing Radioactive Waste Safely: a framework for implementing geological disposal, June 2008, DEFRA (Evidence Base document reference LD44)

but consolidation of waste storage facilities, elsewhere in the UK, to serve a number of sites is being considered.

- 4.7 The Environment Agencies and the NDA require organisations that have responsibilities for radioactive wastes to develop plans for their management. National policy requires these plans and "Integrated Waste Strategies" to be prepared with early and open engagement with local communities and 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 Plans throughout the country, including the Cumbria MWLP.
- 4.8 Quantities of plutonium are also stored at Sellafield. The Government's 'preliminary policy view' is that stocks of plutonium should be converted into MOX fuel for use in nuclear new-build reactors<sup>26</sup>. This, however, does not appear to be the basis on which the consultations were carried out in connection with the National Policy Statement on Nuclear Power Generation (EN-6). That 'preliminary policy view' may also require reviews of the Generic Design Assessment process for nuclear new-build and of the design of a deep geological repository for higher activity wastes. The Government's illustrative timeline for construction of a new MOX plant suggests a procurement date around 2015.
- 4.9 Spent nuclear fuel (SNF) is not currently designated a waste material. It is likely that with the closure of the Thermal Oxide Reprocessing Plant (THORP) by 2018 and the Magnox Reprocessing Plant before 2020, a minimum of around 6,500 tonnes of SNF, transferred from generation sites across the UK, will accumulate for long term storage at Sellafield pending the availability of a geological disposal facility. Depending on the size of any future new nuclear build programme, and the strategy for the storage of SNF, this could be substantially more – possibly as much as 34,000 tonnes.

## **Disposal**

- 4.10 National policy for the disposal of the higher activity wastes, as set out in the 2008 White Paper "Managing Radioactive Waste Safely" (MRWS), is that they should be placed in an engineered containment facility deep inside a suitable rock formation, a geological disposal facility (GDF). This would be between 200 and 1000 metres below ground.
- 4.11 With regard to where a deep disposal site should be, the 2008 White Paper stressed the "volunteering" approach. It invited expressions of interest from communities interested in discussions about the issues related to potentially hosting a geological disposal facility (GDF). West Cumbria was the only place in the UK where the Local Authorities had expressed interest in such discussions. The agreement of both levels of local government and central Government is a pre-requisite for participation and that ended in January 2013 when the County Council decided that it would not participate in Stage 4 of the MRWS process.
- 4.12 If the continuing MRWS process fails to bring forward any volunteering communities, then Government's position as regards a GDF would most likely be reviewed. It is possible that it might seek alternative means to identify suitable locations for a GDF facility. If this were to happen, and any part of Cumbria's geology was subsequently found to be suitable to host a GDF, then a development proposal may well come forward and would need to be considered under the relevant planning legislation at the time. It is possible that this may

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<sup>26</sup> Management of the UK's Plutonium Stocks: a consultation response on the long term management of UK owned separated civil plutonium, DECC, 1 December 2011

then require a partial review of the Local Plan in order to express County Council policy.

### **Where we need to be**

- 4.13 The MWDF Core Strategy was adopted in 2009. It had been prepared during a period when national policies for the long-term management of radioactive wastes were still evolving and the details of implementing them were not yet clear. The Government published the UK Policy on low level radioactive waste<sup>27</sup> in 2007, its White Paper on managing higher activity radioactive waste safely (MRWS) was published in 2008 and the Nuclear Decommissioning Authority published its UK Low Level Waste Strategy<sup>28</sup> in 2010.
- 4.14 In the circumstances, the Core Strategy policies on radioactive wastes could only be regarded as interim ones until uncertainties about national policy were resolved. A commitment was required to carry out a timely review of the policies, to ensure they are consistent with, and reflect progress on, the detailed implementation of national policy.
- 4.15 The County Council's view is that existing facilities at Sellafield for the storage of higher activity level wastes should be improved. This is to provide more robust surface storage facilities in the decades to come while the Government finds a permanent solution outside Cumbria for the country's higher activity radioactive waste.
- 4.16 With regard to the length of time for such storage, the Nuclear Decommissioning Authority's assumptions of key dates have been that a geological disposal facility will be available by 2040, for Intermediate Level Waste, and 2075 for High Level Waste. The Managing Radioactive Waste Safely White Paper estimated that it would take until around 2120 for all Intermediate and High Level wastes to be available in packaged form for disposal.
- 4.17 Although the potential for joint-site storage facilities at nuclear sites elsewhere is being assessed, it is possible that there will be proposals to store more Intermediate Level Waste from outside the county at Sellafield. The Nuclear Decommissioning Authority has published guidance on such storage for the nuclear industry, "Interim Storage of Higher Activity Waste Packages November 2012"<sup>29</sup>. A Local Plan policy for such storage is appropriate. Other policies of this Local Plan would also be relevant to the consideration of such proposals, including SP16 Community benefits.

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<sup>27</sup> Evidence Base document reference LD42

<sup>28</sup> Evidence Base document reference LD191

<sup>29</sup> <http://www.nda.gov.uk/news/industry-storage-guidance-nov12.cfm>

## **POLICY SP5 High and Intermediate level radioactive wastes treatment and storage**

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

- benefit clearly outweighing any 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 possible alternative methods; and
- that there are no overall adverse impacts on the local economy.

Any proposals to bring Intermediate Level Wastes to Sellafield from outside Cumbria for treatment and/or storage should demonstrate that alternative locations at other licenced nuclear sites where these wastes arise have been rejected only as a result of rigorous assessment.

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.

## **LOW LEVEL WASTE**

4.18 The category of Low Level Waste (LLW) includes ones with a wide range of activity levels; the ones that are identified for this plan are:-

- "out of scope" wastes: these are ones that, after a reassessment of risks, the Environment Agency has decided should not fall under the radioactive substances parts of the Environmental Permitting Regulations (EPR). These are not relevant for the plan's radioactive waste policies.
- "exempt" wastes: these are ones with a slightly higher activity level (less than 0.4Bq/g), but which the Environment Agency risk reassessment has concluded do not require permitting under the radioactive waste parts of the Environmental Permitting Regulations.
- Low Activity LLW (LALLW): as a general rule, wastes with activity levels between 0.4 and 200 Becquerels/gram (Bq/g), which do not need the highly engineered containment systems that are provided at the Low Level Waste Repository (LLWR) near Drigg. They can be sent to suitably permitted conventional non-inert landfills. The only ones with such Environmental Permits at the moment are Kingscliffe in Northamptonshire, Clifton Marsh in Lancashire and Lillyhall in Cumbria.
- Very Low Level Wastes (VLLW), 0.4 to 4 Becquerels/gram, fall within the above category of LALLW: for consideration of disposal options, they can be split into low volume or "dustbin loads", mostly from the non-nuclear industry, which can be disposed of by controlled burial alongside other waste streams

- in non-inert landfills, and high volume ones, particularly from nuclear decommissioning, which require specifically permitted and licenced facilities.
- High Activity Low Level Waste (HALLW) with activity levels above 200 Bq/g, which require highly engineered containment facilities, such as ones provided at the Low Level Waste Repository (LLWR).

- 4.19 Considerable efforts are being made to drive radioactive wastes up the hierarchy and to divert wastes away from the LLWR, which do not need such a high level of containment. Figures published in June 2012<sup>30</sup> show that in the 2012/13 financial year, 335 tonnes of metallic waste, 81 m<sup>3</sup> of combustible waste and 29 m<sup>3</sup> of VLLW had been diverted. The LLWR's operating plan targets for the whole year are 2,137 tonnes of metallic waste, 579.4 m<sup>3</sup> of combustible waste and 2,831 m<sup>3</sup> of VLLW.
- 4.20 In connection with the above categories, the Environment Agency adopts an "averaging" process for estimating the activity level of any consignment of radioactive waste. The other, non-radioactive properties, of the wastes can also be relevant. The Environmental Permitting Regulations distinguish between waste streams which are "controlled wastes" under the provisions of the Waste Directive, and radioactive wastes which are not "controlled wastes". A consequence of this is that, if a waste is classed as radioactive, the Environment Agency and the Scottish Environmental Protection Agency deal with it under the radioactive waste parts of those Regulations, even if it is a hazardous waste. However, it is assumed that the Landfill Directive's 2004 ban on the co-disposal of non-hazardous and hazardous wastes is still relevant.

### Where we are now

- 4.21 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 work 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 that they produce.
- 4.22 On the basis of recent consignments, the sources of waste are:

**Table 4.1**  
**Sources of Packaged LLW sent to the LLW Repository near Drigg (2012/13)**

Waste Organisation(s)	% of LLW	Volume
Sellafield Ltd (including Capenhurst and WAMAC)	68.23	4,133 m <sup>3</sup>
Ministry of Defence Sites	3.43	208 m <sup>3</sup>
Nuclear Power Stations (Magnox, EDF)	9.87	598 m <sup>3</sup>
Nuclear Research Sites (DSRL, RSRL, Culham JET)	6.76	410 m <sup>3</sup>
Uranium Enrichment Facilities (URENCO, Westinghouse)	0.00	0 m <sup>3</sup>
Hospitals, universities, laboratories, minor waste producers	3.65	221 m <sup>3</sup>
Radioisotope manufacturing sites, e.g. GE Healthcare	8.05	488 m <sup>3</sup>
Other sites owned by the Nuclear Decommissioning Authority	0.00	0 m <sup>3</sup>
		<b>6,057 m<sup>3</sup></b>

Source: LLWR Ltd.

<sup>30</sup> Waste Metric Dashboard May 2012, Low Level Waste Repository Ltd., updated 27 June 2012

- 4.23 LLWR Ltd has also provided the following long term estimates (to 2120), based on the 2010 waste inventory projections, of consignments which would require highly engineered containment facilities, similar to the ones that are provided at the Low Level Waste Repository (LLWR). The total volume is far higher than the physical capacity of the LLWR site.

**Table 4.2  
Projected Sources of Raw UK Low Level Waste**

Waste Organisation(s)	% of LLW	Volume
Sellafield Ltd (including Capenhurst)	74.85	3,313,854 m <sup>3</sup>
Ministry of Defence Sites	1.18	52,159 m <sup>3</sup>
Nuclear Power Stations (Magnox, EDF)	13.19	584,183 m <sup>3</sup>
Nuclear Research Sites (DSRL, RSRL, Culham JET)	4.13	182,983 m <sup>3</sup>
Uranium Enrichment Facilities (URENCO, Westinghouse)	5.48	242,744 m <sup>3</sup>
Hospitals, universities, laboratories, minor waste producers	0.22	9,940 m <sup>3</sup>
Radio isotope manufacturing sites, e.g. GE Healthcare	0.54	24,030 m <sup>3</sup>
Other sites owned by the Nuclear Decommissioning Authority	0.40	17,693 m <sup>3</sup>
		<b>4,427,586 m<sup>3</sup></b>

Source: LLWR Ltd.

- 4.24 LLWR Ltd has identified the differences in estimated waste volumes from different data sources and the consequent need to improve the accuracy and quality of the waste data that is submitted by the waste producing organisations.
- 4.25 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 had to be found for the Naturally Occurring Radioactive Materials (NORM) Scales, which are an unavoidable by-product of hydro-carbon production. They used to be macerated and disposed of in the sea. There are still uncertainties about the volumes of these wastes; they are intended to be included in the second stage of work for the Non-nuclear Industry Strategy.
- 4.26 There is very limited disposal capacity remaining in vault 8, which was built in the 1980's. Temporary planning permission, until the end of 2018, was granted in January 2008 for storing wastes in the new Vault 9. This vault was estimated to provide capacity until 2016 if other treatment options were not utilised. In July 2012, 25% of the capacity of Vault 9 had been used (1,411 containers). LLWR Ltd has estimated that successful efforts to divert wastes away from it could extend its life until 2023.
- 4.27 A planning application was submitted, in July 2011, for the construction of six new vaults which, with other measures, would provide around 1 million m<sup>3</sup> of disposal capacity. That application is currently (February 2013) on hold, awaiting further information related to objections to the proposals and also for the resolution of problems that have arisen with waste containers in Vault 8. Those problems are likely to have implications for the design of future vaults and the way the repository is operated. There are also serious issues that would need to be resolved about the potential impacts of sea level rise and coastal erosion.
- 4.28 The Environment Agency has granted Lillyhall landfill at Workington an Environmental Permit for disposing of Very Low Level Waste (VLLW), despite objections by the local authorities. The Permit is for the disposal of up to 582,000 m<sup>3</sup> of VLLW at a rate of 26,000m<sup>3</sup>/year as part of total waste disposals of 67,000m<sup>3</sup>/year.

- 4.29 The permit anticipated that the landfill would have an extended life until 2031, but its current planning permission requires the site to be fully restored by June 2014. It is also apparent from the estimates of waste arisings in the previous chapter, that the volumes of other wastes, with which the VLLW would be mixed, should not arise if there is compliance with the Government's and the Agency's own policies.
- 4.30 The site is being put forward by the operator as a UK facility for the disposal of these wastes. There is a current Environmental Permit application to the Scottish Environmental Protection Agency to dispose of wastes from the Hunterston A power station to Lillyhall. In connection with that proposal, the community engagement requirements of the UK Policy and the Nuclear Decommissioning Authority's Strategy for these wastes have been ignored.
- 4.31 Another proposal for a purpose built disposal facility for VLLW and Low Level Waste (LLW) at the unrestored Keekle Head opencast coal site was refused planning permission by the County Council. The applicant has appealed against that decision.

### **Where we need to be**

- 4.32 The 2007 Defra policy<sup>31</sup> for the long term management of Low Level Wastes (LLW) required optimal use to be made of the Low Level Waste Repository near Drigg and assessment of the extent to which other Low Level Waste disposal options might be employed. The County Council was a member of the NDA's National Low Level Waste Strategy Group and continues as a member of its successors, currently the LLW Strategy Delivery Overview Group.
- 4.33 LLWR Ltd has already been able to demonstrate that a very substantial proportion of the wastes that would, in the past, have been consigned to the Repository will be managed elsewhere. It will now only be used for those wastes that require management within a multi-barrier containment system.
- 4.34 It remains to be seen whether an acceptable proposal can be put forward in the current planning application for disposal capacity at the LLWR. Wastes that do not require such multi-barrier containment will continue to be diverted away from the repository. The latest estimate for these is that, in the UK, over the period 2012 to 2030, around 220,200 cubic metres<sup>32</sup> of waste below the 200 Becquerels/gram level will require disposal, around 80% of this would be soil and rubble.
- 4.35 The Cumbria local authorities are concerned that the diversion of wastes away from the LLWR has led to proposals coming forward to also send these Low Activity Level Low Level Wastes from other parts of the UK for disposal at sites in west Cumbria. National policy requires communities to take more responsibility for their own wastes and for their Local Plans to meet their objectively assessed infrastructure and development requirements.
- 4.36 There is concern that a proliferation of radioactive waste management sites in west Cumbria, such as the proposals at Lillyhall landfill and the Keekle Head site, would be likely to have adverse economic and social impacts due to the manner in which such wastes are perceived.

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<sup>31</sup> Policy for the long term management of solid low level radioactive waste in the UK, March 2007, DEFRA and the devolved administrations

<sup>32</sup> This figure excludes those wastes that would be disposed of in the facilities at Dounreay and the Calder Landfill Extension Segregated Area (CLESA) at Sellafeld

## **POLICY SP6 Higher activity range of Low Level radioactive waste<sup>33</sup>**

For these wastes, provision will be made for the Low Level Waste Repository, near Drigg, to continue to fulfil a role as a component of the UK's radioactive waste management capability but for no additional site within Cumbria unless it is demonstrated to be needed for the wastes that arise within the county.

Proposals for very long term storage or disposal of waste at that Repository will have to demonstrate that a feasible strategy is in place in relation to the long term integrity of the site with regard to sea level rise and coastal erosion. They will also have to demonstrate that they are within the site's radiological capacity and meet the requirements of the other Local Plan policies that are relevant.

The acceptance, by the County Council, of a national role for the Repository is on the basis of:-

- compliance with the waste hierarchy;
- the NDA's and the site operator's initiatives for reducing the proportions of waste that are consigned to the Low Level Waste Repository, and
- restricting the wastes to those that require such highly engineered containment facilities, and
- to a continuation and a review of the obligation for a community fund in recognition of the impacts of hosting the facility.

The success of the initiatives to divert wastes away from the Low Level Waste Repository will be monitored closely, through the reporting requirements of planning permissions and through the Council's membership of the National Low Level Waste Programme Delivery Overview Group.

## **POLICY SP7 Lower Activity Low Level radioactive wastes<sup>34</sup>**

Proposals to treat or dispose of Low Activity Low Level Wastes, including Very Low Level Waste (LALLW and VLLW), from nuclear sites within or outside Cumbria will need to demonstrate:-

1. compliance with the waste hierarchy;
2. that a rigorous assessment has demonstrated that on-site provision of the proposed facility(ies) at the nuclear site where the wastes arise is impracticable, and in those circumstances,
3. that a similar assessment has demonstrated that the use of land adjacent to the nuclear site where the wastes arise is also impracticable, before
4. more distant sites are considered, with priority first being given to assessing the ability of other existing licenced nuclear sites to accommodate the proposed facility(ies).

Any proposal to treat or dispose of these radioactive wastes from outside Cumbria will need to demonstrate that the local social and economic benefits outweigh other sustainable development criteria and principles and are in accordance with the other policies of this Local Plan.

<sup>33</sup> As a general rule, these are wastes with activity levels above 200 Becquerels/gram

<sup>34</sup> As a general rule, these are wastes with activity levels below 200 Becquerels/gram

## 5. STRATEGIC POLICIES FOR MINERALS

- 5.1 The Local Plan has to provide a clear guide to the public, and to mineral operators, about the locations where mineral extraction may take place and where mineral resources will be safeguarded.
- 5.2 Within this context, the strategic policies make an appropriate contribution to national, regional and local requirements for minerals. They are complemented by the development control policies and the site allocation policies. Together, the policies seek 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**

- 5.3 The main minerals that are worked in the county are crushed rock and sand and gravel aggregates for use in construction. Because of geology, other parts of the northwest and other parts of the country rely on supplies of these from Cumbria. The county has traditionally supplied far more sand and gravel and crushed rock than it needs for its own use. There are doubts about the extent to which that can continue in the longer term.
- 5.4 Nationally, there has been a general decline in aggregate sales since 1997. This decline became much more pronounced following the financial crisis in 2007 and the continuing recession, due to the fall in major infrastructure projects and house building. Nationally, sales are currently at their lowest level since the 1960's, with 2012 figures significantly lower than 2011. In Cumbria, as elsewhere, this downturn is due entirely to the economic situation and not to any shortfall in permitted reserves or constraints on their availability.
- 5.5 There are fourteen operating crushed rock quarries within Cumbria, three of these are wholly or 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 eleven operating sand and gravel quarries; none of these are within the National Park. There are around seven processing plants producing alternative aggregates from recycled or reused materials.
- 5.6 There is a large licenced area for marine dredged aggregates in Morecambe Bay, approximately twenty miles off the coast. Around 20,000 tonnes/year of sand from this are landed at Barrow docks. Small amounts are also provided by harbour channel maintenance activities at other ports and harbours. There is no apparent demand, at present, for marine dredged gravel.
- 5.7 Figures on annual sales of aggregates have been collated by the Regional Aggregates Working Party and published in its Annual Reports. The latest figures for aggregate sales have not yet been published by the Working Party and are for 2010; they are included in Table 5.1. The life of the permitted reserves of aggregates are shown in Table 5.2.
- 5.8 The quarries in Cumbria are listed in Appendix 2, together with the expiry dates of their current planning permissions; their locations are shown on the Maps in Appendix 2.
- 5.9 There are uncertainties about the locations of the markets that are served by the Cumbria quarries. Whilst Regional Aggregates Working Party reports indicated

that 59% of sales of sand and gravel from Cumbria's quarries were within the North West Region and over 14% were to adjoining Regions and Scotland, just over a quarter of sales were to unknown destinations. By contrast, the reports indicate that 86% of crushed rock sales were within the North West.

**Table 5.1**

**AGGREGATE SALES FROM CUMBRIA (million tonnes)**

Survey date	limestone	sandstone and igneous	High spec roadstone	All crushed rock	Sand and gravel	Marine dredged
AM01	3.0	1.1		4.1	0.7	0.03
AM02	2.9	1.1		4.0	0.9	0.04
AM03	2.6	1.1		3.7	1.0	0.04
AM04	2.8	1.1		3.9	0.8	0.02
AM05	2.6	0.36	0.74	3.7	0.7	0.02
AM06	2.7	0.27	0.69	3.66	0.79	0.02
AM07	2.8	0.53	0.70	4.03	0.87	0.01
AM08	2.7	0.40	0.75	3.85	0.77	0.02
AM09	1.91	0.38	0.78	3.07	0.52	0.02
AM10	2.46	0.41	0.59	3.46	0.53	0.02
10-year average	2.65	0.75	n/a	<b>3.75</b>	<b>0.76</b>	0.024

**Table 5.2**

**RESERVES AT END OF 2010 (million tonnes)**

	Reserves	Landbank at 10-year average sales (years)	End date of present landbank	Required end date for the minimum landbank <sup>x</sup>
Limestone	109.8	41.4	2051	2038
Sandstone and igneous	47.36	63.1	2073	2038
High specification roadstone	13.16	18.8 (using 5-year sales)	2028	2038
Land won sand and gravel	11.48	15.1	2025	2035

<sup>x</sup> The required minimum landbanks are 7 years for sand and gravel and 10 years for crushed rock

5.10 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.

5.11 As the maps show, the locations of Cumbria's quarries are not dispersed uniformly around the county, 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.

5.12 Traditional supply patterns within the county 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.
- 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.
- 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.

5.13 Three of the crushed rock quarries have specialised national and regional markets; these are Ghyll Scaur, which is the only operating quarry in England that produces very high skid resistance roadstones, and Roan Edge and Holmescales, which produce high skid resistance ones. The extrusive igneous rocks that are quarried at Ghyll Scaur have very limited occurrence outside the Lake District National Park and North Pennines Area of Outstanding Natural Beauty.

5.14 Since the 1970's, there has been a national Managed Aggregates Supply System (MASS), which can demonstrate a successful track record in maintaining sustainable supplies of these essential construction materials. Until recently, this has been based on regular national projections of demand, which were apportioned to regions and then, by the Regional Aggregates Working Parties, to sub-regions. Summary details of these for the Cumbria sub-region are included in Appendix 4.

5.15 Cumbria was a member of the North West Regional Aggregates Working Party, but the successor Aggregates Working Parties have not yet been formally established, because DCLG is still in the process of tendering for their secretariat functions.

5.16 The North West, as a whole, meets only around half of its aggregates consumption from within the region. Cumbria helps to meet the needs of other parts of the region, but much of the shortfall is met from other regions, for example, from quarries in Derbyshire. The figures that the Working Party published for Cumbria include the Lake District National Park.

5.17 It is relevant to consider what uses are made of the aggregates and the extent to which they are substitutable for each other. Information about these matters, as presented by major aggregate producers, is set out in the Competition Commission's November 2012 working paper, as part of its investigation into the Aggregates, Cement and Ready-Mix Concrete Market<sup>35</sup>. A summary of the information is set out in Appendix 3.

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<sup>35</sup> <http://www.competition-commission.org.uk/our-work/aggregates-cement-ready-mix-concrete/analysis/working-papers>

## **Alternative aggregates**

- 5.18 No reliable or publicly obtainable details are available of the production figures or reserves for the secondary and recycled aggregates plants.
- 5.19 The Mineral Products Association (MPA) estimates are that the proportion of aggregates supply accounted for by recycled and secondary aggregates has increased, and that this trend could be expected to continue. Figures quoted to the Competition Commission were an increase from 10% in 2000 to 28% in 2011. In connection with this trend, reference was made to various government initiatives relating to sustainable housing and to the National Planning Policy Framework, which provides strong support for the development of secondary and recycled aggregates operations.

## **Other minerals**

### **Gypsum**

- 5.20 The only gypsum deposits that are being worked are by underground mining in the Long Marton/Kirkby Thore area. Once that mine is exhausted, the remaining resources in that area would have to be worked by surface mining. During the Minerals and Waste Development Framework's examination by the Planning Inspectorate, a commitment was required from the County Council to identify a Mineral Safeguarding Area for other gypsum resources, elsewhere in the county, that may become economically viable in the future.
- 5.21 In recent years, demand for gypsum for plaster and plasterboard has reduced substantially due the recession. Reserves of gypsum at Birkshead mine are consequently still likely to be sufficient for around 15 years, depending on how soon major construction activity picks up.

### **Brick making**

- 5.22 The mudstones needed for Askam in Furness brickworks are only found near the brickworks.
- 5.23 Output from the brick making mudstones quarry has significantly reduced due to the recession. A planning application to extend the life of its planning permission, to the end of the Plan period in 2028, is currently (February 2013) being considered.
- 5.24 National policy<sup>36</sup> requires mineral planning authorities to plan for a 25 year landbank for brick clay. It is difficult to see how that could be achieved for this particular, very localised, specialist resource.

### **Building stones**

- 5.25 There are fourteen operating building stone quarries, and a slate quarry near Broughton-in-Furness. The quarries are listed in Appendix 2.

### **Peat**

- 5.26 The two commercial peat sites have reserves that will last until the expiry of their planning permissions in 2042; however, one of these, at Bolton Fell, will close in

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<sup>36</sup> NPPF paragraph 146

2013, as Natural England have agreed to buy and restore the site to natural peat. National policy requires that mineral planning authorities make no further provision for peat working<sup>37</sup>.

### **Industrial limestone**

- 5.27 Some quarries also market industrial grade high purity limestones; these should not be included in the figures of sales of aggregates. The most notable of these quarries is Shap Fell, which supplies the steel industry's lime kilns at the nearby Hardendale Works.

### **Coal and fireclay**

- 5.28 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.
- 5.29 There is an existing temporary planning permission and a Coal Authority licence for underground coal mining at the Main Band site, to the south of Whitehaven; a licence area that extends into the Longtown area from within Scotland; and small, old consents in the Alston area. With the escalating price of coal, there has been recent interest in the two licence areas, which are shown on the Policies Map.
- 5.30 National policy<sup>38</sup> requires mineral planning authorities to identify any areas where coal extraction and the disposal of colliery spoil may be acceptable. Permission should not be given for the extraction of coal unless the proposal is environmentally acceptable, or can be made so by planning conditions or obligations, or if not, provides national, local or community benefits, which clearly outweigh the likely impacts to justify the grant of planning permission.
- 5.31 No new proposals for deep mining have yet come forward. It seems likely, from discussions with the industry, that economic viability could entail outputs of around 1 million tonnes/year of coal, with perhaps an equal amount of colliery spoil. It has not been possible to identify any areas where this could be acceptable. The existing planning permission near Whitehaven was for a relatively low output of coal, with very limited amounts of spoil being brought to the surface. The situation with regard to coal will need to be kept under review.
- 5.32 The Coal Authority has provided revised maps of the areas which have been worked for coal. These are the areas that it notifies to local planning authorities under the provisions of Article 14 and Schedule 5 of the Town and Country Planning (General Development Procedure) Order 2010. It has also published revised Standing Advice.

### **Oil and gas**

- 5.33 There has also been interest in appraising Cumbria's oil and gas resources. This is not known to have included shale gas and hydraulic fracturing or "fracking". A strategic policy is proposed for coal bed methane and for oil and gas. The position with regard to shale gas will be kept under review, as will the implementation of Government energy policy.

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<sup>37</sup> NPPF paragraph 143

<sup>38</sup> NPPF paragraphs 147 and 149

## Zinc

- 5.34 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.
- 5.35 There has been recent interest in the potential for resurrecting this industry. Geological investigations by boreholes have been carried out, but no definite development proposals have been discussed. It is not considered that a specific strategic policy is needed at this time, but the situation will need to be kept under review. For the time being, national policies that relate to major developments in the North Pennines Area of Outstanding Natural Beauty and European Wildlife Sites, together with other Local Plan policies, are considered to be sufficient.

## Providing for and safeguarding minerals

### Where we need to be

- 5.36 The County Council is responsible for making sufficient provision to meet anticipated need for minerals 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. National policy requires that a landbank of at least seven years should be maintained for sand and gravel and ten years for crushed rock.
- 5.37 The choices for the minerals strategy involve balancing:-
- the need to keep the number of operations and permitted reserves to a reasonable minimum to reduce environmental damage, with
  - meeting local, regional and national needs without disruption of supply, and
  - maintaining local jobs in a traditional rural industry.
- 5.38 The Local Plan can make provision for mineral extraction 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.
- 5.39 In addition to making such provision, the Local Plan also needs to include measures 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. The Local Plan is required to make provision for this safeguarding of mineral resources by identifying:-
- **Mineral Safeguarding Areas:** these 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. In this Local Plan, it is proposed that the Mineral Consultation Areas will be defined by a 250 metre wide buffer around the Mineral Safeguarding Areas.

### **Local Aggregates Assessments**

- 5.40 Whilst the need to maintain the Managed Aggregates Supply System (see paragraph 5.14) has received widespread support, the National Planning Policy Framework has replaced the top-down approach, which was based on apportionments to regions and to sub-regions, with a bottom-up one. It requires that mineral planning authorities should now plan for a steady and adequate supply of aggregates by preparing an annual Local Aggregates Assessment. DCLG has published guidance about this<sup>39</sup>.
- 5.41 These Assessments can be prepared by individual mineral planning authorities or jointly with one or more other authorities. The guidance is that an authority should align itself with neighbouring and other authorities whom it considers appropriate and not feel compelled to work within imposed geographical boundaries or former government office region boundaries.
- 5.42 It is proposed that the Cumbria Local Aggregates Assessment will be a joint one with the Lake District National Park. Information about sales and reserves for the quarries in the National Park cannot be separated from those for the county as a whole.
- 5.43 The National Planning Policy Framework requires that mineral planning authorities should participate in the operation of an Aggregate Working Party and take its advice, and that of the National Aggregate Co-ordinating Group, as appropriate, into account when preparing a Local Aggregates Assessment. The Aggregates Working parties have not yet been formally re-established. In the meantime, a working party in the north west has been reconvened on an informal basis.
- 5.44 The Government will continue to publish National and Sub-National Guidelines. This is because it still sees a role for forecasting the provision of aggregates in England in order to deliver the overarching policy objectives.

### **Landbanks**

- 5.45 The NPPF requires landbanks of planning permissions to be maintained of at least seven years for sand and gravel and ten years for crushed rock. In connection with these, Assessments need to be understood in the context of the sales information from the annual aggregates surveys. They are required to be based on a rolling average of 10 years sales data, but taking account of other relevant local information. They should assess all supply options including

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<sup>39</sup> Guidance on the Managed Aggregate Supply System, DCLG, October 2012

marine dredged, secondary and recycled sources, as well as primary land-won aggregates.

- 5.46 The National Planning Policy Framework requires mineral planning authorities to ensure that competition is not stifled by large landbanks of permitted reserves bound up in very few sites. By inference, this means landbanks held by few mineral companies. This matter is complicated by the succession of mergers and acquisitions over the years. These have significantly reduced the number of mineral companies operating nationally. However, in Cumbria, the control of reserves is not limited to a very few sites or operators.
- 5.47 Work is continuing on Cumbria's first Local Aggregates Assessment. As a starting point for it, Tables 5.1 and 5.2 set out the latest figures for sales and reserves for the ten year reporting period to the end of 2010.
- 5.48 Due to the way sales were reported at the time, it is not possible to separate the high and very high skid resistance roadstones from the crushed rock for general aggregate use to derive annual average sales over a ten year period. This is not, however, considered to alter the overall conclusions that can be drawn.
- 5.49 These initial conclusions are that, on the basis of 10-year average sales, additional provision would need to be made in order to maintain, throughout the whole of the plan period, the minimum 7-year landbank for land won sand and gravel and, on the basis of 5-year average sales, the minimum 10-year landbank for high and very high skid resistance roadstones.
- 5.50 Any additional provision for aggregates would not appear to be needed urgently. On the basis of the rolling average of 5-year sales, the special roadstones landbank would not fall below the minimum before 2021. On the basis of the rolling average of 10-year sales, the landbank for sand and gravel would not fall below the minimum before 2018. It is considered that, in principle, Areas of Search would be sufficient for any provision that needs to be made in this plan, to ensure that the county landbanks could be maintained.
- 5.51 In connection with the other relevant local information, it is of particular relevance to the Local Aggregates Assessment that the most recent Cumbria sales figures<sup>40</sup> for sand and gravel are around 30% lower than the 10-year average and around 8% lower for crushed rock.
- 5.52 The recent sales figures would initially suggest that the sand and gravel landbank would last for considerably more years. However, the recorded reserves at the end of 2010 for sand and gravel were around 2.5 million tonnes lower than in 2009. This implies that some companies have reassessed reserves.
- 5.53 Another issue, which has major implications for the landbanks, is the expiry dates of the planning permissions for the quarries. These are set out in the Tables in Appendix 2.
- 5.54 An assessment of how much aggregate Cumbria requires for its own needs is regarded as the starting point of the relevant local information for the Local Aggregates Assessment. This could then be followed by an assessment of the sustainable contribution the quarries could make in relation to serving potential markets outside Cumbria.

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<sup>40</sup> North West Regional Aggregates Working Party Annual Monitoring Report 2011

- 5.55 On the basis of 2010 UK sales figures, sales of aggregates were equivalent to around one and a half tonnes of crushed rock/person/year and just over three quarters of a tonne of land won sand and gravel/person/year. On that basis, in order to meet its own needs for around half a million people, Cumbria would have to provide approximately 380,000 tonnes/year of land won sand and gravel and 760,000 tonnes/year of crushed rock.
- 5.56 In 2010, Cumbria's quarries sold 530,000 tonnes of sand and gravel and 3.46 million tonnes of crushed rock. Those figures were around 40 and 13% lower, respectively, than immediately before the recession. Cumbria has traditionally provided around twice as much sand and gravel and around four times as much crushed rock than it needs for its own use. It cannot be assumed that that rate of sales could be sustained in the longer term.
- 5.57 The relevant local information that has to be considered in the Local Aggregates Assessment includes broader spatial planning issues that could affect the need for mineral extraction. The Cumbria Economic Ambition<sup>41</sup> and the Britain's Energy Coast initiatives in west Cumbria should be considered. Specific examples are: possible nuclear new-build, regeneration schemes that are proposed for Barrow-in-Furness, Whitehaven and Workington, nuclear decommissioning at the Sellafield complex, improvements to transport links, housing renewal, recovery of house building rates, higher environmental performance standards for buildings and proposals for improved flood defence works.
- 5.58 The relevant local information may also need to include the implications of policies for areas outside the plan. For example, there could be pressure to make up for shortfalls that would result from policies for reducing quarrying in the Lake District and Yorkshire Dales National Parks. Policies for European Wildlife Sites may also lead to closures or constraints on quarries within or adjacent to them. An example of the latter is Force Garth dolerite quarry in Durham, which provides an exceptionally hard and durable roadstone aggregate.
- 5.59 It is difficult to see how the loss of, or reduced production from, such quarries could be completely made up from less environmentally sensitive locations. Reports by the British Geological Survey have highlighted the issues that these matters raise on a national basis<sup>42</sup>.
- 5.60 Whilst Cumbria's overall aggregates landbanks exceed, by a considerable margin, the minimum requirements of national policy, other factors also need to be taken into account. The high and very high skid resistance roadstones need to be considered separately from crushed rock for general aggregate uses. The distribution of the quarry planning permissions and the reserves in relation to the market areas which need to be served is also relevant. Account has to be taken of the county's dispersed settlement pattern and its transport routes.
- 5.61 In recognition of these matters, Minerals and Waste Development Framework Core Strategy Policy 13 currently requires that landbanks should be maintained in supply areas within the county, not just for the county as a whole. The main locational issue is in the south of the county, where the only sand and gravel quarry is Roosecote, near Barrow in Furness. There are limited reserves within

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<sup>41</sup> Evidence Base document reference LD208

<sup>42</sup> Aggregate resource alternatives: options for future aggregate minerals supply in England, Open Report OR/08/025; The need for indigenous aggregates production in England, Open Report OR/08/026; Managing aggregates supply in England: a review of the current system and future options, Open Report OR/08/042. British Geological Survey and Mineral Industry Research Organisation, 2008

the currently permitted extraction area, which was part of a larger earlier permission that has now lapsed.

- 5.62 The owner of the land and the minerals is only prepared to grant licences to continue quarrying at Roosecote on a one year at a time basis. That is not considered to be appropriate for mineral planning and an alternative site needs to be identified to replace that quarry. This is particularly important in terms of “mineral miles”, because the nearest alternative sources of sand and gravel are 40 miles away in Copeland or around 70 miles away in Eden, Carlisle and Lancashire.
- 5.63 In the west of the county, the only sand and gravel quarry is Peel Place, near Gosforth. That has limited reserves within its current planning permission and further provision needs to be made.
- 5.64 At earlier stages of the Minerals and Waste Development Framework, provision was made in draft policies for extensions to some of the other sand and gravel quarries. This draft provision was largely overtaken by the grant of planning permissions and was no longer needed to be made. An exception is Cardewmires quarry near Dalston. In the interests of maintaining the landbank throughout the Plan period, it is considered appropriate to retain the Area of Search that was previously identified for a possible extension to that quarry in the north of the county.
- 5.65 It is possible that there may be shortfalls of supplies of crushed rock in some local areas. The only possible example that has been brought to the County Council’s attention is Moota limestone quarry, which is located on the A595, between Cockermouth and Aspatria. An Area of Search for a relatively small potential extension is identified in the site allocations policies. This could be considered for release if a shortfall in the quarry’s supply area can be demonstrated and/or it would secure the most effective use of resources.
- 5.66 At Silvertop quarry, near Brampton, it is possible that an alternative area for quarrying would have less impact on the setting of the Area of Outstanding Natural Beauty than part of the land within the current planning permission. An Area of Search is proposed in the site allocations policies.
- 5.67 There are varying views about the catchment areas for individual quarries. The information provided by major aggregate producers to the Competition Commission (see paragraph 5.17 above and footnote 42) suggests that catchment areas of around 30 miles are realistic or up to 50 miles in rural areas. To date, the County Council’s policy has tended to use more localised areas than these, partly in relation to the objective of reducing “minerals road miles”. From the customer’s point of view, the relatively low value of aggregates per tonne means that transport tends to be a high proportion of their cost. The Competition Commission has indicated that it plans to do further analysis of catchment areas.
- 5.68 There are no obvious indications at present that construction activity, and its consequent need for aggregates, will pick up rapidly. This situation will be monitored in the annual Local Aggregates Assessments, by using a rolling 3-year average of annual sales to identify signs of an upturn.
- 5.69 The possibility of Cumbria-specific increases in demand have already been mentioned. There is no commitment to those developments but, if they were to happen, their implications would be able to be anticipated in advance through the lead-in time for construction.

5.70 It is not considered that such possible major developments can be addressed in this Local Plan at this time. The position with regard to them, and to any consequent need to review policies, will be addressed in the annual reports on the performance of this plan.

5.71 Having taken account of these the basis of the strategic policy for minerals is:-

- to make provision for a steady and adequate supply of minerals, in accordance with national policy and the annual Cumbria Local Aggregates Assessments;
- to balance the economic potential of Cumbria's 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.

#### **POLICY SP8 Strategic areas for new mineral developments**

The **Kirkby Thore/Long Marton** area is identified as the location for further supplies of gypsum, if required towards the end of the plan period to 2028.

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

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

The sandstones near **Roan Edge Quarry** are identified as the location for further supplies of regionally important high specification roadstone.

The sand and gravel resources in the **Roosecote** area are identified as the location for further supplies of sand and gravel in the south of the county.

The sand and gravel resources in the **Gosforth/Holmrook** area are identified as the location for further supplies of sand and gravel in the west of the county.

## **POLICY SP9 Minerals provision and safeguarding**

Provision for potential further mineral working will be made by identifying:-

- Preferred Areas and/or Areas of Search to enable a landbank of at least seven years sales at the Local Aggregates Assessment level for sand and gravel and at least ten years for crushed rock to be maintained in supply areas throughout the plan period;
- A Preferred Area or Area of Search for extending Ghyll Scaur Quarry for nationally important very high specification roadstone;
- A Preferred Area or Area of Search for extending Roan Edge Quarry for high specification roadstone;
- Locations for facilities required for producing secondary and recycled aggregates;
- An Area of Search for extending High Greenscoe Quarry for brick making mudstones;
- A Preferred Area and/or Area of Search for working additional gypsum.

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

- Mineral Safeguarding Areas for the indicative sand and gravel and hard rock resources (including high specification aggregates) and shallow coal resources identified by the British Geological Survey in its report “Mineral Resource Information for Development Plans - Cumbria and the Lake District: Resources and Constraints” (BGS Technical Report reference WF/01/02);
- Mineral Safeguarding Areas for the remaining gypsum resources
- Mineral Safeguarding Areas for identified resources of local building stones (including slate);
- Mineral Consultation Areas, which will include 250 metre wide buffer zones around the Mineral Safeguarding Areas.

The need to safeguard other mineral resources, secondary aggregate resources and potential railheads and wharves, are considered in the site allocations policies.

**POLICY SP10 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.

**POLICY SP11 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.

**POLICY SP12 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.

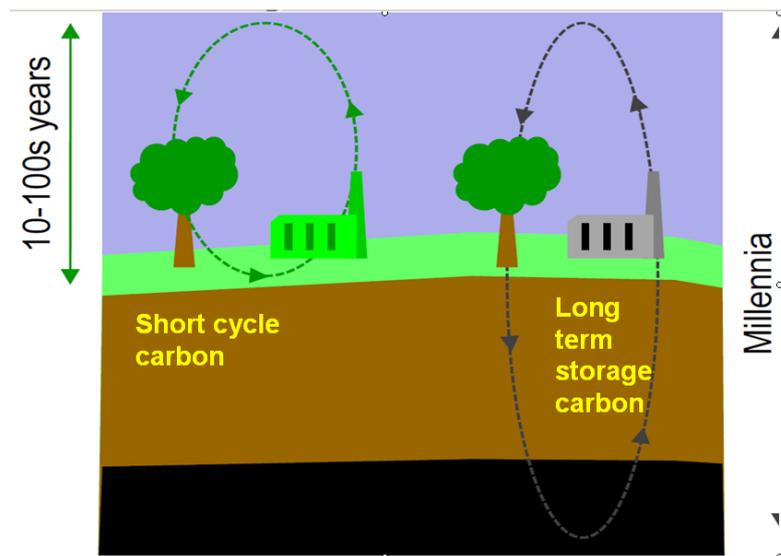
**POLICY SP13 Oil and gas and coal bed methane**

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.

## 6. CLIMATE CHANGE

- 6.1 There is a strong scientific consensus that carbon gases, which are gases given off by many natural and artificial processes, are leading to dangerous climate change. For such emissions, it is important to differentiate between short cycle carbon, which is basically already in the system and is relevant for many waste management processes, and long term carbon which is held in fossil fuels. Diagram 6.1 illustrates the difference.

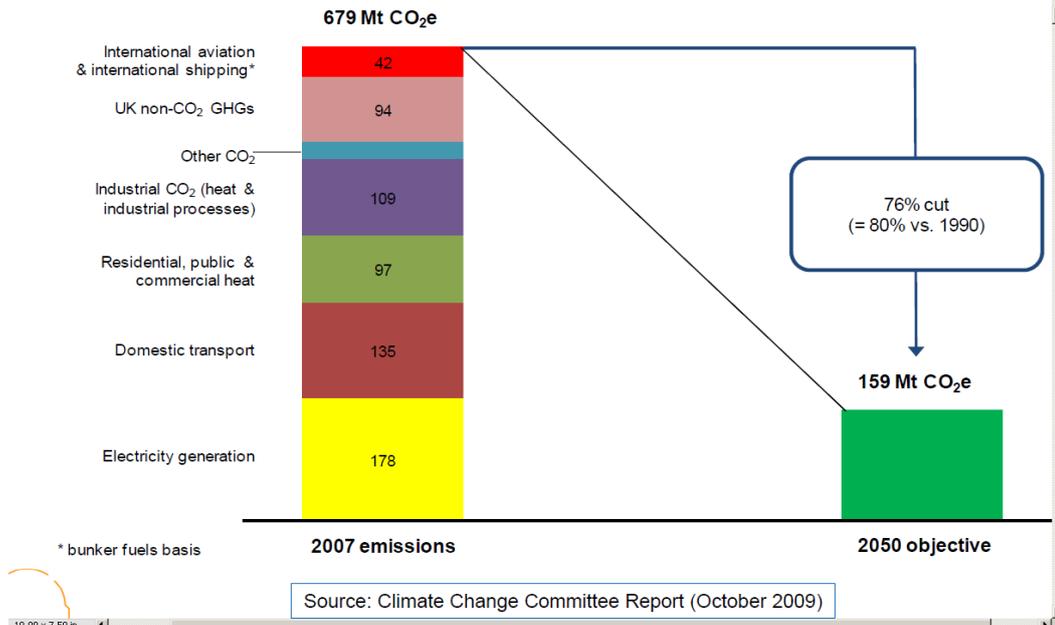
Diagram 6.1



- 6.2 The size of the challenge that will be faced in meeting the commitment to reduce carbon gas emissions is illustrated in Diagram 6.2. The objective to reduce 1990 emissions by 80% by 2050, means that less carbon gas should be emitted by that date than was emitted in 2007 by the electricity generation sector alone. Taken together with the anticipated increase in electricity use between now and 2050, there is a need to very substantially reduce the carbon intensity of electricity generation. In connection with this Local Plan, one consideration is how energy from waste could contribute to this.

**Diagram 6.2**

## The budgets to put the UK on a path to reducing emissions by 80% by 2050



- 6.3 Methane is one of the carbon gases and, in the context of this plan, is mainly associated with landfill gas emissions. All operating and some closed non-inert landfill sites have been 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.
- 6.4 Less methane is being produced as increasing amounts of bio-degradable wastes are diverted away from landfill. A joint programme of work between Defra and the Environment Agency is examining the potential to recover methane from closed landfill sites<sup>43</sup>.
- 6.5 The industries' trade associations have initiatives for carbon and energy reduction schemes. The top climate change priority is to reduce energy use, and Climate Change Agreements have been negotiated between the Government and certain energy intensive users. 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 was a new rail delivery service from Kirkby Thore, to take the equivalent of 12,000 lorry journeys each year off the roads.
- 6.6 Many businesses are adopting energy and carbon reduction measures because they can reduce costs rapidly, and improve profitability and viability. From a Sustainability Appraisal perspective, such measures, for a profitable low carbon economy, demonstrate an encouraging compatibility of economic and environmental objectives.
- 6.7 Sewage treatment also produces methane and United Utilities has a continued programme for developing combined heat and power (CHP) plants using this renewable fuel source at some of its larger treatment works.

<sup>43</sup> Progress with delivery of commitments from the Government's review of waste policy in England, Defra 2011

- 6.8 Carbon reporting is based on consumption and can include emissions that take place in the supply chain of goods and services, wherever in the world those emissions take place. This type of reporting has been used in a recent report on the carbon footprint of Cumbria that was commissioned by the local authorities<sup>44</sup>.
- 6.9 That report estimates that the total carbon emissions by Cumbria's residents and visitors to the county are equivalent to around 11 million tonnes of carbon dioxide per year. The most significant sources of carbon emissions are domestic energy use (15%) and driving by residents (10%). The estimated breakdown of emissions by residents of districts, ranges from the equivalent of 14.6 tonnes of carbon dioxide per person/year in Eden to 16.61 tonnes in Copeland with a county average of 15.73 tonnes.
- 6.10 The report's estimate of the carbon footprint of Cumbria's industries is equivalent to 15.7 million tonnes of carbon dioxide. Of relevance to this plan, 2.6% of these emissions are from waste management, combined with water supply and sewerage, and 0.4% from mining and quarrying. These are a small proportion of the total, but the overall impact of waste policies on reducing carbon goes much further than these figures may suggest. Waste prevention reduces the emissions associated with the creation of products and services and waste can be used as an alternative to fossil fuels as an energy resource.
- 6.11 The Government's Waste Review, published in June 2011<sup>45</sup>, included a commitment to provide a carbon report, which would provide details of the national carbon performance of recycling and waste activities in England. Data showing the carbon impact of waste treatment of municipal waste is intended to be published for the first time, alongside local authority waste management data, in November 2012. It is intended that, in the future, local authority specific carbon reports will also be produced, but these have been delayed until funding can be provided.

### **Where we need to be**

- 6.12 The UK has a statutory target to reduce carbon emissions by at least 34% by 2020 and by 80% by 2050.
- 6.13 Section 10 of the NPPF, explains the key role planning has to secure radical reductions in greenhouse gas emissions, minimising vulnerability, and providing resilience to, the impacts of climate change, and supporting the delivery of renewable and low carbon energy and associated infrastructure.
- 6.14 Among other matters, local planning authorities are required by the NPPF to adopt proactive strategies to mitigate and adapt to climate change, in line with the objectives and provisions of the Climate Change Act 2008<sup>46</sup>. They should have a positive strategy to promote energy from renewable and low carbon energy sources and consider identifying suitable areas for them and identify opportunities for co-locating potential heat customers and suppliers.
- 6.15 The County Council has taken advantage of an EU-funded project on waste to energy<sup>47</sup> to gain and share knowledge of best practice with partners from six other EU countries. An Action Plan has been produced, which is intended as a living document to be discussed with local partners to see how best advantage

<sup>44</sup> The green house gas footprint of Cumbria, September 2012, Small World Consulting Ltd

<sup>45</sup> Evidence Base document reference ND49

<sup>46</sup> <http://www.legislation.gov.uk/ukpga/2008/27/contents>

<sup>47</sup> the INTERREG IVC W2E project

can be taken of the opportunities for using waste as a low carbon energy resource in the best interests of the people of Cumbria.

- 6.16 The first objective of this Core Strategy relates to the climate change issues, which are significant for minerals and waste management developments. Policy needs 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<sup>48</sup> is particularly relevant to adaptation. At the time it was prepared, it took account of the assumptions that were made in Planning Policy Statement 25. Key elements of that Statement have been included in the Technical Guidance to the National Planning Policy Framework (NPPF).
- 6.17 In its new role as the Lead Local Flood Authority, the County Council has produced its Preliminary Flood Risk Assessment<sup>49</sup> and a Surface Water Management Plan. It also has a statutory duty to prepare a Local Flood Risk Management Strategy. The potential contribution towards flood alleviation, that restoration schemes for mineral workings may be able to make, could be a matter for consideration in that Strategy.
- 6.18 The energy hierarchy makes it clear that reduction of energy use is the best way to reduce greenhouse gas emissions. However, is not clear cut what are the relative merits of different minerals and waste management processes and technologies with regard to greenhouse gases. The forthcoming Defra report, mentioned previously, will provide information relating to waste management. However, it is considered that choosing between different technologies is 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.
- 6.19 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.
- 6.20 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 Plans. 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.
- 6.21 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 PPS1. Policy EM18 in the North West Regional Spatial Strategy (RSS), requires that non-residential developments over 1,000 m<sup>2</sup> 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. National policy does not now refer to such a specific target.

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<sup>48</sup> Evidence Base document references CSD10 and CSD11

<sup>49</sup> Evidence Base document reference RD25

- 6.22 One of the recommended priorities of the report on Cumbria's carbon footprint, is also relevant to this plan and to the waste hierarchy; this is to focus on developing the repair, recycling and re-use of consumer goods to bring about carbon savings.
- 6.23 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<sup>50</sup> listed 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.
- 6.24 The Quarry Products Association (now the Mineral Products Association) estimated that carbon emissions from the aggregates and quarry products sector were around 1 million tonnes, 0.7% of the UK total. It adopted a Carbon Reduction Statement of Intent<sup>51</sup> and made a number of recommendations to its members for useful action. Work will be undertaken, in discussion with Cumbria mineral operators, to examine the relevant planning policy considerations and these will be reported in the Annual Reports.
- 6.25 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.
- 6.26 For the siting of waste management facilities, a sequential approach has been adopted, 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. This was in accordance with Regional Spatial Strategy Policy DP4; although the government intends to revoke the RSS, the policy approach is considered to still be appropriate.
- 6.27 Further work relating to "waste miles" and "minerals miles" may need to be undertaken in relation to specific proposals, but conclusions about strategic locations for some developments are put forward in Chapters 3 and 5.
- 6.28 With regard to non-road transport, the Site Allocations Policies assess the need to safeguard existing or potential railheads or wharf facilities.
- 6.29 There is potential for afteruses in mineral and waste site restoration schemes to lock up carbon. This is a matter that can be pursued for specific proposals.

### **Policy**

- 6.30 It is proposed that the MWLP should contribute to securing overall reductions in greenhouse gas emissions by policies that:-

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<sup>50</sup> Stern Review on the Economics of Climate Change, HM Treasury, October 2006

<sup>51</sup> Evidence Base document reference LD6

- a. Continue to require landfill gas collection and management systems that, wherever practicable, use the gas to generate electricity (in the development management 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 Policies 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 Policies 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 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).

#### **POLICY SP14 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 feasible and viable measures have been adopted to use decentralised and renewable or low carbon energy supplies. Any exceptions to this should demonstrate that the development would form part of an integrated process for reducing greenhouse gas emissions or includes proportionate 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.

## 7. ECONOMIC AND COMMUNITY BENEFITS

- 7.1 The essential importance of the minerals and waste management industries to the county's and wider economies 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, there has probably been more investment in waste management over recent years than in any industry other than nuclear.
- 7.2 The Local Growth White Paper<sup>52</sup> states that local authorities are expected to play an active role in promoting economic growth through the variety of levers that are at their disposal. With regard to these, the main priority of this Local Plan is to ensure that provision can be made for the essential construction materials and waste management facilities that will be needed.

### **Where we need to be**

- 7.3 Bearing in mind the very serious social and economic problems experienced in 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.
- 7.4 Whilst recyclables are separated out from waste streams, very little actual waste recycling takes place within Cumbria. There should be development opportunities with potential to "add value" to the Cumbria economy by handling and processing recyclables and compost.
- 7.5 There is 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.
- 7.6 The Council's engagement with the EU-funded waste to energy project and other information sources, have demonstrated the range of possibilities there are for regarding discarded materials as a low carbon energy resource rather than as a waste. The techniques and technologies range from "mining" old landfills to anaerobic digestion, gasification, pyrolysis and incineration of residual wastes. End-products can include electricity, heat, synthesis gas, bio-fuels, alternative aggregates and even aviation fuel.
- 7.7 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 and Sellafield, have been recognised by the provision of Community Funds by the Nuclear Decommissioning Authority and Sellafield Ltd.
- 7.8 Economic and community benefits could, therefore, include:-
- jobs provided in, or supported by, mineral extraction, processing and utilisation;

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<sup>52</sup> Local Growth: realising every place's potential, Cm 7961, HM Government, October 2010, <https://www.gov.uk/government/publications/local-growth-realising-every-places-potential-hc-7961>

- 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

- 7.9 The policy seeks to optimise economic and community benefits, which implies a balancing exercise with other interests.

### **POLICY SP15 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.

## Community benefits

- 7.10 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 hosting the Low Level Radioactive Waste Repository near Drigg.
- 7.11 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.
- 7.12 The West Cumbria Spatial Masterplan highlighted 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.
- 7.13 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.

### **POLICY SP16 Community benefits**

Where 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.

- 7.14 The numbers of off-setting benefits packages that are secured will be set out in the Annual 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.

## 8. CUMBRIA'S ENVIRONMENTAL ASSETS

### Where we are now

- 8.1 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.
- 8.2 As stated in the Structure Plan<sup>53</sup>, "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."
- 8.3 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.
- 8.4 The environmental assets are listed in the Boxes 8.1 and 8.2 overleaf. 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.
- 8.5 The Cumbria Biodiversity Data Centre<sup>54</sup> has the detailed representation of current knowledge of Cumbria's biodiversity. Its evidence base 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.
- 8.6 Extensive lengths of rivers and of coast 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.
- 8.7 There is a Key Species list for Cumbria<sup>55</sup> 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 continuing to relate these species to appropriate habitat types, functional ecological networks and to geographic areas of the county.
- 8.8 Quarries and landfill sites can offer significant opportunities to deliver sustainability objectives. The Nature after Minerals<sup>56</sup> initiatives focus on former workings, but it is not just those 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

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<sup>53</sup> Evidence Base document reference LD16

<sup>54</sup> <http://data.nbn.org.uk/organisation/organisation.jsp?orgKey=10700>

<sup>55</sup> <http://www.lakelandwildlife.co.uk/biodiversity/keyspecies.aspx>

<sup>56</sup> Evidence Base document reference LD48 and <http://www.afterminerals.com/index.aspx>

newts and botanically rich vegetation has naturally regenerated on some of the limestone 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.

### **BOX 8.1**

**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;
- **Internationally important Wildlife Sites (Ramsar sites and 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;
- **World Heritage Site** - "Frontiers of the Roman Empire: Hadrian's Wall";
- **European and Global Geopark** – North Pennines;
- **Heritage Coast** - St Bees Head;
- **Nature Improvement Area** – Morecambe Bay limestones and wetlands;
- 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;
- Habitats and species of principal importance that are included in the England Biodiversity List (published by the Secretary of State under Section 41 of the Natural Environment and Rural Communities Act 2006) and in the UK Biodiversity Action Plan;
- Ancient woodlands;
- Listed buildings.

## **BOX 8.2**

**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);
- Cumbria Biodiversity Action Plan habitats and species and additional ones of conservation importance for the North West that occur within Cumbria;
- Cumbria Geodiversity Action Plan sites;
- 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;
- Landscape attributes and features essential to local landscape character;
- Landscape features of major importance for wild flora and fauna that are essential for migration, dispersal and genetic exchange and which encourage the protection, conservation and expansion of the general ecological fabric;
- Soil resources, including best and most versatile agricultural land
- Veteran and other substantial trees, hedgerows and woodlands;
- Lakes, tarns and rivers;
- Undeveloped coast;
- Locally listed archaeological sites, monuments and buildings.

### **Where we need to be**

- 8.9 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.
- 8.10 The Development Control Policies section includes policies relating to amenity issues. The Landscape Character Toolkit<sup>57</sup> provides detailed advice on applying the Cumbria Landscape Characterisation Assessment. The Guide to Using the Cumbria Historic Landscape Character Database for Cumbria's Planning Authorities, provides similar advice for historic landscape character assessment<sup>58</sup>.
- 8.11 Although North West Regional Spatial Strategy (RSS) Policy EM1 – 'Integrated enhancement and protection of the Region's environmental assets' - is currently still part of the statutory development plan, the government intends to revoke the

<sup>57</sup> Evidence Base document reference LD196

<sup>58</sup> <http://www.cumbria.gov.uk/planning-environment/countryside/historic-environment/histlandcharacter.asp>

RSS. It is, therefore, necessary to consider how the policy should be reflected in local development plan documents.

- 8.12 Its spatial objectives and priorities will mainly be delivered through the District Local Plans, which have a wider remit than this one. Aspects of the policy that relate to conserving and enhancing areas, sites, features and species are relevant to this plan.
- 8.13 RSS Policy EM1 includes four elements: (A) Landscape; (B) Natural Environment; (C) Historic Environment and (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.
- 8.14 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. This is recognised in the identification of the Morecambe Bay limestones and wetlands Nature Improvement Area (NIA)<sup>59</sup>. This is the only NIA that has been identified in the north of England.
- 8.15 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.
- 8.16 The National Planning Policy Framework requires local planning authorities to plan for biodiversity at a landscape scale, across local authority boundaries, and to set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Local planning authorities should work with Local Nature Partnerships (LNPs) in ensuring that policies and decisions are based on up-to date data relating to assets and ecological networks. In Cumbria, the existing LNPs are 'Cumbria', 'Morecambe Bay' and the 'Northern Upland Chain'.
- 8.17 Distinctions are required to be made between the hierarchy of international, national and locally designated sites. This is so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.
- 8.18 For the historic environment, local planning authorities are required to set out in Local Plans a positive strategy for the conservation and enjoyment of the historic environment. This requirement is relevant to this plan, but is most directly relevant to district plans.

## **Policy**

- 8.19 The scale of the minerals and the waste management developments, that are likely to be needed or proposed in Cumbria, is relatively small. It should 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 Local Plan policies.
- 8.20 The policy is not only that development should not result in significant harm to Cumbria's environmental assets, but also incorporates the enhancement

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<sup>59</sup> <http://www.naturalengland.org.uk/ourwork/conservation/biodiversity/funding/nia/projects/morecambebay.aspx>

measures to secure a 'step-change' increase in biodiversity resources that are in Regional Spatial Strategy Policy EM1(B). It also incorporates measures relating to green infrastructure that are in RSS Policy EM3. Green infrastructure is defined as the network of green and blue spaces that lies between cities, towns and villages and which provides multiple social, economic and environmental benefits.

- 8.21 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 compensation measures will be sought.
- 8.22 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 8.1 and 8.2.

### **Policy SP17 Environmental assets**

Minerals and waste management developments should aim to:

- protect, maintain and enhance people's 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;
- improve 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;
- help to secure a 'step-change' increase in biodiversity resources by protecting, enhancing, expanding and linking areas for wildlife within and between the locations of highest biodiversity resources and encouraging the conservation and expansion of the ecological fabric elsewhere;
- help to create new green infrastructure and conserve and manage the existing, and enhance its functionality, quality, connectivity and accessibility.

*(continued)*

There are national policies for areas and features that are identified to be of international or national importance, as set out below.

### **Areas of Outstanding Natural Beauty**

Major developments in these designated areas will only be granted planning permission in exceptional circumstances and where it can be demonstrated that they are in the public interest, in accordance with paragraph 116 of the National Planning Policy Framework.

### **Ramsar and European Wildlife Sites**

Planning permission will not be granted if Habitats Regulations Assessment cannot determine that a proposal will not have an adverse effect on the integrity of the Site. The only exceptions are where there are no alternative solutions that would have no (or a lesser) effect, and that there are imperative reasons of overriding public interest, in accordance with paragraphs 25 to 32 of ODPM Circular 06/2005 (Defra Circular 01/2005).

In accordance with NPPF paragraph 118, this policy also applies to potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites where the Government has initiated the relevant public consultation, and for sites identified, or required, as compensatory measures for adverse effects on European or Ramsar Sites, including the potential, possible or proposed ones.

### **Sites of Special Scientific Interest (SSSI)**

In accordance with paragraphs 56 to 73 of ODPM Circular 06/2005, and the general and overarching duty placed on local planning authorities, to take reasonable steps to further the conservation and enhancement of the features for which sites are of special interest:-

- Planning permission will not normally be granted for development within or outside an SSSI, which is likely to have an adverse effect on it, individually or in combination with other development.
- Exceptions will only be made where the benefits of the development, at the proposed site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of SSSIs.

*(continued)*

**Environmental assets not protected by national or European legislation**

Where not otherwise protected by national or European legislation, great weight will be given to conserving habitats of principal importance, ancient woodlands and veteran trees outside of ancient woodlands. In accordance with NPPF paragraph 118, planning permission will be refused for development resulting in the loss or deterioration of irreplaceable habitats unless the need for, and benefits of, the development in that location clearly outweigh the loss.

Planning permission will not be granted for development that would have an unacceptable impact on the 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.

Information on environmental assets and guidance on implementing parts of this policy are provided by the Landscape Character Toolkit, the Guide to using the Cumbria Historic Landscape Character database, the Cumbria Biodiversity Evidence Base and the Cumbria Historic Environment Record.

## 9. RESTORATION AND AFTERUSE

- 9.1 Restoration and aftercare schemes for mineral working and waste management sites, such as landfills, provide opportunities to secure the increase in biodiversity resources that is required by policy SP17. Such schemes should help to deliver Biodiversity Action Plan objectives; should take account of the key habitats species lists; the Cumbria Landscape Character Toolkit; functional ecological networks and of associated guidance. The ecological frameworks and networks will be developed in district Local Plans.
- 9.2 In addition to biodiversity, there can be other important restoration objectives, such as landscape enhancement, flood risk mitigation and reinstatement 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.
- 9.3 Appropriate and thorough restoration may also be needed for some sites to address land contamination and secure land stability and to reduce future liability for public safety arising from previous mineral and waste developments.

### **POLICY SP18 Restoration and afteruse**

Restoration, afteruse 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. This may include consideration of the potential for biodiversity and landscape enhancement, flood risk mitigation, maintaining agricultural land quality, ameliorating contaminated land and securing land stability.

## **10. PLANNING OBLIGATIONS AND COMMUNITY INFRASTRUCTURE LEVY**

- 10.1 Section 106 of the Town and Country Planning Act 1990 makes provision for local planning authorities and developers to enter into planning obligations or undertakings. Their purpose is to secure measures to mitigate the impacts of proposed development which cannot be secured through conditions on a planning permission. The statutory test for a planning obligation is that it can only constitute a reason for granting planning permission if it is:-
- a) necessary to make the development acceptable in planning terms;
  - b) directly related to the development; and
  - c) fairly and reasonably related in scale and kind to the development.
- 10.2 This test is set out in Regulation 122 of the Community Infrastructure Regulations 2010 and is repeated in National Planning Policy Framework paragraph 204. From April 2014, there will also be restrictions on the local use of planning obligations for pooled contributions towards items that may be funded via the community infrastructure levy (Regulation 123). In some instances, this could impact on the ability to seek planning obligations where five or more schemes are contributing to an infrastructure project or type of infrastructure.
- 10.3 The Community Infrastructure Levy (CIL) came into force in April 2010. It allows local authorities in England and Wales to raise funds from developers undertaking new building projects in their area through a standard charging schedule. The role of CIL is to secure contributions to fund strategic infrastructure that is needed to support the growth of an area. Most buildings over 100 square metres, into which people normally have access, will be liable to pay the levy.
- 10.4 The responsibility for developing a CIL is a discretionary one and it lies with the district councils and not with the county council. It is anticipated that CIL will have limited direct application to most minerals and waste management developments, but there may be overlaps between the types of infrastructure to be funded by the Levy and those required in connection with minerals and waste developments. Examples of the strategic infrastructure and improvements that could be deliverable include road schemes, green infrastructure and flood defence schemes.
- 10.5 Notwithstanding the emergence of CIL, planning obligations are likely to continue to have an important role in mitigating adverse impacts of minerals and waste management developments.

**POLICY SP19 Section 106 planning obligations and Community Infrastructure Levy**

Where it is not possible to achieve the necessary control or outcome through the use of planning conditions, or contributions secured through a District Council prepared Community Infrastructure Levy, the County Council will seek to negotiate Section 106 planning obligations that ensure that development proposals:-

1. Secure long term management of relevant environmental assets.
2. Provide financial guarantees where appropriate for restoration works, except where a national industry guarantee fund will remain in place.
3. Provide necessary infrastructure such as highway and transport improvements, flood and surface water management schemes and green infrastructure.

## **11. MONITORING AND ENFORCING PLANNING CONTROL**

- 11.1 The purpose of monitoring and enforcing planning control is to protect people, the environment, the public interest, transport systems and the amenity of the area. The service of formal enforcement notices is a discretionary function, which will only be exercised when it is for the above purposes; it is not to punish offenders for the sake of doing so.
- 11.2 The principal planning enforcement effort of the Authority is directed towards avoiding infringements through proactive monitoring. It is, nevertheless, inevitable that breaches and offences will occur and the purpose of this policy is to ensure that they are resolved in a consistent, transparent, proportionate and fair manner. Where unauthorised development or breach of conditions occur, the County Council will seek to remedy the injury in the first instance by negotiation and persuasion.
- 11.3 It is not uncommon for persons committing planning breaches to give assurances of ceasing activities or carrying out remedial works within reasonable timescales, but thereafter fail to comply with the agreed timescale. In all negotiations and decisions to resolve planning breaches within a particular timescale, or for a planning application to be submitted, the Authority will have regard to a person's history of compliance or otherwise with planning legislation and any previous informal agreements, without reasonable excuse. As a general rule, very little weight will be given to assurances made by persons who have previously given assurances of compliance, but subsequently have failed to carry out those assurances.

## **POLICY SP20 Monitoring and enforcing planning control**

The County Council, in exercising its function of ensuring compliance with planning control, will:

1. where there is serious harm caused to amenity or potentially irreparable harm to the environment, take practicable immediate action against a breach of planning control to stop further damage;
2. in all other instances, seek to resolve any problems within a reasonable timescale by discussion and negotiation without the need to resort to legal action;
3. only take enforcement action where it is necessary to do so to protect people, the environment, the public interest, transport systems and the amenity of the area, in accordance with the provisions of the development plan;
4. ensure that action is always commensurate with the breach of planning control;
5. give due regard to current legislation, policy framework, instructions, appeal decisions and relevant judicial authority;
6. take account of comments made by the general public and consultees;
7. enable acceptable development to take place, even though it may initially have been unauthorised;
8. maintain the integrity of sites having interests of acknowledged environmental importance and their surroundings;
9. where appropriate, maintain liaison and contact with the general public, and mineral and waste management operators;
10. where a planning application is submitted to address a breach of planning control, only take formal enforcement action in exceptional circumstances, until such time as the application has been determined.

## 12. MONITORING LOCAL PLAN POLICIES

- 12.1 The Local Plan needs to include a monitoring and implementation framework, with clear objectives for delivering the overall vision of the plan. This is in order to be able to prepare the Local Aggregates Assessment and to assess the performance of policies and evaluating what significant effects they are having.
- 12.2 The indicators that are most directly relevant for minerals and waste are:
- Sales of primary land won aggregates broken down into sand and gravel, crushed rock for general aggregate use, and high and very high specification roadstones.
  - Sales of industrial minerals.
  - Production of secondary and recycled aggregates.
  - Landings of marine dredged aggregates.
  - Capacity of new waste management facilities by type.
  - Municipal waste arisings and management methods.
  - Commercial and industrial waste arisings and management methods.
  - Construction and demolition waste arisings and management methods.
- 12.3 Reliable data is available from surveys for most of these, but there are particular concerns about details of commercial, industrial, construction and demolition wastes and secondary and recycled aggregates.
- 12.4 Annual reports on the Local Plan will also include details, where they are available, of carbon emissions, renewable energy capacity, by type and of changes in areas and populations of biodiversity importance. This will include:-
- change in priority habitats and species (by type); and
  - change in areas designated for their intrinsic environmental value, including sites of international, national or local significance.
- 12.5 An updated monitoring matrix, based on Table 11.1 in the Minerals and Waste Development Framework Core Strategy<sup>60</sup>, will be included in the first of the annual reports on the Local Plan.

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<sup>60</sup> Evidence Base document reference CSD14

## **PART 2**

### **DEVELOPMENT CONTROL POLICIES**

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## **13. INTRODUCTION**

- 13.1 This document sets out the Development Control Policies of the Cumbria Minerals and Waste Local Plan. These are the policies that are used when planning applications are considered. The Strategic Policies set out what the Local Plan will do. The Development Control Policies must conform to the Strategic Policies and help to deliver those policies and strategic objectives.

### **Purpose**

- 13.2 The purpose of the Development Control Policies is to provide guidance to the public, and to mineral and waste operators, about the issues that will be considered when planning applications for mineral working and waste management developments are submitted. They provide the detailed criteria needed to control and manage minerals and waste developments, for example, relating to individual environmental impacts.
- 13.3 Planning applications should be determined in accordance with the development plan. This will comprise the Cumbria Minerals and Waste Local Plan and the District Council Local Plans, once they have been formally adopted. In addition to the development plan, national policies in the form of the National Planning Policy Framework (NPPF) and Planning Policy Statement 10 (PPS10) are also material considerations for any planning applications or proposals.

### **Conforming to the Strategic Policies**

- 13.4 The Development Control Policies conform to the Strategic Policies, and provide additional detailed criteria to enable the Strategic Policies to be implemented. For most subjects or issues, broad generic policies are all that is required. For others, for example Environmental Assets, more detailed criteria based policies, which are specific to the subject, are needed in this document in addition to the higher level strategic policy.
- 13.5 Sustainable development<sup>61</sup> requires that the needs of the economy are taken into account as well as the environmental impacts of development. This balance is required to ensure that Cumbria's waste management and minerals needs are met, to support economic activity in appropriate locations and circumstances. These should maintain the viability of local enterprises and minimise impacts on climate change. The strategic policy on economic benefit has no direct development control policy counterpart, but is reflected in the wording of several policies.

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<sup>61</sup> see paragraph 2.27

## **14. ENVIRONMENT AND COMMUNITIES**

- 14.1 Cumbria is unique within the North West, with a high proportion of the County covered by national and international environmental designations. These recognise, and seek to protect, its landscape and other environmental assets. At the same time, urban development has left a legacy of towns, many in remote or coastal locations, that require regeneration and renewal. These include communities which have been based, in the past, on primary industries. They are now planning for regeneration and improved environments, with diversification of employment to include high value businesses and tourism. The initiatives in connection with Britain's Energy Coast and Cumbria's economic ambitions are relevant.
- 14.2 Minerals extraction is required to provide aggregates for new construction and to maintain basic infrastructure and modern waste management facilities are an essential pre-requisite for sustainable development of all kinds.
- 14.3 This chapter sets out the policies for protecting the environment and communities, whilst enabling appropriate and essential minerals and waste management developments where these are needed. The criteria are set out that will be used to decide when planning consent for different types of waste management or minerals developments should be granted, including the most suitable types of location. It also contains guidance on what information might be required with a planning application, what conditions or limitations may be placed on a planning consent and where additional guidance can be found.

### **Protecting communities**

- 14.4 Most minerals developments, and some waste management developments, are temporary, but may be there for many years. Whilst these developments are essential for the community as whole, local communities close to them, or to their lorry routes, need to be protected from unacceptable impacts. Applications to extend the working area or the working life of existing sites will be considered against the latest policies. It may be that the original planning application was considered acceptable because of its short term nature, or because it was granted when different criteria or environmental standards were applied, or because needs were estimated to be higher than they are today.
- 14.5 Where physical or time extensions of long standing developments are granted, planning permission conditions will be upgraded to modern standards. Environmental impacts are integrated into a number of policies; traffic and transport impacts are set out separately as they are usually relevant for any minerals or waste management proposal.

### **Traffic and transport**

- 14.6 The public are generally more aware of traffic than any other aspect of minerals and waste management developments. In Cumbria, lorries often have to use local roads before reaching the strategic road network. Representations are often received about the need to reduce lorry traffic and, particularly, its impacts on communities and on climate change. With regard to the latter point, Strategic Policy 1 requires that all proposals for minerals and waste management developments demonstrate that they minimise "minerals or waste miles".

## **POLICY DC1 Traffic and transport**

Proposals for minerals and waste developments should be located where they:

- a. are well related to the strategic route network as defined in the Cumbria Local Transport Plan, and/or
- b. have potential for rail or sea transport and sustainable travel to work, and
- c. are located to minimise operational "minerals and waste road miles".

Mineral developments that are not located as above, may be permitted if:

- they do not have unacceptable impacts on highway safety and fabric, the convenience of other road users and on community amenity,
- where an appropriate standard of access and traffic routing can be provided, and
- appropriate mitigation measures for unavoidable impacts are provided.

### **General criteria**

- 14.7 Certain issues are common to both minerals and waste developments, and although development may have beneficial effects by providing jobs, essential minerals or managing the community's waste, development will only be permitted when it can be demonstrated that it would not cause unacceptable impacts. The following policy covers specific potential impacts on sensitive receptors. These could include homes, schools, businesses and individuals. Sensitivity to impacts can vary in different situations; for example, people may be particularly sensitive to extraneous noise when enjoying quiet areas of the countryside. The timing or duration of impacts may be important.
- 14.8 The criteria will be used to assess planning applications, and suitable conditions will be used to secure mitigation of impacts where necessary. In some cases, a development may only have been acceptable because of its short term nature and, over the life of a development, accepted environmental standards may change. Proposals to extend the operational life, or the area of a development, will be considered against current environmental standards and development plan policies. Operators are encouraged to engage with local communities, through site liaison committees, about issues that may arise from any operations. The County Council's Senior Monitoring and Enforcement Officer, monitors sites and their planning permission conditions on a regular basis.
- 14.9 Information about the impacts of noise and dust and how they can be measured and monitored can be found in paragraphs 23 to 31 of the NPPF Technical Guidance<sup>62</sup>. The Council for the Protection of Rural England has produced maps showing areas of tranquillity<sup>63</sup>, and reference to these may assist in the assessment of proposals.

<sup>62</sup> Technical Guidance to the National Planning Policy Framework, DCLG, March 2012

<sup>63</sup> Cumbria map of tranquillity – Evidence Base document reference LD28

## **POLICY DC2 General criteria**

Minerals and Waste proposals must, where appropriate, demonstrate that:

- a. assessments, the relevant details of which have been agreed in advance with the planning authority, have been carried out, and proposals have been designed, in connection with, where relevant, impacts on the natural and historic environment or human health, including from noise, dust, blast vibration, air over-pressure, visual intrusion, traffic, increased flood risk, impacts on the flow and quantity of surface and ground water and migration of contamination from the site, and take into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in the locality, and of the policies that follow;
- b. public rights of way or concessionary paths are not adversely affected, or if this is not possible, either temporary or permanent alternative provision is made;
- c. the overall carbon footprint of the development has been minimised;
- d. issues of ground stability have been addressed, including tip and quarry slope stability, mining subsidence and differential settlement of backfill.

Considerations will include:

- the proximity of sensitive receptors, including impacts on surrounding land uses, protected species and areas of tranquility;
- how residual and/or mineral wastes will be managed;
- the extent to which adverse effects can be controlled through sensitive siting and design, or visual or acoustic screening;
- the use of appropriate and well maintained and managed equipment
- phasing and duration of working;
- progressive restoration;
- hours of operations;
- appropriate routes and volumes of traffic; and
- other mitigation measures.

### **POLICY DC3 Noise**

Noise attributable to minerals and waste developments should not exceed background noise levels,  $L_{A90}$  (1 hour) (free field) by more than 10dB(A) at noise sensitive properties, subject to a weekday daytime (0700 to 1900 hours) maximum of 55dB(A)  $L_{Aeq}$  1 hour (free field).

Weekday evening (1900 to 2200 hours) noise levels should not exceed background levels at noise sensitive properties by more than 10dB(A) 1 hour (free field) and should be lower than 55dB(A)  $L_{Aeq}$  1 hour (free field).

Weekday night time (2200 to 0700 hours) noise levels should not exceed 42dB(A)  $L_{Aeq}$  1 hour (free field) at noise sensitive properties.

Weekend working near to noise sensitive properties should be avoided where practicable, for any weekend working that is required, the noise levels should not exceed 10dB(A) above background noise levels.

It is recognised that some temporary activities, including soil stripping, construction and removal of soil storage and baffle mounds, aspects of road construction and maintenance, often bring longer-term environmental benefits. For such activities, increased temporary weekday daytime noise level limits should not exceed 70dB(A)  $L_{Aeq}$  1 hour (free field) for periods up to eight weeks in a year at specified noise sensitive properties. Operators will be expected to make every effort to deliver temporary works at a lower level of noise impact.

Where tonal noise and/or peak and impulsive noise would contribute significantly to total site noise, separate limits will be required independent of the background noise levels and may include  $L_{max}$  in specific octave or third-octave bands, and will not be allowed to occur regularly at night.

### **POLICY DC4 Quarry blasting**

Ground vibration attributable to quarry blasting shall not exceed peak particle velocities of 6mm/second in any direction at sensitive properties.

The operator shall develop a regression line model<sup>64</sup> which will be used to inform blast design. Records of the detailed design of each blast shall be maintained and made available to the mineral planning authority within two weeks of written request.

Records of the detailed design of each blast shall be maintained at the site for a period of at least three months and be made available to the mineral planning authority on request.

<sup>64</sup>[http://www.sustainableaggregates.com/sourcesofaggregates/landbased/blasting/blasting\\_acceptlevels\\_p2.htm](http://www.sustainableaggregates.com/sourcesofaggregates/landbased/blasting/blasting_acceptlevels_p2.htm)

## **POLICY DC5 Dust**

Applications for new minerals and waste development, and for the expansion of existing operations, will only be permitted where the applicant can provide evidence that the proposed development will not have a demonstrable impact on amenity, human health, air quality and the natural and historic environment, with regard to dust emissions.

Applications for developments must be accompanied by a dust assessment study. The scope of the study should be agreed with the Local Planning Authority, but the study must: identify sensitive receptors/locations; identify the existing baseline conditions at the application site and the sensitive receptors; identify site activities that could lead to dust emission; identify site parameters which may increase potential amenity impacts from dust; and recommend mitigation measures and site design modifications. The study should also include details of how the dust levels arising from the development would be monitored during the operation of the site and how complaints relating to dust emissions will be managed.

Applicants must first seek to remove dust emissions at their source. If this is not possible, then the emissions must be controlled. Should neither option be possible, mitigation measures must then be implemented. Planning applications should clearly set out what measures to minimise the potential effects of dust from development sites on sensitive receptors/locations are proposed.

If the development is expected to produce PM<sub>10</sub> dust, additional measures may need to be put in place if the actual source of emission is within 1,000m of any residential property or other sensitive receptor/location (this distance may be revised due to local circumstances).

All laden Heavy Good Vehicles entering/leaving a site should be sheeted to avoid dust being emitted from the lorry load when transporting loose materials.

The Local Planning Authority will liaise with the Environmental Health Officers from the Cumbrian District Councils with regard to dust emissions.

- 14.10 Strategic Policy SP14 Sustainable location and design, requires that minerals and waste management developments demonstrate that carbon reduction measures have been a determining design factor and that feasible and viable decentralised and renewable or low-carbon supplies would be used. In the early part of the plan period, it is anticipated that the focus will be on the carbon reduction strategies, particularly for mineral developments. Advice and support on establishing carbon footprints and developing carbon reduction strategies can be obtained from the Carbon Trust.

### **Cumulative environmental impacts**

- 14.11 In some cases, a proposed development may itself have multiple environmental impacts that would be acceptable on their own, but which may exacerbate impacts caused by other developments. Such cumulative environmental impacts can derive either from a number of developments with similar impacts being operational at the same time in an area, or from a number of concurrent developments in an area with different impacts or from a succession of similar

developments over time. They can include the impacts of noise or traffic, and impacts on the landscape, water resources or wildlife habitats.

- 14.12 Local Plan policy needs to take account of the extent to which a particular locality, community, environment or wider area can reasonably be expected to tolerate such cumulative impacts. This may involve mitigation of impacts or the timing of permissions and phasing of operations to make a proposal acceptable.

**POLICY DC6 Cumulative environmental impacts**

Cumulative impacts of minerals and waste development proposals will be assessed in the light of other land-uses in the area. Considerations will include:

- a. impacts on local communities,
- b. all environmental aspects including habitats and species, visual impact, landscape character, cultural heritage, noise, air quality, ground and surface water resources and quality, agricultural resources and flood risk,
- c. the impact of processing and other plant,
- d. the type, size and numbers of vehicles generated, from site preparation to final restoration and potential impacts on the highway network, safety and the environment,
- e. impacts on the wider economy and regeneration,
- f. impacts on local amenity, community health and recreation facilities and opportunities.

## 15. WASTE MANAGEMENT DEVELOPMENT

- 15.1 The Strategic Policies seek to ensure that provision should be made for managing all of Cumbria's wastes as high up the waste hierarchy as possible. It includes estimates of the volumes of wastes that this net self-sufficiency involves, of the capacities of new facilities that will be needed and the number of sites that need to be identified (Policies SP2, 3 and 4). Sites are identified in the Site Allocations Policies and Policies Map section of the Local Plan. The following Development Control Policies provide detailed criteria for the development of any sites, not only ones that are identified in the Site Allocations Policies. They also indicate the type of locations that are considered to be suitable for different types of waste management facilities.
- 15.2 Proposals for waste management facilities that contribute to an adequate network of provision, and do not have an unacceptable adverse impact on surrounding land uses or prejudice the overall development of an area, will be encouraged. Proposals on sites identified for that purpose in the Site Allocations Policies should be acceptable in principle. That is because the assessment of those sites will have included consideration of likely impacts, of opportunities for enhancement and of how they could contribute to the integrated network of facilities that is required. However, sustainable design will still have to be demonstrated and Environmental Impact Assessments and Habitats Regulations Assessments may still be required. Prospective applicants should seek early advice about these matters. Proposals for sites that have not been identified in this Local Plan will also be assessed against the relevant Strategic Policies relating to need, sustainable location, economic benefit and environmental assets.
- 15.3 Different processes, and different waste streams, can have very different environmental impacts and, therefore, require different types of location. Many modern facilities, for managing waste higher up the waste hierarchy and for diverting waste from landfill, are likely to be enclosed within a purpose designed building, which is designed and landscaped to be suitable on an urban industrial site. However, at the same time as such sites need to be found, the available land on industrial estates has decreased, regeneration aspirations have emphasised business parks and high value employment areas, and residential development has been permitted in close proximity to industrial/commercial developments. All these changes have sharply reduced the number of sites considered acceptable for waste management developments. There is also a need to more closely integrate provision for waste segregation and recovery into both residential and commercial developments.

## **POLICY DC7 Criteria for waste management facilities**

Waste management facilities that accord with Strategic Policies 2, 3 and 4, and which do not have adverse environmental or traffic impacts, will be permitted if they conform to the locational and other criteria below.

- a. Proposals for scrapyards, vehicle dismantlers, materials recovery facilities, or transfer and storage facilities to facilitate materials re-use and recycling, including household waste recycling centres, will be permitted on existing or planned industrial estates or at existing waste management sites.
- b. Developments of facilities involving processing, storage or transfer of non-inert waste in proximity to housing, business uses or other sensitive industries, will only be permitted if enclosed within a building and adverse emissions controlled through appropriate and well managed equipment.
- c. Facilities for physical, chemical or biological treatments of waste will be permitted if they reduce the potential of waste to pollute the environment and are:
  - i. on industrial estates, or
  - ii. at non-inert landfill sites where they are needed for pre-treatment, or for treatment of leachate, and will not prejudice good operational standards or the restoration scheme.
- d. Open windrow green waste composting will be permitted, where adequate stand off distances can be established to safeguard other land uses from odours and emissions, and development is on:
  - i. farms or open countryside locations, or
  - ii. isolated industrial or waste management sites.
- e. Other facilities for composting waste will only be permitted where odours and emissions to atmosphere are controlled by effective enclosure and other techniques.
- f. Waste water treatment infrastructure will be permitted in appropriate locations if proposals have minimised any adverse environmental impacts.
- g. In considering energy from waste proposals, including anaerobic digestion, preference will be given to combined heat and power providers. Proposals located on an industrial site or premises where the waste arises or heat can be used, will be favoured.
- h. Proposals for recycling facilities for construction and demolition waste, mineral and other wastes will be permitted at active quarries and landfill sites, and on suitable industrial estates. Proposals for facilities for periods longer than the active life of a quarry or landfill will require to be justified as sustainable development.
- i. The use of redundant agricultural or forestry buildings will be considered on the merits of the particular proposal.

- 15.4 The policy balances the objectives of this plan. If it is successful, high quality integrated waste management facilities will be developed, and recycling rates should continue to increase.

### **Hazardous waste**

- 15.5 No requirements for additional capacity in Cumbria have been identified for this Local Plan. No development control policies specific to hazardous waste are, therefore, proposed. The situation with regard to proposals for Low Activity Low Level Radioactive Wastes (LALLW), which would otherwise be classified as hazardous “controlled waste”, will be kept under review.

## **Radioactive wastes**

- 15.6 The Strategic Policies include detailed policies for radioactive wastes. No additional development control policies specific to these wastes are proposed. The previous paragraph's reference to keeping hazardous waste under review is, however, relevant.

## **Landfill**

- 15.7 The operational sites in Cumbria involve landraise rather than landfill and the name is used to cover both. Waste minimisation measures and diversionary technologies are reducing the amounts of non-inert (i.e. biodegradable) waste going into landfill. The Strategic Policies identify the need for only 1.3 million cubic metres of non-inert landfill capacity over the plan period. That is a fraction of the remaining capacity provided by the current planning permissions for the Cumbria landfills, but those planning permissions expire within the plan period. Proposals to provide excess capacity will be discouraged, as they could hinder initiatives for more sustainable waste management and delay the completion and restoration of the existing landfills.
- 15.8 A substantial proportion of inert waste can be driven up the waste hierarchy for use as an alternative aggregate. The disposal of residual inert waste should, as a first priority, be directed to landfill engineering works, mineral workings or derelict land requiring fill for agreed restoration schemes.

### **POLICY DC8 Criteria for landfill**

Proposals for additional non-inert landfill capacity will only be permitted if they are required to meet the need identified in the Strategic Policies, and will be required to demonstrate the measures that have been taken to drive the wastes up the waste hierarchy, to reduce waste road miles, have comprehensive landfill gas management systems including electricity generation, where viable.

All such proposals will also be assessed against environmental and community policies in this plan and, in addition, their proximity to sensitive receptors, including aerodromes. Proposals involving landraising should comply with policy DC15.

Proposals for new or extended inert waste landfill will need to demonstrate that they will not undermine the availability of such waste material for non-inert landfill engineering, agreed restoration schemes at mineral workings and landfills, and for derelict land and do not conflict with the County Council's culverting policy as the Lead Local Flood Authority.

## 16. MINERALS DEVELOPMENT

- 16.1 The Strategic Policies consider the need for a sustainable supply of minerals and include policies for the most significant minerals extracted within the County. In order to deliver the vision and objectives of the Strategic Policies, the Local Plan also needs to set out clear and appropriate development control policies, which protect resources and make them available to meet the needs of the economy.

### Non-energy minerals

- 16.2 Policies SP8 to SP13 set out the requirements for aggregates, building stones and other minerals, and for safeguarding these resources. Further provision is made by Preferred Areas or Areas of Search. Safeguarding will be achieved by identifying Mineral Safeguarding Areas and Mineral Consultation Areas in the Site Allocations Policies and on the Policies Map. The Site Allocations Policies consider whether the release of identified Preferred Areas should be related to the landbanks and how they may be phased over the plan period. This development control policy relates to aggregates, building stones and other non-energy minerals.

#### **POLICY DC9 Criteria for non-energy minerals development**

Proposals for non-energy minerals development inside the identified Preferred Areas will be permitted if they do not conflict with other policies in this plan.

Proposals for non-energy minerals development outside the Preferred Areas will only be permitted if:

- a. the landbank of reserves with planning permission is below the required level, and there is a need for the proposal to meet the levels of supply identified in the Local Aggregates Assessment, and
- b. they do not conflict with other policies in this plan and to any relevant locational or site specific policies, and
- c. where relevant, there are adequate safeguards for land stability.

Favourable consideration may also be given to proposals that can be demonstrated to be more sustainable than any available alternative, including:

- borrow pits to meet a specific demand not easily met from elsewhere.
- building stone quarries to meet the need for stone to match local vernacular building, and the conservation and repair of historic buildings.
- areas already subject to minerals extraction where the additional working will enable comprehensive exploitation of the reserves, or where the proposal achieves a more sustainable afteruse or a better restoration of the area.

Note. This policy applies to proposals to renew existing planning permissions as well as to proposals for new areas of land.

## Energy minerals

- 16.3 The development of Cumbria's energy minerals resources could become important for both the national and local economy. National energy policy and the need to work these resources, including deep-mined coal, will be kept under review. The following policy relates to these minerals. Locational aspects are covered by national policies, such as those for Areas of Outstanding Natural Beauty, and environmental impacts are covered by other policies in this Local Plan. Strategic Policy 18 and its supporting text relate to the afteruse and restoration of sites. The policy below will be reviewed if there are proposals in Cumbria for oil shales and “fracking”.

### **POLICY DC10 Criteria for energy minerals**

Planning permission will be granted for energy minerals developments that conform to the Strategic Policies where proposals:

- a. for appraisal, drilling and testing or for development of oil and gas or coal bed methane are consistent with an appropriate scheme for the appraisal of the resource,
- b. for coal extraction where:
  - the proposal is environmentally acceptable, or can be made so by planning conditions or obligations; or, if not, provides national, local or community benefits which clearly outweigh the likely impacts to justify the grant of planning permission;
  - in addition, for underground coal mining, there are acceptable proposals for rail transport, the disposal of colliery spoil and for mitigating the impacts of subsidence.

### **Applications for new conditions**

- 16.4 Applications for the review of mineral planning permissions under the Environment Act 1995 are considered against the policies of the Development Plan that are current at the time of the application. This is subject to the provisions of the Act, and in guidance, that the asset value and viability of the site should not be unduly affected.

### **POLICY DC11 Applications for new conditions**

In all initial or periodic reviews of minerals developments, standards of operation consistent with present day standards must be achieved, which:

- minimise impacts on the environment and communities;
- realise the potential to achieve significant environmental enhancement, including
- enhanced restoration and after-use schemes.

## Minerals safeguarding

- 16.5 Since the early 1980's, it has been a requirement of national policy for two tier planning authorities that Minerals Consultation Areas are established. This has the dual purpose of ensuring that sensitive development, such as houses, are not built in areas close to mineral workings, and that mineral resources are not unnecessarily sterilised by other types of development. Mineral Safeguarding Areas are required to be identified for potentially useful and viable mineral resources.

### **POLICY DC12 Minerals safeguarding**

District Councils should consult the County Council on any planning applications they receive for non-minerals development, which fall within the boundary of a Minerals Consultation Area, and which would be likely to affect the winning and working of minerals. Where a development site overlies or would sterilise mineral resources, their prior extraction will be permitted as long as it can be achieved:

- a. without prejudicing the development, and
- b. completed within a reasonable timescale, and
- c. without unacceptable environmental impacts.

- 16.6 The consultations would include housing or sensitive development where future extraction of workable minerals deposits would be prevented without significant adverse effects on future occupiers of such development. A protocol will be agreed with the districts about which planning applications should be subject to the consultation requirements. Householder developments, developments within existing built up areas or developments that are allocated in current development plans would not be subject to this policy.
- 16.7 Minerals Consultation Areas were originally established in 1981 based on geological information. A full review was undertaken, using the British Geological Survey's Mineral Resource Information for Development Plans – Cumbria and the Lake District<sup>65</sup>, as part of the Site Allocations Policies work for the Cumbria Minerals and Waste Development Framework.

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<sup>65</sup> Evidence Base document reference LD46

## **17. CUMBRIA'S ENVIRONMENTAL ASSETS**

- 17.1 The Strategic Policies recognise and describe the unique importance of the natural assets and historic environment of Cumbria. These underpin the tourism industry, attract business and investment and contribute to the quality of life. The health of the eco-system is vital for everyone.
- 17.2 The assets include, but are not confined to, the nationally and internationally designated areas and their settings. There are also local designations and additional areas within the area of this plan where the historic environment, wildlife habitats, species and landscape character are highly valued. Bearing in mind the relatively small scale of the developments that are likely to be proposed in Cumbria, it is considered that the Local Plan's focus can, in most cases, be on enhancement and not just protection of the assets.
- 17.3 It is also important that development is compatible with the characteristics and features of Cumbria. Many waste management developments are fairly flexible with regard to their precise location and should be able to avoid the more sensitive locations. In contrast, minerals can only be worked where they occur.
- 17.4 Strategic Policy 17 provides for protection and enhancement of all Cumbria's environmental assets, including, habitats, species and geological assets, as well as the historic environment, landscape and water resources. Each of these aspects is considered in more detail in the following sections. Matters relating to quality of life and amenity are covered in the previous chapters.

### **Biodiversity and geodiversity**

- 17.5 Regional Spatial Strategy (RSS) Policy EM1(B) is still part of the statutory development plan until it is revoked. It seeks a "step-change" increase in the region's biodiversity resources. This would involve protecting, enhancing, expanding and linking habitats, using the functional ecological and green infrastructure networks that were proposed. These included the networks of natural habitats, which are essential for migration, dispersal, genetic exchange and the general ecological fabric.
- 17.6 Work has been completed on a detailed representation of what is meant by Cumbria's biodiversity. As part of this process, a list was drawn up of Cumbria's Key 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 has been undertaken to relate species to appropriate habitat types, functional ecological networks and to geographic areas of the county. Key Species and Priority Habitat Statements have been prepared, which provide further guidance for policy and for applicants. Twenty three of the species could, potentially, be the ones that are most likely to be at risk from minerals and waste developments within the Plan area.
- 17.7 The aim of planning decisions will be not only to prevent harm to biodiversity and geological conservation interests, but also to seek enhancements. In addition to national policies, Strategic Policy 17 sets out that where granting planning permission would result in significant harm to those interests; local planning authorities will need to be satisfied that the development cannot reasonably be located on any alternative sites that would result in less or no harm. In the absence of any such alternatives, local planning authorities should ensure that, before planning permission is granted, adequate mitigation measures are put in place. Where a planning decision would result in significant harm to biodiversity

and geological interests, which cannot be prevented or adequately mitigated against, appropriate compensation measures should be sought. If that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission should be refused.<sup>66</sup>

- 17.8 Strategic Policy 17 makes it clear that the development control process will ensure that proposals demonstrate compliance with the statutory protection for internationally and nationally protected features, and will seek to protect and enhance all environmental assets. More detailed policy criteria for local biodiversity and geodiversity resources, including County Wildlife Sites and Local Nature Reserves are set out below. The assets are listed in the Strategic Policies.

**POLICY DC13 Biodiversity and geodiversity**

Proposals for minerals and waste developments, including ones for the renewal of existing planning permissions, will be required to identify:-

- their likely impacts on important biodiversity and geological conservation assets, as defined in the Strategic Policies and on functional ecological and green infrastructure networks, and
- their potential to enhance, restore or add to these resources, and
- to contribute to national and local biodiversity and geodiversity objectives and targets.

Proposals for developments within, or affecting the features or settings of such resources, should demonstrate that:

- a. the need for, and benefits of, the development and the reasons for locating the development in its proposed location and that alternatives have been considered,
- b. appropriate measures to mitigate any adverse effects (direct, indirect and cumulative) have been identified and secured, and advantage has been taken of opportunities to incorporate beneficial biodiversity and geological conservation features, or
- c. where adverse impacts cannot be avoided or mitigated for, that appropriate compensatory measures have been identified and secured, and
- d. that all mitigation, enhancement or compensatory measures are compatible with the characteristics of, and features within, Cumbria.

- 17.9 The policy derives from Strategic Policy 17 and its supporting text. It highlights the need not only to avoid significant harm to assets, but also to enhance them where possible. This is reflected in the order in which criteria will be considered. Where harm cannot be avoided or mitigated for, compensatory measures should be provided, and these will need to be well considered and designed, with provision for long term management where appropriate.

- 17.10 Other legislation requires Habitat Regulations Assessment for any proposals which may impact upon a European Wildlife Site, or features associated with it. This is to determine whether the proposal would be likely to have significant adverse effects on the integrity of the European site. Any developments that are unable to demonstrate no adverse effect will not be supported.

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<sup>66</sup> NPPF paragraph 118

17.11 Developers are advised that ecological surveys are usually needed to establish whether protected species are present on prospective minerals and waste sites. Early attention needs to be given to these. Some of these surveys can only be done effectively at certain times of the year. Planning applications may not be able to be considered without the survey information and a criminal offence may be involved if harm is caused to the species or their habitat.

### **Historic environment**

17.12 Strategic Policy 17 aims to protect, conserve and enhance the historic environment and the key elements of the historic environment are listed in its supporting text. The policy below contains more detailed advice and criteria that will be applied to relevant proposals. The policy relating to cumulative impacts may also be relevant for some proposed developments.

#### **POLICY DC14 Historic environment**

Proposals for waste management developments that would adversely affect an internationally or nationally important archaeological site, monument or historic asset, whether scheduled or not, or its setting, will not be permitted unless the site and setting can be preserved in situ.

Proposals for mineral developments that would adversely affect an internationally or nationally important archaeological site, monument or historic asset, whether scheduled or not, or its setting, will not be permitted unless there is an over-riding reason of national importance for the development to proceed, or the site and setting can be preserved in situ.

Proposals that:

- a. fail to preserve or enhance the character or appearance of Conservation Areas; or
- b. damage, obscure or remove important archaeological sites or other historic features; or
- c. are detrimental to the character or setting of a listed building;

will not be permitted unless it is demonstrated that the need for and benefits of the development decisively outweigh these interests.

Proposals should be accompanied by an assessment of any impacts on the historic environment, including an appropriate level of field investigation if necessary.

17.13 The County Council's Historic Environment Service provides advice about recorded historic environment interests and whether a development would be likely to affect a site or its setting. Issues that should be considered are listed in the box below. Planning applications will need to include sufficient information about such interests and may be required to include the findings of preliminary site investigations, or other information relevant to a design statement. Advice about the appropriate level of field investigation can be found in the NPPF section 12, on conserving and enhancing the historic environment. Applicants are advised to contact the Council's Historic Environment Unit at an early stage for advice.

### **Issues that should be considered when assessing the significance of impacts upon the historic environment**

- a. The rarity of the historic asset and any trends;
- b. The historic environment is an irreplaceable and finite resource and hence, impacts are unlikely to be reversible;
- c. The critical importance of a thorough understanding of the historic environment and a robust baseline so that significant adverse impacts can be avoided or reduced and potential benefits maximised;
- d. The inextricable link between the historic and natural environment and the character of the landscape;
- e. The potential for cumulative impacts: when considering impacts on the historic environment, care must be taken before concluding that impacts on individual heritage assets are not significant. This is because:
  - individual assets can have local, regional or national significance through scarcity or associations with similar assets, e.g. a particular building type or earthwork, ridge and furrow;
  - cumulative minor impacts on a range of individual assets can become significant;
  - the effect of small impacts, or loss of features, which are not significant individually may become significant, e.g. loss of character of a conservation area.

17.14 The term "historic asset" includes World Heritage Sites, Registered Historic Battlefields, and Registered Parks and Gardens of Historic Interest. Cumbria's principal historic characteristics and features have been recorded and defined as part of the "Historic Landscape Characterisation Programme". Development should be compatible with such historic characteristics and features. The Landscape Character Guidance includes non-statutory advice on applying the Cumbria Landscape Character Assessment.

17.15 In any exceptional case of over-riding national importance, where a Scheduled Monument would be affected, Scheduled Monument Consent under other legislation<sup>67</sup> is required as well as planning consent.

### **Landscape and design**

17.16 National policies provide for the protection of National Parks and Areas of Outstanding Natural Beauty; these are set out in paragraph 115 of the NPPF. The protection of other landscapes from unacceptable adverse effects of developments is intended to be achieved by the use of the Cumbria Landscape Character Assessment Toolkit. It enables the distinctive characteristics of a landscape to be assessed, its sensitivity to development to be evaluated and its "capacity" to accept development to be determined. Development proposals will be considered against these findings and will be expected to be compatible with landscape character and distinctive features.

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<sup>67</sup> Ancient Monument and Archaeological Areas Act 1979

## **POLICY DC15 Landscape**

Proposals for development should be compatible with the distinctive characteristics and features of Cumbria's landscapes and should:

- a. avoid significant adverse impacts on the natural and historic landscape,
- b. use Landscape Character Assessment to assess the capacity of landscapes to accept development, to inform the appropriate scale and character of such development and guide restoration where development is permitted,
- c. in appropriate cases, use the Guidelines for Landscape and Visual Impact Assessment<sup>(i)</sup> to assess and integrate these issues into the development process,
- d. ensure that development proposals consider visual impact and the effects on: locally distinctive natural or built features; scale in relation to landscape features; public access and community value of the landscape; historic patterns and attributes; and openness, remoteness and tranquility,
- e. ensure high quality design of modern waste facilities to minimise their impact on the landscape, or views from sensitive areas, and to contribute to the built environment,
- f. direct minerals and waste developments to less sensitive locations, wherever this is possible, and ensure that sensitive siting and high quality design prevent significant adverse impacts on the principal local characteristics of the landscape including views from, and the setting of, Areas of Outstanding Natural Beauty, the Heritage Coast or National Parks.

17.17 The radical changes in waste management that are now being introduced, require the development of modern new waste management facilities. These need to be in sustainable locations, to reduce "waste miles" and to ensure that impacts on climate change and the environment are minimised. These modern facilities will almost all be within buildings and should be located where possible on brownfield or industrial land. In Cumbria, such land is often highly visible from high quality or sensitive landscapes or coasts. The policy requires high quality of design, and sensitive siting, to ensure that adverse effects are minimised.

### **Flood risk and water resources**

17.18 The river systems, lakes and groundwater resources of Cumbria, form a unique resource, and contribute significantly to the character and perceptions of the county. Many of them are internationally and nationally important for wildlife and are protected as Special Areas of Conservation, Special Protection Areas, Ramsar sites or Sites of Special Scientific Interest. These aspects of the water environment are covered under the biodiversity policies in this document and the Strategic Policies. The following policies relate to flood risk and to the prudent use of water resources.

<sup>i</sup> published by the Landscape Institute and the Institute of Environmental Management and Assessment

- 17.19 With regard to flooding, national policy is set out in the NPPF Technical Guidance, paragraphs 2 to 19. The aim of this is to steer new development to areas with the lowest probability of flooding and it includes a sequential approach for determining appropriate locations. This approach is based on the indicative Flood Maps prepared by the Environment Agency. A Strategic Flood Risk Assessment was carried out to inform the preparation of the Minerals and Waste Development Framework; this work has also informed this Local Plan preparation.
- 17.20 For planning applications in identified areas of flood risk, the Sequential Test and, where appropriate, the Exception Test, will need to be carried out together with site specific Flood Risk Assessments to demonstrate that the development will be safe. Advice and guidance is given on <http://www.environment-agency.gov.uk/research/planning/33098.aspx>.

#### **POLICY DC16 Flood risk**

All proposed minerals and waste management developments should be located using the sequential tests in the NPPF Technical Guidance. Developments should be located, wherever possible, in areas with the lowest probability of flooding (Zone 1). Where there is no reasonably available site in Flood Zone 1, a flood risk assessment will be required and account must be taken of the flood vulnerability of the development:-

- sand and gravel workings are water-compatible development and may be appropriate in the functional flood plain (Zone 3b).
- sewage transmission infrastructure and pumping stations are water-compatible development and may be appropriate in the functional flood plain (Zone 3b).
- other mineral workings and processing may be appropriate in areas of high probability (Zone 3a).
- waste treatment facilities (except landfill and for hazardous wastes) may be appropriate in areas of high probability.
- sewage treatment plants may be appropriate in areas of high probability (if adequate pollution control measures are in place).
- landfills and sites used for hazardous waste management facilities may be appropriate in areas of medium probability (Zone 2).

Exceptions to the policy will only be permitted if:-

- a. it is demonstrated that the wider sustainability benefits of the development outweigh the flood risk and contribute to sustainability development, or
- b. development is on developable brownfield land or there are no reasonable alternative sites on developable brownfield land; and,
- c. flood risk assessment demonstrates the development will be safe, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall.

- 17.21 The Environment Agency is consulted on all minerals and waste management planning applications and provides advice on the protection of surface and groundwater resources. The identified groundwater protection zones in Cumbria cover only a small proportion of the groundwater resources that are used for water supplies. Proposals will, therefore, be required to demonstrate that they do not have unacceptable adverse impacts on water resources. Any adverse impact should be avoided or, if unavoidable, suitable mitigation measures should be proposed.

#### **POLICY DC17 The water environment**

Planning permission will only be granted for developments that would have no unacceptable quantitative or qualitative adverse effects on the water environment, including surface waters and groundwater resources. Proposals that minimise water use and include sustainable water management will be favoured.

### **Land Quality and Soil Resources**

#### **Protection and management of soil resources**

- 17.22 Soils are a vital, natural resource, that form the foundation of much of the County's landscape, land use and wildlife interests and serve a wide range of essential functions. Soils are also a "carbon sink" that can either sequester or emit carbon, depending on their condition and temperature. The Soil Strategy for England<sup>68</sup> sets out an ambitious programme of actions to improve the protection and sustainable use of soils (irrespective of their Agricultural Land Classification grading). These cover cross-cutting issues relating to the different function of soils, protecting soils through the planning system and minimising contamination.
- 17.23 Some types of development have not always appreciated the need to protect soil resources, and they are under threat from a number of processes including: climate change, compaction, erosion, loss of biodiversity, loss of organic matter, contamination and the sealing that occurs when impermeable materials such as concrete and asphalt are superimposed on valuable soil.
- 17.24 Soils may overlie valuable mineral resources, particularly sand and gravel. Even in the case of valuable agricultural land, this may not prevent development as long as the soil resources are protected, and restoration is to the highest standards. The waste developments expected over the period of the plan are less likely to involve valuable soil resources if the Strategic Policies' site selection criteria are used, which favour the use of brownfield sites. This is in line with paragraph 112 of the NPPF.
- 17.25 National policy<sup>69</sup> requires Mineral Planning Authorities to "safeguard the long-term potential of best and most versatile agricultural land, and conserve soil resources in a sustainable way". The County Council has secured the management and protection of soil resources on minerals and waste development through conditions on planning consents, and agreed operations programmes, in accordance with Structure Plan, Minerals and Waste Local Plan and Development Framework policies. Typically, planning permissions require

<sup>68</sup> Safeguarding our Soils: A Strategy for England, DEFRA, 2009

<sup>69</sup> bullet 8, paragraph 143, NPPF

topsoil and subsoil to be stripped and stored separately in grassed mounds of appropriate height and shape before a site is developed or traversed by heavy vehicles or machinery. The soils have to be retained for use in the restoration schemes that are required to be submitted with planning applications. These can specify details of soil handling and replacement and secure land forms that avoid soil erosion and enable after-care management operations to be carried out.

- 17.26 Returning organic matter to soil, such as agricultural wastes and sewage sludge, is considered to be advantageous in some circumstances, but is managed under other regulatory regimes.

### **Best and Most Versatile agricultural land**

- 17.27 “Best and Most Versatile” (BMV) agricultural land is defined as that in Grades 1, 2 and 3a under the Defra system of Agricultural Land Classification<sup>70</sup>. NPPF paragraph 143 requires that high quality restoration and aftercare of mineral sites takes place, including, for agriculture, safeguarding the long term potential of best and most versatile land and conserving soil resources.

#### **POLICY DC18 Protection of soil resources**

Proposals for minerals and waste development will be required to demonstrate that:

- a. soil resources are protected and maintained in viable condition to be used in restoration of the site, or
- b. where developments are permanent and restoration is not envisaged, that soil resources are used effectively on undeveloped areas of the site, or used appropriately on other suitable sites.

- 17.28 This policy will apply particularly to greenfield sites, especially where the site includes Best and Most Versatile agricultural land. Soils and land quality surveys may be required to provide a definitive record of the soil quality prior to the proposals. Planning application proposals would need to demonstrate that soil would be protected and include a soil handling and replacement strategy, to demonstrate that a satisfactory standard of reclamation would be achieved for the proposed afteruses. Afteruse and restoration are covered more broadly in the following section.

### **Restoration and afteruse**

- 17.29 It is particularly important that sites of temporary developments are properly restored and that restoration is appropriate to the character of the area. If high standards of restoration are not achieved, the trust necessary for further developments is undermined. Problems may arise from technical failure more often than financial failure and the risk of problems may be significantly reduced when restoration is progressive, i.e. is phased during the working life of the development.
- 17.30 Strategic Policy 18 affirms that restoration of sites should take full advantage of opportunities to deliver sustainability objectives relating to the environment and the economy of the county. It is essential that planning applications establish an

<sup>70</sup> Agricultural Land Classification: protecting the best and most versatile agricultural land, Natural England, Technical Information Note TIN049, Edition 2, December 2012

appropriate afteruse for mineral working and temporary waste management sites and ensure that resources are secured for that afteruse to be successfully established once restoration is complete.

- 17.31 All afteruses will be considered in the light of realistic assumptions about the availability of restoration materials, particularly inert waste. Aftercare can only be required for agricultural, forestry or amenity afteruses and most sites have been restored for these. There has been a presumption that agricultural afteruse should be required where the loss of land would adversely affect the economic viability of an agricultural holding.
- 17.32 Whilst sites on the best and most versatile agricultural land should usually be restored to a similar standard, other uses will be encouraged that contribute to the "step-change" in biodiversity required by current Regional policy and the expansion and enhancement required by Strategic Policy 17. They should restore wildlife habitats that may have declined as a consequence of development at the site or within the local area, strengthen regional and functional ecological and green infrastructure networks, and contribute to UK and Cumbria Biodiversity Action Plan targets.
- 17.33 Schemes that are designed with an appropriate habitat for the prevailing conditions, and demonstrated to be both technically and economically feasible, will be favoured. This is because they are more likely to create self sustaining habitats and require minimum intervention and long term management. On large sites, a mix of compatible uses may provide the best balance for the future, for example low intensity agricultural use, tourism and nature conservation. Some restored sites can also be designed to fulfil a role as educational assets. The previous section has set out requirements relating to soil resources and restoration schemes.
- 17.34 The success of reclamation schemes based on landscape, recreation and nature conservation enhancement will, however, sometimes depend not only on a well-funded and effective 5-year scheme of aftercare being implemented, but also provision for the longer-term management of the land. Non-profit generating afteruses (e.g. leisure, amenity, nature conservation, etc.) may require applications to provide long-term management proposals to demonstrate how such uses will be sustainable in the longer-term.
- 17.35 Prospective developers may demonstrate how they propose to make provision for the proper reclamation of their sites either through membership of an established and properly funded industry guarantee scheme, or by the provision of a bond or other financial guarantee, prior to the commencement of development. The exceptional circumstances where financial contributions or agreements may be required are referred to in NPPF Technical Guidance paragraph 50. The following table suggests how specific strategic objectives could be met by different afteruses, in locations where they are compatible with other development plan policies, including District Councils' Local Plans.

<b>Objectives</b>	<b>Afteruse options</b>
To optimise local economic benefit	Enhance and preserve the economic viability of agricultural undertakings where land has been temporarily used for minerals or waste development, afteruses should either be agricultural, farm diversification activities or employment land. Other opportunities may be available, particularly where waste facilities were on brownfield sites.
To minimise the impacts of climate change on people and the environment	Some mineral workings may have potential for flood water storage to mitigate flood risk. Peat workings should be restored to peat generating vegetation wherever possible. Long-lived woodland species could be planted on other suitable sites. A minimum standard could be to replace the carbon capture capability of the site before development.
To protect and enhance natural environmental assets (including the historic environment)	Enhance bio-diversity through nature conservation after-uses that protect and enhance species and habitats that either pre-existed on minerals and waste sites or for which the site has potential. Provide for enhancement of the historic environment, including industrial archaeology; and/or select an after-use that contributes to the local landscape character. Aftercare programmes that are properly financed may be essential to achieve and sustain high quality restoration.
To reduce the proportion of development on greenfield sites	Built development can deliver social and economic benefits on former minerals and waste sites if the local highways network is suitable for the traffic generated.
To support the economic aims of the sub-regional economic strategy	Tourism related development, including amenity uses, could be encouraged on minerals and waste sites well related to the coastal fringes, or in other areas where tourism and recreation, including outdoor activities, would benefit the economy.

## **POLICY DC19 Restoration and afteruse**

Proposals for minerals extraction, or for temporary waste facilities such as landfill, should be accompanied by detailed proposals for restoration, including proposals for appropriate afteruse, financial provision and long term management, where necessary. Restoration and enhancement measures should maximise their contributions to national and local biodiversity objectives and targets. In all cases, restoration schemes must demonstrate that the land is stable and that the risk of future collapse of any mine workings has been minimised.

After-uses that enhance biodiversity and the environment, conserve soil resources, conserve and enhance the historic environment, increase public access, minimise the impacts of global warming and are appropriate for the landscape character of the area, will be encouraged. These could include: nature conservation, agriculture, leisure and recreation, and woodland.

Where sites accord with other policies, an alternative or mixed afteruse that would support long term management, farm diversification, renewable energy schemes, tourism or employment land, may be acceptable.

All proposals must demonstrate that:

- a. for agricultural, forestry and amenity afteruses, the existing soil resources will be conserved, ahead of the development; and there is an aftercare management programme of at least 5 years, but longer where required to ensure that the restoration scheme is established,
- b. the restoration is appropriate for the landscape character and wildlife interest of the area, and measures to protect, restore and enhance biodiversity and geodiversity conservation features are practical, of a high quality appropriate to the area and secure their long term safeguarding and maintenance,
- c. restoration will be completed within a reasonable timescale and is progressive as far as practicable,
- d. provision for the likely financial and material budgets, including a suitable soil profile where appropriate, for the agreed restoration, aftercare and afteruse will be made during the operational life of the site,
- e. restoration will be undertaken using industry best practice.

Peat workings should be restored to peat regeneration wherever possible.

## 18. IMPLEMENTATION

- 18.1 A monitoring matrix will be produced for the first of the Local Plan Annual Reports. This will set clear objectives, with targets and monitoring indicators where possible. The Annual Reports will highlight any implementation problems, and the need for policies to be reviewed.

### Planning application process

- 18.2 Depending on the nature of the proposal, a significant amount of information can be needed in order that a planning application can be properly considered. The validation and decision making processes are quicker and more efficient if all the relevant information is included when the planning application is submitted. It is helpful for applicants when the information requirements are set out clearly.

### Agreements and obligations

- 18.3 Chapter 10 and Strategic Policy 19 are relevant to these and the Community Infrastructure Levy. In accordance with NPPF paragraph 292, Strategic Policy 19 sets out that planning obligations may be needed when it is not possible to secure measures through the use of conditions on a planning permission. Such obligations would need to be in place before a planning permission is issued. The NPPF sets out the three tests for S.106 obligations. These tests are that the obligation is necessary to make the development acceptable in planning terms; is directly related to the development; and is fairly and reasonably related in scale and kind to the development. Obligations are also required to take account of changes in market conditions over time and, wherever appropriate, to be sufficiently flexible to prevent planned development being stalled. The following development control policy lists some of the measures that may need to be considered for inclusion in obligations.

#### **POLICY DC20 Planning obligations**

Where planning obligations or legal agreements are required in order to achieve the necessary control of a development, provision for the following may be included:

- a. the undertaking of landscaping, road improvement or other works;
- b. the implementation of long term monitoring, mitigation and enhancement measures for environmental assets before, during and after the development;
- c. the long term restoration and afteruse of sites;
- d. the long term management of and public access to, sites restored for amenity purposes;
- e. the revocation without compensation of a planning permission;
- f. the provision and maintenance of rights of way;
- g. the off site monitoring of water courses, groundwater levels and water supply abstractions; or
- h. the provision of facilities to compensate local communities for the loss of amenity.

- 18.4 Amenity purposes may include leisure and recreation uses and the conservation and enhancement of biodiversity, geodiversity or the historic environment, in accordance with Strategic Policy 17.

- 18.5 Restoration schemes will not normally require planning obligations except to secure long term after care management beyond the five-year period that can be required by planning condition. This may include financial contributions by the developer towards the management of the land. In such cases, the funding requirement would not arise from fears of restoration failure, but because it is an acceptable provision to enable the development to proceed. In exceptional cases, it may also be reasonable for the County Council to seek a financial guarantee to cover all restoration costs, through a voluntary agreement/planning obligation at the time a planning permission is given. Examples of such situations may be:
- i. for very long-term new projects where progressive reclamation is not practicable, where incremental payments into a secure fund may be made as the site develops;
  - ii. where a novel approach or technique is to be used, but the County Council considers it is justifiable to give permission for the development;
  - iii. where there is reliable evidence of the likelihood of either financial or technical failure, but these concerns are not such as to justify refusal of permission.
- 18.6 It should not be necessary for such obligations to guarantee against financial failure where an operator is a member of an established mutual funding scheme, such as the Mineral Products Association Restoration Guarantee Fund. However, there are examples in Cumbria of members of that scheme disposing of quarries shortly before restoration.

## **PART 3**

### **SITE ALLOCATIONS POLICIES**

These are the policies which identify the sites and the areas of land that the County Council considers are needed for working and for safeguarding minerals and for managing wastes over the period to 2028, within Cumbria outside the two National Parks. The sites and areas are also shown on the Policies Map.

SAP1 – Household Waste Recycling Centres (HWRC)	102
SAP2 – Waste treatment facilities, including Mechanical and Biological Treatment plants, Materials Recovery Facilities and transfer and bulking stations	103
SAP3 – Energy from Waste plants	104
SAP4 – Non-inert landfill capacity	105
SAP5 – Low Level radioactive Wastes	106
SAP6 – Preferred Areas, Areas of Search and sites for secondary or recycled aggregates facilities	109
SAP7 – Mineral Safeguarding Areas	110
SAP8 – Safeguarding of potential railheads	110

## **19. INTRODUCTION**

- 19.1 The Site Allocations Policies and the accompanying Policies Map have to identify the sites and areas of land that will be required to implement the Minerals and Waste Local Plan's strategic policies for working and safeguarding minerals and for managing wastes. The most directly relevant Strategic Policies are SP3, 4, 7, 8 and 9. The policies list the types of sites and areas of land that need to be identified.

### **Number of sites**

- 19.2 In accordance with Policy SP3, six sites of 2 to 3 ha are now needed for waste treatment facilities, two sites of 2 to 4.5 ha for energy from waste plants, landfill capacity of around 1.3 million cubic metres and alternative sites for Household Waste Recycling Centres that need to be replaced. In accordance with the Strategic Policies (paragraph 3.41) more than the minimum number of sites may be identified.
- 19.3 The criteria that will be used for assessing proposals for waste management facilities are set out in Policy DC7. There is reference in that policy to Policy SP3, with its estimates of the number of facilities of each type that will be needed. However, it should be made clear that it is not intended to use that policy restrictively, to the extent of using those figures on the principle of this number and no more. There are considered to be too many uncertainties, in the rapidly changing context of planning for waste management, for that approach to be sustainable. It is acknowledged that proposals may be able to demonstrate a need for additional facilities.

## 20. THE SITE ALLOCATIONS POLICIES

- 20.1 The policies list the County Council's proposed sites for each type of waste management facility, and for each of the types of areas for safeguarding minerals.
- 20.2 The identification of a site is not a presumption that planning permission will be granted. If, and when, a planning application is submitted, it will be considered against the Strategic and Development Control Policies. Comments about particular sites are set out in the Site Assessment and Sustainability Appraisal documents. These refer to issues relating to the development of the sites and to the potential for complying with the requirements of Policy SP17 and Policy DC13, in connection with environmental assets, and with the County Council's Biodiversity Duty under Section 40 of the Natural Environment and Communities Act 2006.

### **Household Waste Recycling Centres (HWRCs) (sites of around 0.5 to 1 ha are needed)**

- 20.3 Policy SP3 states that the plan will seek to identify alternative sites for those HWRCs, which are required to be replaced. The current understanding is that those are Kendal Canal Head, Workington Clay Flatts, Frizington and possibly Maryport. Proposals for additional sites that were proposed in the Minerals and Waste Development Framework have been curtailed by austerity measures, but will be kept under review in the Annual Reports.

#### **Policy SAP1 Household Waste Recycling Centres (HWRC) (sites of around 0.5 to 1.0 ha)**

- AL35 Risehow Industrial Estate, Flimby, if needed to replace the HWRC at Maryport
- AL37 Lillyhall industrial estate to replace the HWRCs at Clay Flatts, Workington, and at Frizington
- SL1B Land adjacent to Kendal Fell Quarry, to replace the HWRC at Canal Head

## **Waste treatment facilities (sites of around 2 to 3 ha are needed)**

- 20.4 In accordance with Policy SP3 this policy needs to identify at least six sites for these facilities.

### **Policy SAP2 Waste treatment facilities, including Mechanical and Biological Treatment plants, Materials Recovery Facilities and Transfer and Bulking Stations (sites of around 2 to 3 ha)**

AL3 Oldside, Workington  
AL8 Lillyhall Waste Treatment Centre, Workington  
AL18 Port of Workington  
CA11 Willowholme, Carlisle  
CO11 Bridge End Industrial Estate, Egremont  
ED31 Flusco waste management site, near Penrith  
SL1A Kendal Fell Quarry, the quarry floor  
*(Note: this is mostly within the Lake District National Park and not within the area of this Local Plan)*

## **Energy from Waste (EfW) (sites of around 2 to 4.5 ha are needed)**

- 20.5 The municipal waste contract does not include Energy from Waste plants, but the Mechanical and Biological Treatment plants produce a fuel that could be used (solid recovered fuel – SRF). The waste hierarchy has been refined to give greater weight to waste recovery, including energy recovery. Its potential contribution to the low carbon agenda (see Diagram 6.2) has been mentioned in chapter 6.
- 20.6 The County Council has recently been engaged, with partner organisations from six other EU countries, in a European Union funded project about using waste as an energy resource as part of an overall sustainable waste management strategy. The project is known by the acronyms INTERREG IVC W2E (Waste to Energy).
- 20.7 Details of working examples in other countries have demonstrated the opportunities for regarding different types of discarded materials as a resource rather than a waste by making use of a range of technologies. An Action Plan<sup>71</sup> has been produced which is intended as a “living” document that will be developed through discussions with interested parties. It sets out broad areas of work about what could increase levels of energy recovery that may be agreed and achieved in the interests of people in Cumbria.
- 20.8 There are planning permissions for an EfW plant at the Port of Barrow, mainly using imported wood waste; for a steam raising plant, using refuse derived fuel and other waste, near Kendal; and for an anaerobic digester plant for agricultural wastes near Silloth.
- 20.9 There has been interest in developing additional EfW plants for the commercial and industrial waste streams both within and outside of the sites where the wastes arise. Policy SP3 requires that two new sites should be provided; in accordance with paragraph 3.41, more than the minimum are identified. It is intended that supplementary guidance will be prepared, about how energy from

<sup>71</sup> Evidence Base document reference LD213

waste proposals should fit into the overall sustainable waste management strategy.

**Policy SAP3 Energy from Waste plants (sites of around 2 to 4.5 ha)**

AL3 Oldside, Workington  
AL8 Lillyhall Waste Treatment Centre, Workington  
AL18 Port of Workington  
CA31 Kingmoor Park East, Carlisle

**Landfill**

- 20.10 Policy SP3 identifies that only around 1.3 million cubic metres of non-inert landfill capacity should be needed over the plan period. That is far less than the 2008 MWDF Core Strategy estimate of 7 million cubic metres and the 6.5 million cubic metres remaining in landfill planning permissions, but reflects the latest information. Those planning permissions will all expire within the plan period (see paragraph 3.49).
- 20.11 The strategic policy also states that non-inert landfill capacity will only be provided for residual wastes, which remain following practicable measures to divert wastes from landfill. That capacity should be located in proximity to the Mechanical and Biological Treatment plants for municipal waste **near Carlisle** and **at Barrow in Furness**, or to the location of an equivalent facility that is developed for commercial and industrial waste, or where it is necessary to secure the acceptable restoration of existing landfills. The County Council is not aware of any proposals for plants to treat commercial and industrial wastes and no such site is, therefore, identified in the policy. This matter will be kept under review in the Annual Reports.
- 20.12 Priority should be given to assessing viable options for disposing of residual non-inert wastes in the south of the county throughout the plan period, after the 2017 expiry of the Bennett Bank landfill planning permission. The only potential site that has been able to be identified is Goldmire Quarry. Although it is proposed in the following policy, it is uncertain whether any new landfill in the south of the county could be a viable proposition for the much reduced need for landfill capacity. This matter will be kept under review in the Annual Reports.

### **Policy SAP4 Non-inert landfill capacity**

The 1.3 million cubic metres of non-inert landfill capacity that is estimated to be needed over the plan period should be provided in close proximity to major facilities that are diverting waste from landfill.

The existing such facilities are the Mechanical and Biological Treatment plants for municipal waste and the proposed provision in relation to these is within the existing non-inert landfills at:-

BA23 Bennett Bank, Barrow  
CA24 Hespin Wood, near Carlisle

and the proposed non-inert landfill at:-

BA10 Goldmire Quarry, Barrow

Part of the landfill requirement will be for waste that is needed to secure acceptable restoration landforms at the other existing non-inert landfills which are:-

Lillyhall landfill, Workington  
Flusco landfill, near Penrith

Proposals will be discouraged, that would provide significant excess total non-inert landfill capacity.

### **Low Level radioactive Waste**

- 20.13 There are existing facilities for managing these wastes at Lillyhall (metal recycling), Sellafield (the Calder Landfill Extension Segregated Area) and at the Low Level Waste Repository, near Drigg (storage). The Lillyhall landfill has an Environmental Permit for disposing of Very Low Level Waste.
- 20.14 Strategic policy SP6 is for those higher activity ranges of Low Level Waste (above 200 Becquerels/gram), and makes provision for the Low Level Waste Repository to continue to fulfil a role as a component of the UK's radioactive waste management capability, but for no other site in Cumbria.
- 20.15 As stated in that policy, the acceptance of that role is subject to the success of initiatives to divert wastes away from the Repository, that do not require its highly engineered containment facilities. Policy SP7 relates to proposals for new facilities for managing such lower activity ranges of Low Level Wastes in accordance with the waste hierarchy.
- 20.16 It is particularly important that facilities are provided, within Cumbria, and throughout the UK, to divert Low Activity Low Level Waste away from the highly engineered facilities at the Repository. This includes the sub-category of Very Low Level Waste – (VLLW is defined as having 0.4 to 4 Becquerels/gram activity). The volumes of these wastes will increase significantly as nuclear sites are decommissioned.
- 20.17 The County Council's and Copeland Borough Council's policy is that decommissioning wastes should be managed on the site where they arise

unless a rigorous assessment demonstrates that this is not practicable. In those circumstances, a similarly rigorous assessment should be carried out for land adjacent to the nuclear site, before new and more distant sites are considered, with priority given to licenced nuclear sites.

- 20.18 Efforts continue to be made by the nuclear industry to improve the quality of the inventory of these wastes. However, uncertainties still remain, about the volumes of arisings, when they will arise, the potential for driving some of them up the waste hierarchy and the type of facilities that may be needed. What is clear is that a substantial proportion of decommissioning wastes will, as would be expected, arise at the Sellafield complex.
- 20.19 Of the existing radioactive waste management sites in Cumbria, the metal recycling facility at Lillyhall would not appear to have potential for significant additional waste management capacity. The County Council considers that the Lillyhall landfill is an unacceptable location for the disposal of radioactive wastes. This is because of its location adjacent to one of the county's main employment land sites and the cumulative impact of further extending the several decades of landfilling in this locality.
- 20.20 Within the boundaries of the Low Level Waste Repository, there would certainly appear to be significant capacity for disposing of lower activity levels of Low Level Waste (LALLW) within the capping layer and infilling that will be required over and between the existing permitted facilities. A detailed assessment of this 100 ha site may also conclude that there is potential for additional types of facilities to be provided.
- 20.21 The capability of the 280 ha Sellafield complex to accommodate facilities for managing Low Level Waste from its decommissioning is currently being assessed by Sellafield Ltd's consultants. It is understood that the initial conclusion is that there is no capacity within that complex at present, but there are possible sites on adjacent land owned by the Nuclear Decommissioning Authority.
- 20.22 It is considered that the Low Level Waste Repository, the Sellafield complex and land adjacent to it, can provide adequate capacity for the disposal of Low Level radioactive Wastes within Cumbria for the plan period and beyond.

**Policy SAP5 Low Level radioactive Wastes (LLW) management and disposal**

**Higher activity LLW** (*generally defined as those wastes with activity levels above 200 Becquerels/gram*)

CO35 The Low Level Waste Repository, near Drigg

**Lower activity LLW** (*generally defined as those wastes with activity levels below 200 Becquerels/gram*)

CO35 The Low Level Waste Repository, near Drigg, excluding disposal within highly engineered containment facilities

CO36 Land within Sellafield

CO32 Land adjacent to Sellafield

## **Sand and gravel**

- 20.23 Policy SP9 requires that Preferred Areas and/or Areas of Search will be identified to enable a landbank of at least seven years to be maintained throughout the plan period, and Mineral Safeguarding Areas and/or Areas of Search for the indicative sand and gravel resources identified by the British Geological Survey. The landbank is to be based on the annual Cumbria Local Aggregates Assessment.
- 20.24 The starting point for the Local Aggregates Assessment is the 10-year average annual sales figure. The latest published information about sales is for 2010 and the 10-year annual average is 760,000 tonnes/year. The landbank at the end of 2010 was 11.48 million tonnes, equivalent to 15.1 years. That would not be sufficient to maintain a 7-year landbank throughout the plan period, i.e. past 2028, to 2035.
- 20.25 Although the 10-year average annual sales figure is the starting point for the Local Aggregates Assessment, other relevant local information also has to be taken into account. The most significant local information is that current sales of sand and gravel from Cumbria quarries are only around 530,000 tonnes/year due to the recession. The situation will continue to be monitored annually. At the moment it seems likely that the 10-year average will continue to reduce over the next few years and that the landbank will last longer.
- 20.26 The location of the reserves of sand and gravel is another important consideration; for example, Roosecote is the only sand and gravel quarry in the south of the county and Peel Place in the west. The Local Aggregates Assessment will address this issue of the location of quarries in relation to the areas they serve.
- 20.27 Although further releases of land would not appear to be necessary, for at least ten years, it is necessary for these policies to make provision for the landbank to be maintained throughout the plan period. This will be by identifying Preferred Areas and Areas of Search.

## **Crushed rock for general aggregate use**

- 20.28 Policy SP9 requires that Mineral Safeguarding Areas and/or Areas of Search will be identified for the indicative hard rock resources identified by the British Geological Survey. The strategic policies explain that no further provision for the release of general crushed rock aggregate can be justified because of the size of the current landbank. For limestone, this would last over 40 years and for sandstone and igneous rock over 60 years (see table 5.6 in Appendix 2).
- 20.29 Two Areas of Search for limestone quarries are identified in Policy SAP6. At Silvertop Quarry, this would only be relevant if it would secure environmental improvements. At Moota Quarry, it would be relevant if a shortfall of supply in that area is demonstrated. The Mineral Safeguarding Areas Map shows the extent of the known geological resources for crushed rock.

## **High and very high specification roadstones**

- 20.30 Policy SP9 requires that a Preferred Area or Area of Search will be identified for extending Ghyll Scaur Quarry, for nationally important very high specification roadstone, and Mineral Safeguarding Areas and/or Areas of

Search for the high specification aggregate resources identified by the British Geological Survey. Two Areas of Search are identified in Policy SAP6.

### **Local building stones**

- 20.31 Policy SP9 requires Mineral Safeguarding Areas for identified resources of local building stones; two Mineral Safeguarding Areas are shown on the maps.
- 20.32 One of the Mineral Safeguarding Areas is for slate. More specific proposals have been suggested, but it is considered that these should be addressed through the planning application process and not through planning policy. The County Council has no doubts about the importance of the Kirkby Slate quarries. They are an integral part of the operations of what is, probably, Cumbria's largest mineral operator in terms of employment. Planning application proposals would be assessed against the Development Control Policies. In that context, favourable consideration may be able to be given to proposals that can be demonstrated to be more sustainable than any available alternative and the considerations may need to include slope stability matters.

### **Brick making mudstones**

- 20.33 Policy SP9 requires that an Area of Search will be identified for extending High Greenscoe Quarry.

### **Gypsum**

- 20.34 Policy SP9 requires that a Preferred Area and/or Area of Search will be identified for working additional gypsum and a Mineral Safeguarding Area for the remaining gypsum resources. The Birkshead mine is working the last of the gypsum resources that can be worked by underground mining. In the Preferred Area identified, the gypsum is too shallow to be worked that way and would have to be quarried.
- 20.35 Gypsum has raised questions, about how the Mineral Safeguarding Areas should be defined, that are not found for other minerals. The geology map shows the outcrops of the gypsum beds, but significantly larger areas of land than the outcrop would be needed to extract the gypsum. For example, an earlier proposal for the Stamphill Preferred Area was for an extraction area of around 25 ha, but required an area three times as large as that to accommodate its operational needs, including screen mounds and temporary overburden storage.
- 20.36 The Mineral Safeguarding Areas have been drawn more broadly than the geological resource as an indication of the areas of land that would be likely to be needed for working the gypsum resources. In the Minerals and Waste Development Framework, the identification of Areas for gypsum raised concerns relating to the possibility that they could cause a long period of blight on properties. The issue was exacerbated by the very localised occurrence of gypsum compared with the other minerals that were being safeguarded. In response, it was agreed during the Examination of the MWDF documents that areas of gypsum resources, which may become economically viable in the future, should be included in the Mineral Safeguarding Areas. National policy requires the Framework to safeguard economically important minerals<sup>72</sup>. For gypsum, it is not proposed to identify a separate Mineral Consultation Area in

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<sup>72</sup> National Planning Policy Framework Section 13, DCLG, March 2012

addition to the Mineral Safeguarding Area. This is because the MSA has to extend well beyond the gypsum outcrop identified on the BGS maps.

**Policy SAP6 Preferred Areas, Areas of Search and sites for secondary or recycled aggregates facilities**

**Preferred Areas for minerals**

- M18 Stamphill, Long Marton, for gypsum
- M12 Roosecote sand and gravel quarry, Barrow-in-Furness

**Areas of Search for minerals**

- M5 land adjacent to High Greenscoe Quarry, near Dalton-in-Furness, for brick making mudstones
- M6 land between Overby and High House sand and gravel quarries, near Abbeytown
- M8 land adjacent to Cardewmires sand and gravel quarry, near Dalston
- M10 land adjacent to Silvertop limestone quarry, near Brampton
- M15 land adjacent to Peel Place sand and gravel quarry, near Gosforth
- M17 land adjacent to Ghyll Scaur very high specification roadstone quarry, near Millom
- M30 land adjacent to Roan Edge high specification roadstone quarry, near New Hutton
- M33 land adjacent to Moota limestone quarry, near Cockermouth

**Sites for secondary or recycled aggregates facilities**

In addition to existing recycling facilities at waste management sites and elsewhere, the hard rock quarries are considered to be suitable locations for processing alternative aggregates from their quarry wastes and from recycled aggregates, subject to detailed consideration of environmental impacts including traffic.

**Other mineral resources, secondary aggregate resources and potential railheads and wharves**

- 20.37 Policy SP9 requires that the need to safeguard these will be considered. The shallow coal and fireclay resources, one slag bank and two potential rail sidings<sup>73</sup> are identified, on the maps, as safeguarding areas, together with the areas of planning permissions for underground coal, lead and zinc mining.
- 20.38 Policy SP13 relates to coal bed methane. The areas that have been licenced by the Coal Authority are shown on Policy Map 2. References are made to the high prospects for coal bed methane within the West Cumbria coalfield and the extension of the Canonbie coalfield. The strategic importance of this resource, and others, including oil shales and deep coal, will be kept under review in the Annual Reports.
- 20.39 It has not been considered necessary to identify Mineral Safeguarding Areas for the deep coalfields, because any future mining would not be directly sterilised by other types of development in the same way that shallow coal

<sup>73</sup> Site M31 Salthouse, near Millom, currently has temporary planning permission, tied to the life of Ghyll Scaur Quarry, for an aggregate loading facility for the quarry

resources could be. The Coal Authority has provided details of the extent of deep coal resources and of current licenced mining areas; these are shown on Policy Map 2. Pending any need, that may be identified for a review of the policies, it is considered that the strategic policies and development control policies provide the appropriate policy framework for energy mineral proposals.

### **Policy SAP7 Mineral Safeguarding Areas**

These are defined for sand and gravel, limestone, high purity limestone, local building stones (including slate), igneous rocks, sandstone, shallow coal, fireclay and gypsum in accordance with the geological resources maps included within the British Geological Survey Technical Report WF/01/02 Mineral Resource Information for Development Plans: Cumbria and the Lake District.

M24 Derwent Howe Slag Bank, Workington, is a Mineral Safeguarding Area for its resource of secondary aggregate

The areas of planning permissions for the underground mining of coal, near Whitehaven and for lead and zinc, near Nenthead, are also shown.

### **Policy SAP8 Safeguarding of potential railheads**

AL32 Siddick (if required in connection with mineral working or waste management proposals)

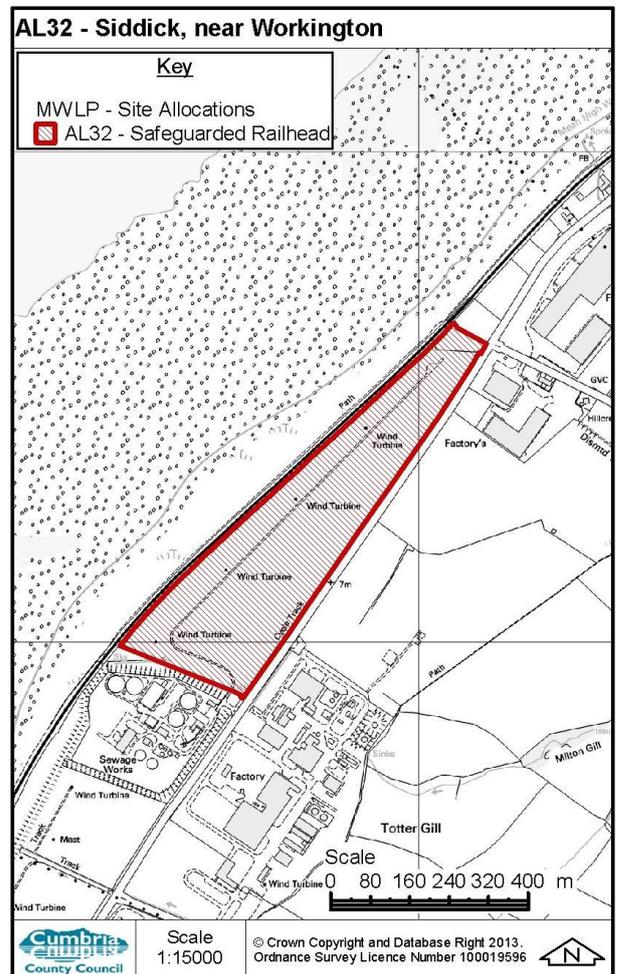
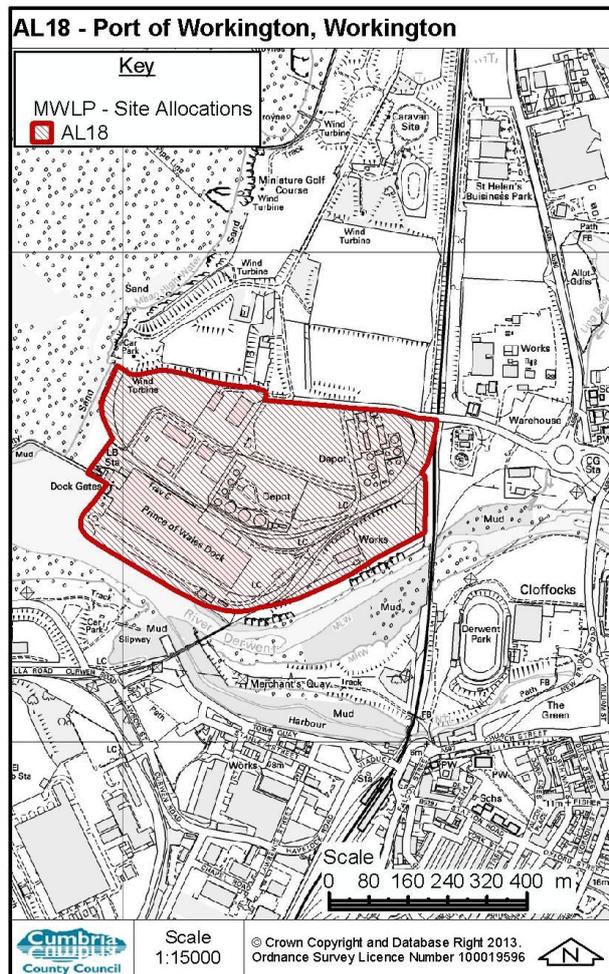
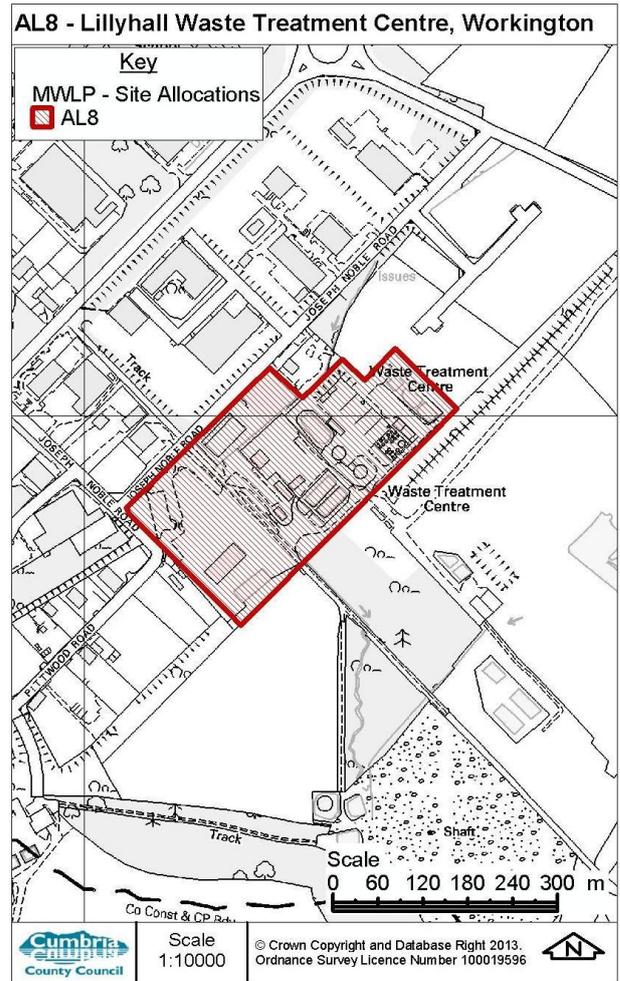
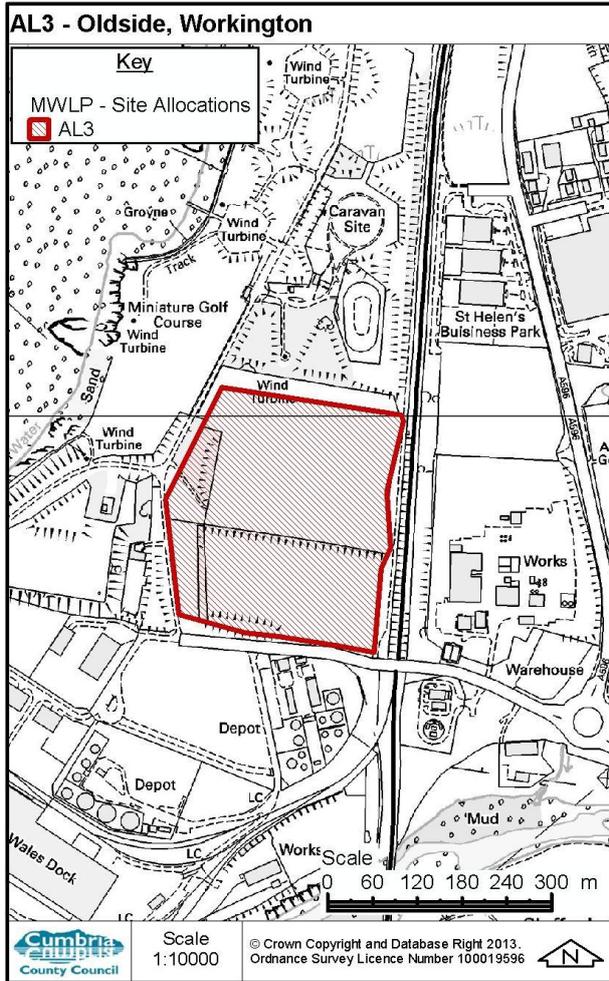
M31 Salthouse, near Millom, for Ghyll Scaur Quarry

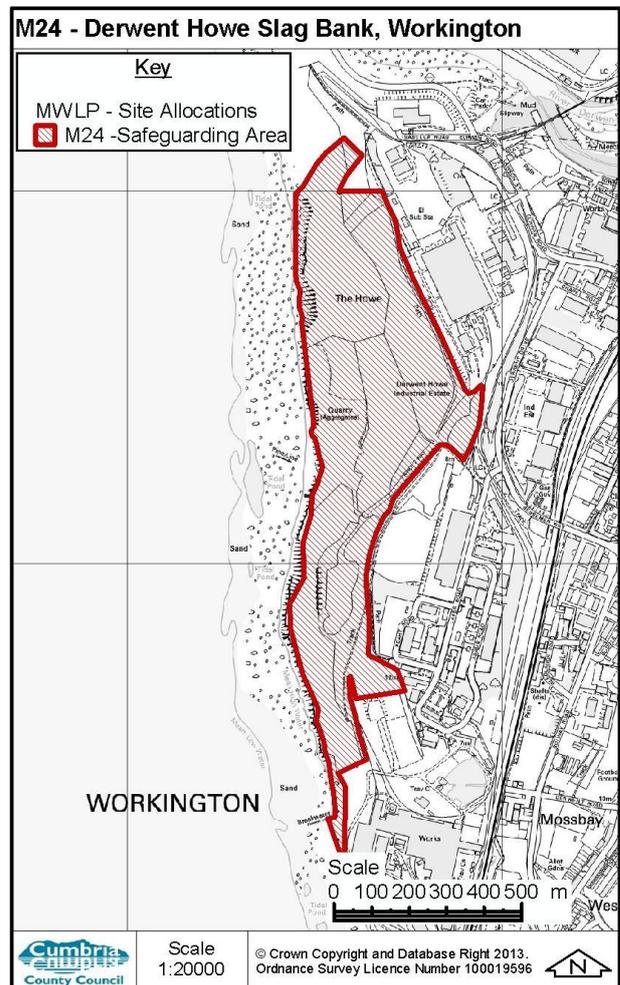
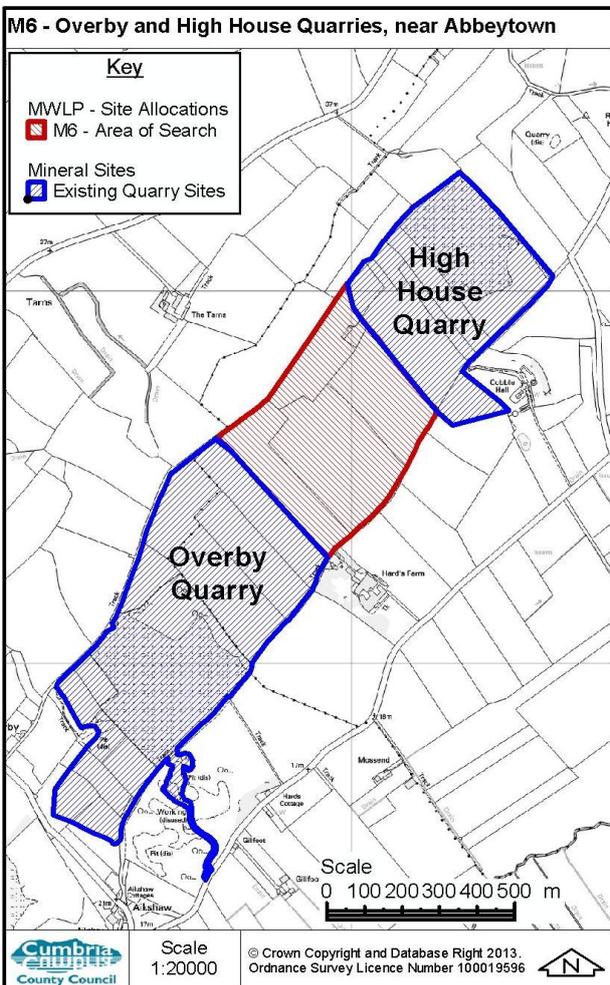
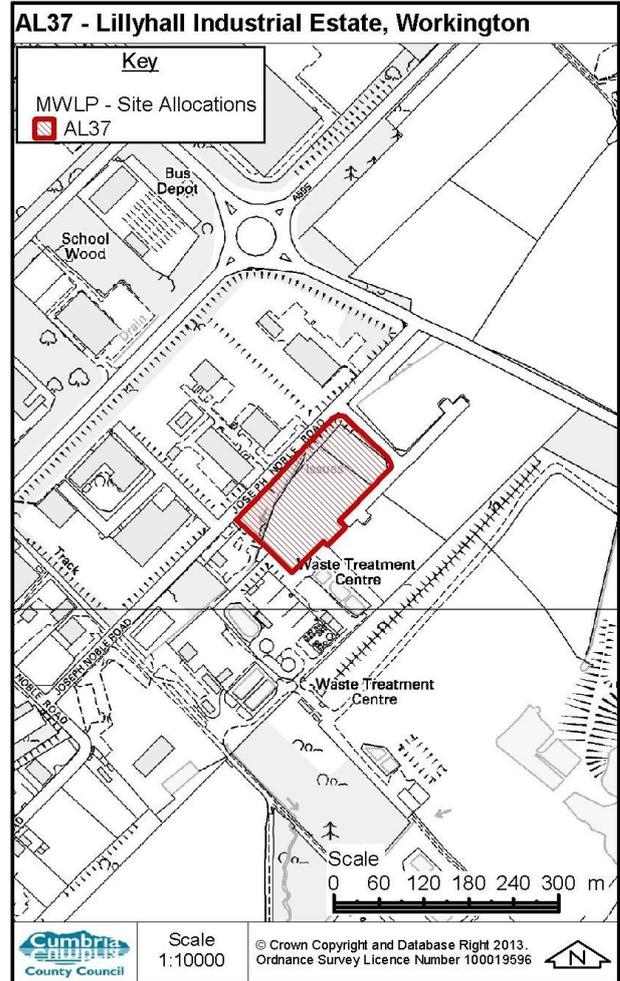
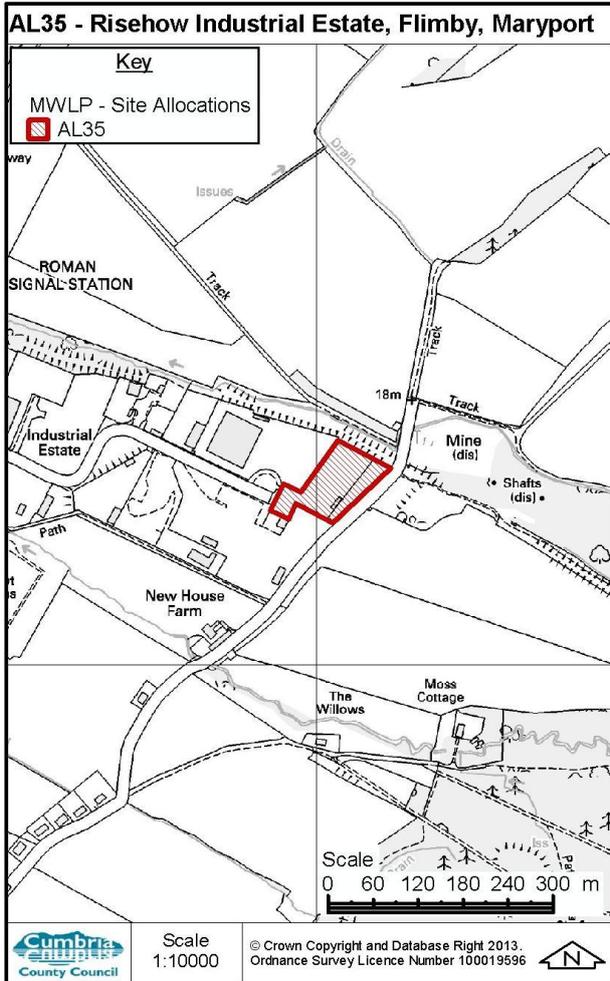
### **Mineral Consultation Areas**

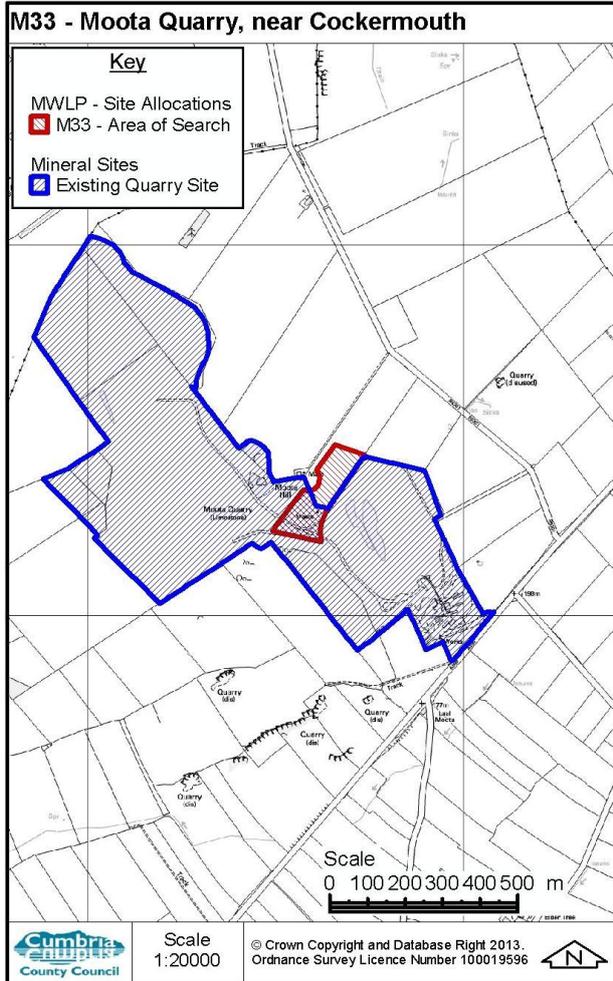
- 20.40 These are for use in two-tier planning areas. They identify where consultations are needed, between county and district councils, about development which would be likely to affect land with potential for mineral extraction and also about how mineral working could affect other existing or proposed land uses.
- 20.41 Policy SP9 requires that Mineral Consultation Areas will be identified, which include 250 metre wide buffer zones around Mineral Safeguarding Areas. With the exception of gypsum, as explained above, the Mineral Safeguarding Areas have been defined as the extent of the mineral resources shown on the British Geological Survey maps.
- 20.42 The Mineral Consultation Areas will also have to be shown on District Local Plan Policies Maps. It is intended that guidance will be produced, jointly with the districts and adjoining authorities, on the details of the consultation process. This guidance will set out the locations, types and scale of development proposals for which consultations are necessary. At this stage, no attempt has been made to exclude built up areas or any other types of areas from the Mineral Consultation Areas. These matters will be addressed in the guidance.

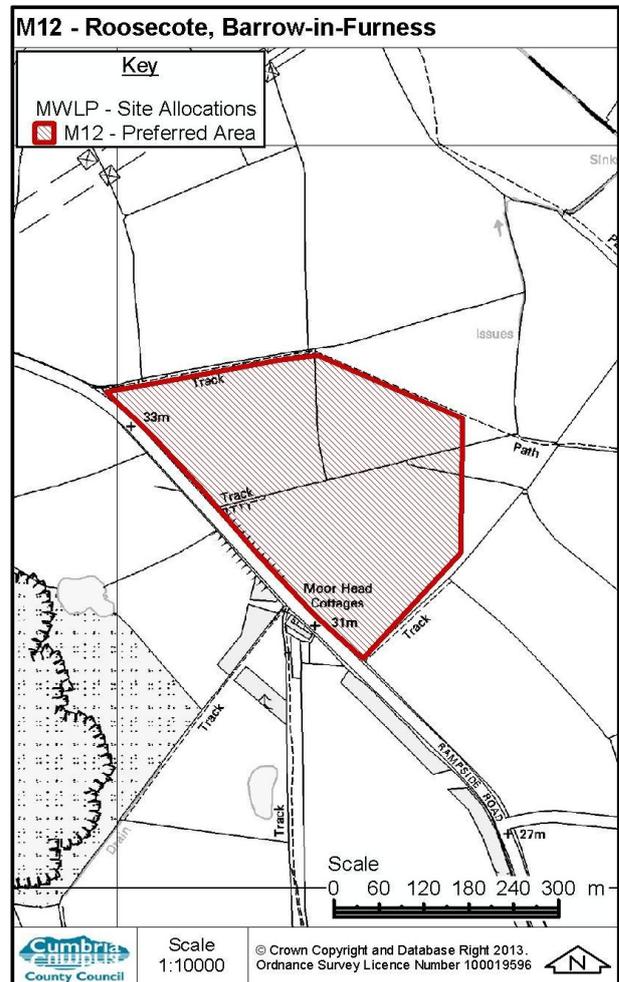
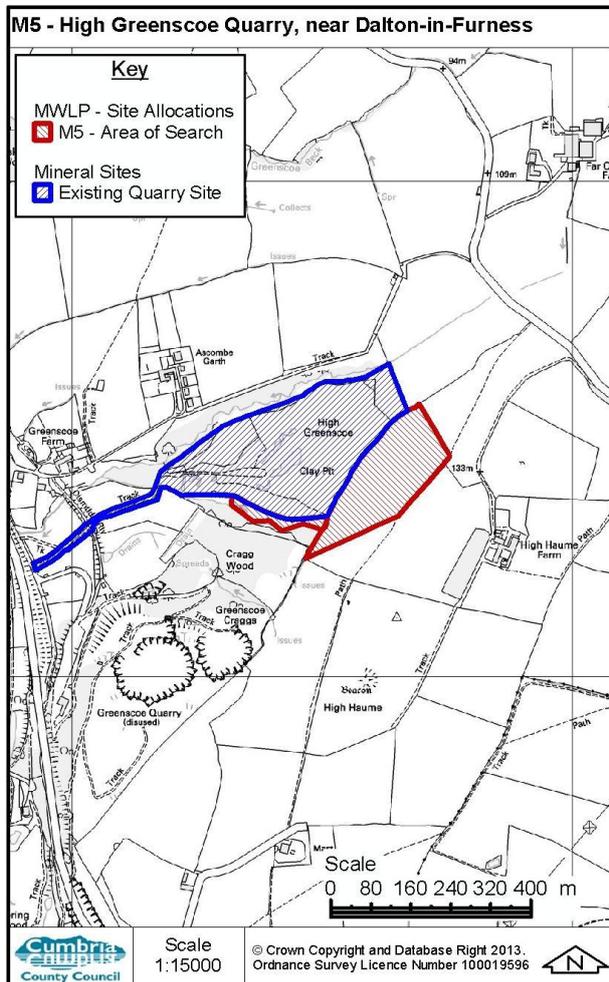
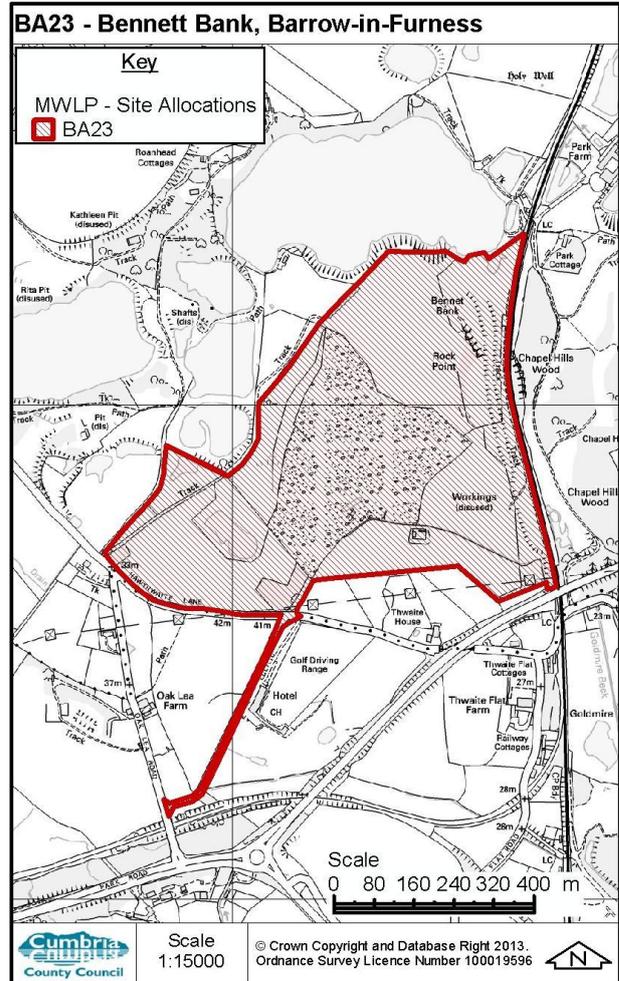
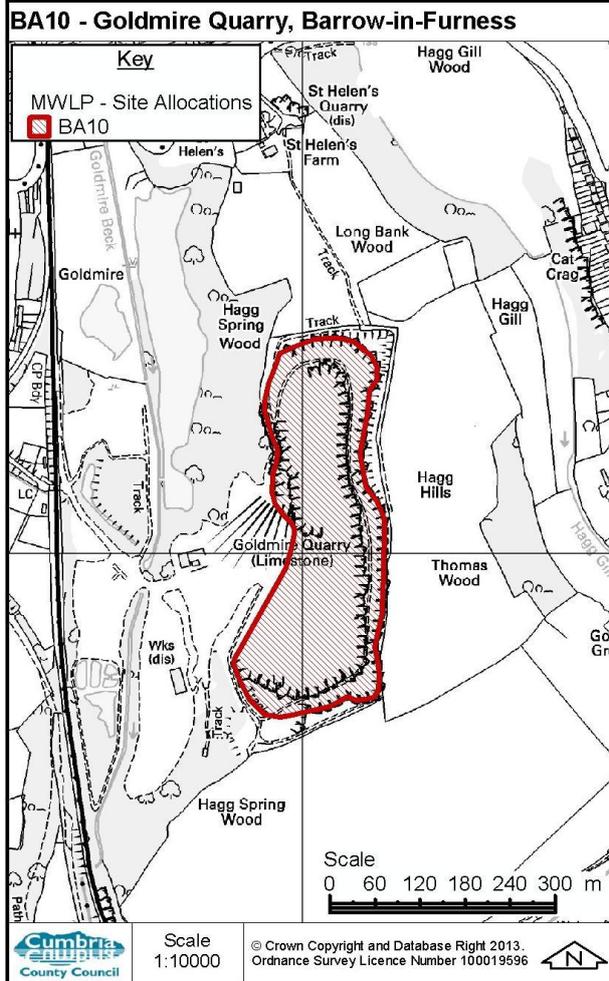
# 21. MAPS OF PROPOSED SITES

## Allerdale







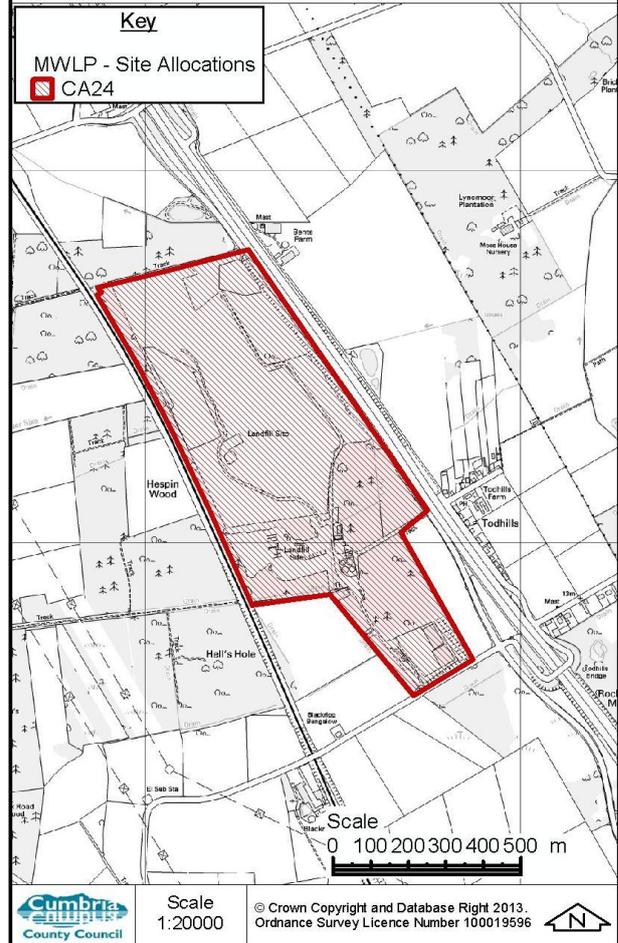


# Carlisle

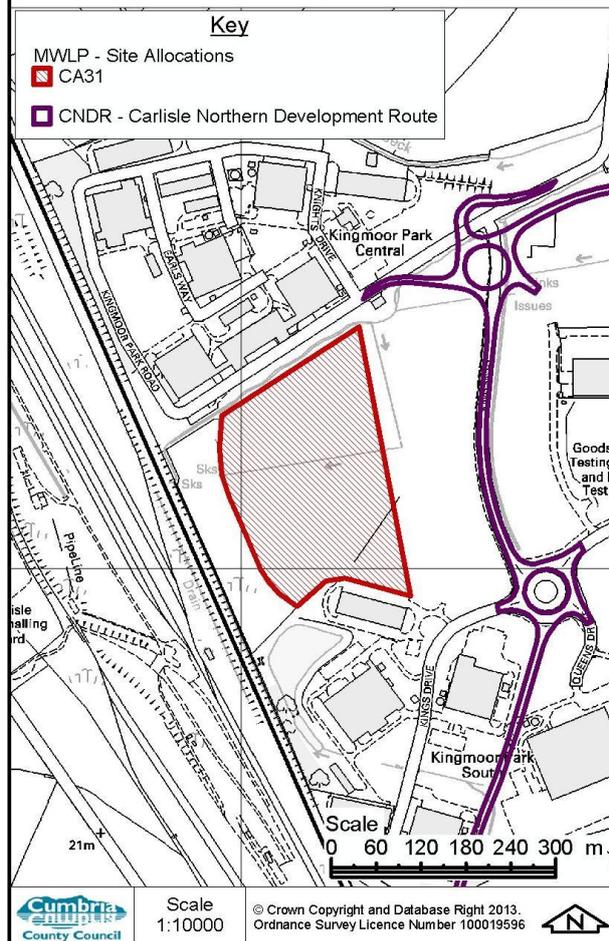
**CA11 - Willowholme, Carlisle**



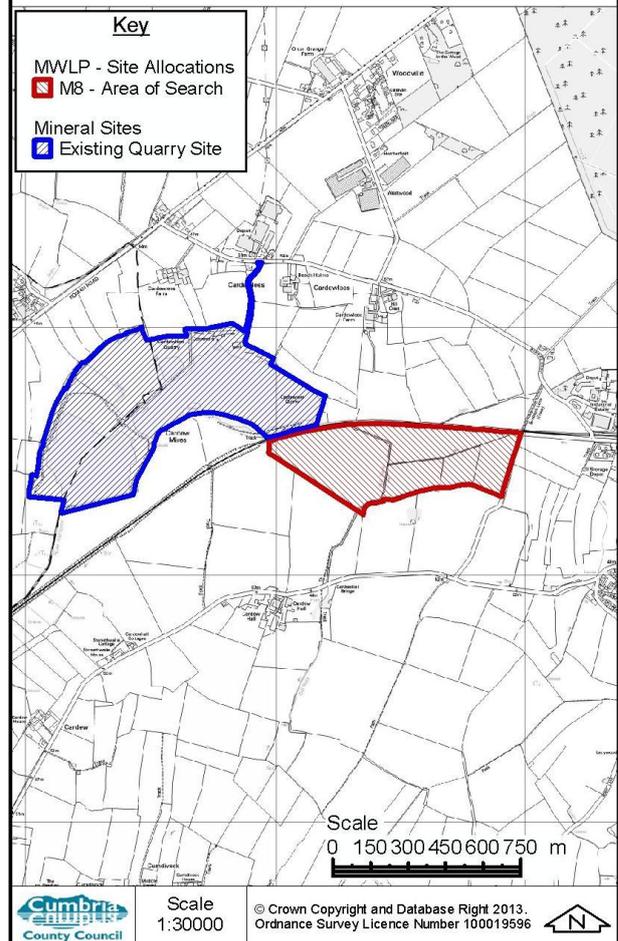
**CA24 - Hespin Wood, near Carlisle**



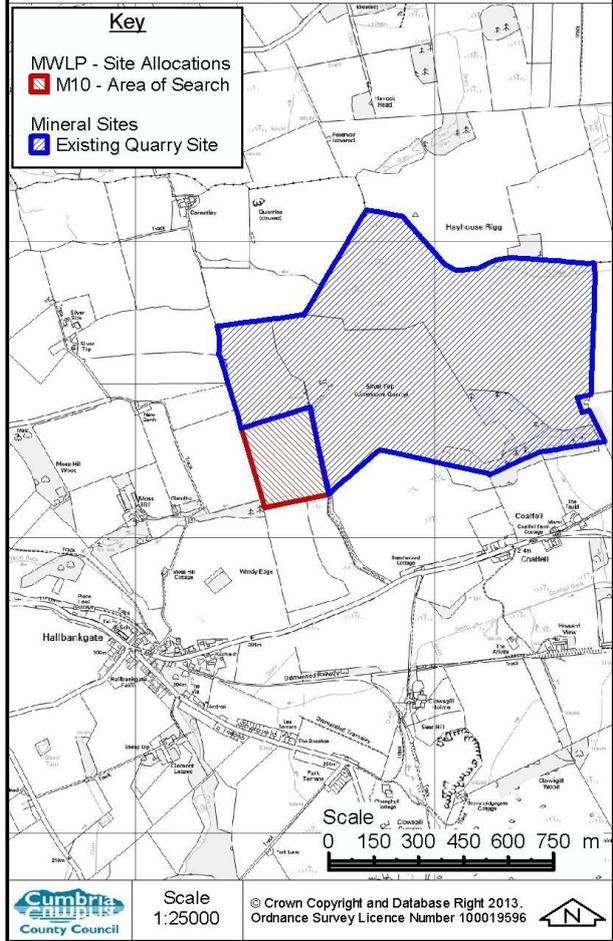
**CA31 - Kingmoor Park East, Carlisle**



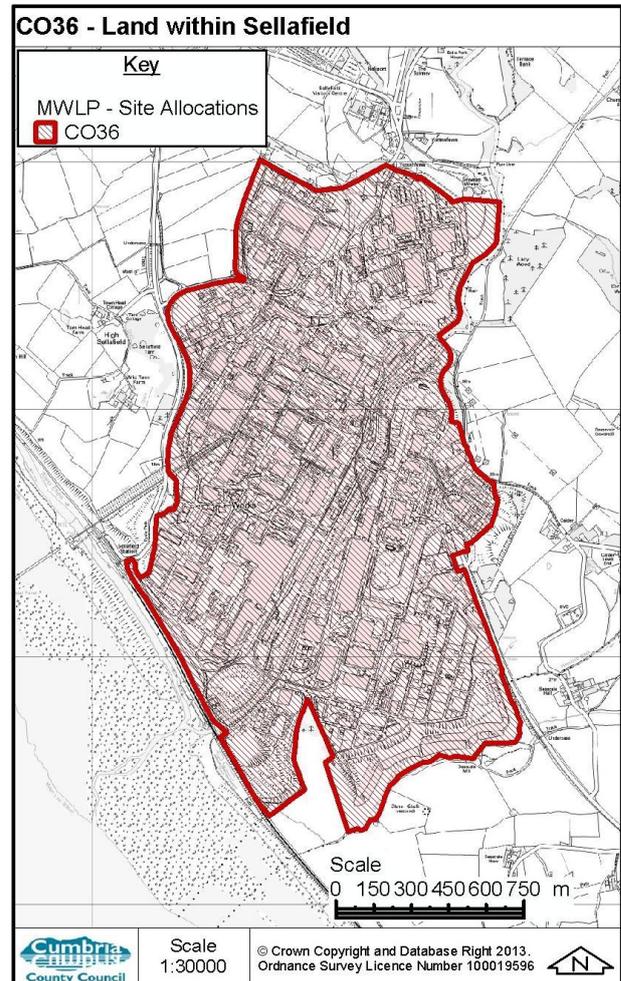
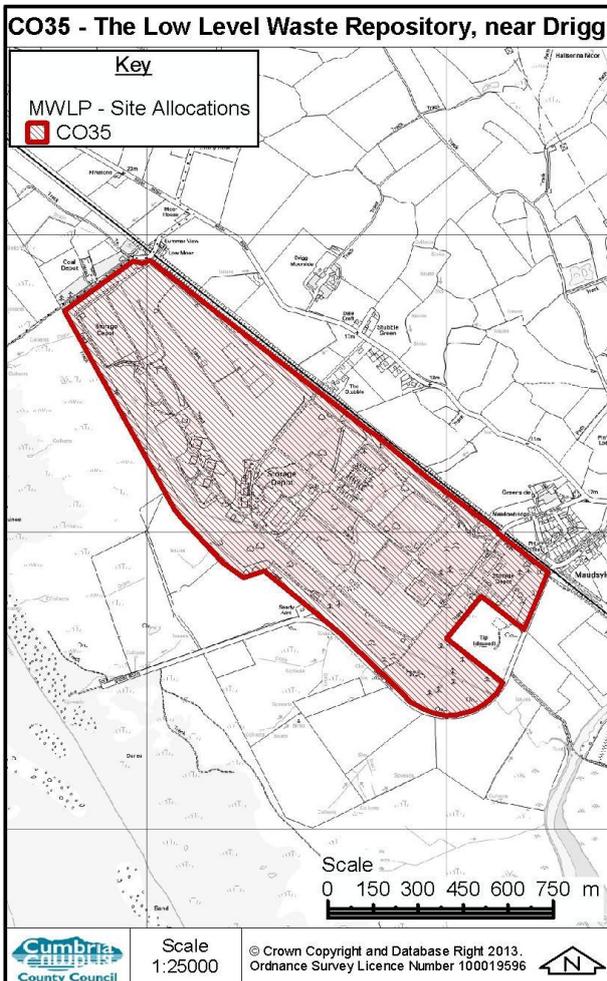
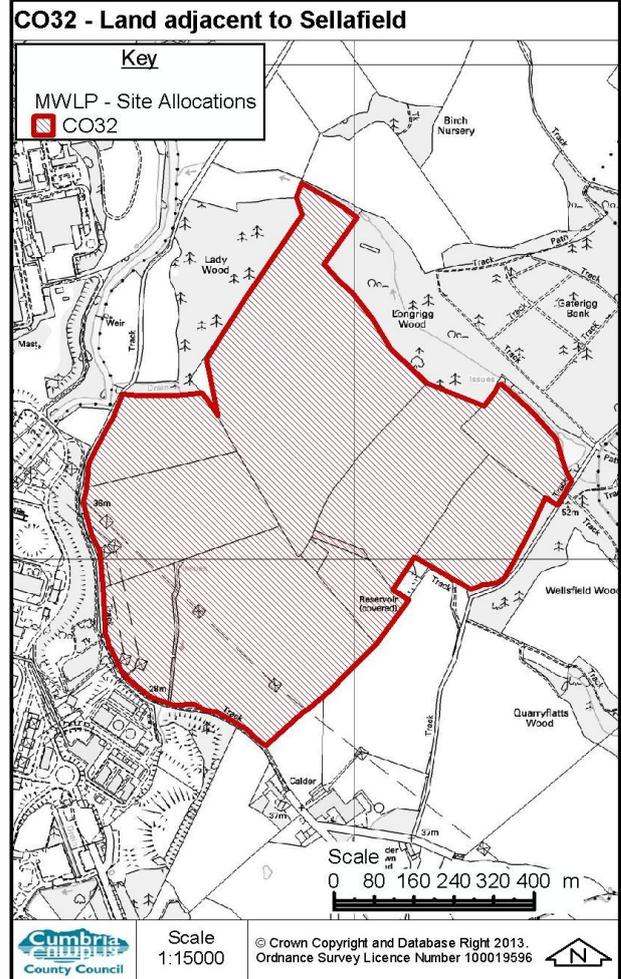
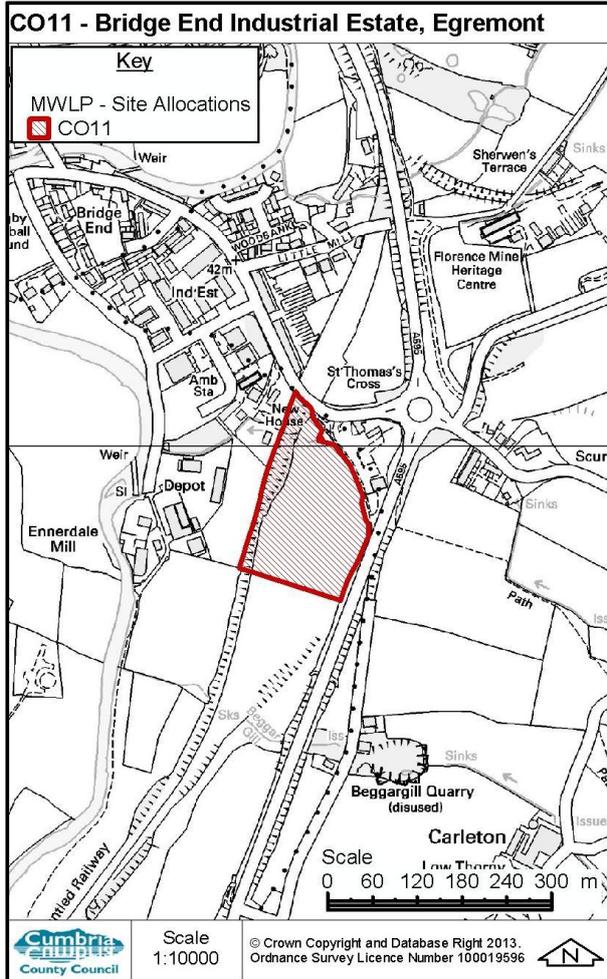
**M8 - Cardewmires Quarry, near Dalston**

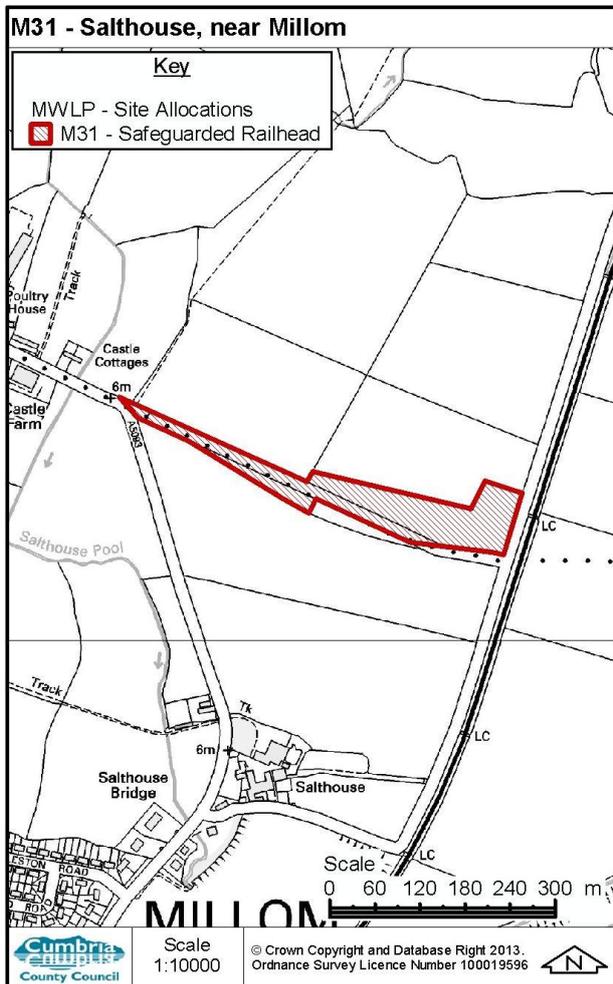
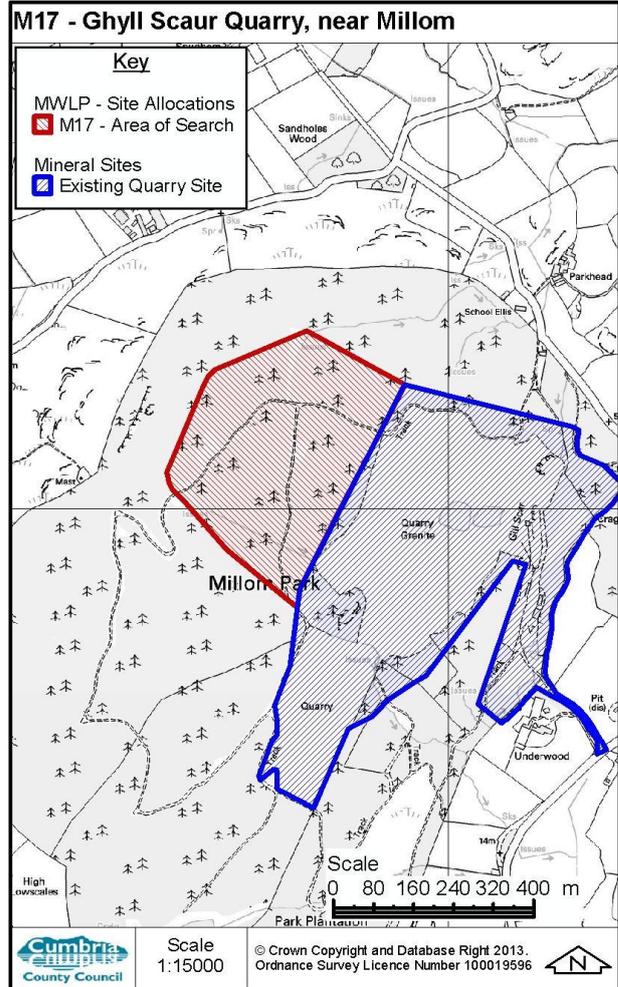
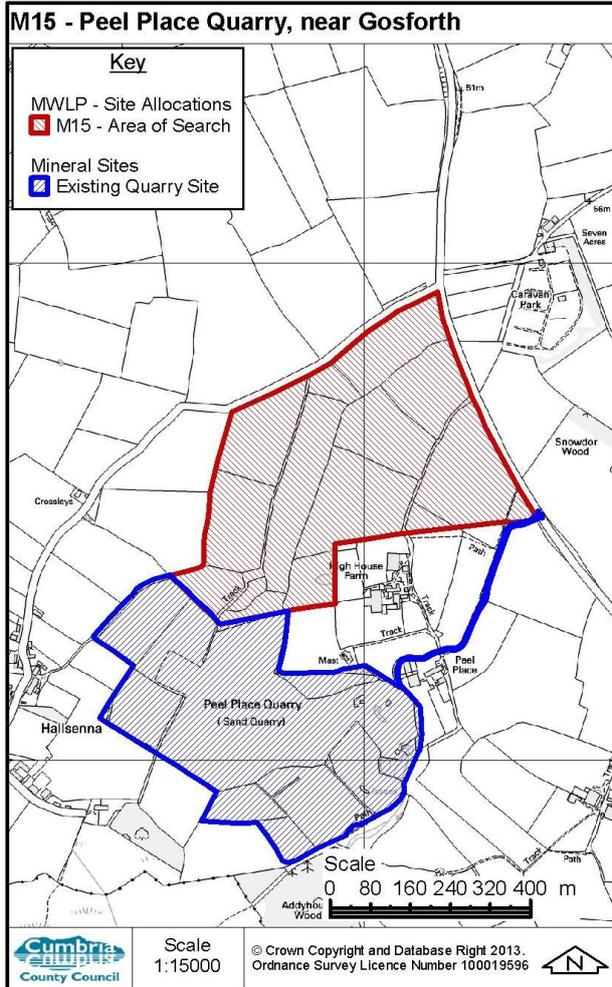


# M10 - Silvertop Quarry, near Brampton

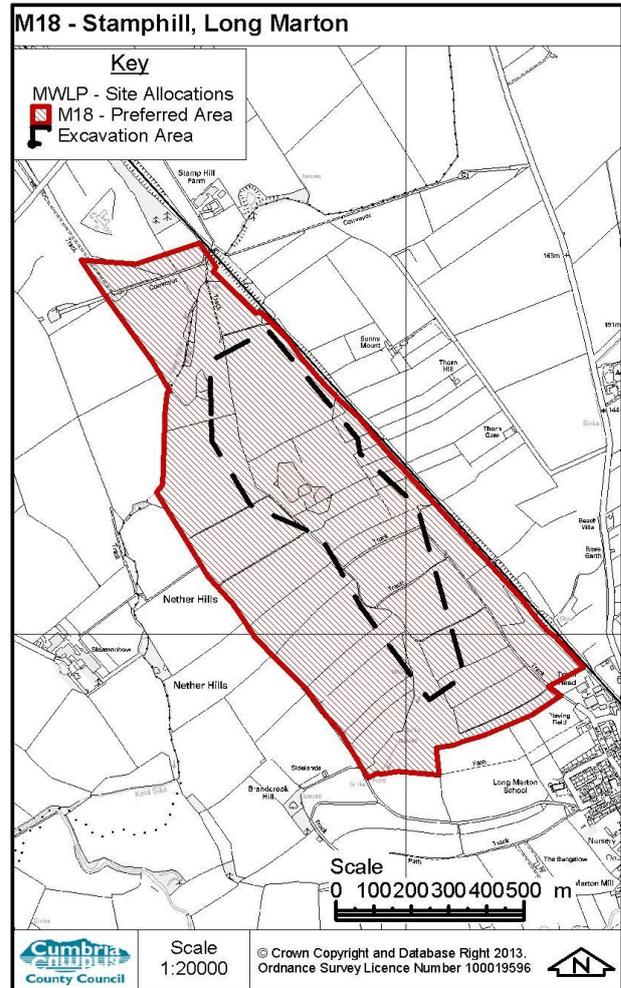
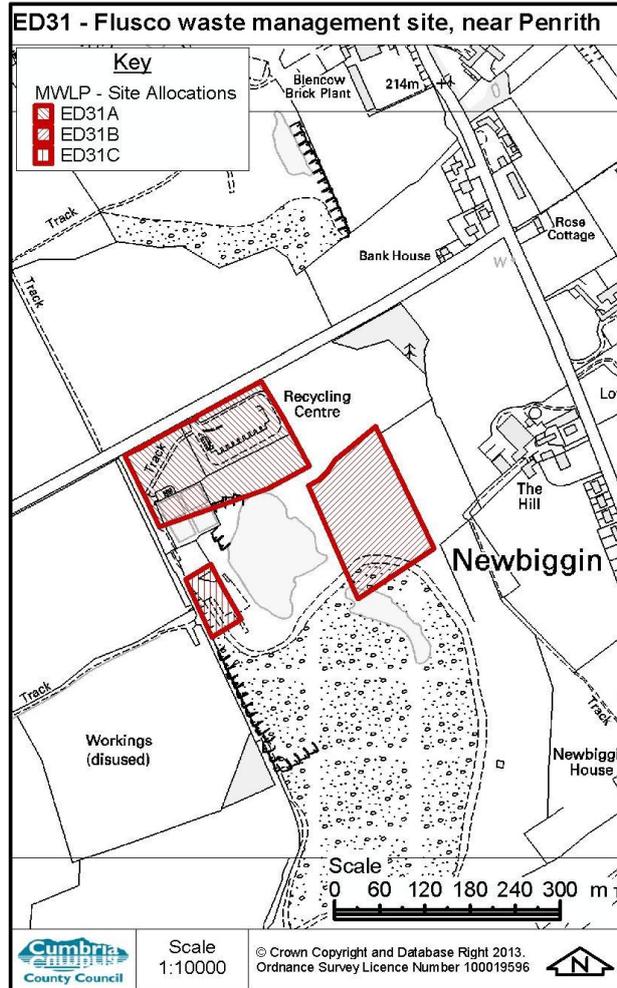


# Copeland



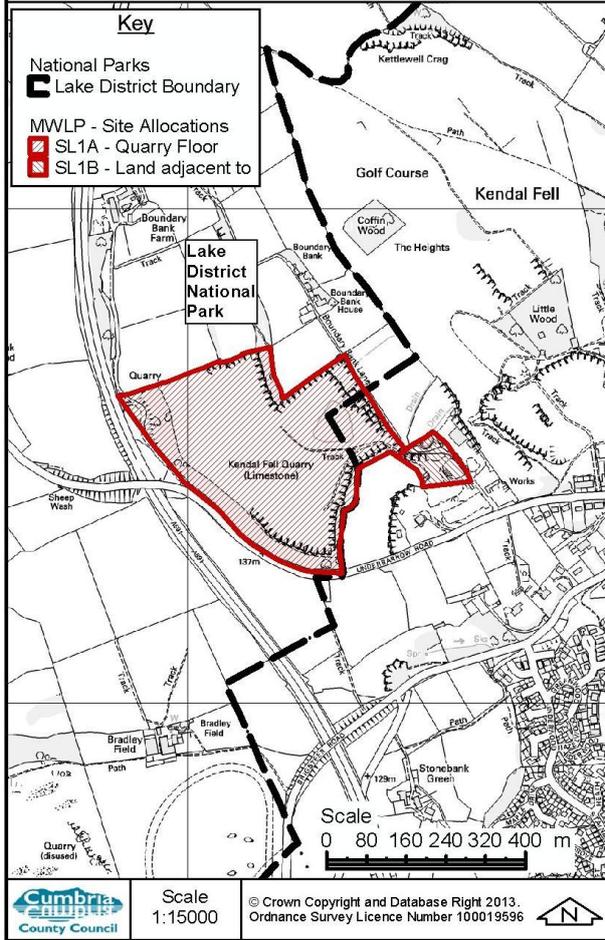


# Eden

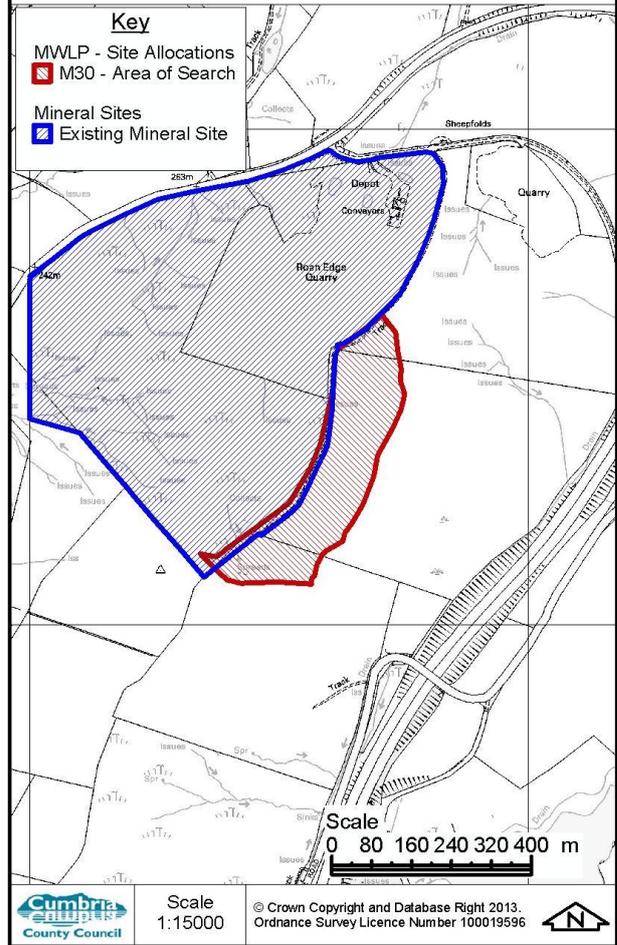


# South Lakeland

## SL1 - Kendal Fell Quarry, Kendal



## M30 - Roan Edge Quarry, near New Hutton



**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.

**Anaerobic Digestion** A natural process in which microorganisms break down organic matter, in the absence of oxygen, into biogas (a mixture of carbon dioxide (CO<sub>2</sub>) and methane) and digestate (a nitrogen-rich fertiliser). The biogas can be used directly in engines for Combined Heat and Power (CHP), burned to produce heat, or can be cleaned and used in the same way as natural gas or as a vehicle fuel. The digestate can be used as a renewable fertiliser or soil conditioner.

**Annual Report** Previously the Annual Monitoring Report, this document is part of the Local Plan, assessing the implementation of, and the extent to which, policies in the Plan 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.

**Background Radiation** Most background radiation comes from two sources, cosmic radiation and radioisotopes in the rocks and soil. The amounts vary with geology of the area (different rocks are made up of different elements) and elevation (less atmosphere at higher elevations to absorb cosmic radiation).

**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
- 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 that can be redeveloped for other uses.

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

**Climate Change** A change in the statistical properties of the climate system when considered over long periods of time, regardless of cause. The term is often used to refer specifically to climate change caused by human activity, as opposed to changes in climate that may have resulted as part of Earth's natural processes. In this sense, the term *climate change* has become synonymous with global warming and everything else that increasing greenhouse gas levels will affect.

**Commercial and Industrial Waste** This is a diverse waste stream, generated from commercial and industrial operations, including, but not limited to processing and manufacturing industries, service sector, the trade and transport and distribution sectors, primary production and mining.

**Construction and Demolition Waste** Arising from the construction, repair, maintenance and demolition of buildings and structures. It mostly includes brick, concrete, hardcore, subsoil and topsoil, but it can also include quantities of timber, metal and plastics.

**Core Strategy** A Development Plan Document, which formerly set out the spatial vision and objectives for a specific period, with the strategic policies necessary to deliver that vision. This is now replaced by the Strategic Policies within the Local Plan.

**Development Plan** For the Plan area, this will comprise the Minerals and Waste Local Plan and the Local Plans for each district in Cumbria. There are still a few policies retained from the Joint Cumbria and Lake District Structure Plan, though most were replaced by the North West Regional Spatial Strategy – Government intend to revoke this latter document as soon as possible.

**Energy from Waste (EfW)** The recovery of energy value from waste by burning the waste directly, or by burning a fuel produced from the waste.

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

**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.

**Gasification** Thermal treatment that involves heating waste in the presence of oxygen to recover energy in the form of gas.

**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.

**GVA** Gross Value Added, i.e. the difference between salary costs and actual profits per person.

**Hazardous Waste** Waste that is reactive, toxic, corrosive, or otherwise dangerous to living things and/or the environment.

**Higher Activity Low Level Waste (HALLW)** as a general rule, radioactive wastes with activity levels above 200 Becquerels/gram (Bq/g).

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

**Household Waste Recycling Centre (HWRC)** Civic amenity sites which may be used by local residents (usually free of charge) and businesses (usually charged). The sites provide facilities for collection of all household and garden waste other than anything which may be considered as hazardous and requiring special treatment.

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

**Intermediate Level Radioactive Waste (ILW)** 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.

**Landfill Directive** This was adopted by the European Community in 1999. It sets tough operational and technical requirements for disposal of waste by landfill, with the aim of reducing the negative effects of landfilling.

**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.

**Low carbon energy supplies** These use technology that can help reduce carbon emissions. They can include combined heat and power (CHP) 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 consisted 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 was an LDF dealing only with minerals and waste issues. The frameworks have now been replaced by Local Plans.

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

**Local Enterprise Partnership (LEP)** Organisations that replaced the Regional Development Agencies (RDAs). They are voluntary partnerships between local authorities and businesses, formed by the Department for Business, Innovation and Skills, and will aim to play a key part in promoting local economic development.

**Local Nature Partnership (LNP)** The Government's ambition for LNPs is that they will help their local area to manage the natural environment as a system and to embed its value in local decisions for the benefit of nature, people and the economy. To do this effectively, they will need to be self-sustaining strategic partnerships of a broad range of local organisations, businesses and people, with the credibility to work with and influence other local strategic decision makers.

**Local Plan** These Plans, produced by the Local Planning Authority, have now replaced the Local Development Frameworks.

**Low Activity Low Level Waste (LALLW)** as a general rule, radioactive wastes with activity levels between 4 and 200 Becquerels/gram (Bq/g), which do not need the highly engineered containment systems that are provided at the Low Level Waste Repository near Drigg. They can be sent to suitably permitted conventional non-inert landfills.

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

**Low Level Radioactive Waste Repository (LLWR)** LLW Repository Ltd is a waste management company that works on behalf of the Nuclear Decommissioning Authority, to provide services to customers to treat and dispose of low level radioactive waste at the national Low Level Waste Repository in West Cumbria. They oversee a national Low Level Waste programme to ensure that lower activity waste is managed effectively.

**Managed Aggregates Supply System (MASS)** The underpinning concept behind this system, is that Mineral Planning Authorities who have adequate resources of aggregates make an appropriate contribution to national as well as local supply, while making due allowance for the need to reduce environmental damage to an acceptable level.

**Mechanical and Biological Treatment (MBT) Plant** A type of waste processing facility that combines a sorting facility with a form of biological treatment, such as composting or anaerobic digestion. MBT plants are designed to process mixed household waste as well as commercial and industrial wastes.

**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 250 metre buffer zone around them.

**Minerals and Waste Local Development Framework** See Local Development Framework (LDF) above.

**Minerals and Waste Local Plan** The Minerals and Waste Local Plan deals only with minerals and waste issues. It has replaced the Minerals and Waste Development Framework.

**Municipal Waste** Municipal solid waste (MSW) is a waste type consisting of everyday items that are discarded by the public. The waste is from domestic properties, including caravans, residential homes and premises forming part of an educational establishment and part of a hospital or nursing home.

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

**National Planning Policy Framework (NPPF)** The Framework sets out the Government's planning policies for England and how these are expected to be applied. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

**National Waste Management Plan (NWMP)** The national waste plan for England. The NWMP is required by the European Waste Framework Directive and will replace the 2007 Waste Strategy. Until its adoption, expected in late 2013, Local Authorities preparing waste plans must use Planning Policy Statement 10: Waste Management.

**Naturally Occurring Radioactive Materials (NORM)** These can be found in many geological formations and may be brought to the surface during oil/gas drilling and abstraction. The natural radioactive elements that are present in very low concentrations in earth's crust, are often brought to the surface through these activities.

**Nature Improvement Areas** These are the Ecological Restoration Zones proposed by the Government's "Making Space for Nature" review. They are areas where opportunities to deliver ecological networks, both in terms of large area scale and valuable benefits accruing to wildlife and people, are particularly high.

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

**Pyrolysis** Chemical decomposition of a substance by heat in the absence of oxygen, resulting in various hydrocarbon gases and carbon-like residue.

**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
- 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 Party (RAWP)** These former Regional Planning Body Assembly organisations included representatives of central and local government and the minerals industry, considering the production and need for aggregates in the region. They produced annual reports and a more comprehensive survey was conducted and reported every 4 years. The NPPF still requires Aggregate Working Parties, but their funding is still being reviewed by Government.

**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. Government intend to revoke all RSS's as soon as possible.

**Regional Technical Advisory Body (RTAB)** These former Regional Planning Body Assembly organisations, included representatives of central and local government and industry. They considered 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 Plans 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.

**Very Low Level Radioactive Waste (VLLW)** Waste at the lower end of the LLW scale, that is contaminated with a very small amount of activity (0.4 to 4Bq/g)

**West Cumbria Spatial Masterplan** In 2008, the West Cumbria Strategic Forum initiated the masterplan, which set out the strategies that the West Cumbrian partners identified as being important for the regeneration of the area. The plan’s vision was set out in terms of economic growth, environmental sustainability and management, and in meeting the UK’s long-term energy needs.

**West Cumbria Strategic Forum** In 2004, Government signed a Memorandum of agreement with West Cumbria Partners, including the Nuclear Decommissioning Authority and West Cumbria local authorities, to safeguard West Cumbria’s economic prosperity. The agreement was signed at the first meeting of the West Cumbria Strategic Forum, which exists to facilitate co-operation between all the bodies involved with regeneration in West Cumbria. The Forum’s primary aim is to help create a sustainable economy, taking into account the threats and opportunities that nuclear decommissioning brings to an area so heavily dependent on the nuclear industry.

**Zero Waste Commitment** The Coalition Agreement committed the Government to work towards a zero waste economy in which material resources are re-used, recycled or recovered wherever possible, and only disposed of as the option of very last resort.. Defra’s Structural Reform Plan sets out an action to “set the path towards a ‘zero waste’ economy through review of waste policies”.



## **APPENDICES**



## ESTIMATES OF LANDFILL REQUIREMENTS 2013 – 2028

1. The most recent Environment Agency figure is that 274,000 tonnes of non-inert, non-hazardous wastes were landfilled in Cumbria in 2011. If that were to continue over the 15-year plan period, around 4.1 million tonnes, or 3.4 million cubic metres, of landfill capacity would be needed. It is considered that in this Local Plan, provision should only be made for a significantly lower figure than that.
2. The intention of the municipal waste contract is that only 12.5% of the waste, which is processed through the two Mechanical and Biological Treatment plants, will be landfilled. That is mainly comprised of the residual “fines”. If 150,000 tonnes/year of waste are processed, then 18,750 tonnes/year would be landfilled.
3. The County Council is looking at ways of reducing that figure even further. Taking account of material from Household Waste Recycling Centres that may need to be landfilled, the absolute maximum amount of residual municipal waste that will be landfilled could be around 30,000 tonnes/year. Over the 15-year plan period, that would be 450,000 tonnes, or 375,000 cubic metres, of residual waste. It is considered that the actual amount is likely to be significantly less than that.
4. For commercial and industrial waste, if the findings of the Environment Agency’s 2009 survey are correct, then around 75% of the 99,500 tonnes that were landfilled, could readily be recycled or recovered. For the northwest as a whole, the survey concluded that up to 97.5% of the commercial and industrial waste that was landfilled, could be diverted if the correct facilities and services were available. Those proportions seem unlikely to be secured in the near future.
5. For this plan, it is proposed to assume that the amount of commercial and industrial waste that is landfilled may have increased by 10% since the midst of the recession in 2009 to around 110,000 tonnes/year. With no further treatment facilities, that would imply a landfill capacity requirement over the plan period of 1,650,000 tonnes, or 1,375,000 cubic metres.
6. Using the above figures, the combined landfill requirement for municipal, commercial and industrial wastes over the plan period would be around 2.1 million tonnes or 1.75 million cubic metres.
7. It is considered unrealistic, and unreasonable, to assume that there will be no more initiatives to divert commercial and industrial wastes from landfill. For this plan it is proposed to assume that:-
  - they will take up spare processing capacity of 20,000 tonnes/year in the Mechanical and Biological Treatment (MBT) plants for municipal waste, and
  - that facilities for one third, 30,000 tonnes/year, of the remaining commercial and industrial wastes, equivalent to an additional MBT plant, will come into operation mid way through the plan period in 2020/21, and
  - that residual waste from those facilities which needs to be landfilled will be 12.5% of that processed (i.e. *the same capability as the municipal waste plants*)
8. On the basis of these assumptions, the initial 110,000 tonnes/year of commercial and industrial waste to landfill would first be reduced by 20,000 tonnes to 90,000 tonnes/year. That would be 675,000 tonnes, or 562,000 cubic metres, over the first half of the plan period.

9. After 2020/21, when the equivalent of a new 30,000 t/y MBT plant is assumed to be operational, the remaining 60,000 t/y, plus 3,750 t/y of residual waste from that plant, would require landfill. That would be around 480,000 tonnes or 400,000 cubic metres over the second half of the plan period.
10. If these assumptions were to be correct, the landfill requirements over the 15-year plan period would be:-
  - 450,000 tonnes, or 375,000 cubic metres, of residual municipal waste, plus
  - 1,155,000 tonnes, or 962,000 cubic metres, of commercial and industrial waste.

This gives a combined total of around 1.6 million tonnes, or 1.3 million cubic metres.

The average annual landfill rate over the 15 years would be less than 110,000 tonnes or 90,000 cubic metres.

9. It is considered that these estimates of need for landfill err towards the “worst case”. This is in order to avoid constraints on economic growth and on development due to lack, or scarcity, of waste management facilities. It seems unlikely that so much landfill capacity will be needed for the following reasons:-
  - There are very few wastes for which landfill is the only option, these are mainly the residual wastes for which no other treatment options are practicable.
  - The Mechanical and Biological Treatment (MBT) plants and the municipal waste management contract are intended to ensure that only 12.5% of the waste that is processed through the plants will be landfilled, that will be around 18,750 tonnes/year.
  - Much of the municipal waste that will not be processed through the MBT plants, will be diverted directly to recycling/re-use/recovery. Its residual waste that has to be landfilled is unlikely to increase the municipal waste landfill requirement to the 30,000 tonnes/year assumed for the estimates.
  - The County Council is not aware of evidence that commercial and industrial wastes have increased by the 10% since 2009, the figure that has been used in the estimates.
  - The commercial and industrial sectors are likely to pursue initiatives to further minimise their waste and to drive it up the waste hierarchy in the interests of reducing their carbon footprint and reliance on fossil fuel energy sources.
  - As the capabilities, and range of end-products, of existing successful waste management technologies become more widely demonstrated, there is likely to be increased interest in them.
  - There seems likely to be continued interest in less well established technologies and techniques for diverting waste from landfill.

The basic conclusion is that landfill should not now be regarded as a 21<sup>st</sup> century waste management solution for many wastes. There are even examples, elsewhere in the country, of old landfills being “mined” to recover their waste as an energy resource.

## DETAILS of CUMBRIA QUARRIES

Table 5.3 Crushed rock quarries

Quarry	Expiry date	Notes	Quarry	Expiry date	Notes
Moota	31 December 2016		Sandside	30 June 2020	
Eskett and Rowrah	30 September 2034		Shapfell	31 December 2018	Current planning application to deepen
Flusco	31 December 2015	Current planning application to extend to 31 December 2032	Silvertop	21 February 2042	
Goldmire	21 February 2042	Also construction waste recycling to 31 December 2014	Stainton	21 February 2042	Planning application 5/10/9001
Hartley	21 February 2042	The site was mothballed at the end of 2008. Current Environment Act application for new planning conditions	Tendley	31 December 2029	
Helbeck	21 February 2042		Shap Beck #	21 February 2042	
Holme Park	31 December 2023		Shap Blue #	21 February 2042	31 December 2034 for deposit of mining waste on land east of the A6

# The extraction areas for these two quarries are within the Lake District National Park.

**Table 5.4 Sand and gravel quarries**

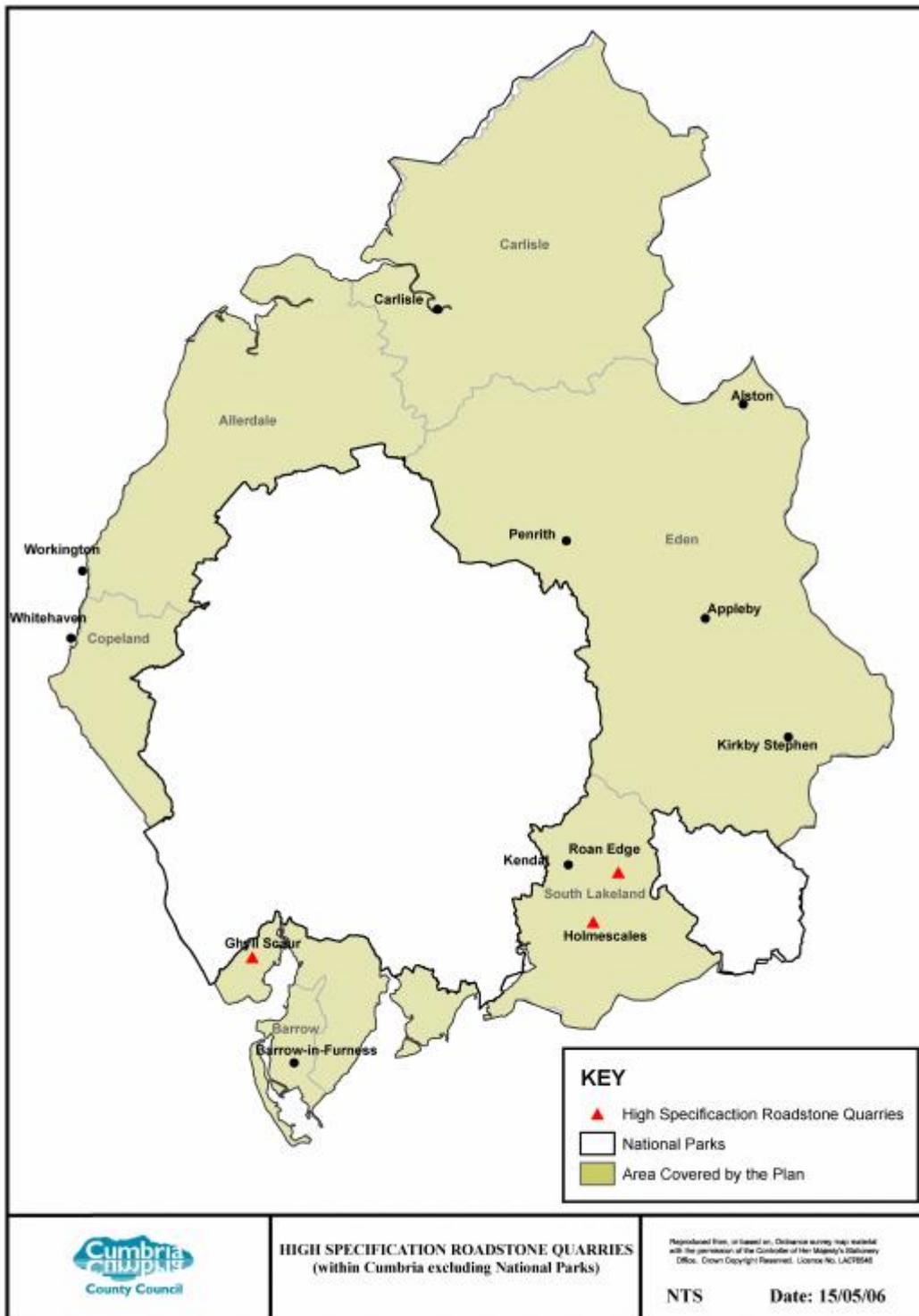
<b>Quarry</b>	<b>Expiry date</b>	<b>Notes</b>	<b>Quarry</b>	<b>Expiry date</b>	<b>Notes</b>
Aldoth	restored by 31 December 2013	Quarry worked out	Kirkhouse	28 July 2023	
Bonnie Mount	31 December 2014 Restored by 31 December 2015		Low Gelt	31 December 2019	
Brocklewath	31 August 2021		Low Plains	30 September 2011	Current application for an extension to 2033
Cardewmires	31 December 2025 Restored by 31 December 2026		New Cowper	31 December 2012 Restored by 31 December 2013	Quarry worked out
Faugh No. 1	30 June 2014	Mothballed at present	Overby No. 2	31 December 2026 Restored by 30 September 2027	
Faugh No. 2	31 December 2022	Recent permission	Peel Place	26 April 2015	Planning application 4/04/9011
High House	Restored by 31 December 2021		Roosecote	Restored by 31 August 2016	

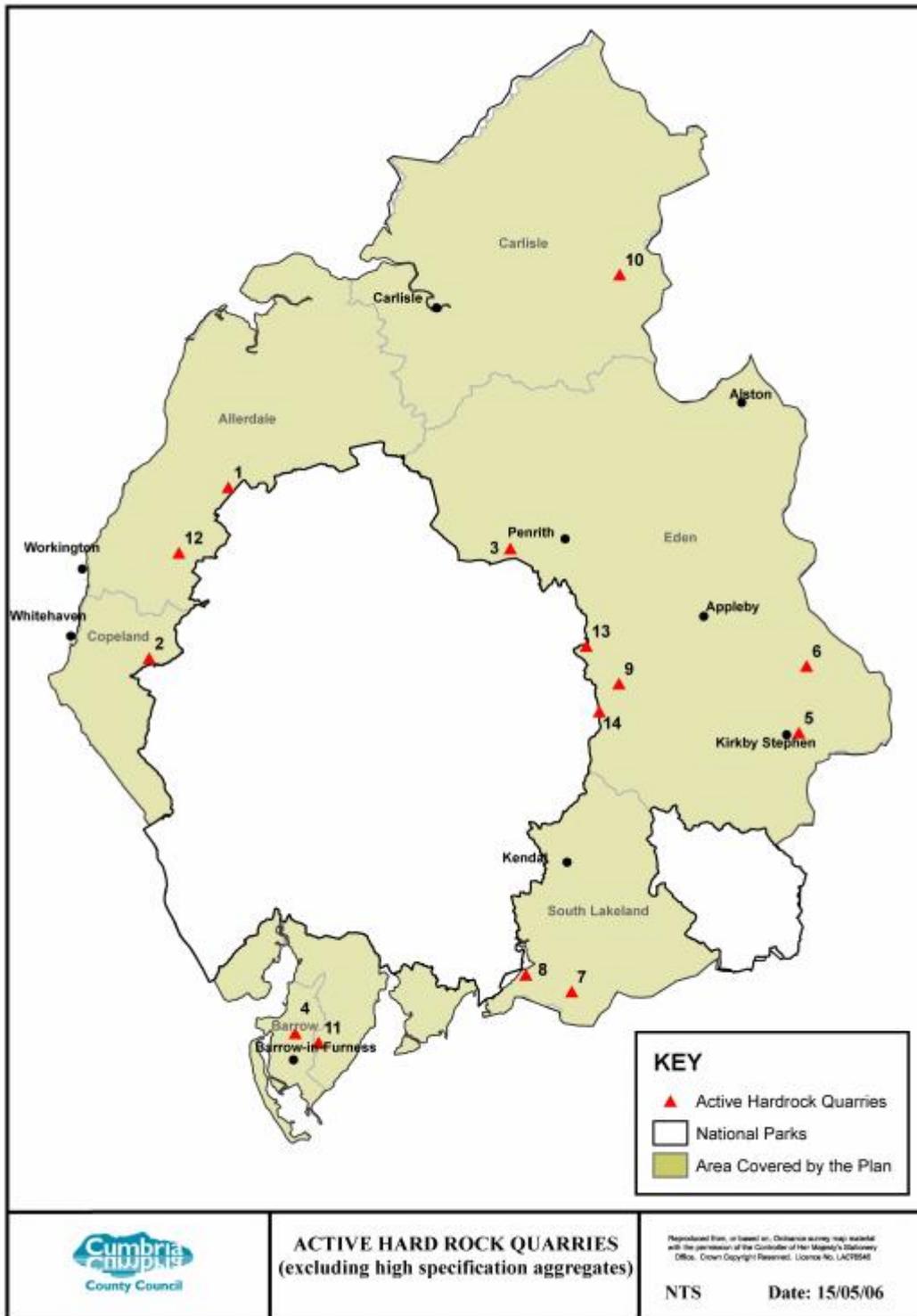
**Table 5.5 High and Very High Specification Roadstone Quarries**

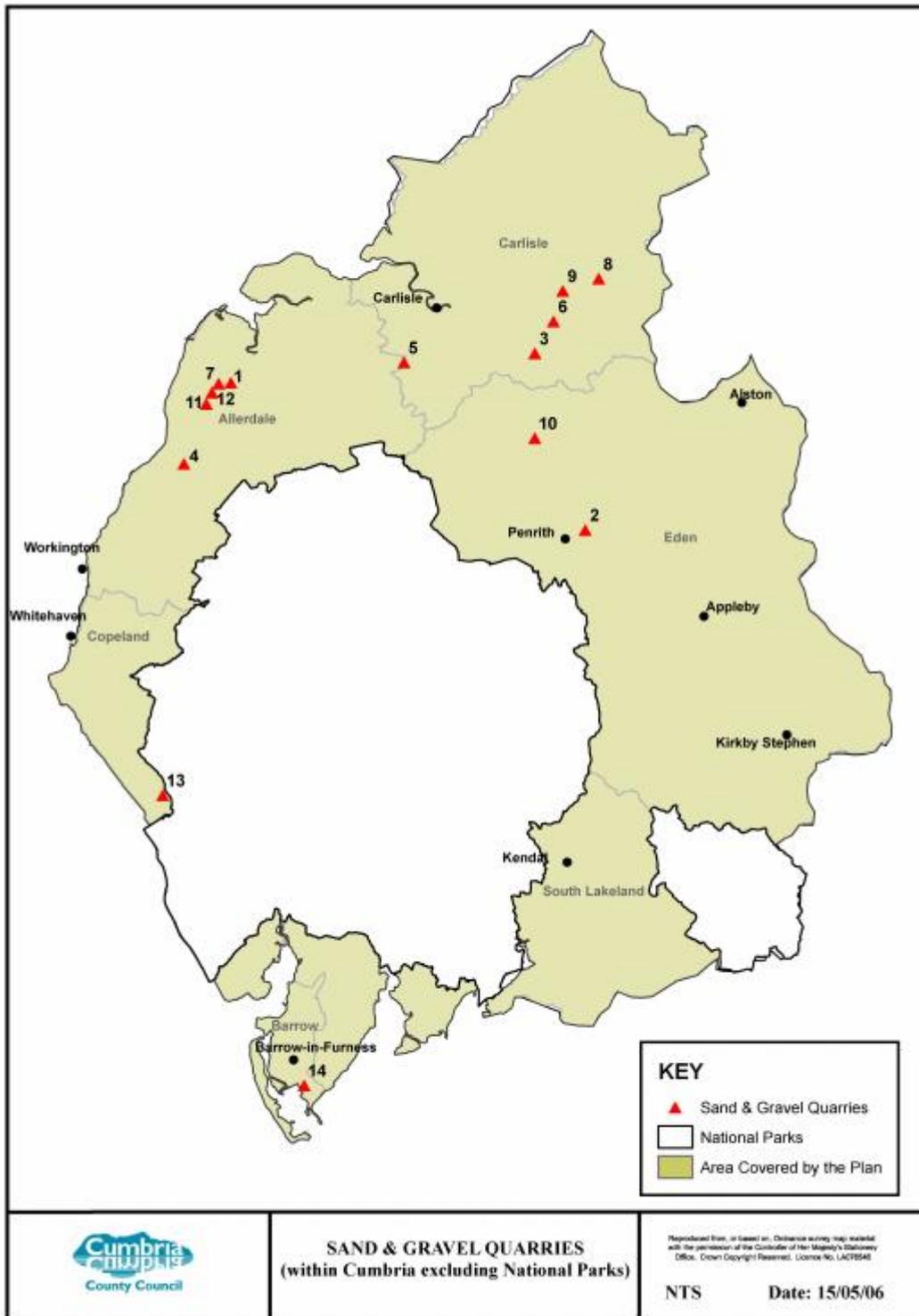
<b>Quarry</b>	<b>Expiry date</b>
Ghyll Scaur	31 December 2021
Roan Edge	1 November 2016
Holmescales	21 February 2042

**Table 5.6 Building/roofing stone quarries**

<b>Quarry</b>	<b>Expiry date</b>	<b>Quarry</b>	<b>Expiry date</b>
Bank End	2042	Larchwood	30 September 2007
Baycliff Haggs	21 February 2042	Leipsic	20 December 2022
Birkhams	31 July 2015	Pickering	26 February 2013
Bowscar	10 January 2025	Red Rock Canyon	
Brownrigg Fell	31 July 2021 Restored by 31 July 2022	Rooks	31 October 2017
Crag Nook	21 February 2042	Scratchmill Scar	30 January 2016
Flinty Fell	31 December 2024	Snowhill no 1	Restored by 31 May 2017
Grange	Restored by 29 January 2016	Snowhill no 2	Restored by 31 May 2015
Kirkby Slate	21 February 2042	Talkin Fell	3 February 2011
Lambhill	30 January 2021		







## SUMMARY DETAILS OF AGGREGATE END-USE AND SUBSTITUTABILITY

1. This is a summary of information that the major aggregate companies provided to the Competition Commission's investigation into the aggregates, cement and ready mixed concrete market (<http://www.competition-commission.org.uk/our-work/aggregates-cement-ready-mix-concrete/analysis/working-papers>)
2. General construction', which is construction applications other than the production of ready mixed concrete, concrete blocks and asphalt, and is described as mostly sub-base and structural fill, accounts for around half of the aggregates used in GB. The main aggregates used for this are crushed rock (45 to 50%) and recycled and secondary aggregates (40 to 50%), with sand and gravel only a small proportion (5 to 10%).
3. Ready mixed concrete accounts for around 20% of aggregates used in GB. The main ones used are sand and gravel (60 to 65%) and crushed rock (25 to 30%). Use of recycled and secondary aggregates is low (5 to 15%).
4. The manufacture of concrete products accounts for around 10% of aggregates used in GB. The main aggregates used are sand and gravel (50 to 55%) and crushed rock (30 to 40%). Use of recycled and secondary aggregates is low (5 to 15%).
5. The manufacture of asphalt accounts for about 12% of aggregates used in GB. The main aggregate used is crushed rock (70 to 75%), sand and gravel accounts for 5 to 15%. Recycled and secondary aggregates account for around 10 to 20 %, but it seems likely a large proportion of this is recycled road planings with their high bitumen content.
6. With regard to substitutability, the Commission's November 2012 working paper suggested that:-
  - there is wide scope for using recycled and secondary aggregates for general construction in low specification applications;
  - there is little use of sand and gravel in general construction, even in regions where sand and gravel are prevalent;
  - for ready mixed concrete and concrete products, the use of sand and gravel or crushed rock appears to be largely influenced by geology and availability. Gravel or crushed rock can be used and the sand can be either that which occurs naturally, or it could be manufactured by washing crushed rock fines;
  - there is more limited scope for using recycled and secondary aggregates for other applications, such as ready mixed concrete and concrete block manufacture;
  - blends of primary and recycled and secondary aggregates can be used in several applications.

**SUMMARY DETAILS OF NORTH WEST REGIONAL AGGREGATES WORKING PARTY APPORTIONMENTS TO CUMBRIA**

1. Until 2010, the sub-regional apportionments to Cumbria of the North West Regional Aggregates Working Party (NWRAMP) had been 700,000 tonnes/year of sand and gravel and 4.1 million tonnes/year of crushed rock.
2. In 2010, the revised national guidelines included a lower apportionment to the north west region as a whole. However, the NWRAMP attempted to increase the Cumbria apportionment of sand and gravel to 880,000 tonnes/year. Cumbria dissented from this.
3. The reasons for dissenting were that:-
  - if there was a shortfall within the north west region, it would be in Merseyside and Greater Manchester, which would not be supplied by quarries located in the north of Cumbria;
  - that Cumbria quarries were also supplying outside the north west, which could not be reflected in the NWRAMP apportionment; and that
  - a Sustainability Appraisal relating the locations of demand to those of the sources of the aggregates had not been undertaken for the proposed higher figure.
4. With regard to the crushed rock apportionment to Cumbria, surveys show that the 4.1 million tonnes figure had hardly ever been reached. This is despite the large landbank and implies that the apportionment was over estimated. The 2010 revised apportionment was 4.02 million tonnes, which is still higher than in most recent years and the 10-year average.
5. The system of apportionments to regions and then to sub-regions has now been replaced by one based on Local Aggregates Assessments. In preparing these, mineral planning authorities are required to take the advice of the re-constituted Aggregates Working Parties and the National Aggregates Co-ordinating Group.

**APPENDIX 5**  
**SUMMARY DETAILS OF CUMBRIA'S ECONOMY**  
*(This is an extract from Cumbria's Economic Ambition)*

### People & Communities

- A rapidly ageing population structure with 9% fewer young people and 13% more over 65s in the past decade;
- Workplace earnings lower than average in most places, 85% of the UK average overall in Cumbria;
- Above average proportions of part time and seasonal employment;
- Comparatively low rate of Job Seekers Allowance claimants (3.2%) now rising and up 20% since 2008;
- 25% plus working age adults claiming benefits in some urban wards;
- Good educational achievements with Key Stage 2, 4 and 5 achievements on, or above, the national average;
- Comparatively low levels of young people not in education, employment or training – 4.9% in 2010 (6% nationally);
- Increasing levels of youth unemployment with rates twice that of the adult population;
- A tenth of businesses have skill gaps among their current workforce and almost a third say that availability of skilled staff is a barrier to their business.

### Business & Enterprise

- 95% of Cumbrian businesses employ fewer than 20 staff;
- 20 organisations employ a quarter of the county's workforce;
- County vulnerable to decision-making in defence and energy sectors;
- Above average employment in agriculture, manufacturing, hotels/restaurants and construction, but below average in business and financial services;
- Twice as many employees in Cumbria work in the advanced manufacturing & nuclear sector as nationally (9.7% v 4.9%);
- The health & social work sector is the third biggest sector, employing just under 30,000 people and contributing £654m in Gross Value Added (GVA). Employment in the sector has risen by 11% in the past 3 years, at a time when most other sectors have contracted;
- 23% of the county's workforce is employed in public sector organisations, just above the national average of 22%. Copeland is the most public sector dependant local authority in the UK, with 50% of the workforce in the public sector (due to the classification of Sellafield);
- Between 2008 and 2010 employment in private sector organisations in Cumbria fell by 3.4%;
- Between 2009 and 2012 employment in local authorities in Cumbria was estimated to have fallen by 9.1% (2,100);
- Long term GVA performance (1997-09) has been poor, with Cumbria 34th out of 37 sub regions for growth. Medium term growth (2004-09) was much improved (Cumbria 6th) before dropping back most recently (2008-09) with Cumbria down to 29th out of 37;
- GVA per filled job in 2009 was only 80% of the UK, ranking Cumbria 33rd worst out of 37 sub regions;
- Share of GVA from manufacturing is nearly 23% of all GVA, double the UK average, but is falling. GVA from business services is 16% compared to 27% nationally;
- There were 40.1 million visitors to Cumbria in 2011, generating £2.2bn in value and supporting 33,000 Full Time Equivalent posts;

- Business births per 1,000 population are below average, but 3-year survival rates are higher than average.

#### Infrastructure & Environment

- Housing affordability is an issue in some places, with prices more than 7 times household income in Eden and South Lakeland;
- Housing supply and quality varies enormously around the county;
- Rate of new housing development slowing;
- Household growth of 4.2% (9,146 households) is predicted between 2010 and 2020;
- Increases in vacant town centre floorspace 2007-09;
- Appropriate employment land not necessarily located in areas of demand;
- Almost 4 in 10 (38%) of businesses say higher speed broadband is critical to their future business, rising to 45% of businesses within the Lake District National Park;
- Natural environment recognised as amongst the finest in the UK.
- Cumbria has over seven and a half thousand kilometres of roads, seven thousand kilometres of paths and bridleways, three thousand bus stops and many other transport facilities and infrastructure assets to maintain.