COUNTY DURHAM
Minerals Local Plan

Adopted Plan

December 2000
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The County Durham Minerals Local Plan

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INTRODUCTION

The County Durham Minerals Local Plan

1.1 The County Durham Minerals Local Plan sets out the detailed local planning policies and proposals that will guide future mineral development within County Durham. It provides the framework for minerals planning throughout the County in the period to 2006.

Purpose of the Plan

1.2 County Durham possesses a range of mineral resources, some of which are of regional or national importance. Minerals contribute to the local economy through direct employment and as essential raw materials for industry and for the construction and maintenance of developments such as houses, schools, factories, railways and roads. Their extraction can, however, cause major disturbance to people's living conditions and the wider environment.

1.3 The purpose of the Minerals Local Plan is to strike the most acceptable balance between the requirement for minerals and environmental protection. In doing this it takes account of the need for minerals, the likely impact of working upon different areas and the background provided by national, regional and Structure Plan policy. Detailed policies and allocations are proposed which will provide the framework by which planning applications for mineral working can be assessed, thereby giving a degree of confidence to residents, the industry and other interested parties as to how proposals for minerals working will be assessed in the future. The Minerals Local Plan replaces the minerals element of the existing Magnesian Limestone Escarpment (Minerals and Landscape Restoration) Local Plan.

1.4 The Minerals Local Plan operates within the context for the determination of planning applications as set by the Town and Country Planning Acts. Section 70(2) of the 1990 Act requires the decision maker to have regard to the development plan (of which the Minerals Local Plan forms a part, together with the Structure Plan and other local plans), so far as it is relevant to the application, and to any other material considerations. Where the development plan is material to the proposal, Section 54a requires a planning application to be determined in accordance with the plan, unless material considerations indicate otherwise.

The Development Plan

1.5 The Minerals Local Plan, prepared by the County Council, is only one of a number of planning documents which together provide the Development Plan for the County. Other relevant plans are:

- the County Durham Structure Plan. This is prepared by the County Council and provides the broad, strategic framework for planning in the County, setting out the overall principles for the Minerals Local Plan and other local plans;

- the County Durham Waste Disposal Local Plan. This will be superseded in due course by a new County-wide waste local plan prepared by the County Council;
district wide local plans. These are prepared by District Councils and provide detailed policies and proposals on a district basis for development other than minerals or waste disposal (housing, industry, open space etc);

other adopted plans. Relevant provisions in other adopted plans will remain in force only until such time as they are replaced by local plans as above.

1.6 Taken together these will provide a comprehensive framework for land use planning within the County. Although the Minerals Local Plan will be the most detailed plan in relation to mineral working reference may also have to be made to other parts of the Development Plan. The different parts of the Development Plan should normally be consistent with each other but, in the unlikely event of any conflict, legislation requires that the provisions of the most recently adopted local plan will prevail.

**Monitoring and review**

1.7 The Plan will cover the period up to 2006. Although most of the policies will remain relevant throughout this period, and even beyond, regular monitoring and review will ensure that its provisions remain up to date. Where necessary, formal alterations may be adopted before the end of the Plan period.

**Environmental appraisal of the Plan**

1.8 The policies and proposals of the Minerals Local Plan have been subject to environmental appraisal during their preparation and revised as necessary. The Environmental Appraisals of both the Consultation Draft and Deposit Minerals Local Plan are available on request.
2 Policy Context

International Context
National and Regional Policy
Structure Plan Policy
Waste Local Plan
District Local Plans
POLICY CONTEXT

2.1 The Minerals Local Plan has not been prepared in isolation. It derives from and relates to policies at all levels, including:

- international context
- national and regional policy
- structure plan policy
- waste local plan
- district local plans.

International Context

2.2 The Minerals Local Plan needs to recognise that planning issues are no longer confined to national boundaries. Concern for the environment is now a global issue, especially in relation to matters such as climate change, depletion of non-renewable resources and loss of the ozone layer. These concerns are embodied in the concept of ‘sustainability’, the interpretation of which in terms of the Plan is outlined as part of its overall strategy (Section 3). Some of the mineral resources within the County, for example high grade dolomite (Policy M18), are of potential national and international importance in terms of their relative scarcity. It is of particular importance that the Minerals Local Plan protects such resources successfully for high-grade uses, and does not allow their extraction for uses for which lower grade material would suffice.

2.3 The greater inter-relationship of world markets could also have implications for the future of mineral extraction in County Durham. The viability of parts of the local minerals industry will increasingly depend upon their being able to compete fairly in international markets, at the same time as maintaining the high environmental standards required of minerals operations within the County.

National and Regional Policy

2.4 The national context for planning for minerals is summarised in the white paper 'This Common Inheritance', published in 1990:

"Minerals are an important national resource. However, extracting them can be environmentally disruptive; they can only be worked where they are found, and strong conflicts of interest and controversy often arise. The environmental costs of transporting minerals must also be fully considered. Decisions about proposals to work minerals need to strike a careful balance between the interests of amenity and the need to exploit resources. Operators must take account of best environmental practice and aim to be good neighbours. The scope for recycling building materials may also be relevant."

2.5 Specific national minerals planning policy is set out in Minerals Planning Guidance Notes (MPGs), issued by the Department of the Environment, Transport and the Regions, and is guided by the goal of sustainable development (paragraph 3.3). Policies and proposals throughout the Plan have had regard, as appropriate, to national policy guidance.
2.6 The government also issues regional planning guidance to provide a framework for the updating of Structure Plans. Regional Planning Guidance for the Northern Region (RPG7) was issued in September 1993 and emphasises a number of issues in relation to minerals planning:
- the importance of sustainable development
- the need to make adequate provision for mineral working
- the need to avoid sterilising significant mineral reserves
- the need for an assessment of the environmental impact of proposed working
- the importance of high standards of operation and reclamation
- the need to minimise the impact from the transport of minerals
- the need to encourage recycling of material and the development of alternative aggregate sources.

2.7 A review of Regional Planning Guidance is currently being undertaken.

**Structure Plan Policy**

2.8 The statutory strategic land use policy context for the Minerals Local Plan is provided by the Structure Plan. The Structure Plan for County Durham was adopted on 25 March 1999, and it is upon the policies of that Plan that the Minerals Local Plan is based.

2.9 The focus of the Structure Plan is the need to sustain and improve the County's economy and environment through three main aims:

i) to generate and provide for development to meet the social and economic needs of the County's residents in ways which do not compromise the quality of the environment and the quality of life of future generations, in accordance with the principles of sustainability;

ii) to create for the people of County Durham the best possible opportunities for work, housing, shopping, education and leisure and for meeting social and community needs, including assisting those within the community with particular disadvantages to improve their quality of life; and

iii) to improve and protect the built and natural environment of the County.

2.10 The minerals policies of the Structure Plan are based on the following principles:

- protecting the environment and local communities from the adverse impacts of mineral working;
- guiding future mineral working to the most appropriate areas where impacts on local communities and the environment can be minimised;
- meeting established and recognised needs for minerals where appropriate;
- conserving and making the best use of minerals within the wider context of a sustainable approach to natural resources.

2.11 The adopted Structure Plan policies for minerals are reproduced in Appendix 1.
Waste Local Plan

2.12 The County Council is also responsible for land use planning in relation to waste disposal within County Durham. Policies covering such activities are currently set out in the County Durham Waste Disposal Local Plan, adopted in 1984, although it is envisaged that this will be replaced by a new Waste Local Plan within the period of this Plan.

2.13 Links between minerals and waste issues exist in that minerals sites may sometimes be used for waste disposal as part of an overall reclamation scheme. Any proposal for the deposit of waste in former mineral workings will need to take account of the provision of both plans: the Minerals Local Plan will establish the general criteria under which waste disposal as part of restoration of mineral sites may be appropriate (see policies M48 and M49) while the Waste Local Plan provides detailed guidance on the conditions that will need to be satisfied for waste disposal to be acceptable.

District Local Plans

2.14 The district councils have prepared, or are in the process of preparing, local plans to cover their areas. These local plans deal with issues other than minerals and waste but will often contain policies and proposals relevant to proposals for mineral extraction, particularly in relation to proposed after uses and general environmental issues (for example, nature conservation designations and updated landscape areas).

2.15 The different parts of the Development Plan should normally be consistent with each other but, in the unlikely event of any conflict, legislation requires that the provisions of the most recently adopted plan will prevail.
3

Minerals Local Plan
Strategy

Sustainability

Provision of Minerals

Protection of Resources

Environmental Protection
MINERALS LOCAL PLAN STRATEGY

3.1 The strategy of the Minerals Local Plan derives from and develops the adopted Structure Plan strategy in relation to mineral working. This seeks both to protect the environment of the County, and to meet established needs for the mineral (paragraph 2.10).

3.2 Within the overall approach the Minerals Local Plan strategy has four aims: sustainability in relation to minerals planning; the provision of sufficient non-energy minerals to meet established need; the protection of mineral resources from unnecessary sterilisation; the protection of the environment from the adverse effects of extraction.

Sustainability

3.3 Increased emphasis is being given at all levels of government to the need for sustainable development. This has been defined as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.

3.4 The issue of sustainability is distinct from other environmental concerns in that it deals with the potential impact of current activity upon the future. It embodies issues of global importance in seeking to sustain human and natural resources, and this needs to be reflected in action at all levels.

3.5 In relation to the Minerals Local Plan sustainable development has particular importance in the need to:

i) conserve minerals as far as possible whilst ensuring an adequate supply to meet the needs of society for minerals. This means ensuring that resources are only extracted where they are required to meet an established need, that maximum use is made of alternative or recycled materials and that mineral resources are not unnecessarily sterilised;

ii) ensure that the environmental impacts caused by mineral operations and the transport of minerals are kept, as far as possible, to an acceptable minimum;

iii) minimise production of waste and to encourage efficient use of materials, including appropriate use of high quality materials and recycling of wastes;

iv) encourage sensitive working, restoration and aftercare practices so as to preserve or enhance the overall quality of the environment;

v) protect areas of designated landscape or nature conservation value from development, other than in exceptional circumstances and where it has been demonstrated that development is in the public interest. County Durham has seen extensive past mineral working, particularly in the area covered by the exposed coalfield, which has led to the loss of considerable areas whose characteristic landscape pattern has developed over several centuries. Within an overall approach of conserving and enhancing the wider environment it is necessary that important features are protected wherever possible for the benefit of future generations;

vi) prevent the unnecessary sterilisation of mineral resources.

3.6 The aim of sustainable development is central to the Minerals Local Plan, and underlies its policies throughout. Separate objectives are therefore not defined, its needs being implicit in those for both resource provision and protection, and environmental protection.
Provision of Minerals

3.7 The provision of adequate resources to meet needs over the Plan period is important in order to ensure a sufficient supply of minerals to meet the needs of the economy. Although the number of jobs provided directly by mineral extraction in County Durham as a whole is now relatively small, the supply of minerals is vital in providing the raw materials for a range of industrial and construction processes. The Minerals Local Plan assesses the need for additional mineral resources to meet requirements throughout the Plan period and, wherever possible, identifies locations where extraction may take place, subject to suitable environmental safeguards.

3.8 For aggregate minerals national policy guidance, set out in MPG 6 and translated into sub-regional apportionments by the Regional Aggregates Working Party, provides the basis for assessing local provision. For non-aggregate minerals, although specific national guidance is not generally provided (other than in the case of limestone for cement manufacture in MPG 10), appropriate landbanks are specified in Policy M1. For energy minerals, MPG 3 indicates that landbanks are not considered appropriate: it is for individual operators to determine the level of output they wish to aim for and the Mineral Planning Authority to determine the acceptability of individual projects in accordance with the land use planning system whilst having regard to all material considerations.

3.9 Mineral extraction also contributes directly to the local economy through the provision of jobs and the purchase of supplies and services. Although wider economic factors are most likely to determine the total level of employment in minerals the Minerals Local Plan does seek to assist in retaining current employment, where this can be achieved consistent with the overall aims of resource conservation and environmental protection.

3.10 The Minerals Local Plan has the following objectives in relation to the provision of minerals:

i) to identify any requirement for additional mineral resources to be made available for extraction over the Plan period;

ii) to identify areas where extraction could take place, subject to environmental safeguards;

iii) to assist in retaining employment, where this can be achieved consistent with resource conservation and environmental protection.

Protection of Resources

3.11 Protecting mineral resources to meet future needs has implications in terms of both avoiding the sterilisation of minerals and also in influencing the way they are used. Identified resources need to be protected from sterilisation by other development so that the scope for meeting the minerals needs of future generations is maintained. It is also important that levels of new approvals are managed to ensure that rates of extraction do not exceed established needs and that high grade minerals are not used for purposes which do not require these particular qualities. This will ensure that identified resources are not unnecessarily depleted and will assist in limiting the overall impact of working on the County. Maximising the use of secondary or recycled materials will also assist in achieving this aim by reducing the need for new working and helping to minimise the use of non-renewable resources.
3.12 The Minerals Local Plan has the following objectives in relation to the protection of mineral resources:

i) to safeguard deposits of potential economic importance from sterilisation by other forms of development;

ii) to minimise the use of non-renewable mineral resources;

iii) to ensure the efficient use of resources.

Environmental Protection

3.13 Mineral extraction is a potentially intrusive activity which, if not properly controlled, can have severe detrimental impacts upon affected areas. The Minerals Local Plan needs to consider environmental impacts in their widest sense and to ensure that the overall effects of proposals, either singly or cumulatively, are acceptable at all levels. This applies to all types of minerals production, including that from secondary or recycled sources. Where appropriate, planning applications will need to be accompanied by a formal Environmental Impact Assessment as required under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999.

3.14 The aim of environmental protection covers four main areas:

- the protection of local amenity;
- enhancing the attractiveness of the County as a location for investment;
- the protection of the natural and man-made environment;
- ensuring the effective and appropriate reclamation of mineral sites upon cessation of working.

3.15 Ensuring that local communities are effectively protected from unacceptable adverse impacts of mineral working is essential if the quality of life for local residents and the vitality of areas is to be maintained. Noise, dust, traffic, visual intrusion and other impacts can all have a disruptive effect on the life of communities. Any such impacts should be minimised and kept, either individually or cumulatively, to an acceptable level (it should however be noted that the land use planning system is only able to deal with the land use impacts of pollution: the control of pollution in itself is the responsibility of the relevant agencies, in particular the Environment Agency). Controlling the impacts arising from mineral working will also be important to secure the future of the minerals industry by making continued extraction more acceptable and reducing public opposition to new proposals.

3.16 It is important to ensure that public safety is taken into account when considering the impacts of mineral workings. Government guidance indicates that conditions should not be imposed to secure the safe enclosure of quarries. However, fencing and other precautionary measures necessary in the interests of public safety are dealt with in the Mines and Quarries Act 1954 and for excavations close to the highway, Section 165 of the Highways Act 1980 and Section 25 of the Local Government (Miscellaneous Provisions) Act 1976.
3.17 County Durham enjoys a rich natural and cultural heritage which needs to be safeguarded for the enjoyment of future generations. This requires the identification and protection of areas and features of international, national, regional or County-wide importance which are an irreplaceable resource. It also requires measures to protect the quality of the wider environment, through the overall conservation of the general character and diversity of the landscape, cultural heritage and ecology, and measures to protect more fundamental elements of the wider environment such as air and water quality. In some circumstances mineral working can bring about environmental improvements or other benefits to the community which may offset other impacts and it will be important to ensure that such mitigation is secured. In any such cases a genuine balance of environmental resources should be achieved through appropriate compensatory measures which maintain and, wherever possible, improve the quality and quantity of the environmental resources.

3.18 The approach taken by the Minerals Local Plan to the protection of the natural and built environment is therefore one that seeks to:

(a) protect those natural and cultural resources that are considered vitally important and irreplaceable; and

(b) conserve the overall character and quality of the wider natural and cultural environment.

3.19 In addition to the irreplaceable natural and cultural resources highlighted above, mineral extraction will also have impacts on other non-renewable, non-mineral resources, for example fuel used in extraction, processing and transport, and agricultural land. Although often inevitable to some extent the Plan should, wherever possible, seek to ensure that use of such resources is minimised.

3.20 The comprehensive and prompt reclamation of mineral workings upon their cessation is an important element in minimising their adverse effects. Proposals for restoration and after-use need to be seen as an integral part of any mineral development and should, wherever possible, provide positive benefits to the local community or the wider environment.

3.21 The Minerals Local Plan has the following objectives in relation to environmental protection:

i) to avoid the unnecessary pollution of land, air and water, and to further minimise that pollution wherever possible;

ii) to minimise the use of non-renewable resources;

iii) to protect communities from unacceptable adverse effects of mineral extraction and related activities;

iv) to protect and enhance the attractiveness of the County as a location for investment;

v) to protect important landscapes and landscape features;

vi) to protect and enhance important ecological, geological and geomorphological sites;

vii) to conserve and enhance the character of the landscape;

viii) to conserve and enhance the ecological value of the wider environment;
ix) to protect sites, buildings and areas of architectural, historic or archaeological importance;

x) to minimise the adverse impact of extraction through agreed working practices and effective restoration schemes;

xi) to seek the highest practical standard of reclamation and the positive after use of mineral workings.

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<tr>
<th>Overall Aim</th>
<th>Other Aims</th>
<th>Objectives</th>
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Resource Considerations

The Extent of Resources
Maintenance of landbanks
Regional aggregates apportionment
Demands on mineral resources
Resource conservation
Areas for extraction
Areas of Search for sand and gravel
Opencast coal and fireclay
Preferred areas for dolomite, limestone, brickclay and barytes
Todhills Brickworks
Proposals outside identified areas
Borrow pits
Safeguarding mineral deposits
Information about mineral resources
The efficient use of minerals
Oil and gas
RESOURCE CONSIDERATIONS

4.1 The proper management and conservation of resources is central to the County Council’s aim of achieving sustainable development and protecting the environment. In relation to the Minerals Local Plan this has implications in terms of ensuring a sufficient supply of minerals while at the same time avoiding the wasteful use of resources or the sterilisation of potentially valuable reserves. This will ensure that, even if all reserves allocated in this Plan are extracted, future generations will be able to meet their need for minerals. The policies in relation to resource management are derived from the objectives set out in paragraphs 3.10 and 3.12.

The Extent of Resources

4.2 The extent of resources in the County (excluding potential sources of recycled materials) is defined by its geology, and this has given rise to the range of mineral resources that are potentially available. In terms of solid geology County Durham consists principally of a succession from west to east of Carboniferous and Permian rocks, with the Permian giving way to Triassic rocks in the south-east of the County; all the strata dip gently towards the east. The Great Whin Sill, an igneous complex consisting of a number of sills and associated dykes, underlies much of the County but is best exposed in Upper Teesdale and to a lesser extent in Weardale. The Whin Sill has been extensively quarried for crushed road aggregate. The basic geology of the County is illustrated by Figure 4.1.

4.3 The rocks of Carboniferous age may be divided into three main lithological groups - the Carboniferous Limestone series, the Millstone Grit, and the Coal Measures.

4.4 The Carboniferous Limestone series is represented by alternations of sandstone, shale and relatively thin limestone bands, which crop out in the upper reaches of West Durham. The Carboniferous sequence plays host to an ore field consisting of numerous mineral infilled fractures and although it is mainly developed in the Carboniferous limestone and Millstone Grit to the west of the County, in places it extends to the coal measures in the east. The orefield consists of two distinct zones, with an inner zone centred on Weardale dominated by fluorspar, and an outer zone in which barytes is the dominant mineral. Lead ore occurs and has been exploited throughout the ore field, but the richest deposits occur within the outer fringes of the fluorspar zone. This ore field is unique in that it carries economic deposits of the rare mineral witherite.

4.5 Although generally eroded away in the upper reaches of west Durham, the Millstone Grit increasingly forms the fells and ridges between the main Dales to the east of a line between Blanchland and Middleton in Teesdale. The Millstone Grit series is represented by three groups of sandstone beds separated by shales, with a few thin coal seams.

4.6 The succession eastwards continues with the Millstone Grit being overlain by the Coal Measures, the division broadly corresponding with the easterly extent of the open moorland of west Durham. The Coal Measures extend to the east of the Wear Valley, where they are overlain by Permian rocks. Southwards the strata are thrown into strong undulations beyond the Butterknowle Fault and end in a sharp uprise beneath the Magnesian
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<th>Triassic Sandstones</th>
<th>U Permian Marl</th>
<th>Magnesian Limestone</th>
<th>Coal Measures</th>
<th>Millstone Grit</th>
<th>Lower Carboniferous</th>
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**Figure 4.1**

**GEOLOGY OF THE DURHAM REGION**

- Disturbances
- Lynedale Fault
- Whin Sill
- Whin Dykes
- Tholeiite Dykes
- Barnard Castle
- Birtley
- Sunderland
- Durham
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Limestone. These boundaries to the east and south mark the extent of the 'exposed' part of the Durham coalfield; the concealed part of the field extends beneath the Permian strata eastwards across the County and continues beneath the North Sea. The Coal Measures consist essentially of beds of sandstone and shales with numerous coal seams of varying thickness. Ironstone and fireclay are sometimes found in conjunction with the coal seams. Over the lowlands of the Wear valley and its tributaries the Coal Measures are covered by glacial drift deposits which gives rise, from time to time, to deposits of sand and gravel and brick clay.

4.7 The eastern edge of the Wear lowlands is marked by the outcrop of Permian rocks in the form of a bold escarpment running in a north-south direction between Pittington and Ferryhill and then turning south-westwards, with the outcrop gradually disappearing to the south of Shildon. The base of the Permian is represented by the Basal Yellow Sands which outcrop north of Ferryhill. Above the Basal Yellow Sands lies a thin bed of marl slate, followed by deposits of magnesian limestone which consists of a variable mixture of the minerals dolomite and calcite. Where the mineral dolomite is the principal constituent and scarcely any free calcite is present, the deposit is referred to as a dolomite rock. The occurrence of such deposits of dolomite is mainly confined to the lower beds of the Magnesian Limestone, the outcrop of which within the County is restricted to the lower slopes of the escarpment between Ferryhill and Pittington. Throughout the remainder of the Magnesian Limestone series the rock ranges through varying degrees of dolomitised limestone to pure limestone. Eastwards from the escarpment, the Magnesian Limestone is extensively covered by glacial drift deposits, which occasionally give rise to deposits of sand and gravel and brick clay.

4.8 Beds of rock salt and associated deposits of gypsum and anhydrite occur in the Permian strata between Hartlepool and Billingham. Although the beds of rock salt thin rapidly to the west and are not thought likely to extend into the County, beds of gypsum have been proved south of Darlington.

Maintenance of landbanks

4.9 Controlling the supply of minerals is a necessary element in ensuring that resources are properly managed, that valuable reserves are not squandered, and that the cumulative impact of mineral working on the County is minimised. It is also important to ensure that the minerals industry has a sufficient supply of reserves to meet established needs and, where appropriate, to justify investment in new plant and equipment.

4.10 In general terms it is an aim of the Plan to provide for a sufficient stock of permitted reserves (a landbank) to ensure that the County's contribution to the supply of minerals is maintained. This is considered a reasonable method of ensuring continuity of supply and, although the existence of a landbank does not automatically preclude the granting of further planning permissions, landbanks are one criterion which is used to assess the need for new working to be permitted.

4.11 For sand and gravel Minerals Planning Guidance Note 6 (MPG6) suggests a landbank equivalent to at least seven years' production, and this is reflected in the Structure Plan. MPG6 suggests a larger but unspecified landbank for crushed rock aggregate, and the Structure Plan proposes a landbank of at least 10 years. This is also considered appropriate for dimension (building) stone. MPG10 suggests that 15 years is the minimum landbank required for raw materials for the cement industry, and it is considered reasonable that this is extended to other minerals whose primary processing requires
substantial investment in kiln equipment.

4.12 The maintenance of landbanks for the Plan period and beyond will depend not only on the identification of environmentally acceptable sites which do not compromise interests of acknowledged importance, but also on the availability of consistent, reliable and, where necessary, publicly available information of sufficient detail to enable the County Council to come to a considered judgement on the adequacy of the landbank. While the need for a degree of commercial confidentiality is recognised the industry has a clear responsibility to provide sufficient information to enable the accurate monitoring of landbanks.

Policy M1

For the County as a whole the following landbanks of permitted reserves are proposed and will be maintained throughout the Plan period:

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Landbank (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand and gravel</td>
<td>at least 7 years</td>
</tr>
<tr>
<td>Crushed rock aggregate</td>
<td>at least 10 years</td>
</tr>
<tr>
<td>Dimension stone</td>
<td>at least 10 years</td>
</tr>
<tr>
<td>Cement making raw materials</td>
<td>at least 15 years</td>
</tr>
<tr>
<td>Brick making material</td>
<td>at least 15 years</td>
</tr>
<tr>
<td>Burnt dolomite for use in the chemical and refractory industries</td>
<td>at least 15 years</td>
</tr>
</tbody>
</table>

Regional aggregates apportionment

4.13 National estimates of the future need for aggregates are made in MPG6, broken down by region. These regional estimates are in turn used to define sub-regional County apportionments, setting out the share of the regional need for aggregates that the County should seek to meet. The sub-regional apportionments are agreed through the Regional Aggregates Working Party (RAWP) for the Northern region. The RAWP has agreed a Countywide apportionment of 51.3 million tonnes for magnesian limestone and 19.9 million tonnes for other crushed rock for the period 1992-2006 (Policy M2). Table 4.1 sets out the current position in relation to regional aggregates supply.

4.14 The sand and gravel apportionment for Durham includes an allowance for Cleveland, as only a limited amount of land-won material comes from that County. Current landbanks (1995) within Durham provide overall for the extraction of 12.1 million tonnes sand and gravel, in excess of the total apportionment figure even after 3 years of the relevant apportionment period. The secession of Darlington from Durham may however require a future re-consideration of the landbank position between County Durham and the Tees Valley Authorities.

Table 4.1: Land won aggregates supply

<table>
<thead>
<tr>
<th></th>
<th>Crushed rock</th>
<th>Sand &amp; gravel*</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAWP apportionment (mt)</td>
<td>71.2</td>
<td>11.0</td>
</tr>
<tr>
<td>Sales 1992-96 (mt)</td>
<td>22.3</td>
<td>2.6</td>
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<tr>
<td>Residual apportionment (mt)</td>
<td>48.9</td>
<td>8.4</td>
</tr>
<tr>
<td>Reserves 01/01/97 (mt)+</td>
<td>207.4</td>
<td>13.2</td>
</tr>
<tr>
<td>Landbank (years)*</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>Source: RAWP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* based on RAWP apportionment. Using recent sales landbanks are 48.3 years (crushed rock) and 21.7 years (sand and gravel)

+ includes Tees Valley
Policy M2

Land will be made available for mineral working to meet the County’s share of the regional supply of aggregates. For the period 1992-2006 provision will be made for the supply of at least 11.0 million tonnes of sand and gravel*, 51.3 million tonnes of magnesian limestone, and 19.9 million tonnes of other crushed rock, unless exceptional circumstances prevail.

* Together with Tees Valley authorities

Demands on Mineral Resources

4.15 This section discusses the broad extent of workable deposits, the characteristics and uses of the minerals concerned, and identifies the need for more land for mineral extraction.

Coal

4.16 Within the County the Durham coalfield chiefly covers those areas east of the Pennine uplands, but including some of the Pennine fringe area. The west of the coalfield, where the seams lie close to the surface or actually outcrop is known as the exposed coalfield. Further east, the coal measures are overlain by a thick overburden of rock. The quality of the coal also tends to decline in a west to east direction. Historically, coalmining in the County has moved generally from west to east as the more accessible, better quality reserves in the west have been worked out. As in other coalfield areas, the deep mined coal industry has been in decline for several decades. The decline has been such that in 1993 the two remaining deep mines in County Durham, Easington and Seaham/Vane Tempest ceased production.

4.17 Within the exposed coalfield, which covers approximately 715km² (30% of the County), coal has also been worked by opencast methods. Over the years, areas affected by opencast coalslaking have spread to cover a significant proportion of the exposed coalfield with over 120km² having been worked or had approval for working. National policy states that it is not the role of the planning system to seek to set limits on or targets for opencast coal production. The landbank approach is therefore not appropriate and a criteria based approach towards future opencast extraction is set out in Policy M7.

4.18 Coal can also be extracted from the exposed coalfield by drift mines. Such mines make a relatively small contribution to the supply of coal and the environmental implications are more localised than for opencast mines. The main issues are the impact of surface development and the potential effects on drainage and of subsidence on nearby developments and on agricultural land. Any proposals for new drift mines will need to be treated on their merits in the light of relevant policies.

Brickmaking material

4.19 There are essentially three types of material found in the County which can be used in brickmaking. Shales are found within the coal measures and these are fairly widespread in occurrence. Fireclay is also found within the coalfield particularly in association with certain seams such as the Brockwell. Glacial deposits of clay found in the Team Valley are also used. Deposits of glacial clay occur elsewhere in the County but these are spasmodic and
unknown with any precision. Due to the processes and machinery involved, glacial deposits and those found within the coal measures are not generally interchangeable and brickworks tend to use one or the other material. Although there are no national guidelines the level of capital investment in brickmaking is such that a 15 year landbank for brickmaking material overall is proposed (Policy M1).

**Fireclay**

4.20 Fireclay is produced in association with the extraction of certain coal seams in County Durham (e.g. Brockwell, Busty and Hutton seams) and the quality of these fireclays is recognised nationally by the brickmaking industry. However, the industry also recognise the proportion of fireclays utilised remains relatively small compared with the considerable quantities liberated by opencast coal mining. The mismatch between immediate demand and supply has led to wastage, failure to exploit and sterilisation of a valuable mineral resource. Given the limited potential for further working within the exposed coalfield and in the interests of sustainable development, it is vitally important that operators exploit any fireclay produced and avoid wastage.

**Brickclay**

4.21 There are two brickworks in the County, at Todhills near Newfield, and at Eldon, both of which are operated by Ambion Brick. The Union Brickworks near Birtley lies in Gateshead Borough although the clay working which supplies it is within County Durham. The supply of materials to the two brickworks comes mainly from “dedicated” sources (permitted reserves adjacent to the brickworks) and are supplemented by supplies from opencast coal sites.

4.22 A need for additional supplies has been identified at Todhills, as part of a co-ordinated programme of working and restoration around the brickworks (and for which a resolution to grant planning permission has now been passed, subject to a satisfactory legal agreement), and at Eldon, but it is unlikely that additional reserves will be needed at Union brickworks.

**Magnesian Limestone**

4.23 Limestone is a rock composed of the mineral calcite, whose principal chemical constituent is calcium carbonate. Most limestones contain some magnesium carbonate, and where this becomes significant (between 5 and 15%) the rock is described as magnesian limestone. Where the proportion is in excess of 15% the rock is commonly known as dolomite.

4.24 The Lower Magnesian Limestone series, which only outcrops extensively along the escarpment between Pittington and Shildon, is the most important part of the Magnesian Limestone succession.

4.25 In October 1995 there were seven quarries working magnesian limestone from the escarpment. Most magnesian limestone is sold as aggregates for use in the roadbuilding and construction industries. However, a significant proportion is sold for non aggregate purposes.

4.26 In terms of the supply and demand situation for aggregates there are well established methods through the Regional Aggregates Working Party (RAWP) of assessing the adequacy of permitted reserves (Policy M2). Current reserves are adequate to meet the need for magnesian limestone, agreed by the RAWP, providing a landbank equivalent to over 30 years production. In County terms there would therefore appear to be no need to approve additional reserves for aggregate purposes during the Plan period.
4.27 Local circumstances have meant that, for the current round of RAWP apportionments, it has been decided to combine the magnesian limestone requirements from County Durham with that for Tyne and Wear. This combined figure of 59.1 million tonnes is similarly adequately provided for by landbanks in the short term. In the longer term as current landbanks are depleted, there may be a need to reconsider the position within the apportionment area as a whole, given important environmental and sustainability criteria.

4.28 Agricultural lime, which is used to correct the acidity of soil, is produced from quarries on the Magnesian Limestone escarpment. The material is often the fines which remain after limestone and dolomite has been crushed and screened to meet specifications for aggregate or other markets. Agricultural lime will continue to be produced from existing quarries and permissions on the Magnesian Limestone escarpment, and there is therefore no need to permit additional working for this purpose.

4.29 Dolomite which has relatively low levels of impurities is considered to be 'high grade' and suitable for use in the production of magnesia, as a steel flux and as an iron sinter. Evidence suggests that Thrislington Quarry and the area immediately to the east is the only area in Great Britain which contains dolomite of sufficient quality to be used both in the steel and magnesia industries. Whitwell Quarry in Derbyshire also contains dolomite suitable for the steel industry. A process of calcination (burning) is used to produce high grade products from the raw dolomite. To maintain a landbank of permitted reserves of at least ten years throughout the Plan period additional reserves will need to be permitted at Thrislington Quarry (Policy M56).

4.30 Magnesian limestone of sufficient purity for glassmaking exists on the coast, at Hawthorn Quarry. The quarry has extensive permitted reserves and is currently dormant, and there is therefore no need to provide for additional reserves in the Plan period.

**Carboniferous limestone**

4.31 The most commercially important of the limestone beds within the Carboniferous series is the Great Limestone. It outcrops fairly continuously along the sides of Weardale above Frosterley. In Teesdale, glacial drift deposits restrict its occurrence to localised pockets around Middleton in Teesdale and to the south of Barnard Castle around Boldron.

4.32 Although similar in some respects to magnesian limestone, Carboniferous limestone often differs in some of its physical qualities. In particular Carboniferous limestone tends to be harder than magnesian limestone, and therefore more suited to particular heavy duty uses, for example in sea defence works.

4.33 Carboniferous limestone aggregate is not dealt with explicitly through the RAWP, but is included as part of the general crushed rock apportionment. Current supplies are however sufficient to meet any particular need for Carboniferous limestone.
4.34 The only currently active quarry working carboniferous limestone for non-aggregate purposes is Eastgate in Weardale. This site is operated by Blue Circle and all of its production goes to cement manufacture at the adjacent works. MPG10 “Production of raw material for the cement industry” states that mineral planning authorities should normally aim to maintain permitted reserves of at least 15 years. Where significant new investment (such as a new kiln) is required, the guidance suggests that a landbank equivalent to at least 25 years production should be provided for. Current reserves are not adequate to maintain a 15 year landbank and therefore additional supplies need to be identified.

Igneous Rock (Whinstone)

4.35 Igneous rock is exceptionally hard and durable. These qualities make it an important source of aggregate material for the top wearing course of roads which have to withstand heavy volumes of traffic. It is also used as a concrete aggregate and in the construction of sea defences. Igneous rocks are found as intrusions into the Carboniferous Limestone series in the west of the County. The most important of these is the series of intrusions collectively known as the Whin Sill, from which the term Whinstone is derived. This outcrops extensively in Upper Teesdale. There is only one quarry currently producing igneous rock in the County, Force Garth in Teesdale. Permitted reserves are extensive and there is no need to consider permitting additional reserves for the foreseeable future.

Sandstone

4.36 Sandstones occur within the Millstone Grit series and coal measures and outcrop in several parts of West Durham. Traditionally, sandstone has been worked for use as building stone (also known as dimension stone) and this remains an important local industry in Teesdale. More recently, sandstone has been worked increasingly as an aggregate. Permitted reserves currently provide a landbank equivalent to approximately 86 years production and therefore there is no need to permit additional reserves. In April 1995 there were nine active sandstone workings in the County.

Sand and Gravel

4.37 Three types of sand and gravel are produced in County Durham: concreting sand and gravel, Basal Permian sand and moulding sands (grits). Although the RAWP has agreed a total apportionment of 11 million tonnes sand and gravel for the period 1992-2006 each type of material has its own particular characteristics and end uses and is therefore considered separately in terms of the adequacy of existing reserves.

4.38 Concreting sand and gravel is derived from three types of deposit. River terrace deposits exist along the rivers Wear, Tees, Gaunless and Skerne and are usually the most predictable in terms of occurrence and quality. Glacial deposits are variable in occurrence and their location is difficult to predict. Their value as a concrete aggregate can be reduced by the presence of impurities such as coal. Fluvio-glacial deposits are the material left by the melt waters of glaciers. They give rise to more uniform deposits of sand and gravel than glacial deposits, although the quality is generally not up to that of river terrace deposits, particularly those of the River Tees. In some circumstances concreting sand can also be produced from Basal Permian sands associated with the Magnesian Limestone escarpment, and this currently takes place at Crime Rigg Quarry.
4.39 Basal Permian sands outcrop at the foot of the Magnesian Limestone Escarpment and are often worked in conjunction with the magnesian limestone and dolomite. These sands constitute a very clean and well graded deposit. This softer and less angular sand is used for making plaster and mortar and is usually referred to as building sand. Very fine deposits are used to make asphalt.

4.40 Grits from the Millstone Grit series produce sand which contains a small proportion of clay which holds the grains in shape. Such material is known as moulding sand or naturally bonded sand and is used in foundries or for other industrial purposes. In April 1995 there was only one quarry producing moulding sand in the County, at Weather Hill in Wear Valley. Output is very small and permitted reserves are likely to be adequate for the Plan period and well beyond.

4.41 Table 4.2 sets out the position with regard to the adequacy of landbanks for sand and gravel extraction. A surplus of asphalt/building sand exists, but there is a shortfall of some 4 million tonnes of concreting sand and gravel. Although some of this will be provided from Tees Valley (a relatively small amount at present), and some alternative supplies of coarse and fine aggregate are available from limestone quarries, it is nevertheless appropriate to provide additional areas for sand and gravel extraction over the Plan period (Policy M6).

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<th>Table 4.2: Sand and gravel supply</th>
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<tr>
<td>(a) Total apportionment 1992-2006</td>
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<td>(b) Total per year (a/15)</td>
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<tr>
<td><strong>Annual sales</strong></td>
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<td>1994-96</td>
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<tr>
<td>(c) Total 1992-1996</td>
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<tr>
<td>(d) % split</td>
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<tr>
<td>(e) Apportionment split</td>
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<td>(f) Residual needs 1996-2006 (e-c)</td>
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<tr>
<td>(g) 7 year supply at end of Plan (b<em>d</em>7/100)</td>
</tr>
<tr>
<td>(h) Total plan needs (f+g)</td>
</tr>
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<td>(i) Reserves 01/01/97</td>
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<td>(j) Plan allocations required (i-h)</td>
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<td><strong>Source:</strong> RAWP</td>
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Note: figures may not sum due to rounding
* building/asphalting sand
+concreting sand and gravel (also includes ‘other sand and gravel’ as defined for the purposes of regional aggregates monitoring)
Ganister

4.42 Ganister is a silica rock which is found within the Carboniferous Limestone and Millstone Grit series of west Durham outcropping on the fells above Weardale and within the lower coal measures in a belt running between Knitsley and Butsfield. It is used in the manufacture of refractory bricks and cements. For refractory use, the rock must have a minimum silica content of 97%. In April 1995 there was only one active ganister quarry, at Harthope Head between upper Weardale and upper Teesdale. Permitted reserves of ganister are such that there is no need to permit new working for the foreseeable future.

Fluorspar

4.43 Fluorspar consists of fluorite together with variable amounts of associated minerals. Fluorite is composed almost entirely of calcium fluoride and is the only significant source of the element fluorine. It is used as a flux in the iron and steel industry, in the chemical industry to manufacture hydrofluoric acid and in the aluminium industry to manufacture artificial cryolite, which is used as a flux in the production of primary aluminium. Fluorspar is a vein mineral and is found within the central zone of the Northern Pennine orefield which is within the Carboniferous Limestone series and extends into the Millstone Grit and coal measures to the east. The main fluorspar bearing veins are centred around upper Weardale and its tributary, the Rookhope Valley.

4.44 The last active fluorspar mine in the County, Frazers Grove mine in Weardale, closed in 1999.

Barytes

4.45 Barytes (Barium Sulphate) is a vein mineral which occurs on the margins of the North Pennine orefield. It is used in a number of chemical applications, the nuclear industry, in coal working and in oil and gas well drillings. The only currently active mine is at Close House, Lunedale, which is in the North Pennines AONB. Permitted reserves at this mine are limited and additional allocations will be necessary if the mine is to continue working throughout the Plan period.

Oil and Gas

4.46 It is not currently known whether commercially exploitable reserves of oil and gas exist in County Durham. The Government has, however, issued exploration licences within the County and the Plan will need to make general provision for possible commercial exploitation.

Peat

4.47 Areas of peat bogs exist in parts of the west of the County. These are all blanket bogs, which are commercially unattractive in respect of peat extraction when compared with the raised bogs found elsewhere in the country. It is therefore considered unlikely that there will be any proposals for commercial peat extraction within the County. Were any such proposals to arise however, they would be assessed against the general policies of this Plan, in the light of Government Guidance contained in MPG13, which seeks to restrict new extraction to areas “which have already been significantly damaged by recent human activity and are of limited or no current nature conservation or archaeological value.”
Conclusions

4.48 There is a need to provide additional resources over the Plan period for extraction of the following minerals:
- concreting sand and gravel;
- high grade dolomite;
- limestone for cement manufacture at Eastgate;
- brickclay for Eldon and Todhills brickworks;
- barytes at Closehouse mine.

A criteria based approach is used to assess proposals for working opencast coal and fireclay (Policy M7).

In addition the Plan will need to make allowance for the extraction of any oil and gas reserves which may be identified.

Resource Conservation

4.49 The principle of sustainability (see paragraph 3.3) suggests that permission to extract minerals should only be given where they are required to meet an established need. National policy is, however, equivocal on this point, Minerals Planning Guidance Note 1 recognising the need to conserve minerals as far as possible, but also stating that need should not be a requirement of planning proposals unless there are material planning objections which are not outweighed by other benefits. The potentially intrusive nature of mineral extraction is such that, in general, many proposals will raise material planning objections and will therefore require a consideration of need.

4.50 On this basis extraction in excess of established need will only be justified in special circumstances, where it has specific advantages in terms of:

a) the avoidance of significant sterilisation by other development;

b) the provision of aggregates in proximity to specific construction projects;

c) reclaiming significant areas of derelict land;

d) improving existing planning permissions.

4.51 In order to retain existing employment and to avoid the unnecessary sterilisation of minerals, it may also be desirable to allow extensions to some existing workings even if there is no established need. Where an existing site is operating satisfactorily an extension may also be less environmentally intrusive than a wholly new proposal.

4.52 However there may be cases where extensions will not be appropriate. The scale and extent of quarrying on the Magnesian Limestone Escarpment, together with the large potential reserves allocated in the Plan, make it unnecessary and undesirable to allow further extensions, other than that allocated in the Plan, in this area (Policy M54). Extensions to opencast coal or fireclay sites will be considered under Policy M7 and M8.
Policy M3

Extension to mineral workings will be allowed under the allocations made in policies M10, M11, M55 and M56, and under the criteria set out in policies M6, M12, M22 and M23. Additionally, extensions to existing mineral workings, other than for opencast coal or fireclay, will be permitted provided that they:

a) will not lead to any material requirement for increased plant capacity or road traffic; and

b) do not provide for a significant level of reserves beyond the end of the Plan period; and

c) do not have a material impact upon the landscape, ecology and other features of nature conservation importance; and

d) will have no other significant additional adverse impacts; and

e) would ensure the rectification of any identified deficiencies in existing workings or planning permissions in accordance with Policy M53; and

f) will not, when viewed against projected needs over the Plan period, add significantly to the total landbank of approved reserves within the County; and

g) do not involve any further mineral extraction on the Magnesian Limestone Escarpment.

The Use of Waste and Recycled Materials

4.53 Increased use of recycled materials and material previously consigned to waste as a mineral working deposit will help to reduce the demand on green field sites and conserve resources for the future. The re-use of material occurs mainly in relation to aggregates and bulk fill. Recycled construction materials can be used in place of newly won aggregates as fill material and road planings can be recycled. Extracting material from a mineral working deposit such as a colliery spoil heap can have the added advantage of removing eyesores from the local environment.

4.54 MPG6 sets national objectives for reducing the proportion of aggregates supply from primary land won sources in England, from 83% in 1992 to 68% by 2006. Such objectives are implicit in the derivation of regional and sub-regional apportionments for aggregates (Policy M2). It would not therefore be appropriate to define further targets for increased use of secondary or recycled minerals, although the potential for use of such material will be a material consideration in determining the need for new land won mineral extraction (policies M6, M10, M12, M22 and M23).

4.55 In general terms, changes in market prices and specifications in favour of the use of recycled and waste materials will be necessary before any major impact on the demand for newly won minerals, particularly aggregates, can be achieved. However, it is considered appropriate that the County Council, as both minerals planning authority and a major specifier of construction aggregates, encourages greater use of recycled and waste materials.
4.56 Although not strictly secondary materials there may also be scope for the better use of minerals which are currently discarded as waste or sold for lower grade uses. Examples of this include the potential use of limestone fines, either directly or when blended with fine sand, as a concreting sand and the increased utilisation of high grade limestone resources for high grade end uses through improved processing.

Policy M4

The use of recycled and waste materials will be encouraged and supported by:-

a) preferring their use for road construction, maintenance and other works projects, where this is technically and economically feasible; and,

b) permitting the extraction of material from a mineral waste deposit where this can be achieved consistent with environmental protection objectives.

Construction and demolition waste recycling facilities

4.57 The recycling of construction and demolition waste material involves the use of heavy machinery such as crushers and conveyors. The potential impacts are likely to relate to noise and dust emissions and the transport of materials to and from the site. As well as suitable industrial locations opportunities may also exist to locate recycling facilities at active quarries where similar environmental impacts tend already to have been taken into account. In order to reclaim suitable material from the waste stream there is also scope for this type of facility in conjunction with landfilling operations. The need for sites and facilities for all forms of recycling, and the locational criteria to apply, will be considered fully in the Waste Local Plan.

Policy M5

Proposals to develop recycling facilities for construction and demolition wastes will be permitted at active quarries and landfill sites for a temporary period not exceeding the permitted life of the quarry or landfill site provided that:

a) any existing adverse impacts on the environment or local community are not significantly increased;

b) the operation or restoration of the site is not prejudiced or significantly delayed.

Areas for Extraction

4.58 One of the main functions of the Plan is to identify potential areas in which mineral extraction may be acceptable. The different characteristics of different materials, in terms of their need and occurrence, however requires that a number of approaches are taken to the identification of such areas. The Minerals Local Plan uses the following approaches:

for sand and gravel, where there is an overall need for further reserves, broadly based areas of search are defined;

for major extensions relating to existing sites, a site specific or 'preferred areas' approach is adopted;

for coal, and associated fireclay extraction, a criteria based approach.
Areas of Search for Sand and Gravel

4.59 The method used to define the draft areas of search used the extent of mineral resources as a starting point, these being established through a study of published sources and in consultation with industry. Areas were then excluded where mineral extraction would cause harm to interests of acknowledged importance. Land excluded from areas of search through this process include:

- high quality landscapes, as defined nationally and in Structure and local plans;
- the undeveloped coast;
- Sites of Special Scientific Interest (SSSIs);
- Local Nature Reserves;
- sites with potentially adverse access and traffic problems;
- best and most versatile agricultural land;
- historic parks and gardens;
- scheduled ancient monuments;
- ancient semi natural woodland;
- appropriate stand off distances from residential areas.

4.60 Given the broad designation of areas of search it is not appropriate to include detailed environmental considerations in the criteria used to define them. Assessment of local environmental factors is therefore the subject of separate policies to be applied to specific proposals for mineral working.

4.61 The areas of search will not represent areas where proposals for mineral extraction will automatically be approved. All proposals will need to be considered in terms of their specific impacts and will need to conform with policies aimed at protecting the environment and quality of life for local people, as well as any area specific advice contained in Section 6.1. Proposals will also be required to meet an established need, except as allowed for in paragraphs 4.49-4.52.

4.62 It is acknowledged that, in the interests of resource conservation, it may in certain circumstances be desirable to allow limited working of land beyond the boundary of an area of search as part of a scheme for the extraction of deposits largely within it. Where this is the case extraction outside the area of search would only be acceptable where an intending operator could demonstrate in advance that they are able satisfactorily to overcome all the factors that led to the original exclusion of such land. Proposals with more than 50% of their area outside an area of search should be treated as lying wholly outside for the purposes of the Minerals Local Plan.

4.63 Areas of search for sand and gravel have been defined at 5 locations throughout the County. They have been defined with the aim of minimising the impact on local communities and the environment whilst providing a reasonable choice of areas to meet needs throughout the Plan period. A more detailed explanation of the background to the definition of the areas of search is contained in the technical working paper.
Policy M6

Other than allowed for under Policies M12, M22 and M23, sand and gravel extraction will be permitted only within the areas of search identified on the proposals map and where one or more of the following applies:

a) it is required to meet an established need which cannot be met from existing permissions or by the use of suitable secondary or recycled materials;

b) the mineral extraction is in advance of other development which is either subject to a planning permission or allocated in an adopted development plan (in accordance with Policy M15);

c) the proposal is acceptable as a borrow pit (in accordance with Policy M13);

d) a significant part of the site is derelict or contaminated and in need of treatment and the proposal provides for its comprehensive reclamation;

e) where it leads to overall environmental improvement through the updating of existing planning permissions to an appropriate standard (in accordance with Policy M53);

f) it is an extension to an existing mineral working (in accordance with Policy M3).

Opencast coal and fireclay

Opencast coal

4.64 The exposed coalfield within County Durham has seen extensive opencast coal mining activity over the past 50 years. A major issue of concern is the fact that communities and the local environment in some parts of the coalfield have suffered from the cumulative impacts of a succession of sites over many years. Such impacts have been compounded by the unpredictable, transient nature of opencast coal mining and the re-working of previously restored sites. The extent of past working, when combined with other planning constraints across the exposed coalfield, mean that there is now only limited potential for further acceptable sites to be found.

4.65 The difficulties in finding acceptable sites reflects the particular situation found in County Durham. The general settlement pattern in the coalfield consists of small, scattered communities that developed around individual collieries. The absence of major areas of open countryside remote from such communities has intensified the difficulties of identifying sites which would not adversely affect them. The pattern of opencasting in Durham, with large numbers of relatively small sites, and re-working of areas has added further to the cumulative impacts on these communities.

4.66 Opencast coal mining on the scale experienced has led to a widespread loss of traditional landscape features and associated wildlife. This has had a significant impact on the area, with the loss of subtle landscapes developed over centuries, which not even sympathetic restoration schemes can recreate adequately. Areas of High Landscape Value (AHLVs) are particularly sensitive to the intrusiveness of opencast working, and the loss of traditional landscape features. Although a few small areas within AHLVs have been
worked previously for opencast coal the greater part of them remains undisturbed by such mineral working. The sensitivity of the AHLVs is such that many of them, for example the Derwent Valley, have previously enjoyed protection from all working. The AHLVs therefore represent the main areas of landscape within the exposed coalfield remaining free from the impacts of opencast working. As a result proposals for working within AHLVs will need to pay particular attention to impacts, including piecemeal and cumulative effects, on their special character and quality in accordance with Policy M23.

4.67 The eastern part of the exposed coalfield contains some areas of high environmental quality, particularly around the City of Durham and along the valley of the River Wear. As a result much of this area is designated as an AHLV. Although opencast coal mining has not been as widespread as in the west of the exposed coal field, large scale quarrying activity on the Magnesian Limestone Escarpment has had significant impacts. The importance of this environment, not only to the immediate surrounding area but as a gateway to the County, further limits the scope for opencast coal mining in this area.

4.68 About 20% of the exposed coalfield in the County is now within the general extent of the North Durham Green Belt whose main purpose is to keep land permanently open. Whilst national policy does not exclude mineral extraction in Green Belts, mineral extraction would be subject to compliance with a number of tests. The general extent of the Green Belt and the test are explained in paragraph 5.4. The revised MPG 3 “Coal Mining and Colliery Spoil Disposal” strengthens the general guidance in PPG 2 and states that applications to extract coal in the Green Belt should be tested against the highest environmental standards. It is important that the period of mineral extraction is kept to a minimum to maintain the openness of the Green Belt. Associated operations, such as the stockpiling of overburden and minerals, should be subject to similar constraints as these activities can be visually detrimental to the openness of the Green Belt due to their siting, material or design. Where planning permission is granted to extract coal, stringent conditions should be attached to ensure the site is well operated and restored to the highest standards.

4.69 It is therefore becoming increasingly difficult to find sites in County Durham that can be worked without damaging the environment to an extent that local communities and society in general find unacceptable. However, there may be scope for a continuing modest level of opencast coal extraction within the County. There may be some areas where it is possible to develop proposals which, when considered against the environmental policies of this Plan (including cumulative impact), do not raise significant environmental concerns. Elsewhere there may be instances where the benefits to local communities of a proposal clearly outweigh the adverse impacts that will result from mineral working.

4.70 The nature of modern opencast working involving the movement of large amounts of material makes it a particularly suitable method of addressing contaminated and/or derelict land. Although only limited amounts of derelict land remain within the coalfield, there may be scope to allow opencast extraction as a means of reclaming such land without the public expense that would otherwise arise. It is also possible that new areas of dereliction may arise during the Plan period which require reclamation. In assessing any such applications it will be important to ensure that the area proposed for opencasting fairly and reasonably relates to the extent and nature of dereliction.
The exposed coalfield

Boundary of exposed coalfield
Areas worked 1943 to 1996
Main built up areas

Figure 4.2
OPENCAST COAL AREAS WORKED 1943 TO 1996

County Durham Minerals Local Plan December 2000
4.71 Similar benefits may arise in allowing opencasting where it would enable the reclamation of contaminated land. The amount of contaminated land within the exposed coalfield area is not currently known. However, since 1997 several opencast schemes have successfully addressed areas of contamination. When assessing whether land is derelict or contaminated close attention will be paid to the formal definitions of such land, as set out in Appendix 3. As with derelict land it will be important to ensure that any area proposed for opencasting fairly and reasonably relates to the extent and nature of contamination.

4.72 The avoidance of unnecessary sterilisation of minerals, wherever possible, will help to reduce pressure on other sources of supply, and will help to ensure that mineral reserves are not, in effect, wasted. Such benefits from prior extraction of coal should be realised, wherever they can be accommodated in an environmentally acceptable manner, provided that the ensuing development is not prejudiced or delayed significantly. Ideally, in order to avoid potential problems of delay, any potential opencasting should be included in an overall programme for the development.

4.73 Extensions to opencast workings, or a series of proposals in the vicinity of particular communities, add to the impacts from sites, and prolong the uncertainty and disruption for those affected. These problems are compounded by the difficulties of achieving the most appropriate restoration for an area in overall terms from a series of fragmented proposals. Given their short life, relative to other kinds of mineral extraction, piecemeal workings of this kind should be avoided, and an outline of any proposed future workings in an area should be included in the original application. In some circumstances, and in consultation with local communities, it may be possible to agree in advance a programme of working sites in an area to achieve their exploitation in an acceptable manner. Where previously unforeseen circumstances, for example unexpected geological faulting, lead to an application for an extension, any such proposal will be considered under Policy M7.

Fireclay

4.74 Opencast coal seams generally occur in conjunction with other minerals, notably fireclay and brickclay. In the interests of sustainable development, the efficient use of mineral resources is desirable and it is important that the opportunity to work these other minerals commercially is fully explored and exploited. The co-ordinated working of mineral deposits can reduce the need to extract minerals elsewhere and prevent the unnecessary sterilisation of valuable mineral resources.

4.75 The brickworks operating in County Durham have particular requirements for fireclay resources which are best provided by local supplies. Where fireclay is extracted, it is important that priority is given to local brickworks to utilise the resource so that current production and employment levels are maintained. It is recognised that the local brickworks may not be able to use the fireclay produced (at any given time) for various reasons and it is imperative that fireclay supplies are not wasted. When this occurs, the resource should be utilised by other brickworks throughout the region and country.
4.76 In the event that no brickworks can utilise the fireclay resource, every effort should be made to avoid the unnecessary sterilisation of the mineral by the stockpiling or storage of the mineral for future use. This would accord with the principles of sustainable development. It is recognised that there is the potential to store or stockpile fireclay both on and off-site, above and below ground, but that each of these options have particular problems. Extensive testing of the characteristics and firing qualities of the fireclay will need to be investigated by the operator prior to any decision on its subsequent storage or stockpile. This is a matter which will need to be assessed on an individual site basis and would be subject to planning conditions and/or obligations attached to any planning permission. This balanced strategy should provide fireclay to assist in meeting local, regional and national demand for this mineral.

Policy M7

Within the exposed coalfield area there will be a presumption against proposals for the opencast mining of coal and/or fireclay unless:

a) they are environmentally acceptable, or can be made so by planning conditions or obligations; or

b) they provide local or community benefits which clearly outweigh the adverse impacts of the proposal. In assessing such benefits particular regard will be had to:

i) the contribution of the proposal towards the comprehensive reclamation of areas of derelict or contaminated land;

ii) the avoidance of sterilisation of mineral resources in advance of development which is either subject to a planning permission or allocated in an adopted development plan (in accordance with Policy M15);

iii) their contribution (or otherwise) to the maintenance of high and stable levels of economic growth and employment;

iv) the need for supplies of fireclay to serve local brickworks.

All proposals should avoid the unnecessary sterilisation of other minerals, particularly fireclays and brickclays.

Policy M8

The piecemeal working of opencast coal deposits will not be allowed.

Drift Mines

4.77 The above approach applies only to coal extracted by opencast methods. The limited surface impact associated with drift mines means that they should be judged solely in terms of the relevant general policies. Particular attention will need to be paid when considering proposals for drift mines to the possibility of subsidence, and to the minimisation of waste and the impacts of its disposal (Policy M36).
Policy M9

Drift mining will be permitted where proposals conform with other relevant policies of this Plan.

Preferred Areas for Dolomite, Limestone, Brickclay and Barytes

4.78 The assessment of resources (paragraphs 4.15-4.48) identified specific needs in relation to a number of existing workings and site specific preferred areas are defined for dolomite, limestone for cement manufacture, brickclay and barytes.

4.79 The submission of a proposal within a preferred area does not guarantee its acceptability. All proposals will need to be considered in terms of their specific impacts and will need to conform with policies aimed at protecting the environment and quality of life for local people as well as the site specific policies and advice contained in Section 6. Particular attention will be paid to the need for high grade minerals (Policy M18), especially if the demand from specialist end uses does not meet expectations.

Policy M10

Preferred areas for the working of the following minerals are defined on the proposals map:

- dolomite;
- limestone for cement manufacture;
- brickclay;
- barytes.

Proposals for working within a preferred area will be permitted subject to being consistent with the resource management and environmental protection policies of the Plan.

Todhills Brickworks

4.80 In accordance with Policy M1, the Mineral Planning Authority (MPA) will aim to provide a landbank of 15 years for the brickworks. Existing reserves of material will allow extraction up to 2014. Therefore, additional material will be needed beyond 2014 to maintain a 15 year landbank. If significant new investment (such as a new kiln) is agreed with the MPA, the brickworks should be provided with a landbank of at least 25 years.

4.81 Given that insufficient information exists to identify either a site specific or preferred area for the extraction of brick making materials, an area of search for clay extraction is allocated to the immediate south east of the brickworks, as identified on proposals map Inset 8. Any working of this area of search will be required to progress in a southerly direction, commencing to the immediate south of the brickworks.
4.82 The area of search does not represent an area where proposals for mineral extraction will automatically be approved. However, the continued availability of clay and shale over the longer term is desirable in order to encourage continued investment which would assist in securing the long term future of the brickworks. Proposals for working in the area of search will be considered in terms of their specific impacts and will need to conform with policies dealing with the protection of the environment and the quality of life of local people, as well as any specific advice contained in Section 6.3(b).

4.83 The strategy for Todhills brickworks should set out the approach to working deposits in the area of search and contain objectives and proposals for the mitigation of landscape and visual impacts. The area of search rises progressively to the south east and consequently it would become increasingly difficult to screen operations in views from the north. Any proposal for future working must ensure that impacts on the character of the landscape and on surrounding communities are minimised, and this is likely to be best achieved through a co-ordinated programme of screening (including substantial advanced planting), phased working and restoration. The design of screening measures will need to be agreed with the MPA and planned well in advance of any mineral extraction (10 to 20 years) to ensure that advanced planting achieves the necessary scale and visual density to screen operations effectively.

Policy M11

An area of search south of Todhills Brickworks is defined on the proposals map Inset 8 for brick making materials. Proposals for working within the area of search will be permitted but will be subject to the imposition of conditions as appropriate, and which amongst others will include specifically for:-

a) the long-term economic future of Todhills Brickworks;

b) the extent, date of commencement, and duration of workings;

c) such advance and preparatory works as are deemed necessary to safeguard the landscape, environmental, and residential amenities of the area; and

d) an agreed scheme of working.

Proposals outside identified areas

4.84 Paragraphs 4.15-4.48 examine the position in relation to different minerals in County Durham and in many cases conclude that current reserves are adequate to maintain an identified landbank. Where a shortfall has been identified however, the Plan has identified areas of search and preferred areas as potential areas where mineral extraction may be acceptable. In order to give a degree of certainty to residents, and protect sensitive areas, new proposals outside these areas will not be allowed unless they are justified by special circumstances. These circumstances are set out in Policy M12, and are aimed at permitting extraction only where it is needed and cannot take place within an area of search or preferred area, or where it has specific advantages in terms of the issues outlined in paragraphs 4.49-4.51. The Minerals Local Plan’s approach to need is outlined in paragraphs 4.49-4.50. A specific approach towards opencast coal is set out in Policy M7, and to quarrying in the Magnesian Limestone Escarpment area in section 6.5.
4.85 Parts of the County have been identified as areas of particular landscape importance (the North Pennines Area of Outstanding Natural Beauty and Areas of High Landscape Value). Such designated landscape areas will be particularly sensitive to the impact of mineral extraction and therefore require additional protection from mineral working. If there is a need for working outside preferred areas or areas of search this should, wherever possible, take place outside such designated areas, and this principle is outlined in policies M22 and M23.

Policy M12

Outside areas of search, preferred areas and designated landscape areas identified in Policies M6, M10, M11, M22, M23, M55 and M56 of the Plan, proposals for mineral extraction, excluding opencast coal working, will only be permitted where one or more of the following applies:

a) it is required to meet an established need which cannot be met:
   i) from existing permissions; or
   ii) from within an area of search or preferred area; or
   iii) by the use of suitable secondary or recycled materials;

b) the mineral extraction is in advance of other development which is either subject to a planning permission or allocated in an adopted development plan (in accordance with Policy M15);

c) the proposal is acceptable as a borrow pit (in accordance with Policy M13);

d) a significant part of the site is derelict or contaminated and in need of treatment and the proposal provides for its comprehensive reclamation;

e) where it leads to an overall improvement through the relinquishing or consolidation of other planning permissions (in accordance with Policy M53);

f) it is an extension to an existing mineral working (in accordance with Policy M3).

Borrow Pits

4.86 "Borrow Pit" is a term used to describe temporary quarries on, or in the vicinity of, major civil engineering construction sites which are used solely to supply material for this construction project, and which are sometimes used for the disposal of surplus materials. Their main advantage is in reducing the need to transport minerals, thereby limiting costs and reducing the disturbance on the local road system.

4.87 To be set against their apparent advantages there are, however, a number of other considerations. The most important of these is the difficulty in obtaining satisfactory working and restoration of small scale, temporary projects often worked by firms with little experience of restoring mineral sites to the high standard now required. In addition, because borrow pits are tied to one project they are vulnerable to problems relating to technical quality. Where only low grade material is required, allowing a borrow pit may preclude consideration of the use of suitable waste or recycled materials. Any advantage gained from reduced traffic on local roads will also be negated where there is a need to import fill in order to restore the site.

4.88 In general terms the Mineral Planning Authority considers the problems relating to borrow pits outweigh their advantages. Their exploitation therefore needs to be strictly controlled, in line with the following policy.
Policy M13

Applications for the development of borrow pits will only be permitted where all the following criteria are met:

a) the applicant can demonstrate that the supply of the mineral from existing sources would be seriously detrimental to the amenity of the area because of the scale, location or timing of the necessary operations;

b) the need cannot be met by the use of suitable secondary or recycled materials;

c) material taken from the borrow pit can be transported to the point of utilisation without the use of the public highway system;

d) the site can be restored to a satisfactory end use and landscape condition without the use of imported material, other than that generated on the adjoining construction scheme and which can be brought to the site without the use of the public highway system;

e) appropriate measures are in place to ensure that:
   i) the site is used solely in connection with the adjoining construction scheme;
   ii) the satisfactory restoration and after-care of the site takes place in accordance with an agreed scheme. The provision of appropriate mutual funds, or exceptionally financial bonds or other means may be sought to guarantee that any breach of planning conditions with regard to the restoration and after-care of the site can be remedied without additional public cost;

f) the proposal conforms with other relevant policies of this plan.

Safeguarding Mineral Deposits

4.89 The finite nature of mineral resources makes it important to safeguard deposits of potential economic significance against sterilisation by other types of development. The sterilisation of deposits reduces the extent of workable reserves, thereby limiting the range of options for future extraction and possibly leading to increased pressure on sensitive areas.

4.90 The Minerals Local Plan seeks the protection of important mineral deposits through policies aimed at:

i) preventing the sterilisation of significant quantities of mineral deposits which are or may become of economic importance;

ii) allowing mineral extraction in advance of other development.

Preventing the sterilisation of mineral deposits

4.91 As existing resources are used up it becomes increasingly important that the remaining deposits are kept available to meet future needs. The County Council has defined those areas considered to contain mineral deposits of existing or potential economic importance (other than coal and vein minerals which are protected by arrangements involving the Coal Authority) as Mineral Consultation Areas, together with appropriate safeguarding zones, on the proposals map. Within these areas district councils are required to consult the County Council on planning applications which could have the effect of sterilising mineral deposits. Where significant quantities of minerals are affected by proposals in a Mineral Consultation Area development may be opposed, although certain kinds of development, such as infill development may be acceptable (see Appendix 2).
4.92 The situation may arise where a proposed development within a Mineral Consultation Area is acceptable in respect of all other relevant considerations. In any such instance the main issues to be considered will be:

i) the availability of suitable alternative sites for the development; and

ii) the particular importance of the mineral reserves that would be sterilised by development.

4.93 The designation of a Mineral Consultation Area does not give any indication that mineral working will be acceptable. Their definition is intended solely as a means of protecting finite resources to meet long term needs. All applications for extraction will be considered against the relevant policies contained elsewhere in this Plan.

Policy M14

Development will only be permitted within or adjoining a Mineral Consultation Area as shown on the proposals map where:

a) it would not sterilise significant quantities of potential mineral resources; or

b) it represents infill development within an established built up area; or

c) it is otherwise acceptable and:

i) no other suitable locations are available; and

ii) development would not lead to the sterilisation of reserves of high quality or scarce minerals (in accordance with Policy M18).

Extraction in Advance of Other Approved Development

4.94 Where another type of development is approved on a site containing minerals, opportunities may exist to avoid sterilisation by their prior extraction. Care will, however, be needed to ensure that any additional disturbance caused by extraction is kept to an acceptable level.

Policy M15

The extraction of minerals in advance of other development with planning permission or which is on land allocated in an adopted development plan will be permitted provided that:

a) the extraction does not prejudice or unduly impede the development; and

b) any additional impact on local amenity is acceptable (in accordance with policies M36-M37).

Information about mineral resources

4.95 Although the basic geology of the County is established, mineral exploration will be necessary in order to refine knowledge about the extent of deposits, and in proving potential reserves. Most exploration is of relatively short duration and has a limited environmental impact, and some of it is permitted development. Where planning permission is required applications will be considered on the effects of the exploration activity itself, rather than on the possible merits of any future proposal to exploit the mineral. Similar considerations will be taken into account by the County Council when responding to consultations on proposals where planning permission may be granted under the terms of the General Development Order.

4.96 Mineral exploration may also have an adverse impact on the agricultural management of the land concerned. Suitable conditions may therefore need to be imposed on any planning consent to ensure that the works are carried out in a manner which protects the agricultural quality of the land and associated features.
Policy M16

Where appropriate, approval will be given for exploration to identify mineral deposits, without prejudice to the consideration of subsequent planning applications for mineral extraction, provided that the exploration conforms with other relevant policies of this Plan.

4.97 In the interests of resource protection and minimising the effect on local communities it is important that, where this does not have an unacceptable environmental impact, reserves are worked comprehensively. In order to achieve this information on the extent of mineral deposits beyond the site of any individual proposal will be required in order to ensure that piecemeal working of deposits does not take place.

Policy M17

In considering proposals for mineral extraction, where:

a) sufficient information on the extent of workable deposits is not otherwise available; and

b) land outside the proposed boundary is physically capable of being worked as part of the application site;

the Mineral Planning Authority may require an applicant to indicate through supporting information their understanding of the location of mineral reserves in surrounding land in order to justify the proposed extent of mineral extraction. Such information may take the form of data from mineral exploration, old mining records and other relevant sources of geological information.

The Efficient Use of Minerals

4.98 Mineral resources are finite and it is important to make the best use of them so that current needs can be met without jeopardising the ability of future generations to meet theirs. This involves not only reducing the need for newly won minerals (Policies M4-M5) but also ensuring that mineral working takes place as efficiently as possible and that scarce resources are not used when alternatives exist.

The Conservation of High Grade Mineral Resources

4.99 Some industrial processes require high grade minerals in terms of their quality or purity such as dolomite from the magnesian limestone escarpment, some of which is suitable for use in the chemical, metallurgical and glass industries (see also section 6.5). Although mineral deposits will usually comprise material of varying qualities, it is important that these scarce resources are not used for more general purposes, such as construction aggregates, when lower grade alternatives are readily available. The Mineral Planning Authority, through the use of conditions and/or agreements shall seek to ensure that these resources are worked in the most efficient manner possible so that proper use can be made of their special qualities and that they remain available for the future. Although this approach primarily relates to dolomite at present, industrial specifications may change and other minerals may be considered as high grade during the Plan period.
Policy M18

The extraction of high grade minerals, including dolomite, will be permitted only for the purposes for which their specific qualities are essential. Control will be exercised through use of conditions, planning obligations or other legal agreements as necessary and appropriate.

The area of high grade dolomite east of Thrislington Quarry will be protected from all mineral working unless:

a) there is a need for high grade minerals for use in the refractory or steel industry which cannot be met through the use of:
   i) lower grade material; or
   ii) high grade material from existing planning permissions; or
   iii) land allocated under Policies M55 and M56; and
b) the proposal is consistent with the resource management and environmental protection policies of the Plan.

The Concurrent Working of Minerals

4.100 When two or more minerals are found together in the same site it is often beneficial in economic and environmental terms for the minerals to be worked together. Examples in Durham are brickmaking materials which are often found in conjunction with coal suitable for opencasting and permian sand which can often be extracted from magnesian limestone quarries. Where minerals are worked together, the need for the potentially damaging working of green field sites can be reduced and wasteful restoration and the sterilisation of reserves can be avoided.

Policy M19

Where mineral extraction is acceptable in principle the concurrent working of two or more minerals from the same site will be encouraged and will be permitted provided that:

a) the overall proposal remains acceptable in terms of its impacts on the environment or the local community and its duration; and
b) it does not significantly delay site restoration.

Oil and Gas

4.101 Were commercially exploitable supplies of oil and gas to be found in County Durham then the nature of their occurrence and extraction means that the areas of search or preferred area approach will not be appropriate. Separate policies are therefore required to deal with the possible development of any reserves of oil or gas.

4.102 There are three stages involved in the exploitation of oil and gas deposits. The exploration stage to locate deposits, the appraisal stage to determine the extent of deposits and the production stage. Each stage requires a separate licence issued by the Government in addition to any necessary planning permission. Exploration licences covering parts of Durham have been issued but as yet no production has been proposed.

4.103 Any proposed exploration for oil and gas will be considered under the general policy on mineral exploration. In the case of appraisal and production it is important to prevent the piecemeal development of deposits in order to avoid the unnecessary proliferation of the industrial structures associated with such activity.
Policy M20

Development to appraise the extent of a proven deposit of oil or gas will only be permitted in accordance with an overall agreed scheme.

Policy M21

Development for commercial production of oil or gas will only be permitted in accordance with a scheme for the comprehensive development of the deposit in an efficient and environmentally acceptable manner.
5

Environmental Protection

Landscape
Nature Conservation
Listed Buildings and Conservation Areas
Archaeology
Agricultural Land
Recreational Areas and Public Rights of Way
Protecting Local Amenity
Water Resources
Transport
Cumulative Impact
Restoration
Waste Disposal
On Site Processing and Storage
Site Management
Updating Planning Permissions
ENVIRONMENTAL PROTECTION

5.1 Where mineral extraction is necessary the County Council attaches overriding importance to ensuring that both the way it is carried out and the effects that it has on the environment accord with the principles of sustainability. Its impact must be acceptable in terms of both the local and wider environment. Minimising environmental disturbance has advantages to residents and the wider economy in improving and maintaining the attractiveness of an area, and to the industry by making continued working more acceptable.

5.2 The policies in relation to environmental protection are derived from the objectives set out in paragraph 3.21.

5.3 Environmental protection covers a wide range of different issues. Although the various effects that will need to be considered in relation to proposals for mineral working will often be complementary in their requirements, there may be occasions when conflicts arise between different environmental issues. It is not possible to resolve such potential conflicts within the Minerals Local Plan and, where they do arise, each case will have to be treated on its merits, depending upon the relative significance of opposing considerations in each particular circumstance.

5.4 The adoption of the County Durham Structure Plan establishes a Green Belt in the north of the County. The purposes of including land within the North Durham Green Belt are to check the sprawl of the Tyne and Wear conurbation, prevent towns and villages in the north of the County from merging into one another, assist in safeguarding the countryside from encroachment, and preserve the setting and special character of the historic City of Durham. Paragraph 3.11 of PPG 2 states that mineral extraction in Green Belts need not be inappropriate development; it need not conflict with the purposes of including land in Green Belts provided that high environmental standards are maintained and that the site is well restored. It goes on to state that mineral and local planning authorities should include appropriate policies in their development plans. However, detailed boundaries have yet to be defined in district local plans and it would be premature for the County Council to define the detailed boundaries in this Minerals Local Plan. When the first review of the Minerals Local Plan takes place, existing local plans will have been revised and will have defined detailed Green Belt boundaries in North Durham. It will be appropriate at that time to include a Green Belt policy within the Minerals Local Plan. Until the detailed boundaries have been defined, regard should be had to the general extent of Green Belt defined in the adopted County Durham Structure Plan.

Landscape

5.5 County Durham exhibits a very wide range of landscapes from the Pennine uplands and the Pennine fringe in the west, through the lowland plains and valleys of its major rivers to the limestone plateau and coast in the east. Included in these are some of the most attractive landscapes in northern England.
5.6 Mineral extraction can have a significant and enduring effect on the character of the landscape, both in terms of physical impacts on topography, vegetation and surface features and the visual intrusion of operations. Such impacts, which often have an influence well beyond the site boundary, are of particular importance in areas which have seen substantial working, such as the exposed coalfield and the Magnesian Limestone Escarpment.

5.7 With good design and modern restoration practices restored workings can eventually complement the surrounding landscape, although they will often appear immature and relatively featureless for some time. However some landscape features are irreplaceable or cannot be recreated within a short timescale: historic features, ancient hedges and mature trees, mature woodlands, semi-natural vegetation and complex natural landforms are best conserved in situ.

5.8 Mineral working can in some circumstances bring about positive benefits to the landscape, for example through the reclamation of derelict land. It may also facilitate changes in land use or the development of new landscapes such as community forests or new landscape features like wetlands or heathlands.

North Pennines Area of Outstanding Natural Beauty

5.9 The North Pennines Area of Outstanding Natural Beauty (AONB) has been designated for its national importance and contains extensive areas of near wilderness landscapes and smaller scale traditional agricultural landscapes, both of which are extremely sensitive to change. PPG7 identifies the primary objective of the designation of an AONB as "... the conservation of the natural beauty of the landscape".

5.10 Environmental impacts should therefore be a primary consideration in assessing any proposal for mineral extraction within or adjacent to the AONB. Even relatively small scale development can have a damaging effect on the AONB’s special character, and it will generally be inappropriate to allow further mineral extraction within the area. Any working that may be permitted in the AONB, including the two Local Plan allocations where a specific need has been identified (proposals 6.2 and 6.4), will need to pay particular attention to the environmental sensitivity of the AONB in their working and restoration proposals.

Policy M22

Other than as allowed for in Policy M10, mineral extraction in or adjacent to the North Pennines AONB will not be permitted except in exceptional circumstances and where one or more of the following applies:

a) there is an overriding national need for the mineral which cannot be met from alternative sites or sources elsewhere, including suitable secondary or recycled materials, and which is sufficient to outweigh the need to conserve the character of the area;

b) the mineral extraction is in advance of other approved development or which is on land allocated in an adopted development plan (in accordance with Policy M15);

c) the proposal is acceptable as a borrow pit (in accordance with Policy M13);

d) part of the site consists of derelict or contaminated land in need of treatment and the proposal provides for its comprehensive reclamation;

e) where it leads to an overall improvement through the relinquishing or consolidation of other planning permissions (in accordance with Policy M53);

f) it is an extension to an existing mineral working (in accordance with Policy M3).

In all cases proposals will be required to conform with other relevant policies of this Plan.
Designated landscapes

5.11 In addition to the AONB there are a number of areas within the County which are considered to be sufficiently important to the appearance of the County to be worthy of special recognition. These include areas of high landscape value, as identified in the Structure Plan and local plans, which include regionally and locally important landscapes, principally within the major river valleys of the Tees, Wear, Browney, Derwent and Team and parts of the coast and coastal denes. These areas are also often important for nature conservation, for their archaeological heritage, historical and cultural associations, and are highly valued for both formal and informal recreation.

5.12 Historic Parks and Gardens are of similar significance and make an important contribution to the quality of the County's landscape and reflect the cultural and horticultural traditions of their time. They are also likely to be of importance in other respects, and in particular offer a resource for recreation, tourism and education and often provide outstanding settings for listed buildings. English Heritage's register currently includes 11 parks or gardens within the County which are considered to be of national importance.

5.13 The policies of the adopted Structure Plan recognise the need to conserve the character and the quality of these landscapes and seek to protect them from inappropriate development. Mineral extraction would in many cases result in unacceptable damage either through direct impacts on landscape features or through the visual intrusion of industrial operations in a landscape valued for its scenic qualities, even where working is of a short duration and considerable effort is put into restoration. For the most part alternative sources of mineral deposits exist in less sensitive locations. This Plan has, for example, made adequate provision for sand and gravel by identifying "areas of search" (see paragraphs 4.59-4.63). For this reason proposals for new working within the landscape areas outlined above will only be permitted after the most careful consideration. All proposals for new or extended working will need to pay particular attention to the sensitivity of the landscape in designated areas.

Policy M23

In Areas of High Landscape Value and Historic Parks and Gardens, proposals for mineral working will be given the most careful consideration. Proposals will only be allowed where the environmental impact on the special character and quality of the landscape is acceptable, or can be made so by planning conditions or obligations and, in the case of non-energy minerals, where one or more of the following additionally applies:

a) there is a need for the mineral which cannot be met from alternative sites or sources elsewhere, including suitable secondary or recycled materials;
b) the mineral extraction is in advance of other approved development or which is on land allocated in an adopted development plan (in accordance with Policy M15);
c) the proposal is acceptable as a borrow pit (in accordance with Policy M13);
d) part of the site consists of derelict or contaminated land in need of treatment and the proposal provides for its comprehensive reclamation;
e) where it leads to an overall improvement through the relinquishing or consolidation of other planning permissions (in accordance with Policy M53);
f) it is an extension to an existing mineral working (in accordance with Policy M3)

In all cases proposals will be required to conform with other relevant policies of this Plan.
Local Landscapes

5.14 Although the most outstanding landscapes within the County warrant special protection it is vital to ensure that the landscape throughout the County is conserved and enhanced. The County exhibits a very wide range of landscapes and each of these has a distinctive local character based on differences in geology, soils and vegetation and on patterns of human settlement, farming practices and industrial development. It is important that this local distinctiveness is preserved, and that features which contribute to the character and quality of the landscape are protected.

5.15 Mineral working can have a considerable and usually detrimental impact on the rural landscape, not only through damage to the landform and the loss of landscape features but also through the effect on the way they inter-relate to each other in the local context. Although working in itself may be a temporary activity, its impact on the landscape can be long lasting, even with modern restoration techniques. Complex landforms and landscape features cannot be easily recreated as they are the result of a process of gradual change and evolution over many years and are the product of underlying geological conditions. Furthermore restoration, including new planting, often takes many years to mature. It can often be the case that, even with considerable effort, the intrinsic landscape value of an area subject to mineral working is lost permanently.

5.16 For these reasons the County Council will pay close attention to both the short and long term effects of mineral working on the landscape generally. The potential for effective restoration schemes will be taken into account and in particular the character of the restoration proposals and any benefits which can be achieved for the local landscape such as the reclamation of derelict land, the removal of degraded land or the development of new landscape features of an appropriate scale and character.

Policy M24

Minerals development will be required to:

a) ensure that the scale of any adverse effects on local landscape character is kept to an acceptable minimum; and

b) conserve, as far as possible, important features of the local landscape.

Restoration proposals should have regard to the quality of the local landscape and seek to provide landscape improvements where appropriate.

Nature Conservation

5.17 The sound stewardship of wildlife and key natural features, for the benefit of this and future generations, depends on the wise use and management of the County’s resources as a whole. The decisions of local planning authorities in relation to the development and use of land can contribute to this objective. Minerals development can have both positive and negative implications for nature conservation. For example site restoration can be designed to create new wildlife habitats. Conversely, proposals for mineral extraction can potentially have seriously damaging effects, both directly and indirectly. Where such an impact is identified proposals will be the subject of the most rigorous examination. The County Council has adopted both Nature Conservation and Geological Conservation Strategies to assist in the identification, conservation and enhancement of this natural heritage. National planning policy in relation to nature conservation is set out in PPG 9.
5.18 In recent years there has been an increased recognition of the importance of nature conservation, with national, European and international legislation and directives placing an obligation on member states to ensure the protection and management of key sites and areas. These key international obligations are set out below:

i) The Berne Convention - carries an obligation to conserve the habitats of wild plants and animals especially those listed in the convention as endangered or vulnerable.

ii) The Ramsar Convention - requires the conservation of wetlands, especially sites listed under the Convention.

iii) EC Council Directive on the Conservation of Wild Birds - requires member states to take measures to preserve a sufficient diversity of habitats for all species of wild birds naturally occurring within their territories and to take special measures to preserve the habitats of particularly sensitive species and migratory species. English Nature has proposed that under this directive the North Pennines should be designated a Special Protection Area (SPA) for its ornithological value.


i) Comprehensive survey and assessment of biological sites of national importance was published by the former Nature Conservancy Council in 1977, and subsequently reviewed by the Joint Nature Conservation Committee. These sites are known as Nature Conservation Review Sites (NCRs).

vi) The former Nature Conservancy Council in the 1980s conducted a similar comprehensive survey and assessment of geological sites. This identified, assessed and described all geological and geomorphological areas where conservation is essential for education and research in the earth sciences. English Nature and the Joint Nature Conservation Committee are continuing to conduct the survey process. These sites are known as Geological Conservation Review Sites (GCRs).

5.19 Sites of Special Scientific Interest (SSSI) and National Nature Reserves (NNRs) are identified by the Government as being sites of nationally important nature conservation and ecological interest. SSSIs are particularly vulnerable to being damaged and should be afforded maximum protection. Minerals development even beyond the boundary of an SSSI can have serious impacts on the site, for example through any resultant alteration to the local hydrological system or through pollution. (All SPAs, SACs, NNRs and Ramsar Sites are also SSSIs under national legislation).

5.20 Particular protection should also be afforded to ancient woodlands. Mature deciduous woodlands are probably the richest and most diverse habitat type in the County having taken many hundreds of years to develop their complex interdependent communities of plants and animals. Once lost an ancient woodland cannot be recreated and no amount of replanting will compensate for their disappearance. A Nature Conservancy Council survey in 1987 revealed that such areas, continuously wooded since 1600, were relatively scarce in County Durham. Therefore mineral workings which would result in any significant loss or damage to areas of ancient woodland will not be permitted.
5.21 Nature conservation in the County is dependent not only on the conservation of nationally designated sites but also on a whole range of natural and semi-natural vegetation types which provide the habitats for many rare and valued species. These include traditionally managed hay meadows, limestone grasslands, wetlands, heathlands and moorlands and the coast. The County Council in collaboration with Durham Wildlife Trust and English Nature identifies nature conservation sites, including County Wildlife Sites and County Geological Sites. Locally important Sites of Nature Conservation Interest are identified and designated by District Councils in their Local Plans.

5.22 The County Council will assess both the short and long term impacts of any proposed mineral working on a Site of Nature Conservation Importance and planning permission will not normally be granted for proposals which would detract from the overall value of such a site. Mineral development can however often make a positive contribution towards conservation objectives, and proposals which would change the character of a site and yet maintain or enhance its conservation value may be permitted. For example the restoration of sand and gravel workings has enabled the creation of nature reserves and quarries have exposed important geological formations.

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

5.24 The nation’s wildlife cannot be sustained solely by site protection but depends on the wise management of the land resource and its nature conservation value as a whole. There is a continuous gradation of nature conservation interest throughout the countryside and many urban areas. Development can sometimes be designed to retain local wildlife habitats such as hedgerows, woodlands, roadside verges, old pastures and ponds or restore them as part of the restoration scheme. Where appropriate the County Council will also encourage the creation of new areas of wildlife or geological interest.

5.25 Species protected under the Wildlife and Countryside Act 1981 (as amended) may be found in many places not designated as SSSIs or SNCIs. Only by protecting the habitats of these species can their survival be ensured. The County Council published guidance in April 1997 entitled "Species Protected by Law" to provide the necessary information to ensure that neither local authorities nor developers will be in breach of the legislation for wildlife protection where planning permission is granted.

Policy M25

Minerals development affecting existing or proposed internationally important nature conservation sites, including SPAs, SACs and Ramsar sites, which is not directly connected with or necessary to the management of the nature conservation site will not be permitted unless the Mineral Planning Authority is satisfied that:

a) the proposal will not have an adverse effect on the site, either individually or in combination with other proposals; and

b) the developer has demonstrated that there is no alternative solution; and

c) there are imperative reasons of overriding public interest.
Policy M26

Minerals development affecting existing or proposed nationally important nature conservation sites, including NNRs, SSSIs, NCRs and GCRs, which may have an adverse effect, either directly or indirectly, will not be permitted unless the Mineral Planning Authority is satisfied that:

a) the developer has demonstrated that there is an established national need for the mineral which cannot be met from alternative sites or sources, including suitable secondary or recycled materials; and

b) the reasons for the development clearly outweigh the value of the site itself and national policy to safeguard the nature conservation value of such sites.

Policy M27

Minerals development affecting regional or locally identified sites of nature conservation interest, including LNRs, RIGs, SNCIs and Ancient Semi Natural Woodlands, which may have an adverse effect will not be permitted unless the Mineral Planning Authority is satisfied that the developer has demonstrated there are reasons for the proposal which clearly outweigh the need to safeguard the intrinsic qualities of the site.

Policy M28

Minerals development should seek to preserve the nature conservation value of defined wildlife corridors by maintaining their integrity and continuity. Where possible, minerals development should contribute to their nature conservation interest through appropriate restoration and management.

Policy M29

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

a) opportunities for the creation of new areas of nature conservation interest;

b) the need to conserve local features of nature conservation value.

Listed Buildings and Conservation Areas

5.26 Proposals for mineral working, by their very nature, normally affect open land rather than buildings. Nevertheless there may be proposals which affect the built heritage of the County, particularly isolated listed buildings in the countryside and rural areas included in conservation areas. In order to protect this heritage proposals which adversely affect listed buildings, conservation areas or their settings will be resisted.

5.27 Through careful design and provision of suitable stand-off distances it should, in many cases, be possible to accommodate mineral working in the vicinity of listed buildings and conservation areas. Where, exceptionally, operations which detract from the setting of such areas are necessary, particular attention will need to be paid to protecting key features, conserving or enhancing the original character of the landscape on restoration, and establishing new landscape features to replace those destroyed by the operations.
Policy M30

Planning permission for mineral development will not be permitted where this would have an unacceptable adverse effect on listed buildings, conservation areas, or their settings.

Where, in exceptional circumstances, working in the vicinity of listed buildings and conservation areas is justified permission will only be granted where the working and restoration of the site ensures:

a) the retention of important built and landscape features; and
b) final restoration is to at least the original landscape quality, with replacement of any landscape features that it is not possible to retain during working.

Archaeology

5.28 The importance of archaeological sites and the need for their conservation is underlined in PPG16 issued by the Department of the Environment in November 1990. It recognises that archaeological remains are a finite, irreplaceable and non-renewable resource, in many cases highly fragile and vulnerable to damage and destruction. It states that where nationally important archaeological remains, whether scheduled or not, and their settings, are affected by proposed development there should be a presumption in favour of their physical preservation.

5.29 County Durham possesses a rich archaeological heritage including many sites of industrial archaeological interest such as early coal mining remains. They represent an irreplacable asset of educational, cultural, recreational and tourism value. The County Council’s Archaeological Unit at County Hall maintains a "Sites and Monuments Record" - a complete list of all scheduled ancient monuments in the County together with an extensive listing of other known or suspected sites of regional and local importance.

5.30 The County Structure Plan Review seeks to conserve and enhance the sites and settings of the County’s important archaeological sites. Minerals can, however, clearly only be worked where they are found so they often differ from other forms of development in that there is not the same flexibility of choice of location.

5.31 Minerals operators should therefore give early consideration, before planning applications are made, to whether archaeological remains exist on the site. Field evaluations will be required where there is a strong indication that important remains exist and the results of these evaluations should be made available to the Mineral Planning Authority as part of any subsequent planning application. The provision of this information will ensure that the archaeological importance of the remains can be judged against the need for the proposed development, and that each application is judged on its merits.

5.32 In considering applications for minerals development which would affect areas of archaeological interest, the Mineral Planning Authority will, in conjunction with the applicants and the County Archaeological Unit, seek means of accommodating the development in ways which would not cause unacceptable damage to the remains. It may, for example, be possible to amend site boundaries to avoid the most sensitive areas, though this may not always be a suitable solution since mineral workings often change the hydrology of the area which can itself threaten the preservation of remains.
In some cases an archaeological excavation to allow for preservation by record may be an acceptable alternative, particularly where remains are of local rather than national importance. Opencast coal extraction for example is likely to encounter early mining remains across the exposed coalfield and provide an opportunity for recording the unwritten history of this industry. In such cases the Mineral Planning Authority will need to be satisfied before granting planning permission that the appropriate provision for the excavation and recording of the remains has been made, at the developer’s expense. Such activities should be carried out before development commences, working to a brief prepared by the Mineral Planning Authority.

5.33 The preservation of important archaeological remains by record is, however, for a variety of reasons, the second best option and particular efforts should therefore be made to ensure that nationally or regionally important archaeological remains are preserved in situ.

Policy M31

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

Policy M32

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

Proposals for mineral development that would have a significant adverse effect on regionally important remains will only be permitted where:

a) no other suitable locations are available; or

b) where there is an overriding need for mineral which outweighs the requirement for physical preservation.

Policy M33

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

5.34 Some of the issues outlined above are covered in the CBI Archaeological Code of Practice for Mineral Operators. This code has helped improve practice regarding archaeological remains and engendered co-operation between operators and the County Archaeological Unit, and should continue to be used wherever applicable.

Agricultural Land

5.35 Agriculture is the predominant land use in the County and occupies approximately 64% of its land surface. At present agricultural surpluses have made it unnecessary to continue to expand food production. Correspondingly, Government guidance has shifted to rural diversification whilst continuing to protect the best and most versatile agricultural land. In County Durham this predominantly comprises land with an Agricultural Land Classification of grades 2 and 3a. Consultation with MAFF is required on any proposed mineral development where agriculture is proposed as an after use or where more than 20ha of best and most versatile agricultural land would be lost as a result of the development. In such cases applicants are advised to consult MAFF at the earliest possible stage. When considering proposals for mineral development the Mineral Planning Authority will take account of the overall effect on agriculture in the area.
5.36 Minerals can only be worked where they are found and most mineral workings are likely to affect agricultural land. Restoration of better quality agricultural land to an equivalent standard can be problematic, especially where soils would need to be stored over a long time, and there are cases where it will physically not be possible to restore land to its original agricultural quality, for example where the mineral forms an integral part of the soil profile or where the final surface is below the level of the water table. Mineral excavation can also have an impact on a wider area than simply the site itself. For example, in certain circumstances excavated material, such as natural soil or soil forming material, can be used to improve the restoration of older workings, if sufficient material is available without detriment to the restoration of the mineral site itself.

**Policy M34**

Mineral development which affects or is likely to lead to the loss of 20 or more hectares of the best and most versatile agricultural land will not be permitted unless:

* a) there will be no overall loss of agricultural land quality following restoration; or

* b) there is a need for the mineral which cannot be met from suitable alternative sources on lower quality agricultural land.

### Recreational Areas and Public Rights of Way

5.37 The County Structure Plan Review places considerable emphasis on providing opportunities for both residents and visitors/tourists to enjoy and have access to the countryside. The County's existing public footpaths, public rights of way, bridleways and cycleways provide important means of getting into and enjoying the countryside. Equally the County's country parks and picnic areas are of strategic importance due to their accessibility to its towns and villages and main transport routes. The County Council will have particular regard to the effect of proposals on the local footpath network and on the effects on the level of recreational amenity provided by the network. Even where provision is made for the retention or diversion of such rights of way, their amenity value could be significantly undermined by the development.

**Policy M35**

Mineral development that would have an unacceptable impact upon the recreational value of the countryside, and in particular facilities such as paths, other public rights of way, the local path network, country parks and picnic areas, will not be permitted unless there is a need for the mineral which cannot be met from suitable alternative sites or sources. Adequate arrangements will be required for the continued use of public rights of way both during and after mineral development, either by means of existing or diverted routes.

### Protecting Local Amenity

5.38 The main sources of disturbance to local communities are through the visual impact of the development, noise, dust, mud and the impact of heavy lorry traffic on local roads.

5.39 Major sources of visual impact resulting from mineral extraction are extraction areas, working faces, open voids, stockpiles, overburden and soil storage, removal of vegetation and the presence of plant, lighting and mobile machinery. The degree of impact will depend on the topography of the area, the site’s proximity to residential areas and their environs and the scale and
nature of the working involved. Careful consideration of the detailed design, siting and layout of a development can help to reduce visual intrusion. This might include making use of the screening potential of existing vegetation and topography, the development of visually acceptable environmental barriers, the seeding and profiling of environmental barriers, the seeding and profiling of soil and overburden mounds and prominent extraction areas, advance tree planting in strategic areas, and the selection of appropriate colours and materials for plant and buildings.

5.40 If not adequately controlled, noise from mineral workings can be a major cause of disturbance. This is particularly the case where development is proposed close to dwellings and other noise sensitive areas. Such noise can arise from soil stripping, the movement of heavy lorry traffic, blasting and the general operation of machinery on site. MPG11 provides guidance on the control of noise through measures including the siting of plant in relation to dwellings, the imposition of noise levels which should not be exceeded in relation to dwellings and at the boundaries of the site, and the use of planning conditions in these matters.

5.41 Noise, as well as other effects, can pose an additional nuisance when activities take place outside normal working hours. Ensuring that the intrusion of working on local amenity is reduced to an acceptable level will, therefore, generally require limits on working hours.

5.42 Blasting associated with mineral working is often a major concern to local residents and businesses. Although structural damage to properties is extremely rare the disturbance caused to local communities can be considerable. Blasting generates both ground vibration waves and air blast waves. The extent of disturbance depends on the type and quantity of explosive, the degree of confinement, the distance to the nearest buildings, the geology and topography of the site and atmospheric conditions. The Mineral Planning Authority will seek to ensure that the effects of blasting are reduced to a minimum, using planning conditions where necessary to do so. Where appropriate the Mineral Planning Authority will consult HM Inspectorate of Mines and Quarries.

5.43 Problems from dust and mud arise from the handling of overburden, the processing and treatment of excavated material, the movement of plant and the transport of materials. The severity of problems varies according to the amount of moisture in the soil, the time of day and year, temperature, humidity and wind direction. The Mineral Planning Authority will expect operators to adopt recognised methods to suppress and control dust and mud including the spraying of materials with water at suitable stages in their handling and transport, the watering of those areas of site regularly used by vehicles, the surfacing of main site haulage roads with tarmac or concrete, the use of dust extractors and ensuring that vehicles using public roads undergo wheel washing and sheeting before leaving the site. Planning conditions will be used, as appropriate, as a means of securing an effective dust and mud control regime.

5.44 The transport of materials from working sites usually involves the use of heavy lorries which can cause damage to roads and verges, cause noise and disturbance and threaten road safety. Its impact on the road network and the amenity of communities often some distance from the site itself can therefore be considerable (see also Policy M42).
5.45 Certain types of extraction, particularly underground working such as drift mines, may pose problems in terms of possible subsidence and emissions of gas. Subsidence and landslip can cause problems both through the direct effects on structures, and in reducing the potential of agricultural land by disrupting drainage patterns and creating an irregular landform. Developers will be required to incorporate suitable measures to counteract the effects of subsidence and possible gas emissions and, where appropriate, to provide monitoring.

5.46 The means of reducing the impact of mineral working on local amenity and preventing the types of pollution outlined above will vary from site to site. Adherence to the high standards outlined in Policy M52 will help to achieve these ends and operators will be expected to ensure that pollution control is considered in the earliest stages in designing the development.

5.47 The effects of noise and dust are also covered by the Environmental Protection Act (1990), and will need to be considered by district councils in relation to any potential statutory nuisance. It is however important to emphasise that the planning considerations of noise and dust relate to the wider context of local amenity and it does not therefore necessarily follow that if a proposal is acceptable in environmental health terms, it is similarly acceptable in planning terms. Concerns have also been expressed about possible adverse health impacts resulting from dust, particularly on respiratory diseases such as asthma. Current research on this issue is inconclusive, but the county and district councils will need to monitor and take into account any appropriate new evidence that may arise in the consideration of new proposals for mineral working.

**Policy M36**

Proposals for mineral working should incorporate suitable mitigation measures to ensure that any potentially harmful impacts from the following sources are reduced to an acceptable level:

- a) pollution by noise, vibration, dust and mud;
- b) visual intrusion;
- c) traffic and transport; and
- d) subsidence, landslip and gaseous emissions.

5.48 In certain situations (including those described in Policy M7) it may be possible to demonstrate on the basis of local circumstances, that mineral working in closer proximity to housing areas would not prejudice the amenity of local communities. In most cases however, in order to contain disturbance to acceptable levels and to provide residents with a degree of certainty as to the proximity of future working, a stand off distance between mineral site boundaries, or operations involving blasting at hard rock workings, and housing areas is necessary. Exceptions to this policy will be considered where mineral extraction will achieve particular benefits through the reclamation of derelict or contaminated land, or avoiding sterilisation in advance of other development.
Policy M37

Unless it is demonstrated that the amenity of local communities can otherwise be protected from the adverse impacts of mineral working, mineral development will not be permitted where:

a) extraction or associated activities are within 250 metres of a group of 10 or more dwellings; or

b) in the case of hard rock workings, operations involve blasting taking place within 500 metres of a group of 10 or more dwellings.

Exceptions to this policy will be considered where mineral extraction will achieve particular benefits through the reclamation of derelict or contaminated land, or avoiding sterilisation in advance of other development, and where these benefits clearly outweigh the disturbance caused to nearby communities.

5.49 It is essential that once a mineral operation is underway effective monitoring is carried out to ensure that the site is being operated in the most environmentally acceptable way and that planning conditions are being met. Where appropriate, local liaison committees comprising representatives of the developer, the contractor, members of the local community and a representative of the Minerals Planning Authority will be encouraged. This should ensure that the local community has a full understanding of working practices and that the developer and contractor can respond quickly to concerns about the operation of the site.

Water Resources

5.50 Mineral extraction can have significant effects on water resources in terms of both adverse environmental impacts or increased risk of flooding. The quantity, quality and flows of water can be affected over areas far wider than the immediate vicinity of any site, with possible implications for existing water abstraction, river flows, lake levels, natural habitats and recreational and amenity use. The improvement of contaminated water or the restoration of quantities and flows can be difficult and very expensive. Development will therefore only be appropriate where its impact upon water resources is acceptable. In assessing the likely effects of any proposal, the Mineral Planning Authority will have close regard to any advice provided by the Environment Agency.

5.51 When considering proposals attention will be paid to any possible long term effects on water resources. Proposals will need to ensure that any concerns over the possible long term impact on water resources following the cessation of working are dealt with satisfactorily.

Policy M38

If a proposal for mineral development would affect the supply of, or cause contamination to, underground, surface or coastal water, it will not be permitted unless measures are carried out as part of the development which would mitigate those impacts throughout the working life of the site and following final restoration.
Transport

5.52 Transport is one of the main environmental considerations relating to mineral extraction. The heavy vehicles involved in the movement of minerals can cause adverse environmental impacts in a number of ways:

i) Safety - danger from traffic may be actual or perceived, posing either a real threat to personal safety, or its perception causing people to modify their behaviour.

ii) Local amenity - problems arise through congestion, noise, vibration, dust, air pollution, physical separation of communities, and visual intrusion from traffic. It is important that full consideration is given to problems of local amenity caused by transport, particularly heavy lorries, in deciding planning applications.

iii) Greenhouse gas emissions - transport is a major source of greenhouse gas emissions, and particularly carbon dioxide, the main gas associated with global warming. Minimising the emission of such gases is an environmental aim of international importance;

iv) Wildlife - heavy lorry traffic can have both direct and indirect adverse effects on wildlife.

5.53 The Minerals Local Plan seeks to minimise the adverse environmental impact of traffic through policies aimed at:

maximising the use of the rail network;

minimising the impact of heavy lorry traffic.

Maximising the use of the rail network

5.54 Use of the rail network enjoys a number of advantages in environmental terms over road transport:

it is a very safe mode of transport, running on segregated tracks apart from the public highway;

the impact on residential amenity is relatively slight, particularly given the relatively small number of movements required to transport large quantities of material (one 1500 tonne train can handle the equivalent of 60 38 tonne lorries);

rail transport is far more efficient in terms of CO₂ emissions (table 5.1). It also has the long term potential, through well established electrification technology, to access energy generated from renewable or less polluting sources.
Table 5.1: Emissions generated per unit travelled (1988)

<table>
<thead>
<tr>
<th>Freight transport</th>
<th>CO₂ emissions (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road</td>
<td>207</td>
</tr>
<tr>
<td>Rail</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Royal Commission on Environmental Pollution 18th Report, Transport and the Environment, HMSO, 1994

5.55 The potential for use of the rail network is, however, restricted by the limited extent of the network, the high cost of new infrastructure and the relatively costly nature of certain types of rail operation. In particular the transport by rail of relatively small quantities of minerals to local, dispersed points is likely to be uneconomic, and could lead to a poorer environment due to increased total travel distance and the need for final delivery by road.

Protection of rail routes

5.56 If use of the rail network (Figure 5.1) is to be maximised then links to existing or potential workings need to be protected from inappropriate development. Any proposal which would breach such an alignment through permanent development will not be acceptable. Where a link is currently disused, temporary uses which maintain the integrity of the alignment, such as recreational routes, may be permissible.

Policy M39

Planning permission will not be granted for any development which would prejudice the use of the following rail connections for mineral traffic:
- a) Bishop Auckland - Eastgate Cement works;
- b) Ferryhill - Cornforth - Raisby quarry;
- c) Thrislington quarry.

Scope for rail use in planning applications

5.57 Information on the scope for maximising the use of the rail network will be a requirement, where appropriate, in planning applications. The Mineral Planning Authority recognises that this will not be relevant to all proposals, and is most likely to apply where working is proposed near or adjacent to an existing or protected rail route, and where it is probable that significant quantities of products will be exported outside the County. As well as the export of material from a site, such considerations should also include the import of material, where this is required as part of any on-site processing.

5.58 In assessing the feasibility of rail use regard will be had to both practical and economic implications. However this does not mean that rail use should necessarily be discounted wherever it is not the easiest or cheapest option, only that the level of additional costs incurred should be reasonable in scale when compared with the local and wider environmental benefits that would accrue. Where rail use cannot be accommodated the environmental impacts of road traffic will be assessed against the criteria in Policy M42.
Policy M40

In determining a planning application for mineral development conditions may be imposed or planning obligations or legal agreements sought with the developer and rail operator, to ensure that, where rail use is feasible, the movement by rail of mineral, or mineral products, is maximised.

Mineral Disposal Points

5.59 The ideal location for the rail loading of minerals is at the point of extraction. The limited extent of the rail network and relatively short life of some workings such as for opencast coal means however that this will not always be possible and the need may arise for disposal points, remote from mineral workings themselves, for the transfer of material from road to rail. This will have advantages in reducing the wider environmental impacts of traffic and, in certain circumstances, may help secure the use of threatened rail lines. The location of any such disposal points will however need to be selected carefully if their impacts are to be minimised.

5.60 The range of environmental issues that will need to be considered will be broadly similar to those relating to other mineral development. Particular attention will need to be paid to protecting communities from the effects of heavy lorry traffic, and amenity problems such as dust that may result from the transhipment of minerals.

Policy M41

The establishment of disposal points for the transfer of minerals from road to rail transport will be permitted provided that the development would have an acceptable impact in relation to traffic, amenity and other environmental effects.

Road traffic

5.61 Although the Plan aims to maximise use of the rail network it is inevitable that the majority of the minerals produced in the County will continue to be transported by road. Minimising the impact of heavy traffic upon roadside communities will continue to be an important element in the consideration of all proposals for mineral extraction.

5.62 In assessing any proposal for mineral extraction there will be three main considerations in terms of the traffic impact:

- access to the strategic route network
- the need for lorry routing
- detailed safety and amenity considerations

5.63 The Structure Plan defines a strategic road network which comprises those routes suitable for carrying heavy lorries (Figure 5.1). If local communities are to be protected from the impact of traffic from mineral workings then it is important that the Strategic Route network can generally be accessed conveniently and safely from any site, without the need to pass through them. Where additional road traffic resulting from mineral development is considered acceptable, measures to ameliorate any adverse traffic impacts on local communities will be sought.
5.64 The wide ranging nature of the road network means that there will often be a number of possible routes between any one site and the Strategic Route network, some of which may be less suitable for minerals traffic. Where this is the case the Mineral Planning Authority will wish to secure agreement to the use of only the most suitable routes as part of any planning permission.

5.65 Minerals development can also be visually intrusive in terms of both its direct impact on nearby transport routes, and indirectly where necessary highway improvements change the character of rural roads. Although it is desirable to locate mineral working to allow convenient access to the Strategic Highways network, these are often the major through routes for residents and visitors to the County, and any visual impact upon them should be minimised. Minor rural roads are an important element in the character of open areas, and often act as recreational routes for cyclists, horse riders and walkers. Any visual impact upon them, or necessary improvements resulting from mineral extraction and transport, should therefore respect their essentially minor local character, particularly in terms of their setting in the wider landscape, and the need to retain their attractiveness in providing recreational access to the countryside.

5.66 In order to accommodate the traffic generated by mineral working, highway improvements may be needed. Planning applications should therefore be accompanied by a thorough Traffic Impact Assessment (provided by the applicant) identifying the effect on the highway network of traffic generated by the workings. This will identify whether or not a proposal is feasible in traffic terms, and will ascertain the necessity and scope for acceptable highway improvement works. Works may be required to protect the safety and efficiency of trunk and local road networks. Any development must be satisfactorily integrated into and co-ordinated with the highway network.

5.67 Although the County Council acts as highway authority for most roads within the County, trunk roads, providing the main through routes to and from the County, are the responsibility of the Secretary of State for the Environment, Transport and the Regions. Within County Durham these include roads A1(M), A19, A66, A167. Proposals affecting trunk roads will need to comply with national policy regarding access to trunk roads, and may require highway improvement works in line with paragraph 5.66 and Policies M42 and M43.

Policy M42

Minerals development will only be permitted where:

a) traffic generated by the development can be accommodated safely on the highway network; and,

b) the strategic highway network can be safely and conveniently accessed, and the amenity of roadside communities is protected; and,

c) the impact of traffic generated by the development on local and recreational amenity is otherwise acceptable.
Policy M43

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

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

Transport of oil and gas

5.68 Unique opportunities exist for minimising heavy traffic resulting from oil and gas extraction by the use of pipelines. Should commercial production of oil and gas ensue it is likely to span a period of 20 to 25 years and involve a substantial number of production wells. The relatively fixed location of production wells will often prevent easy access to the Strategic Highway network and so road transport may be particularly unsuitable. The flexibility in the siting of export terminals should be used to achieve a location adjacent to a railway or to feed into a long distance pipeline. Pipeline routes must respect safety considerations and avoid causing environmental damage. Once constructed, pipelines will place some restrictions upon nearby new development.

Policy M44

Oil and gas should normally be transported from production wells to export terminals by pipeline. Export terminals should be located to allow the use of long distance pipelines and/or rail for transporting oil or gas from them. In assessing proposals for pipelines particular account will be taken of:

a) the impact on the development potential of adjacent land; and
b) any environmental impact

Cumulative Impact

5.69 Where a number of separate mineral workings are situated in close proximity it is necessary to assess the overall impact on communities and the natural environment. Some impacts, such as ecological effects, may require the assessment of cumulative impact over a wide area. Even where the impact from single effects or individual sites is acceptable it may be that, in combination with others, the overall environmental effects are not. Such cumulative impacts can occur in a number of ways:

i) the cumulative impact of a number of separate effects from a single site;
ii) the cumulative effects from two or more active sites, including sites being restored or used for waste disposal;
iii) the combined effect on the landscape and ecology from the working, reworking and restoration of a number of sites; or
iv) the cumulative impact on the quality of life of local communities from a relatively unbroken sequence of working and restoration.

All the above components will need to be assessed carefully to determine if they should be applied to any new proposal.
5.70 Experience in County Durham has shown cumulative impact to be an important issue. It is of particular significance in relation to opencast coal, where extraction has taken place throughout a wide area over an extensive period of time (Policy M7), and on parts of the Magnesian Limestone Escarpment (Policy M54). In assessing the effect of proposals on an area it is necessary to take into account the overall level of environmental impact, including the effects of successive operations, irrespective of the number of sites involved. This will include, where appropriate, consideration of the potential impact from sites with planning permission but where extraction has not started or is in abeyance and current planning applications for mineral development (but not prospective sites for which no planning application has been made).

5.71 In assessing the cumulative impact of proposals on the landscape, the Mineral Planning Authority will need to take into account the character of the landscape, of the site’s setting, the effects of other operations upon it, including the degree of maturity of any restored sites, and the extent to which it can accommodate the changes proposed. The definition of a site’s setting will vary according to the character of the landscape but will generally reflect the scale of the local topography.

5.72 In assessing the cumulative impact of proposals on local communities the extent of the area will reflect the scale, duration and particular impacts of both the proposal and other workings on the communities affected jointly by them. This will be determined by such factors as the scale of the landscape, settlement and communications patterns in the area, and the scale and setting of the site. It may also be necessary on occasion to consider the cumulative impact of other non-mineral development (for example waste disposal activities), where mineral extraction would add to their existing adverse impacts.

5.73 The time period over which cumulative impacts are considered will depend upon the particular circumstances of individual proposals. The key test will be whether the disturbance caused by previous working remains a material consideration in terms of an area’s amenity, landscape and ecological value, and its overall attractiveness.

**Policy M45**

In considering proposals for mineral development the cumulative impact of the following will be taken into account:-
- (a) existing mineral working in the area;
- (b) mineral development with planning permission, including proposals not yet started, or where extraction is in abeyance;
- (c) past mineral working in the area;
- (d) current planning applications for mineral development in the area;
- (e) other non-mineral activities in the area.

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

5.74 The restoration of land following the extraction of minerals is an integral part of the working of any site, and is essential if long term environmental impacts are to be minimised and the overall aim of sustainability achieved. The County Council will ensure that all land taken for mineral operations is restored to a high standard at the earliest opportunity and is capable of an acceptable after-use.

5.75 In dealing with the use of land after mineral working has ceased restoration issues go beyond the scope solely of the Minerals Local Plan. When assessing the potential for different after-uses, and for any possible infilling with waste materials, regard will need to be had to other parts of the Development Plan as appropriate.

5.76 The restoration of mineral workings covers any operations involved in both the immediate restoration of land, and any after-care period that may be necessary. Although primarily concerned with operations after the cessation of working it also covers events which take place before and during extraction which are of importance to successful final reclamation.

5.77 The process of restoring sites may, of itself, have environmental impacts relating to, for example, the import of fill material and necessary site operations. Any such impacts will be taken into consideration when the overall effects of a proposal are being assessed, and will be dealt with in terms of the relevant policies.

Restoration Conditions

5.78 It is important to ensure that, at the time a planning application is submitted, satisfactory provision is made for restoration. Any requirement to import waste material to aid successful restoration should be included within the planning application (it is recognised that minerals working sometimes take place over a long period of time and, in these cases, any future need to import waste will be identified when the permission is subject to periodic review under the Environment Act 1995). Regard will be had not only to the adequacy of the proposals themselves but also to their feasibility including what the likely financial and material budgets for restoration, aftercare and after-use will be, how it is intended to implement the scheme, and the availability of any fill material which needs to be imported. Where proposals will require long term management beyond any after-care period, provision should be made for this through, for example, the use of endowments or formal agreements, or the transfer of land to an appropriate agency.

5.79 A successful restoration depends on the way in which soils are stripped, stored, replaced and subsequently managed. Proposals should be supported by a detailed soils handling strategy which includes details of the soil resource, storage proposals, type of machinery to be used, proposed soil profiles and treatment of soils following restoration. Where there is a shortage of soil material then every attempt should be made to recover suitable soil-making material from excavated overburden. Working schemes should maximise the potential for progressive restoration.
Policy M46

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

a) the submission of further detailed restoration proposals at specified stages in the development;

b) the phased extraction and restoration of mineral operations in order to ensure that the period over which land is out of beneficial use is kept to a minimum;

c) the stripping, storage, replacement and management of topsoil, subsoil and soil making material in good condition for ultimate restoration;

d) the installation of drainage systems;

e) the contouring and grading of restored land;

f) a programme of after-care following the completion of restoration including, where appropriate, provision for long term management;

g) the removal of buildings, plant, structures, machinery and hardstanding used in connection with the mineral working operations after the completion of mineral extraction;

h) any other matters necessary to ensure the satisfactory restoration of the site.

After-uses

5.80 Appropriate after-uses for minerals sites can help to conserve and enhance the character and nature conservation value of the landscape while maximising benefits to local communities and the environment within the framework of the Development Plan. The usual location for mineral working, away from urban areas, means that an open use will usually be most appropriate. It may be appropriate to restore land to its former character as part of the agricultural landscape. Where the land was previously of best and most versatile quality, the standard of restoration should ensure that there is no overall loss in the quality of agricultural land following reinstatement. This will require particular care in planning and carrying out soil handling operations. Where other agricultural land is to be restored to an agricultural after-use, the restoration scheme should be designed to achieve a good standard of restoration, consistent with the former quality of the land. Even in predominantly agricultural restorations however, attention should be paid to opportunities for environmental enhancement and other public benefits. Opportunities will also often arise for the creation through restoration of new features of landscape, nature conservation or amenity value including community woodlands, public open space, wetlands, heathlands or other habitats of nature conservation interest. The development of such features may help to mitigate, in some degree, the adverse impacts of the working site. Mineral operators will need to have regard to the advice contained in any landscape and nature conservation strategies prepared by the Mineral Planning Authority when designing reclamation schemes.
5.81 The need to foster the diversification of the rural economy is likely to lead to the increasing consideration of forestry as an after-use for mineral workings. Mineral operators should have regard to the advice contained within the County Council's Indicative Forestry Strategy (currently under preparation) and other relevant advice when planning reclamation to forestry. Should any proposals for mineral working arise in the area covered by the Great North Forest (Figure 5.2) the scope for the creation of new community woodland will be of particular importance. Where forestry or other non-agricultural land use is proposed as an after-use on former best and most versatile agricultural land, the site should be restored in such a way that it may be returned to full agricultural use, without loss of quality, if ever required in the future.

5.82 Other parts of the Development Plan, and in particular other local plans, will be important elements when determining the best after-use for a site. A separate planning application may be required for some proposed after-uses, though this is unlikely to be the case where reclamation to agriculture, forestry, nature conservation or informal recreation not involving substantial public use is involved. Any such separate applications will be determined by the relevant planning authority; not necessarily the minerals planning authority.

5.83 The effects of mineral operations on the landform of a site can be the most enduring visible legacy of extraction. Where appropriate the former subtleties of the landform should be recreated, including minor topographical micro relief features, and this of particular importance in the working of extensive mineral deposits such as opencast coal. Where it is either not desirable or possible to reconstruct the original topography close attention should be paid to the integration of the new landform within the surrounding landscape, including the use of landform replication techniques such as restoration blasting.

Policy M47

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

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

5.84 Former minerals sites can also make a contribution to the provision of sites for waste disposal. The opportunity for waste disposal should be determined by a demonstrable need to import waste to achieve a satisfactory restoration of the site. In some cases a more appropriate restoration can take place without imported wastes, while on putrescible waste sites the requirements of landfill gas and leachate control systems can inhibit after uses. In particular, where a site formerly contained best and most versatile land, the presence of such systems can inhibit the range of agricultural operations and reduce potential land quality for the foreseeable future. In such cases the operators will need to forward comprehensive restoration schemes, including details of gas and leachate control, as part of the application proposals for mineral extraction.

5.85 Policies and proposals relating to the use of sites for waste disposal are contained in the Structure Plan and the County Durham Waste Disposal Local Plan. Any proposals for the tipping of waste as part of a reclamation scheme will need to satisfy the relevant policies in these plans.*

Policy M48

The disposal of imported waste will only be permitted as part of a restoration scheme for any minerals site where:

a) the site is allocated for that use in the adopted Waste Local Plan; or

b) waste disposal can assist in achieving the most appropriate landform; and in all cases,

c) the impact of traffic and waste disposal operations would not have any increased detrimental impact on the environment or residential amenities of the area.

Where significant areas of best and most versatile agricultural land quality are affected, the proposals should ensure that there is no overall loss in quality of agricultural land following reinstatement.

5.86 The particular nature of opencast coal workings means that these will generally not be appropriate for waste disposal. The nature of extraction, from relatively thin seams, means that there is generally no need to import waste to obtain a satisfactory restored landform. In addition the cumulative impact from the large number of past and present sites in the exposed coalfield make it important that restoration is not delayed significantly by landfill operations. These objections will usually outweigh any limited benefits that might be gained from a small increase in the supply of landfill sites, especially given the current supply of such sites in Durham.

*It is expected that during the life of Minerals Local Plan, the existing Waste Disposal Local Plan will be replaced by a Waste Local Plan, whose provisions will then apply to this section.
Policy M49

The disposal of imported waste on opencast coal sites will not be permitted unless the proposal;

a) conforms with Policy M48; and;

b) would not delay the final restoration of the site.

On Site Processing and Storage

5.87 There are a range of activities related to mineral working which either need to be carried out, or have advantages in being carried out, in proximity to the extraction process. In particular some processing and storage of minerals may take place upon minerals sites. Such activities, where they are acceptable, need to be subject to appropriate controls in order to ensure that the environmental disturbance arising from them is minimised.

On Site Processing

5.88 Details of the plant required for processing minerals should be an integral part of any planning application for new working. Changes in markets and working practices however mean that new plant may be required during the lifetime of any site.

5.89 The General Development Order (GDO) gives operators the right to erect certain buildings and plant without the need for planning permission. This is generally where it is directly related to the winning and working, initial treatment or disposal of minerals. Examples of facilities that may not require planning permission are conveyors, washing and screening plant and loading facilities.

5.90 Section 102(8) (Schedule 9) of the Town and Country Planning Act 1990 provides guidance on the discontinuance of mineral working. In accordance with these provisions, the Mineral Planning Authority may assume that the winning and working of minerals has permanently ceased when no winning and working has occurred, to any substantial extent, at the site for a period of at least two years and the resumption of winning and working to any substantial extent at the site is seen as being unlikely.

5.91 The location of minerals processing and manufacturing plant at extraction sites can help to minimise overall environmental disturbance through reductions in the need to transport minerals for processing and in providing the most appropriate location for processes that it may be difficult to accommodate elsewhere. It is important however to avoid the creation of new freestanding industry and also to ensure that additional environmental impacts resulting from, for example, noise and visual intrusion from plant or the import of materials are acceptable. Close attention will therefore be paid to ensuring that the scale and type of any manufacturing processes are ancillary to the mineral working and that additional environmental impact is minimised. Proposals for development in relation to the recycling of construction and demolition wastes will be considered under Policy M5.
Policy M50

Where planning permission is required, minerals processing and manufacturing plant, and other developments ancillary to mineral extraction, will be permitted within the boundaries of mineral extraction sites provided that:

a) in the case of processing plant, it is required to process minerals extracted from the mineral working site; or

b) in the case of manufacturing plant, the greater part of the minerals to be used to manufacture the product will be extracted from the mineral working site and the manufacturing activity will remain ancillary to the primary use of the site for mineral extraction; or

c) in the case of other ancillary development, it is required solely in connection with the administration or servicing of the site.

In granting planning permission for plant and machinery, conditions will be imposed, and planning obligations or other legal agreements sought, to cover the following matters as necessary:

i) minimisation of environmental impact;

ii) ensuring the removal of plant, structure or buildings as soon as extraction of minerals from the site has ceased;

iii) preventing the import of material from elsewhere, other than material necessary for the operation of the plant but which is not capable of extraction from the site.

Storage

5.92 As with processing, details of any intended storage of minerals on site should be an integral part of planning applications for new working. There may, however, be occasions when new proposals arise, or where the stocking of minerals is required after extraction has ceased. The County Council’s main concerns with regard to mineral stocking are that any environmental impact should be acceptable within the general criteria of the Plan and that storage on site after the cessation of extraction does not unduly extend the time during which local communities suffer from the adverse impacts from mineral extraction.

Policy M51

In granting planning permission for mineral stocking areas conditions will be imposed and planning obligations or other legal agreements sought, to cover the following matters as necessary:

a) minimisation of environmental impact;

b) time limits on the storage of materials after working has ceased;

c) preventing the import of materials from elsewhere.

Site Management

5.93 In order to minimise the environmental impact of mineral working operators must adhere to the high standards of site management required by planning conditions and associated codes of practice. If this were not the case an operator could gain an unfair advantage over other, more responsible operators, unnecessary environmental damage would be caused, and the wider future of mineral extraction could be jeopardised as a result of increased public opposition.
5.94 The usual method of remedying breaches of planning controls is through the taking of enforcement action, and the Mineral Planning Authority will continue to pursue this where appropriate. Compliance with planning requirements will be monitored on a regular and consistent basis to enable the identification of shortcomings in the operation of sites, and any remedial measures required (including, where appropriate, publicly available records). The nature of mineral extraction is such, however, that enforcement action may not always be effective for a number of reasons:

- mineral extraction is, by its nature, environmentally intrusive. Relatively minor breaches of planning conditions can cause extensive problems. If an operator is unwilling to remedy these then the degree of public nuisance caused by the time enforcement action takes effect will often be unreasonably large;
- mineral extraction is essentially a transient development. Although some quarries may have very large reserves others, particularly opencast coal sites, operate for only a relatively short time and this may make the taking of effective enforcement action impractical;
- the progressive nature of working and reclamation means that by the time breaches are discovered it may not be practical to remedy them without creating unreasonable additional disturbance;
- an operator may go out of business before reclamation is complete, leading to an increase in derelict land;
- once mineral working has ceased then ensuring that reclamation schemes are carried out properly can be difficult through the use of enforcement action.

5.95 For the above reasons the Mineral Planning Authority will, when considering planning applications, need to take into account the ability and commitment of the intending operator to comply with the necessary conditions. The specialised nature of mineral extraction means that most operators will have a clear track record against which past performance can be assessed objectively in relation to compliance with planning conditions on other sites worked by the intending operator or associated companies.

5.96 The nature of the minerals industry is such that it is unlikely that wholly new operators will emerge. The main consideration in relation to any entirely new operators that may wish to commence operations in the County will be that they should be able to demonstrate that their financial and technical capabilities are sufficient to undertake the working, restoration and aftercare of the relevant proposal in a satisfactory manner.

**Policy M52**

In considering planning applications for mineral development the ability and commitment of the intended operator to operate and reclaim the site in accordance with an agreed scheme will be taken into account. Proposals will only be permitted where either:

a) the operator is capable of, and committed to, the working and full restoration of the site in accordance with the requirements of any planning permissions; or

b) adequate safeguards are in place, through the provisions of financial bonds, appropriate mutual funds operated through the industry, or other means, to ensure that any breach of planning conditions, particularly with regard to the restoration and after-care of the site, can be remedied without additional public cost.
**Updating Planning Permissions**

5.97 Unlike most other forms of development, mineral planning permissions often have a long life span, during which environmental concerns and expectations are likely to change. Recent progress in improving the environmental record of mineral operations means that many old permissions have planning conditions which, by modern standards, are seriously deficient.

5.98 In most cases improvements to older permissions will involve the imposition of modern conditions on existing sites. The location of some existing permissions however may be such that even the most stringent conditions are incapable of ensuring the reduction of environmental impacts to an acceptable level and the most desirable solution is the removal, in whole or part, of the planning approval for that site.

5.99 The statutory basis for updating minerals planning permissions is provided by the Town and Country Planning Act, 1990, the Planning and Compensation Act 1991, and the Environment Act 1995, with further guidance provided in Mineral Planning Guidance Notes 4, 8, and 14. These give the County Council duties in respect of:

a) reviewing every site where mineral extraction has taken place within the 5 years preceding the commencement of the review and sites with planning permission but where mineral working has not yet begun (“The Minerals Review”). Other sites can also be included in the review, if this is thought desirable. Powers are available to amend and improve existing conditions, but the requirement to pay compensation will, in practice, limit the action that can be taken;

b) the registration and attachment of conditions to those permissions granted between 1943 and 1948 under Interim Development Orders;

c) reviewing and updating permissions granted in the 1950s, 60s and 70s both to protect the environment and amenity, and to provide equal treatment between sites and mineral operators. Also the periodic review of all minerals permissions thereafter.

In addition the Conservation (Natural Habitats &c.) Regulations 1994 require that local planning authorities review extant planning permissions which are likely to have direct, indirect or cumulative significant effects on existing and future SPAs and designated SACs.

5.100 The nature of the powers available mean that it may not always be practical or desirable to implement necessary improvements through these means. The County Council will, therefore, seek alternative means of bringing about improvements to existing permissions where this is appropriate. This may be, for example, through negotiation or as part of a new planning permission. A summary of the main deficiencies identified at existing sites is shown in Table 5.2, and illustrated in Figure 5.3. The list is not however exhaustive and it is anticipated further sites will be identified as work on reviewing sites progresses.
Policy M53

The Mineral Planning Authority will:

a) survey mineral sites, as appropriate, in order to identify any inadequacies in planning controls required for the proper protection of the environment both during and after mineral working; and

b) seek, in respect of identified deficiencies, to secure improvements needed to ensure the satisfactory working and reclamation of individual sites.

Table 5.2: Identified Deficiencies at Existing Sites

<table>
<thead>
<tr>
<th>Location</th>
<th>Main Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heights</td>
<td>Working/restoration conditions</td>
</tr>
<tr>
<td>Hulands</td>
<td>Restoration conditions</td>
</tr>
<tr>
<td>Kilmond Wood</td>
<td>Working/restoration conditions</td>
</tr>
<tr>
<td>Selset</td>
<td>Restoration conditions</td>
</tr>
<tr>
<td>Cornforth</td>
<td>Working/restoration conditions</td>
</tr>
<tr>
<td>Raisby</td>
<td>Restoration and treatment of existing spoil heaps</td>
</tr>
<tr>
<td>Quarrington</td>
<td>Working/restoration conditions</td>
</tr>
<tr>
<td>Harthope Head</td>
<td>Working/restoration conditions</td>
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<td>Dunhouse</td>
<td>Working/restoration conditions</td>
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<td>Dead Friars</td>
<td>Working/restoration conditions</td>
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<td>Stainton</td>
<td>Working/restoration conditions</td>
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<tr>
<td>Weather Hill</td>
<td>Working/restoration conditions</td>
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<tr>
<td>Coppys Wood</td>
<td>Restoration conditions</td>
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<tr>
<td>Hayberries</td>
<td>Safety and appearance of quarry, including restoration of previous illegal working</td>
</tr>
<tr>
<td>Todhills/Long Lane</td>
<td>Working/restoration conditions*</td>
</tr>
<tr>
<td>Middlehope</td>
<td>Site restoration</td>
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<tr>
<td>Hope Level</td>
<td>Site restoration</td>
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<tr>
<td>Smithy Dene</td>
<td>Site restoration</td>
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<tr>
<td>White Heaps</td>
<td>Site restoration</td>
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</tbody>
</table>

* subject to separate site specific proposals
This section provides further information and, where appropriate, policies governing extraction and restoration within the areas defined under policies M6, M10 and M11. It is supplementary to the guidance provided by general policies and should not be seen as replacing the wider provisions of the Plan. Further information and proposals map insets are provided for the following:

6.1(a)-(e) Sand And Gravel Areas Of Search

6.2 Eastgate Quarry

6.3(a) Eldon Brickworks

6.3(b) Todhills Brickworks

6.4 Closehouse Mine

6.5 The Magnesian Limestone Escarpment
6.1 Areas of Search for Sand and Gravel

The following section defines areas for possible sand and gravel extraction, in accordance with policy M6. Brief commentary is provided on key issues in relation to each area, though this should not be taken as superseding the need to take full account of the general policies of the Plan.
6.1(a): Proposals map inset 1

Location: Hummerbeck  
Grid ref: 4196 5268

Area: 80 ha

Description
The area lies immediately to the south of an existing industrial estate in West Auckland, on low lying land bordering the River Gaunless. Planning approval has been granted on the western deposits.

Key Issues

Local Amenity: The existing industrial estate is likely to provide a degree of screening between any possible working and the main housing areas. Attention will however need to be paid to local amenity impacts and the needs of any sensitive uses on the industrial estate. Any working should provide adequate screening from nearby properties and roads.

As this site is overlooked from higher ground it will be particularly important to minimise the extent of processing operations and the footprint of extraction, and to ensure progressive restoration.

Traffic: The existing permission requires an upgraded access to the A68. Any access to the A6072 would also require upgrading. Future potential exists to provide access from the proposed West Auckland Bypass.

The line for the West Auckland By-pass runs along the northern edge of the area. Scope may exist for the extraction of some further workable deposits along the road line in advance of construction.

Landscape: The landscape and natural interest of the land comprising the natural floodplain of the River Gaunless (as indicated on the inset plan) should be retained. It contains a number of typical landscape features such as minor terraces, oxbow lakes and wetland features which it is unlikely to be possible to recreate through restoration. Significant working within the floodplain area is therefore unlikely to be acceptable. Any working which may be permitted will need to demonstrate comprehensive compensatory measures in terms of its landscape and nature conservation impacts.

Given the potential visibility of the site from higher land to the south, any proposal should ensure that the amount of land disturbed by mineral working at any one time is kept to a minimum.
Nature Conservation: A Site of Nature Conservation Importance (SNCI) covers part of the eastern end of the area. This site, together with several important habitats, including floodplain grassland are contained within the Gaunless floodplain areas within which significant working is unlikely to be acceptable. (See above).

Restoration: Restoration proposals should reflect the industrial, highways, recreation and open space proposals as outlined in the Wear Valley District Local Plan. Particular potential exists for wetland restoration related to the River Gaunless for amenity and nature conservation purposes. A substantial woodland component would help assimilate the industrial edge of the settlement.

Within the Area of Search, approximately 23 hectares of grade 3a agricultural land exists. Much of this land is in the north of the Area of Search. Any proposal should seek to ensure the conservation of the long term agricultural potential of this resource. In particular, any restoration scheme would need to demonstrate that there would be no overall loss of best and most versatile agricultural land following reinstatement.

Other issues

Lying within the exposed coalfield there may be scope for concurrent extraction of coal in conjunction with the working of sand and gravel.

The area is affected by former waste disposal sites.

Archaeological interest exists along Dere Street roman road, and the abutments to the world’s oldest iron railway bridge, across the River Gaunless.
### 6.1(b): Proposals map inset 2

<table>
<thead>
<tr>
<th><strong>Location:</strong></th>
<th>Nunstainton</th>
<th><strong>Grid ref:</strong> 4315 5296</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area:</strong></td>
<td>40ha</td>
<td></td>
</tr>
</tbody>
</table>

**Description**

This area lies within open countryside south of Ferryhill. Current land use is predominantly agricultural.

**Key Issues**

**Local Amenity:**

The nearest settlement is at Chilton Lane, approximately 1 mile to the north and therefore major issues are unlikely to arise. Attention will however need to be paid to the effects on isolated dwellings in the vicinity.

**Traffic:**

South via road C37 to lorry routes A689 and A1(M). Traffic from any working should not travel north along road C37. Strengthening of road C37 may be needed, if used for lorry traffic. Any proposal would also need to have regard to Department of Environment, Transport and the Regions policy regarding development affecting trunk roads.

**Landscape:**

Any proposal will need to ensure adequate advance screening from Chilton Lane and the A1(M). Mature vegetation within the area should be maintained wherever possible.

**Nature Conservation**

At the time of drafting the area did not contain any nationally or locally designated nature conservation sites.

**Restoration:**

Agriculture or nature conservation/amenity after uses may be appropriate. Satisfactory restoration is likely to require the import of suitable fill material.

**Other Issues**

An Interim Development Order (IDO) permission has been registered adjacent to the area at Gypsy Lane. This permission may eventually replace the existing Chilton Quarry at Ferryhill. The area lies on the Magnesian Limestone aquifer, and in particular the source protection zone for Hopper House public water supply borehole, and detailed site investigation reports and hydrogeological studies will be needed to ensure groundwater protection.

Archaeological interest exists at Nunstainton East mediaeval village. Although this lies just outside the area associated deposits and field systems may extend within the boundary.
Inset Boundary

Area of search for sand and gravel
(Policy M6)

Mineral consultation area
(Policy M14)

Existing IDO permission
6.1(c): Proposals map inset 3

Location: Embleton  
Grid ref: 4419 5306

Area: 250 ha

Description
This area lies in open countryside east of Sedgefield close to the County Boundary. Existing land use is predominantly agricultural, with some woodland. The intricate nature of the landscape within this area means that it is only likely to be suitable for smaller scale working, retaining local features.

Key issues
Local amenity: The area is remote from any settlements and therefore major amenity issues are unlikely to arise. Attention will however need to be paid to the effects on isolated dwellings in the vicinity.

Traffic: Traffic from the northern part of the area should access lorry route A19 via roads C24 and B1280. Traffic from any working should not travel west from the area along road C24. Working in the southern part of the area will need to access lorry route A689 directly.

Improvements will be needed to road C24, if used for access. Substantial junction improvements will be needed to access the A689.

Landscape: The landscape in the area is attractive and important landscape features should be conserved. In particular proposals for working should ensure the protection of woodland and other sensitive areas (see inset map).

Nature Conservation: At the time of drafting the area did not contain any nationally or locally designated nature conservation sites. It does however contain a range of locally significant semi-natural habitats and proposals for working and restoration should ensure the long term conservation of this diversity.

Restoration: Restoration proposals should reflect the recreation after uses proposed for the southern part of the area contained in the Sedgefield District Local Plan. Waste disposal should not be considered.

Other Issues
The area lies on the Magnesian Limestone aquifer, and in particular the source protection zone of three water supply boreholes, and detailed site investigation reports and hydrogeological studies will be needed to ensure groundwater protection.

Archaeological interest exists in two deserted mediaeval settlements and manor house sites. These lie just outside the area, but associated deposits and field systems may extend within the boundary.

The setting of listed buildings outside the area boundary, at Murton Hall and Cole Hill, should be preserved.
Inset Boundary

Area of search for sand and gravel
(Policy M6)

Mineral consultation area
(Policy M14)

Woodland constraint area
6.1(d): Proposals map inset 4

Location: Hutton Magna  Grid ref: 4115 5121
Area: 55ha
Description

This area lies in open countryside south-east of Barnard Castle, immediately north of the A66. Current land use is predominantly agricultural.

Key Issues

Local Amenity: Limiting any impacts on the settlement of Hutton Magna, and other dwellings in the vicinity will be of particular importance in this location.

Traffic: Via road C171 to the A66 only. Local access road would need to be widened and strengthened, with appropriate junction improvements with the A66. Any proposal would also need to have regard to Department of Environment, Transport and the Regions policy regarding development affecting trunk roads.

Landscape: Any proposal would need to ensure adequate screening from the A66. Phased working and progressive restoration will be of particular importance in minimising the landscape impacts of working in the area. The need to minimise landscape impacts also means that no extraction will be permitted outside the area of search boundary as shown on the inset map. Investigations have commenced into defining a more precise preferred area at this location in order to minimise landscape impacts further. It is envisaged any such area will be progressed as part of an early review of this Plan.

Nature Conservation: At the time of drafting the area did not contain any nationally or locally designated nature conservation sites.

Restoration: Low level restoration is likely to be the most appropriate, to a nature conservation or recreational/commercial wetland end use, providing the water table and substrata permit. Regard should be had in drawing up restoration proposals to avoiding depredation of nearby crops as a result of increased local bird populations. Waste infilling at this location is unlikely to be acceptable.

Within the Area of Search, approximately 26 hectares of grade 3a agricultural land exists. Much of this land is in the south of the Area of Search. Any proposal should seek to ensure the conservation of the long term agricultural potential of this resource. In particular, any restoration scheme would need to demonstrate that there would be no overall loss of best and most versatile agricultural land following reinstatement.

Other Issues

The site overlies the carboniferous limestone and is surrounded by a number of surface water and groundwater abstractions. Consultation with the Environment Agency will be needed in relation to the possible impacts on the minor aquifer, tributaries to the Claw Beck and the local drainage installation.
Inset Boundary

Area of search for sand and gravel (Policy M6)

Mineral consultation area (Policy M14)
6.1(e): Proposals map inset 5

Location: Lea Hall  
Grid ref: 4313 5225

Area: 60 ha

Description
This area lies in open countryside to the east of Newton Aycliffe. Current land use is predominantly agricultural.

Key Issues

Local Amenity: The area is relatively remote from nearby settlements and therefore major amenity issues are unlikely to arise. Attention will however need to be paid to the effects on isolated dwellings in the vicinity.

Traffic: Access west along road C34a and C34 to lorry route A167 only. Any proposal would also need to have regard to Department of Environment, Transport and the Regions policy regarding development affecting trunk roads.

Landscape: Operations would need to be screened from adjacent local roads C34 and C34a. Potential long distance views from the main East Coast rail line and A1(M) motorway would also need to be considered. The area contains a number of locally important landscape features, such as intact hedgerows and mature trees, which should be retained wherever possible.

Nature Conservation: At the time of drafting the area did not contain any nationally or locally designated nature conservation sites.

Restoration: The most appropriate restoration would be to nature conservation or recreational/commercial wetland based on low level restoration. Waste infilling is unlikely to be acceptable due to the siting of a borehole in the middle of the area.

Other Issues
The area lies on the Magnesian Limestone aquifer, and in particular the source protection zone of Great Stainton public water supply borehole, and detailed site investigation reports and hydrogeological studies will be needed to ensure groundwater protection.
Inset Boundary

Area of search for sand and gravel
(Policy M6)

Mineral consultation area boundary (Policy M14)
6.2 - 6.5 Preferred Areas

The following sections define preferred areas, in accordance with policy M10, and an area of search for brickclay at Todhills Brickworks (Policy M11). Brief commentary is provided on key issues in relation to each area, although this should not be taken as superseding the need to take full account of the general policies of the Plan.

The issues surrounding the Magnesian Limestone Escarpment area are more complex, based on a number of existing permissions and potential future extensions. Because of the inter-relationship between the various issues this area is dealt with in more depth, with the definition of separate site specific policies.
6.2 Eastgate Quarry (proposals map inset 6)

Site: Eastgate  
Grid ref: 3953 5365

Area 160ha

Description

This limestone quarry is situated in Weardale, some 2 miles west of Stanhope, and serves the nearby cement works. Existing reserves in the quarry are not sufficient, particularly if the recommended 15 year landbank is to remain at the end of the Plan period. The operator of the quarry and cement works (Blue Circle) suggested two possible areas of search, one an extension to the existing working and one involving the opening of a new quarry on the north side of the Dale. The County Council consider working would be best accommodated through an extension to the existing quarry.

Key Issues

Local amenity:

Although the proposed quarry extension is relatively remote from nearby settlements concerns have been raised locally about the potential effects of pollution from the cement works. Such issues are principally the responsibility of the pollution control authorities, rather than the minerals planning authority, although any proposal will need to ensure that the overall impacts on local amenity are acceptable, and that the wider area's potential for further development of tourism is not adversely affected.

Traffic:

Traffic to and from the cement works uses the main A689 Weardale road. This has adverse environmental effects on the communities through which the road passes, difficulties which have been made worse by the decision not to continue use of the rail link to the works. Any proposal for an extension should investigate measures to minimise the environmental impact of traffic on Weardale communities, including a full investigation of the feasibility of using the currently disused rail link. Should use of the rail line appear to be feasible this will be required as a condition of any planning permission. Any proposals which would hinder future use of the rail link will not be permitted. Lorry traffic along the Dale should use the A689 only, and avoid the use of minor roads to travel to Teesdale or northwards.

Landscape:

The area lies partly within the Area of Outstanding Natural Beauty, the remainder being within an Area of High Landscape Value. Any proposal will therefore need to undertake a full assessment of the effects on the landscape, including an assessment of possible alternative sources of supply, and incorporating a full range of measures to ensure the amelioration of such impacts. The landscape sensitivity of what would represent a major extension means that the area shown should be considered more as a general area of search, within which an extension may be defined, rather than a precise preferred area.
Nature Conservation: Part of the extension area is included within the Bollihope, Pikestone, Egglestone and Woodland Fells SSSI and Proposed SPA. Any proposal for working and restoration in this area should pay particular attention to the need to conserve the nature conservation importance of the area.

Adverse impacts on the adjacent Fairy Holes SSSI, and to Sites of Nature Conservation Importance along the Horsley Burn to the east should be avoided.

Cumulative Impact: This is unlikely to be a major issue in this location although the overall impact of quarrying on the Dale will need to be kept to an acceptable level.

Restoration: Proposals for any extension should also ensure the comprehensive reclamation of the existing workings.

Other Issues

Consultation with the Environment Agency will be needed in relation to possible impacts on the minor aquifer.

Any permission will need to ensure that material is quarried solely for use in the adjoining cement works.

The setting of listed buildings at Snowhope Close and Snapegate should be preserved.

Common grazing rights exist over land in the south east of the area and the operator will need to obtain the appropriate agreement from the commoners for any extraction within this area.
### 6.3(a) Eldon Brickworks (proposals map inset 7)

**Site:** Eldon  
**Grid ref:** 4241 5280

**Area**  
1.5ha

**Description**  
Eldon is an established brickclay quarry serving an adjacent brickworks. Although current supplies of material are adequate to meet needs throughout the Plan period, these will not be sufficient to provide a 15 year landbank at 2006.

**Key Issues**

**Local Amenity:**  
Any impacts upon the settlements of Eldon, Coundon Grange, Old Eldon and the Sunnydale part of Shildon.

**Traffic:**  
Access from the quarry to the brickworks should not use the public highway.

**Landscape:**  
The extension would increase the visual impact of the existing working. Any working method should therefore be designed to minimise impacts from vantage points to the west, either by initial working along the contour together with the progressive development of a screening mound, or by placing emphasis on restoring the high back wall with overburden/inert waste material and tree planting.

**Nature Conservation:**  
At the time of drafting the area did not contain any nationally or locally designated nature conservation sites, although a Site of Nature Conservation Importance lies to the north-east of the area.

**Cumulative Impact:**  
As well as extraction of brick clay from the existing void and the proposed extension area, a permission for opencast coal extraction exists on the Eldon Deep site. The cumulative impact from these sites is such that additional mineral working in the vicinity of Eldon is unlikely to be acceptable during the Plan period.

**Restoration:**  
Restoration proposals should ensure a satisfactory reclamation of the entire void, including the area covered by the existing planning permission. A wildlife or agricultural after use is likely to be most appropriate.

**Other Issues**  
A former waste disposal site lies within the existing area of the brickworks. The area lies on the Magnesian Limestone aquifer, and detailed site investigation reports and hydrogeological studies will be needed to ensure groundwater protection.

No export of brickmaking material from the site will be permitted.

Recent changes within the brickmaking industry have led to a requirement upon the current owner, Ibstock, by the Office of Fair Trading to dispose of the works by the end of 1997. Any implications resulting from this change in ownership will be taken into account at the first review of the Plan.
6.3 (b) Todhills Brickworks (proposals map inset 8)

Site: Clarence Farm/Long Lane

Area: n/a

Description

Todhills is an established brickworks situated between the villages of Newfield and Byers Green, to the south of Willington. A number of permissions for extraction of clay and shale already exists at the site but the operator (Ambion) has indicated the need for further reserves. A resolution to grant planning permission for the working of deeper seams within the areas shown has been passed by the County Council, although formal permission will only be given concluding a satisfactory legal agreement. The immediate future of the brickworks has now been secured following its acquisition by Ambion Brick, and there is now an identified need to allocate additional reserves to allow Ambion to plan for future investment programmes at Todhills. The current site at Clarence Farm is due to become exhausted during the lifetime of the Plan, and the permission at Long Lane, based on current production figures, has reserves for 9 to 14 years, although this is dependent on future trends in brickmaking manufacture.

In accordance with Policy M1, the Mineral Planning Authority (MPA) will aim to provide a landbank of 15 years for the brickworks. Existing reserves of material will allow extraction up to 2014. Therefore, additional material will be needed beyond 2014 to maintain a 15 year landbank. If significant new investment (such as a new kiln) is agreed with the MPA, the brickworks should be provided with a landbank for at least 25 years. An area of search for clay extraction is therefore allocated to the immediate south east of the brickworks, as identified on Map Inset 8. Any working of this area of search will be required to progress in a southerly direction, commencing to the immediate south of the brickworks.

Key Issues

Extraction of deeper seams within existing permissions areas is unlikely to raise major new issues. Any proposal should however deal satisfactorily with any additional spoil that may be created, and any problems relating to existing permissions. In particular past operations relating to the brickworks have had severe detrimental impacts on the amenity of local residents. The area to the south of the brickworks is visible both in short and long distance views. Any long term strategy for the development of Todhills brickworks should identify landscape objectives that would screen both short distance views (from Byers Green and Long Lane) and long distance views (from Willington and A690) into any future working area. Any proposal for new mineral working within the area of search should ensure that overall future impacts on the surrounding communities, particularly Byers Green, are minimised. This is likely to be best achieved through a co-ordinated programme of screening, phased working and restoration. Sensitive screening and working practices within the area of search are crucial, as these measures will help alleviate any adverse impacts the surrounding communities may face. The long term nature of this allocation will allow substantial advance planting to screen the area of search. Only by taking such a long term view of the utilisation of the reserves in the vicinity of the brickworks will the effects of mineral extraction within the area of search be satisfactorily mitigated.
6.4 Close House Mine (proposals map inset 9)

Site: Close House  
Grid ref: 3844 5227

Area 18ha

Description

This is currently the only barytes mine operating in Durham and is situated in a remote upland area in the extreme south west of the County. Current supplies of material are limited and an extension is necessary if extraction is to continue through the Plan period.

Key Issues

Local amenity: The remote location of the mine means that this is unlikely to be a major issue.

Traffic: The only access to the mine is via the B6276 road. It is not anticipated that any extension will lead to a significant increase in traffic.

Landscape: The proposal lies wholly within the Area of Outstanding Natural Beauty, and particular attention will need to be paid to the environmental sensitivity of the area in proposals for working and restoration. Any working permitted in the Closehouse Hush area will need to ensure that visibility from the B6276 is minimised.

Nature Conservation: Close House Mine, a geological SSSI, is located within the area of the existing permission. Lune Forest, a biological SSSI which forms part of the proposed North Pennine Moors SPA (pSPA), entirely surrounds the existing planning permission. Any impacts on the pSPA will need to be determined by the process of appropriate assessment, as laid out under the Habitats Regulations 1995.

Cumulative Impact: This is unlikely to be an issue in this remote location.

Restoration: Any extension will need to ensure adequate restoration of the existing workings, including the retention of the important geological features for which the existing Close House Mine SSSI was notified. Restoration of any extension itself will also be a very important consideration given the importance of the surrounding Lune Forest SSSI and pSPA. The site should be restored progressively to a naturalistic ravine/gully feature using on site overburden and waste material. Moorland vegetation of shrub-heath and grass should be reinstated. Moorland soils stripped from any extension should be used in progressive restoration elsewhere on the site.

Other Issues

Archaeological interest exists in various remains of former lead mining, including Closehouse Hush. Consultation with the Environment Agency will be needed in relation to possible impacts on the minor aquifer.
6.5 Magnesian Limestone Escarpment
(Proposals Map Inset 10)

There is a long history of quarrying on the Magnesian Limestone Escarpment. There are currently seven active rock quarries (October 1995), in addition 2 former quarries are currently being infilled with waste, waste disposal is proposed at 8 former and existing quarries and there are 5 other quarries with valid permissions for magnesian limestone working. The quarries tend to be long term operations which have been successfully extended over many years. The primary market for the rock is for aggregates for road building and other construction projects in County Durham, Tees Valley and Tyne and Wear. However, a significant proportion is sold for non aggregate purposes, mainly for use in the steel and chemical industries and as agricultural lime.

MPG6 states that adequate landbanks of aggregates reserves with planning permission should be maintained. Although a specific landbank is not set out for crushed rock, it is suggested that it should be larger than the 7 years production equivalent recommended for sand and gravel. The County Council considers it reasonable to maintain a landbank for the County equivalent to 10 years production throughout the Plan period (Policy M1). The Northern Regional Aggregates Working Party (made up of representatives of Mineral Planning Authorities, the minerals industry and the Department of the Environment, Transport and the Regions) monitors the supply and demand for aggregates, including crushed rock from the Magnesian Limestone Escarpment and the reserves. Based on recent production levels, it is estimated that there are unworked reserves sufficient for the period up to at least 2025. A 10 year landbank can therefore be maintained without the need to permit new mineral workings or extensions to existing operations. However, there is one part of the Escarpment area, at Thrislington Quarry, where exceptional circumstances, in relation to cumulative impact and high grade mineral needs, require a separate policy approach.

Thrislington Quarry

As well as other products Thrislington Quarry produces high grade dolomite for use in the steel and chemical industries. The Magnesian Limestone Escarpment Local Plan recognised the importance of the reserves at Thrislington and identified the area to the east of the existing quarry as the only area in Great Britain, other than Whitwell in Derbyshire, containing dolomite of suitable quality for use in these industries. This area was therefore given protection in that Plan from mineral working or other development which would sterilise the resource.

The extraction of material for high grade purposes continues to form the basis of the operations at Thrislington although significant amounts of construction aggregates are also produced (approximately 60% of total quarry production). The relatively high proportion of aggregates production is a consequence of geological conditions and the high specifications of the steel and
chemical industries. Although production could be maintained during the Plan period it is necessary to look beyond this date to secure supplies of this special resource. This would involve extensions to the quarry both east and west of the A1(M).

**A Strategy for Magnesian Limestone Working**

The special nature of the high grade dolomite resource at Thrislington justifies an exception to the general presumption against future new workings and extensions. The operations at Thrislington are well established and provide benefits directly and indirectly to the local economy.

Existing and past quarrying activities have a significant effect on the area, particularly in terms of visual impact and heavy lorry traffic. Recent permissions for extensions at Raisby quarry and Bishop Middleham quarry in addition to extensions to Thrislington will clearly add to these effects. A particular problem exists in relation to land at Cornforth East quarry which has a valid planning permission for mineral extraction. Subject to the signing of a legal agreement, linked to the approval of an extension at Raisby quarry, a significant part of this land will not be worked. If however, this site were to be fully activated it would be extremely prominent and have serious impacts on the local environment. Equally, if any land at Cornforth East were worked concurrently with the extensions at Raisby and Bishop Middleham quarries in addition to the proposed extensions at Thrislington, the cumulative impacts would be substantial. In addition, an Interim Development Order (IDO) exists to expand Rough Furze quarry, south of the existing quarry at Thrislington. This, if implemented would have significant impacts on the landscape and nature conservation interests. The cumulative impacts would also be unacceptable if any land at Rough Furze quarry were worked concurrently with the extensions at Raisby, Bishop Middleham and the proposed extensions at Thrislington.

Permitting extensions to an existing quarry while unimplemented permissions exist would also have implications for the aim of sustainability and the need to limit production to that required to meet anticipated needs. Although Thrislington produces high grade products for specialised markets, it is also a major producer of aggregates. To allow further significant increases in the landbank will adversely affect the overall sustainability of the Plan and can therefore only be justified if adequate compensatory measures are in place.

The Minerals Local Plan provides the opportunity to establish a comprehensive approach to the planning of future magnesian limestone working on the Escarpment, aimed at providing for recognised needs whilst minimising the impact of present and future working. This approach requires that for an extension west of the A1(M) and south of the existing Thrislington quarry to be acceptable in principle, an agreement must be reached that no further working will have taken place or will take place at Rough Furze quarry. Furthermore, for an extension east of the A1(M) to be acceptable in principle, supplies of material from west of the A1(M), including the southern extension area must be substantially exhausted before any working, other than essential advance preparatory works takes place. Essential advance
preparatory works in this circumstance indicates the following: the removal, processing and sale of stone to facilitate the construction of a tunnel under the A1(M), the stripping of soils and the erection and commissioning of all necessary plant and ancillary works. In addition, for extensions to Thrilsington quarry to be acceptable the Minerals Planning Authority must be satisfied that the cumulative impact of working at Thrilsington remains acceptable in relation to adjacent areas such as Cornforth East and Bishop Middleham quarries.

Thrilsington quarry lies on the Magnesian Limestone aquifer, and detailed site investigation reports and hydrogeological studies will be needed to ensure groundwater protection (Policy M38). Archaeological interest also exists in relation to the proposed eastern Thrilsington extension (see Policies M31 - M33). A substantial part of the southern extension to Thrilsington quarry would be visible from longer distance views from the south west and therefore detailed landscaping and screening works will be required to address any problems (see Policy M36).

The scale of past working of Magnesian Limestone, together with recent approvals and the proposed substantial extensions at Thrilsington quarry, means that other new magnesian limestone workings, or extensions to existing workings will not be permitted elsewhere within the Magnesian Limestone Escarpment area as defined on the proposals map.

Policy M54

Within the Magnesian Limestone Escarpment Area defined on the proposals map, no new or extended magnesian limestone workings other than those allocated in this Plan will be permitted, and the progressive restoration of existing workings will be sought.

A southern extension to Thrilsington Quarry

The principal justification for an extension to Thrilsington quarry is the importance of the high grade dolomite. Part of the proposed southern extension contains material suitable for high grade uses. Permission for an extension south of the existing quarry will therefore be based on the use of the high grade resource in the most efficient manner possible.

However, any additional area will clearly add to the already large aggregates landbank that exists in the County and can only be justified in the light of sufficient compensatory measures. Rough Furze quarry to the west of the proposed southern extension to Thrilsington, contains valuable landscape and nature conservation interests.

A southern extension to Thrilsington will therefore only be permitted if no working has taken place or will take place at Rough Furze quarry and the existing Interim Development Order Permission at Rough Furze quarry is relinquished. It is intended that the land will be managed to protect its landscape and nature conservation interest. These matters will be secured through legal agreements.

The proposed southern extension area is visible from longer distance views from the south west, principally from Bishop Middleham. Proposals to work in this area will therefore need to address this issue through suitable landscaping and screening works.
Policy M55

An extension to the permitted working area at Thrislington quarry, west of the A1(M) and south of the existing quarry as shown on proposals map inset 10 will be permitted provided that:

a) no further working will have taken place and no further working will take place at Rough Furze Quarry and the Interim Development Order permission is relinquished; and

b) the production of high grade dolomite products and maximum utilisation of the mineral for high grade purposes is maintained; and

c) advance landscape and perimeter screening works are carried out; and

d) all lorry traffic can access the strategic highway network in accordance with an agreed scheme; and

e) a satisfactory programme for restoration is agreed.

An eastern extension to Thrislington Quarry

The importance of the high grade dolomite resource at Thrislington and the requirement to maintain a 15 year landbank of suitable material (see Policy M1) justifies consideration of an eastern extension to the existing quarry, provided supplies of high grade material from within the existing permission area, and the southern extension area are substantially exhausted. However, there are a number of other specific issues on which the County Council would need to be satisfied before considering granting planning permission for an extension. These are in addition to the relevant general policy considerations set out in sections 4 and 5 of this Plan.

The principal justification for an extension to Thrislington quarry is the importance of the high grade dolomite resource. Permission for the extension will be based on extraction and the use of the high grade dolomite in the most efficient manner possible, so that this important resource is not wasted through its use for general aggregates or other lower grade uses. The Minerals Planning Authority shall ensure that this is the case through the use of legal agreements.

The transport of quarry products by road has a significant impact in this part of the County and it is important that adverse effects are minimised. Whilst access roads west of the A1(M) will be maintained, new access points are not precluded in connection with the future eastward extension. The existing disposal point at the western end of the quarry should be maintained and kiln feed material extracted from the extension area should be transported to it via a tunnel under the A1(M). All road traffic entering or leaving the site must avoid passing through local communities to access the strategic highway network. It should be noted that although the identified Preferred Area covers only future extraction areas and ancillary works, additional areas outside of these are not precluded for the purpose of, for example, tree screening, planting and access routes. Use of the existing rail link should also be maximised, with the potential for its greater use being reviewed on a regular basis, the term of which will be agreed by the operator and the Minerals Planning Authority.
Given the scale of the existing quarry and the proposed extension, progressive infilling by waste to existing levels would be an extremely long term operation lasting for several decades after extraction has ceased. In any case, the extension area could provide an opportunity to create a significant recreational and nature conservation resource. Also within the extension area, approximately 17 hectares of grade 2 and 44 hectares of grade 3a agricultural land exists. Detailed restoration and after use proposals will need to be agreed at the planning application stage although any restoration scheme would need to demonstrate that there would be no overall loss of best and most versatile agricultural land following reinstatement. In general terms, low level restoration to outdoor recreation, nature conservation and agricultural after uses would be preferred. Detailed proposals would need to demonstrate how the soil resources would be optimised amongst the different after uses.

Policy M56

An extension to Thrislington quarry, east of the A1(M) and west of the A177 as shown on proposals map inset 10, will be permitted provided that:

a) the production of high grade dolomite products remains the primary purpose of mineral extraction and maximum utilisation of the high grade dolomite for high grade purposes is maintained; and

b) no working, other than advance preparatory works, takes place within the preferred extension area until:
   i) supplies of high grade material from within the existing permission area, and the southern extension area as outlined in Policy M55, are substantially exhausted; and
   ii) advance landscape and perimeter screening works have been implemented; and
   iii) disposal points, including rail links where appropriate, are agreed; and
   iv) all lorry traffic can access the strategic highway network in accordance with an agreed scheme; and
   v) a programme of progressive restoration for the area to include open recreation, nature conservation and agricultural after uses is agreed.

In order to conserve the long term high grade dolomite resource east of the proposed extension area, from sterilisation it is important to continue the approach of the Magnesian Limestone Escarpment Local Plan and identify an area to be protected during the Plan period from mineral working or other development of a significant scale or nature (see Policy M18).

Although the special nature of this reserve is recognised this should not be taken as any indication of future approval for working these high-grade deposits. Any extension east of that proposed in Policy M56 is likely to have extremely significant environmental impacts which will need to be considered at the appropriate time against the relevant policies. This will need to include, as appropriate, an assessment of any working of the extensions proposed above against the aims of policies M55 and M56.
Rough Furze Quarry
Inset Boundary
Preferred area (Policy M10, M55, M56)
Existing permission areas (Policy M55)
Mineral consultation area (Policy M14)
Boundary of exposed coalfield (Policy M7)
High grade dolomite reserve (Policy M18)
Protected rail line (Policy M39)
Appendices

1. Structure Plan Minerals Policies
2. Development in Mineral Consultation Areas
3. Glossary of Terms and Abbreviations
**APPENDIX 1**

**STRUCTURE PLAN MINERALS POLICIES**

Those policies contained in the minerals chapter of the adopted County Durham Structure Plan (March 1999).

**Policy 72A**

Land will be made available for mineral working to meet the County’s share of the regional supply of aggregates. For the period 1992-2006, provision will be made for the supply of at least 11.0 million tonnes of sand and gravel*, 51.3 million tonnes of magnesian limestone, and 19.9 million tonnes of other crushed rock, unless exceptional circumstances prevail.

*Together with Tees Valley authorities

**Policy 72**

All proposals for mineral working will be considered in terms of their impacts, whether individual or cumulative on:

a) the environment;

b) the amenity of local communities;

c) the transport network; and

d) the local economy.

**Policy 73a**

Subject to the criteria set out in Policy 72, proposals for mineral working in the North Pennines Area of Outstanding Natural Beauty will be subject to the most rigorous examination and will be required to conserve the special character of the area. Proposals will only be approved in very exceptional circumstances or where there is an overriding national need for the mineral which cannot be met from alternative sources.

In considering proposals for mineral working in the North Pennines Area of Outstanding Natural Beauty, the Mineral Planning Authority will take into account the impact of permitting, or refusing, the proposals on the local economy.

**Policy 73b**

Subject to the criteria set out in Policy 72, proposals for mineral working in Areas of High Landscape Value will be given careful consideration. All proposals will be assessed against the following additional criteria:

a) the impact on the special character and quality of the area's landscape; and

b) the availability of alternative sites or resources in less sensitive areas.

**Policy 74**

For the County as a whole, the following landbanks of permitted reserves will be maintained wherever possible:

a) sand and gravel - a landbank equivalent to at least seven years production;

b) crushed rock aggregates - a landbank equivalent to at least 10 years production;

c) cement making raw materials - a landbank equivalent to at least 15 years production.
Policy 75

Proposals for new mineral workings or extensions to existing workings will only be approved where existing permitted reserves are insufficient to maintain an adequate landbank for the County as a whole unless specific local circumstances, as identified in the County Durham Minerals Local Plan, justify otherwise. This policy is not applicable to coal and other energy minerals.

Policy 76

The extraction of high grade minerals will be approved only for purposes for which their special qualities are essential.

Policy 77

Where mineral working is acceptable in principle the concurrent working of additional minerals from the same site will be approved provided that the overall impact on the environment or local community remains acceptable and it does not significantly delay the reclamation of the site.

Policy 78

Development within or adjoining areas containing minerals of economic importance should be allowed only if:

a) it would not sterilise significant quantities of potential mineral deposits;
   or
b) it represents "infill" development within an established built-up area.

Policy 79

The extraction of minerals in advance of other approved development will be approved provided that the extraction does not prejudice or unduly impede the development and is acceptable under the terms of Policy 72.
APPENDIX 2

DEVELOPMENT IN MINERAL CONSULTATION AREAS

A2.1 Non mineral development within mineral consultation areas will be subject to policy M14. The following paragraphs give broad guidance on the general types of development that may not involve sterilisation of reserves and which, therefore, could be appropriate within a consultation area.

A2.2 Some forms of development involve little or no new permanent buildings or structures. It could still be possible, if such developments were carried out, to extract minerals from the land at a future date if this was subsequently considered desirable. Such developments may include extensions and minor alterations to existing houses, change of use of existing buildings, outside storage, caravan and camping sites, open space (though not outdoor recreation facilities such as golf courses) and allotments.

A2.3 Other forms of development involving a limited amount of new buildings or structures could result in the sterilisation of some deposits, but this could be minimised if the development was sited carefully. This type of development would include agricultural buildings, overhead wires, pipelines and masts and aerials.

A2.4 Some other types of development may be acceptable in mineral consultation areas, particularly in the safeguarding zones beyond the boundary of known mineral reserves, but this will depend upon individual circumstances. This will also often be the case for the type of development discussed in paragraphs A2.2 and A2.3 and, for this reason, this County Council would normally wish to be consulted by the relevant district council on all applications falling within mineral consultation areas except:

a) householder applications (minor development works relating to existing property);

b) development in accordance with a specific allocation in a statutory development plan;

c) infilling in existing towns and villages;

d) advertisements.
APPENDIX 3

GLOSSARY OF TERMS AND ABBREVIATIONS

After-care: Steps necessary to bring restored land up to the required standard for the intended after-use.

After-use: The ultimate use after mineral workings are restored.

Aggregates: Sand, gravel, crushed rock and other bulk materials used by the construction industry.

Agricultural Land Classification: The Ministry of Agriculture, Fisheries and Food grading system based on the degree to which soil, relief and climate impose long term limitations on agricultural land.

Ancient Woodland: An area of woodland which has had a continuous history of tree cover since at least 1600.

Ancillary Operations: Those activities associated with the winning and working of minerals eg processing plant.

Aquifer: A water bearing geological formation.

Area of High Landscape Value: Areas in County Durham where the landscape characteristics and overall appearance are considered to be of sufficient importance to the character of the County to require special recognition.

Area of Search: A broad area within which some mineral extraction may be acceptable, subject to detailed consideration.

Borrow Pit: A temporary mineral working to supply material for a specific construction project.

Bulk Fill: Filling material of low economic value used in construction projects.

Bund: Artificial embankment to screen mineral development or contain tipped materials.

Carboniferous: The period of geological time between 345 and 280 million years ago.

Concreting Sand: Angular grains of sand suitable for use in concrete manufacture.

Contaminated Land: Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that:
(a) significant harm is being caused or there is a possibility of such harm being caused; or
(b) pollution of controlled waters* is being, or is likely to be caused.
(* controlled waters include the sea, up to 3 miles offshore, estuaries, water contained in underground strata, and most lakes, ponds, reservoirs, rivers and other watercourses)
County Geological Site: An area recognised by the County Council as being of importance for its geological or geomorphological features.

County Wildlife Site: An area recognised by the County Council as being of importance for its wildlife (flora and fauna).

Derelict Land: Land so damaged by industrial or other development that it is incapable of beneficial use without treatment. This covers disused or abandoned land requiring restoration works to bring it into use or to improve its appearance. It does not include land which might have a derelict appearance from natural causes such as marshland, mud flats or sand dunes, neglected woods or farmland, waste land, generally land formerly affected by development but which, with time, has blended into the landscape.

Disposal Point: Location for the loading, unloading or transhipment of minerals or mineral products on, from or between transport modes.

Dolomite (mineral): A double carbonate of calcium and magnesium (chemical formula Ca Mg (CO2)2) occurring as crystals in dolomite rock.

Dolomite (rock): Technically a rock containing in excess of 90% of mineral dolomite, but commonly applied to rock containing in excess of 15% of mineral dolomite.

Dormant Site: A site with planning permission on which mineral operations have temporarily or permanently ceased.

Environmental Assessment: The process of assessing the environmental impact of a development proposal prior to determining a planning application. It is a statutory requirement for certain forms of development, based on scale, nature and location of the proposal.

Established need: A need for a mineral when assessed against existing permitted reserves of suitable material, taking into account any sub-regional apportionments and other appropriate policy guidance.

Export Terminal: Central collection point for final distribution for oil or gas from a productive field.

Fines: Silt and clay sized fraction of a deposit finer than 60 microns.

Greenhouse Gas: Gas whose emission is considered to contribute to global warming (‘the greenhouse effect’).

Hard Rock: Consolidated rock such as limestone and granite.

Hectare: Metric unit of area. 1 hectare = 10,000 square metres or 2.471 acres.

High Grade Dolomite: Dolomite rock which has few impurities, particularly iron oxide, silica and alumina, so that when it is used for the production of magnesia, as a steel flux, as an iron sinter, or in the glass making industry such impurities do not impair the quality of the subsequent product.
IDO: Interim Development Order. A permission granted under the Town and Country Planning (General Interim Development) Order 1946.

Igneous: Rocks originating from a molten state which are characteristically of crystalline composition.

Landbank: A stock of mineral reserves with planning permission for their winning and working.

Local Agenda 21: grouping of interested parties aiming to promote sustainability at the local level.

Local Biodiversity Action Plan: local strategy aimed at conserving biological diversity.

Local Nature Reserve: A nature reserve designated by a local authority on land in which it has a legal interest.

MPA: Mineral planning authority.


Magnesian Limestone: Technically a limestone containing between 5 and 15% of the mineral dolomite, the remaining part being largely the mineral calcite. The term is also used to identify Permian age limestone and dolomite features in eastern England.

Mineral: Rock or other material which has a commercial value for which it may be extracted (a planning not a geological definition).

Mineral Consultation Area: An area identified in order to ensure consultation between the relevant District Planning Authority, the minerals industry and the County Council before certain non-mineral planning applications made within the area are determined.

Mineral Development: Any activity related to the exploration for or winning and working of minerals, including tipping of spoil and ancillary operations such as the use of processing plant.

Mineral Working Deposit: Deposit of waste material arising from mineral extraction or processing.

Natura 2000 series: Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) jointly form the Natura 2000 series.

Natural Areas: Areas of countryside identified by their unique combination of physical attributes, wildlife, land use and culture, providing a distinctive nature conservation character which should be sustained. Identification of the conservation objectives for each Natural Area allows targeted management and enhancement of nature conservation features by any land managers, operators and planners.
Opencast Working: A form of surface mining to win minerals, where the overburden is literally ‘cast’ from the working face to the rear as the mineral is exposed.

Overburden: Soil and other material that overlays a mineral deposit which has to be excavated and either tipped or stockpiled to gain access to the underlying mineral.

Planning Conditions: Conditions attached to a planning permission for the purpose of regulating the development.

Primary Aggregates: Naturally occurring sand, gravel and crushed rock used for construction purposes.


Permian: The period of geological time between 280 and 225 million years ago.

Proposed Nationally Important Nature Conservation Sites: A term used where the Government have indicated their intention to define an area as a SSSI, NNRs, etc. but have yet to complete the consultation process.

Recycled Aggregates: Aggregates produced from recycled construction waste such as crushed concrete, planings from tarmac roads, etc.

Restoration: Operations associated with the winning and working of minerals designed to return the area to an acceptable environmental state, whether for the resumption of the former land use or for a new use. Includes events which take place before and during mineral extraction, such as soil handling, and later operations such as filling and contouring or the creation of planned water areas and after-care.

Restoration Blasting: The use of blasting other than for mineral extraction in order to assist in the creation of a suitable restored landform.

RIGs: Regionally important geological/geomorphological site (of equivalent status to County Geological Site).

Scheduled ancient monument (SAM): An archaeological site legally protected by the terms of the 1979 Ancient Monuments and Areas Act. Any proposed activity which will physically disturb such sites requires consent from the Secretary of State for Culture, Media and Sport.

Secondary Aggregates: By-product waste, synthetic materials and soft rock used with or without processing.

Site of Nature Conservation Importance (SNCIs): A composite term including County Wildlife Sites, County Geomorphological/Geological Sites and Regionally Important Geomorphological/Geological Sites.
Sites and Monuments: A listing of all known archaeological sites within the County.

Record (SMR): Maintained by the County Council Arts, Libraries and Museums Department.

SSSI: A Site of Special Scientific Interest is defined under Section 28 of the Wildlife and Countryside Act 1981 as an area of special interest by reason of any of its flora, fauna, geological or physiographical features. Notification of SSSIs is the duty of English Nature. Selection of SSSIs is a continuing process, and a review of existing sites is likely during the life of the Plan.

Special Area of Conservation: Part of a recognised network of important habitat types included in the European Union's Habitat Directive.


Sterilisation: When a change of use, or the development, of land prevents possible mineral exploitation in the foreseeable future.

Tonnes: Metric weight, equivalent to 1000kg, 2204 pounds or 0.984 tons.
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