

# **DERBYSHIRE AND DERBY MINERALS LOCAL PLAN**

**Towards a Minerals Local Plan:  
Winter 2021/2022 Consultation  
Proposed Draft Plan**

## **Background Paper Mineral Safeguarding**

**December 2021**

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## **1. Introduction and Background**

- 1.1 Minerals provide essential raw materials for developing and sustaining our society – whether this is for construction, manufacturing, agriculture, or energy production. Recoverable mineral resources are finite, however, and can only be worked where they occur. To protect these valuable resources for the long term, it is important, therefore, that these resources are not sterilised by non-mineral development being built over them, such as housing, retail, or industry.
- 1.2 Government policy puts the preservation of mineral resources on an equal footing with the protection of other natural assets and now, therefore, requires all Mineral Planning Authorities (MPAs) to define Mineral Safeguarding Areas (MSAs).
- 1.3 A MSA is an area of proven mineral resource that is considered to be of sufficient importance to warrant long term protection.
- 1.4 The designation of MSAs does not convey any presumption that mineral extraction is acceptable and nor does it preclude other development from being permitted; their purpose is to provide a policy tool to ensure that mineral resources are taken into account when they are at risk from being lost to other forms of non-mineral development. There is also no presumption against mineral extraction in areas that are not safeguarded, as MSAs may not necessarily capture every viable resource.
- 1.5 This paper covers all minerals found in Derbyshire and Derby (except deep mined coal and oil, where safeguarding issues will not normally apply). Safeguarding of strategic mineral transport facilities and other minerals infrastructure is considered in a separate paper.
- 1.6 The Councils will seek to safeguard minerals which are considered to be of local and national importance, i.e. Carboniferous Limestone, Permian Limestone, alluvial Sand and Gravel, Sherwood Sandstones, Fluorspar, surface mined Coal and Clay. Resource data for these deposits is generally good. This data

will be obtained from the British Geological Survey Resource Maps and Coal Authority resource maps.

- 1.7 Sources of building and roofing stone for use in the repair of historic buildings and buildings/structures in conservation areas will also be identified. Unfortunately, information is not as extensive for this resource. In order to attempt to define building stone resources more effectively two studies have been conducted. Firstly, a national investigation known as the Strategic Stone Study was trialled in Derbyshire and the Peak District National Park. This was supported by English Heritage and ODPM/DCLG with the groundwork in this area being conducted by the National Stone Centre, then entered onto a national database by the British Geological Survey. The second piece of research was also carried out by the National Stone Centre, commissioned by DCC and English Heritage (now Historic England). In the absence of specific guidance on identifying and safeguarding building stone deposits (existing guidance is focussed on bulk minerals) this sought to define, in a trial area, the resources of building and roofing stone, which should be safeguarded as a result of their economic or conservation potential and to assign relative levels of significance to such deposits e.g. local or national– as implied by the NPPF paragraph 204.

## **2. Policy Context**

- 2.1 The National Planning Policy Framework (NPPF) sets out the national approach to planning for minerals, including the need to conserve mineral resources in accordance with the principles of sustainable development. It requires Mineral Safeguarding Areas (MSAs) to be defined in planning policy documents to ensure that known locations of specific minerals of local and national importance are not sterilised by non-mineral development, whilst not creating a presumption that resources which are defined will be worked. It goes on to say that, when it is considered necessary for non-mineral development to take place, prior extraction of the minerals should be encouraged where practical and environmentally feasible.

It asserts that other development proposals should not normally be permitted in Mineral Safeguarding Areas if it might constrain potential future use for mineral working.

It sets out in Annex 2 of the NPPF that minerals of local and national importance include aggregates, brickclay (especially Etruria Marl and fireclay), silica sand, coal derived fly ash in single use deposits, cement raw materials, gypsum, salt, fluorspar, shallow and deep-mined coal, oil and gas. It encourages the prior extraction of minerals if it is necessary for non-mineral development to take place in MSAs.

It also sets out that, "...local planning authorities should safeguard:

- existing, planned and potential sites for the bulk transport, handling and processing of minerals; and
- the manufacture of concrete and other concrete products and the handling, processing and distribution of substitute, recycled and secondary aggregate material.

2.2 Planning Practice Guidance (PPG) sets out that mineral planning authorities should adopt a systematic approach for safeguarding mineral resources, which:

- uses the best available information on the location of all mineral resources in the authority area. This may include use of British Geological Survey maps as well as industry sources.
- consults with the minerals industry, other local authorities (especially district authorities in two-tier areas), local communities and other relevant interests to define MSAs
- sets out MSAs on the policies map that accompanies the local plan and define Mineral Consultation Areas based on the MSAs, and
- adopts clear development management policies which set out how proposals for non-minerals development in MSAs will be handled, and what action applicants for development should take to address the risk of losing the ability to extract the resource. This may include policies that encourage the prior extraction of minerals, where practicable, if it is

necessary for non-mineral development to take place in MSAs and to prevent the unnecessary sterilisation of minerals.

- National Planning Practice Guidance requires District/Borough councils to include MSAs on their Local Plan Proposals Maps.

2.3 The British Geological Survey (BGS) published the document “Minerals Safeguarding in England: Good Practice Advice” in September 2011. This complements the NPPF by supporting and facilitating MPAs in their implementation of national policy with respect to the safeguarding and the prior extraction of minerals. It provides independent advice and a step by step methodology on how to define MSAs to prevent the needless sterilisation of minerals, as required by the NPPF. It advises that in most cases MSAs should cover the full extent of mineral resources considered to be of economic importance and that they should also cover urban areas under which mineral resources lie.

2.4 Minerals Safeguarding Guidance MPA/POS Practice Guide sets out the process that developers, local authorities and mineral planning authorities should follow to ensure safeguarding is properly considered in planning decisions (allocating sites in plans and determining applications). It describes the information that is required to inform decisions, how and when to obtain it, and the roles and responsibilities of those involved. It builds on, but does not replace, previous advice issued by BGS, helping to develop a more consistent approach to safeguarding and adding a valuable level of detail for practitioners, particularly regarding implementation.

2.5 The guide supports the aims of the National Planning Policy Framework and is a useful guide for all planning authorities, as well as developers considering carrying out development on mineral-bearing land or near to existing or proposed mineral infrastructure.

### **3. The Mineral Resources of Derbyshire and Derby**

3.1 The Plan area has eight distinct mineral resources which have the potential for safeguarding. These are as follows:

1. Sand and gravel.
2. Sherwood sandstone.
3. Carboniferous limestone.
4. Vein minerals.
5. Permian limestone.
6. Coal – surface mined.
7. Namurian sandstones/gritstone.
8. Clays.

3.2 The majority of these resources are in Derbyshire. Derby City's mineral resources are limited to a relatively small amount of sand and gravel.

3.3 Deep mined coal, oil and gas resources are not considered for safeguarding because they are not vulnerable to sterilisation as a result of surface development. This is because although the material is extracted from a wide area underground, it is brought to the surface at a single relatively small point on the surface.

3.4 Information regarding resources of coal derived fly ash is insufficient to enable the Plan to identify specific areas. However, it is known to be present mainly within the sand and gravel resource area as a result of its use in the restoration of sand and gravel quarries. As a result, it will be considered alongside proposals for non-mineral development in the sand and gravel resource.

### **Sand and gravel**

3.5 Sand and gravel of mainly glaciofluvial origin (i.e. deposited by glacial meltwaters at the end of the ice age) is concentrated in the river valleys of the Trent, Dove and Derwent, in the south of the County. Deposits are generally of high and consistent quality in the Plan area and are used mainly in the manufacture of concrete and as a fill material by the construction industry. Sand and gravel from Derbyshire and Derby is considered to be of local and national importance by virtue of the fact that it is used within Derbyshire and Derby as well as in other areas within the East Midlands. It therefore meets local and wider needs for sand and gravel.

### **Sherwood sandstone**

- 3.6 The Sherwood Sandstones contain resources mainly of sand in solid hard rock formations. These were formed by a major fluvial event in the Triassic period, around 230 million years ago. This deposit is much more limited in extent than the river valley sand and gravel. It is concentrated in an area around Mercaston between Ashbourne and Derby. Production is limited to one operation. The relatively small volumes of material produced are used mainly within the Plan area and are considered therefore to be of mainly local importance.

### **Carboniferous limestone**

- 3.7 This resource is concentrated in two main areas; the first around Matlock/Wirksworth and the second around Buxton. It was laid down around 350 million years ago. The rock tends to be very pure in chemical composition, and for this reason is used in a number of chemical or industrial processes. Less pure varieties, generally, are used as fill material (aggregate) by the construction industry, particularly in road construction and repair. The Bee Low Limestone of the Carboniferous sequence is of particular importance as a building stone (Hopton Wood Stone). This stone can be found outcropping in the Wirksworth area. It is of significant local and national importance because Derbyshire is one of the few areas of the country which supplies limestone of industrial and aggregate quality to meet national requirements. It is transported significant distances throughout the country to meet these needs.

### **Vein minerals**

- 3.8 Within Derbyshire, the majority of vein mineral deposits occur within the Peak District National Park. In the part of Derbyshire outside the Peak District National Park, the vein mineral deposits lie within areas bordering the National Park, limited mainly to a line along the eastern edge of the Carboniferous Limestone around Matlock, Wirksworth and Brassington.
- 3.9 Mineralised veins running through the Carboniferous Limestone of Derbyshire have been of economic importance for centuries. Historically, lead was the major vein mineral worked, but today the primary interest is in fluorspar. barytes is also likely to be obtained from fluorspar workings, in varying proportions, as



a secondary material. Calcite is found as a vein mineral and is also a common rock forming mineral, being the principal constituent of all limestones. Of these, only fluorspar is listed in national policy as a mineral of local and national importance, which should be safeguarded.

### **Permian (Magnesian) limestone**

- 3.10 This resource is limited to an area in the north east of the county, in the area around Bolsover and Whitwell. Dolomitisation (the natural addition of magnesium) has formed a high-grade dolomite in the area around Whitwell. This is an important and nationally scarce mineral that is used in the steel making industry. Less chemically important forms of the limestone are prized for their tough physical properties and are generally used as constructional fill material (aggregate). Derbyshire is one of only two areas in the UK which provides this mineral, both nationally and internationally and, therefore, is considered to be of both local and national importance.

### **Surface mined coal**

- 3.11 The main outcrop of coal is in the east of the county. Large scale coal production ceased in Derbyshire in 1993 with the closure of the last deep-mined coalfield. There are a small number of surface coal mines and one drift mine in the Plan area. The market for coal fluctuates and this offers the potential for new mines to open in the future. It is considered to be a mineral of local and national importance by virtue of the need to provide for national security of energy supply.

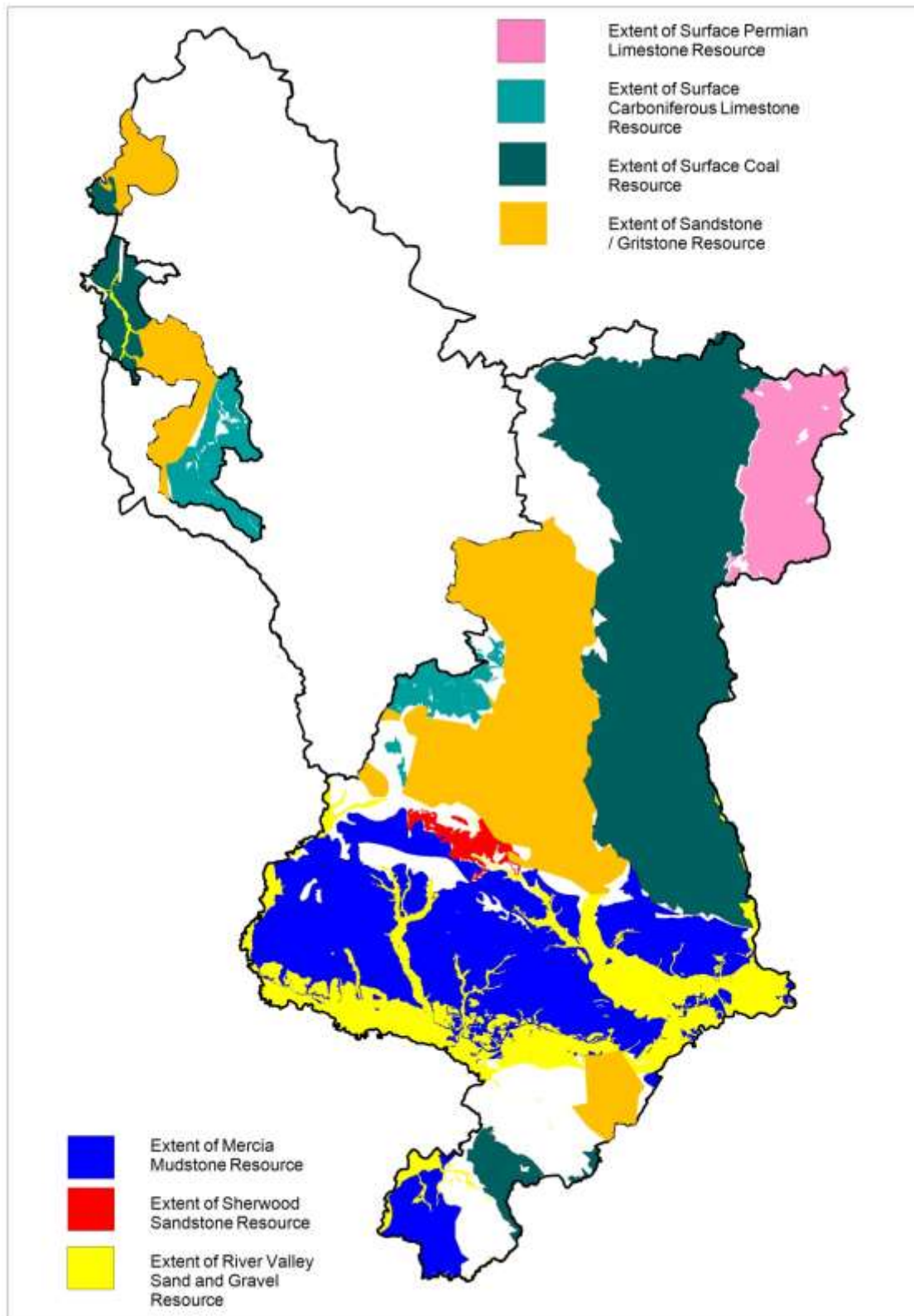
### **Namurian (carboniferous) sandstones**

- 3.12 Also commonly referred to as Millstone Grit, this deposit is used for building and roofing purposes. These formations are extensive in the central part of the county but the areas of usable stone within them are notoriously limited and largely undetermined. The building stone is of local and some national importance as it is used across the country in the construction and restoration

of buildings of historical importance and those in designated areas to retain the character of those areas. A small proportion in the north west of the county is quarried for aggregate. The aggregate quality stone is considered as being of only local importance.

## **Clays**

- 3.13 Brick clays including fireclays are identified in the NPPF as being of local and national importance as a result of their use in the construction industry in delivering economic growth. The most important economic resources of brick clay sources in Derbyshire are found within the Carboniferous clays and shales, mainly in the east and the north west of the county. They are associated with the Millstone Grit and the coal measures of the same age, both of which will be safeguarded. Given their relatively high iron content, they are used to produce red coloured bricks.
- 3.14 Fireclays are sedimentary mudstones which are found under the coal measures and are a by- product of surface mined coal operations. They are used mainly in the production of buff coloured bricks and clay pipes. Fireclay resources are often found in association with surface coal measures (which will be safeguarded) so they will not need to be safeguarded separately.
- 3.15 Mercia Mudstones were laid down in the Triassic period and are widespread in the south of the county. They can be used as a source of clay but have not been exploited to any great extent in the past. There are no current workings of the resource in the Plan area. It is only considered to be of mainly local importance.
- 3.16 Map 1 below shows Derbyshire and Derby's mineral resources. NB. clays and vein minerals found within other mineral resources are as indicated above.



**Map 1: Derbyshire and Derby's Mineral Resources (Not to scale)**

## **4. Minerals to be Safeguarded**

4.1 The BGS Mineral Resource information and the Coal Authority Resource Maps are the primary sources of information when identifying which mineral deposits are considered to be of economic importance, locally and nationally. These digital datasets are based on robust expert technical knowledge of the geology and economic value of the mineral deposits. They represent the best geological and mineral resource information available and are a valuable source of information in helping to determine which minerals should be safeguarded. On this basis, and taking account of the information in Section 2 above, the minerals that we think should be safeguarded in Derbyshire and Derby are set out below. Further detail on the extent to which each of these minerals will be safeguarded is set out in Table 2.

4.2 Minerals proposed to be safeguarded in Derbyshire and Derby:

- Glaciofluvial sand and gravel.
- Carboniferous limestone (aggregate, industrial and building stone grades).
- Fluorspar.
- Permian limestone (industrial grade).
- Coal (surface mined).
- Namurian sandstone (building stone).
- Sherwood sandstone.
- Permian limestone (aggregate grade).
- Fireclay (associated with the coal measures).
- Brick clay.

## **5. Mapping the Extent of Safeguarding Areas**

5.1 Having established which minerals should be safeguarded, this section will consider how the physical extent of each of these resources will be defined.

5.2 The best available geological and mineral resource information should be used as a basis for deciding the extent of mineral to be safeguarded. The BGS Mineral Resource Maps and the Coal Authority Resource Maps are widely

acknowledged as being the best and most reliable geological information currently available. These show the broad location of mineral deposits and are based on robust, expert technical knowledge of the geology of the deposits. It is proposed, therefore, that they are used as the basis for identifying MSAs in Derbyshire.

5.3 It is accepted that the use of these digital datasets and maps largely eliminates the need for MPAs to make their own judgements on which mineral deposits are of economic interest. However, where other detailed data is available, this will be incorporated to help define resources further. This could include borehole and trial pit investigations from the industry and information on building stone resources that is held by English Heritage and more local knowledge gained through consultation on the Minerals Local Plan.

5.4 BGS Good Practice Advice sets out that the full extent of mineral resources which are considered to be of (local and national) economic interest should normally be safeguarded and should not be curtailed by other planning considerations. It goes on to state that, in certain circumstances, MSAs covering resources which occur extensively over the area of the MPA and which are not considered to be of (such) great national or local importance can be reduced in size to include only those parts that are of greater economic significance.

5.5 The judgement on any proposed reduction in the extent of a MSA will take into account the following factors:

#### **Quality of deposit**

5.6 The depth, thickness, level of overburden, dipping of strata, composition and structure of the deposit will be important factors in determining whether the mineral is economically viable and thus, whether it is worth safeguarding.

#### **Conservation value**

5.7 This will be an issue particularly in respect of the Namurian sandstones and to a lesser extent for the limestones. They are quarried for use as building stone in the repair and restoration of historic buildings/structures and buildings/structures in areas of conservation value. They are extensive through the central swathe of Derbyshire but rates of extraction are low in comparison. The Strategic Stone Study has been carried out by English Heritage to identify sustainable stone sources for building and conservation purposes. A separate study has been carried out by the National Stone Centre for the safeguarding of building stone resources in Derbyshire.

### **Environmental constraints (designated areas)**

5.8 These constraints include local and national nature reserves, sites of special scientific interest, special landscape areas, World Heritage Sites and scheduled ancient monuments. The protection from development given to the landscape by these designations might in some cases be considered to be sufficient to also protect the underlying mineral resources from sterilisation by surface development. BGS, however, advises against other planning designations curtailing MSAs unless there is sound justification to do so, since the definition of MSAs alongside environmental and cultural designations will help to ensure that the impact of any proposed development on mineral resources will be taken into account alongside other planning considerations. There does not seem to be any specific reason to go against this advice in Derbyshire and Derby.

5.9 Based on the information that is currently available, the proposals for each of the minerals in terms of the general extent which should be safeguarded, are set out in Table 2 below.

Table 2: Safeguarding proposals for each mineral

| MINERAL  | SUMMARY OF REASONS  |
|--|---|
| Glaciofluvial sand and gravel<br>(Trent, Dove and Derwent valleys) | Strategic minerals of local and national importance, limited in geographical extent with relatively high extraction rates. Significant pressure for future working. Good resource data available. <b>All known resource should be safeguarded.</b>  |
| Carboniferous limestones   | Strategic mineral of local and national importance, resource relatively limited in geographical extent, (particularly high purity element). Significant pressure for future working. <b>All known resource should be safeguarded.</b>   |
| Fluorspar  | Strategic mineral of local and national importance, now very scarce and important in commercial terms. Lies within the Carboniferous Limestone. <b>All known resource should be safeguarded.</b>  |
| Permian limestone  | Strategic mineral of local and national importance. The industrial grade element is part of a nationally strategic resource, relatively scarce and important commercially. Significant pressure for future working. Pragmatic to safeguard the entire mineral resource, both industrial and aggregate grade as it often occurs together. <b>All known resource should be safeguarded.</b> |
| Sherwood sandstone   | Resource limited but extensive relative to likely future rates of extraction. Of mainly local importance. Only one current operation at Mercaston. <b>All known resource to be safeguarded.</b>   |
| Namurian sandstone<br>(building stone)                             | Extensive resource of local importance. Usable stone limited in extent and largely undetermined. Limited extraction but important resource where found to be of suitable quality for building and roofing stone. <b>All known resource to be safeguarded.</b>   |
|  |   |

|                          |  |
|--------------------------|--|
| Mercia mudstone          | Very extensive resource relative to rates of extraction. Of only limited local importance. Limited detailed data available but mineral quality uncertain. <b>Not necessary to safeguard any of the resource.</b>   |
| Surface mined coal       | Part of nationally strategic resource of both local and national importance, which assists in security of national energy supply. Long term depletion a possibility. Resource well understood. <b>All known resource should be safeguarded.</b>  |
| Carboniferous brick clay | Recognised as being of local and national importance. Extensive resource relative to rates of extraction. <b>Will be safeguarded by virtue of it being associated with the predominant Surface Coal and Gritstone resources which will be safeguarded.</b>   |
| Fireclay                 | Recognised as being of local and national importance. Found in association with surface coal measures which will be safeguarded, therefore fireclay will be safeguarded by default.<br><b>All known resource will be safeguarded by virtue of the predominant mineral; surface coal being safeguarded.</b> |

*Note: These proposals for the extent of safeguarding each mineral will be kept under review during the Plan period. Factors such as economic growth and need for the individual minerals will determine whether the proposals for safeguarding each mineral will need to be altered.*

### **Safeguarding in urban and other built up areas**

- 5.10 The issue of whether MSAs should cover urban areas was not covered as a specific issue in the Issues and Options consultation. It was embodied to some extent, however, in the suggested policy for safeguarding.
- 5.11 National Planning Practice Guidance sets out that safeguarding areas should be defined in designated areas and urban areas where necessary to do so. For



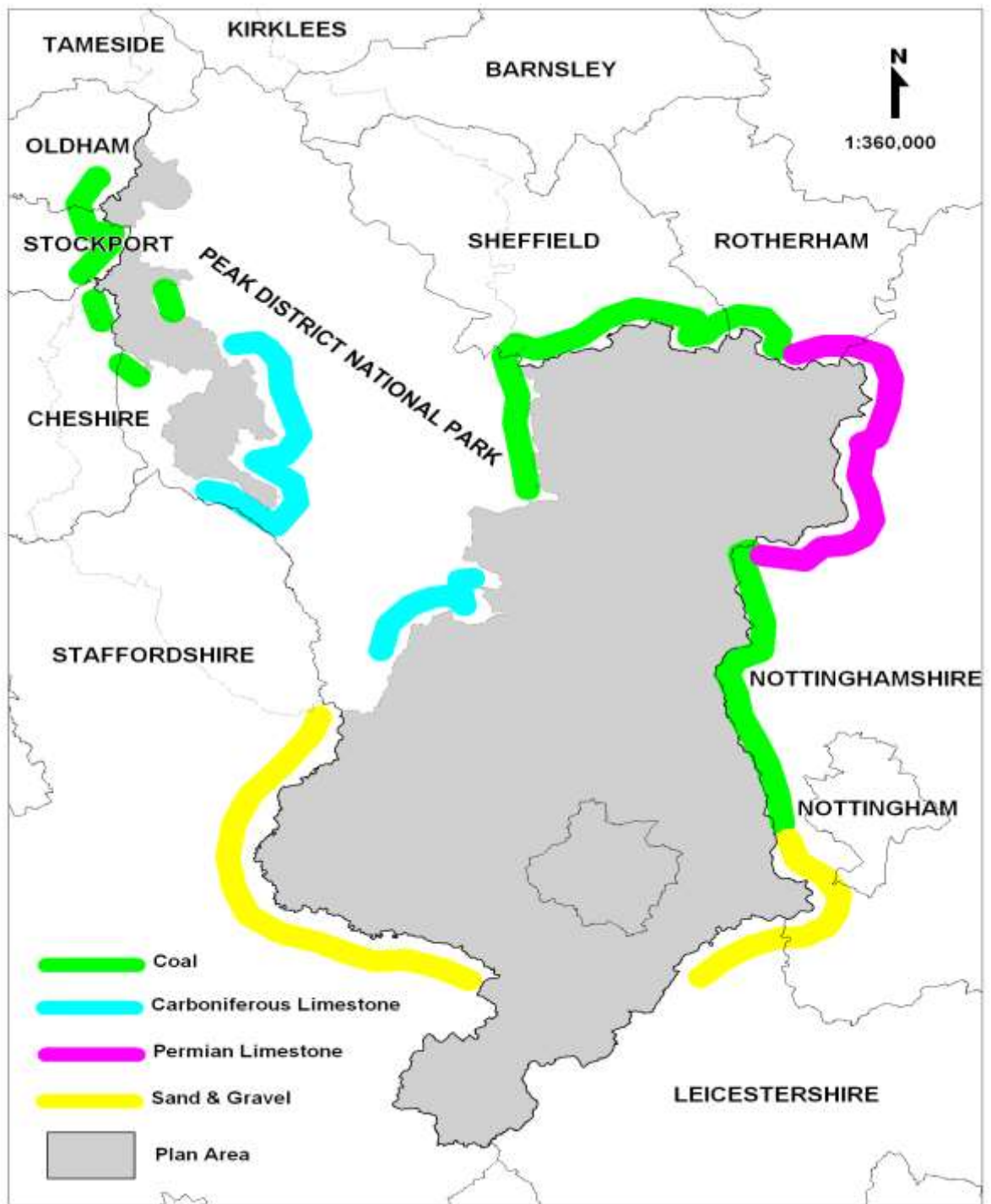
example, safeguarding of minerals beneath large regeneration projects in brownfield land areas can enable suitable use of the mineral and stabilisation of the ground before any non-mineral development takes place.

- 5.12 BGS advises that MSAs should be defined to cover all urban areas which are underlain by minerals, in order to highlight the potential for extracting significant quantities of mineral which can exist beneath large urban regeneration projects and brownfield sites, and which may otherwise be overlooked. Our discussions with the Coal Authority have also supported this approach.
- 5.13 One disadvantage of the approach of MSAs covering urban areas is that it could potentially lead to a large amount of unnecessary notification between district planning authorities and mineral planning authorities. However, exemptions of developments which have no implications for mineral safeguarding (set out in Appendix 1 below) would help to overcome the problem of there being excessive numbers of notifications.
- 5.14 There may be cases when the redevelopment of a site within an urban area underlain by mineral provides the opportunity for mineral to be exploited. Given this, it would seem appropriate to include a policy relating to the prior extraction of important minerals during the redevelopment of a site in an urban area. Extraction of mineral in these cases may be of economic advantage due to the availability of mineral on site for the development proposed or the shorter distance to market if sold. In the case of coal, prior extraction can also help to rectify issues associated with land stability.

### **Safeguarding Mineral Resources Across the County Boundary**

- 5.15 Mineral resources do not stop at administrative boundaries, so development close to the boundary of one authority could effectively sterilise minerals in the adjacent authority area.
- 5.16 It is likely in practice that the mineral will straddle the boundary and will be safeguarded by authorities on each side of the boundary so development

should not, in theory, take place in these areas without consultation having taken place. Where this is not the case buffer zones to protect the margins of mineral resources could extend into neighbouring authorities to protect resources from development. The challenge occurs here because all authorities will be at different stages in developing their safeguarding strategy. The map below shows the minerals which straddle the boundaries of the Plan area. It is important to consider this issue with neighbouring MPAs as part of the Duty to Cooperate on strategic cross boundary matters as set out in the NPPF. It will be important to continue to work closely with adjoining MPAs to ensure coordination of MSA and MCA designations across administrative boundaries.



**Map 2: Mineral Resources adjoining Derbyshire and Derby**

## **6. Implementation of Mineral Safeguarding and Consultation Areas**

6.1 This section considers how mineral resources will be safeguarded from other non-mineral development. There are two opportunities to do this; firstly through the consideration of MSAs when district councils are developing their allocations in their Development Plans, and secondly to assess individual proposals for development when they are submitted as planning applications. The designation of MCAs will ensure that district/borough councils consult the MPA on applications for non-mineral development which may affect mineral resources. The MSAs and MCAs cover identical areas.

### **MSAs in district council development plans**

6.2 Allocations in district council development plans show where future development is likely to take place and will, therefore, be the first place where any mineral safeguarding issues will arise. The best time to consider mineral safeguarding will be when these allocations are put forward for consultation in a draft development plan. This allows mineral safeguarding issues to be considered alongside all other planning issues at an early stage, in order to reach a balanced decision about whether the allocation should be taken forward. Thus, when allocations are adopted, it can be assumed that any future planning applications that fall within them do not raise any mineral safeguarding issues.

6.3 Planning Practice Guidance requires district/borough councils to include MSAs on their Proposals Maps. In this respect, it would also seem appropriate that they include a policy in their Local Plan setting out the consultation procedure with the MPA for developments that occur within MSAs and cross referencing it to the MPA policy. The Minerals Planning Authority and the district/borough councils will continue to work together to develop this approach. Once the policies and procedures for consultation are in place, the policies will be monitored and reviewed to ensure they are working effectively and remain relevant. This will be achieved to some extent through the duty to cooperate mechanism.

## **Consultation with district councils on planning applications within MCAs**

- 6.3 District councils are required to consult the County Council on any non-exempt planning applications for development which fall within a Mineral Consultation Area. The County Council can then advise the district on any implications for minerals and either object to the development or suggest changes to minimise the loss of mineral, even suggesting an alternative location for the development where mineral resources would not be sterilised.
- 6.4 The Mineral Planning Authority and the District/Borough councils will continue to develop the safeguarding strategy together and agree a protocol by which consultation will take place on planning applications which may affect mineral resources.
- 6.5 The safeguarding policy will indicate which types of development will be exempt from the mineral safeguarding consultation process. This will include developments such as extensions to existing dwellings and advertisements (see Appendix 1 below). It is proposed, therefore, that the district and borough councils will not have to consult the County Council on such applications.

## **Appendix 1**

### **Exempt Developments**

A1 Not all proposals for non-mineral development within or close to a safeguarding area pose a risk to future minerals extraction (in terms of sterilising resources by being developed over the mineral or because of their sensitivity causing conflict with nearby mineral operations), and will, therefore, not have to be referred automatically to the MPA. To ensure that consultations are restricted to developments that would have a potential significant impact on mineral resources and to help ensure that the consultation process is not too unwieldy, it is proposed to exempt the following categories of development from the consultation process:

- Applications for minor householder development including extensions and conversions.
- Applications for alterations and extensions to existing buildings and for change of use of existing development, unless intensifying activity on site.
- Applications for advertisement consent.
- Applications for reserved matters, including subsequent applications after outline consent has been granted.
- Development which is in accordance with the development plan where the plan took account of mineral sterilisation and determined that prior extraction would not be practicable.
- Prior notifications (telecommunications, forestry, agriculture, demolition).
- Applications for works to trees.
- Applications for temporary planning permission.
- Applications for Listed Building Consent