The new Minerals Local Plan for Staffordshire (2015 to 2030)

Draft for consultation – May 2014
Foreword

Planning for mineral sites in Staffordshire is an important part of our efforts to support sustainable economic growth and job creation, to minimise the impacts associated with mineral workings and to maximise the opportunities to enhance local amenity and the environment presented by the working and restoration of mineral sites.

We now need to replace our existing Minerals Local Plan with a new Plan to take us up to 2030 and very keen to hear from local communities and the mineral industry.

Before we finalise our new Plan, we have produced a consultation document to provide an opportunity for anyone with an interest in mineral development in Staffordshire to have their say on the way in which we plan for minerals.

I would encourage people to respond to the consultation so that our new Plan will achieve the best outcomes in balancing the needs for minerals and protecting Staffordshire’s local communities and environment.

Mark Winnington
Cabinet Member for Economy and Infrastructure
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Chapter 1: Introduction

What is the purpose of the new Minerals Local Plan for Staffordshire?

1.1 Staffordshire has significant mineral resources. Quarries in the county have produced about two thirds of the sand and gravel sold in the West Midlands (approximately 2 to 3% of total land won aggregate produced in Great Britain) and the greatest output of clay and shale compared with any other county in England. In addition, the county has one of only 12 cement kilns in the UK, and produces 80% of the anhydrite used in the cement industry is produced from Staffordshire’s only working mine.

1.2 Minerals are essential to support sustainable economic growth including jobs. An industry assessment estimates that each employee in the mineral products industry generates over £110,000 of value added per year which is more than double the national average. The industry nationally generated gross value added of over £4billion in 2011 amounting to 0.3% of total UK output. In Staffordshire, industry using minerals contributes around 2.7% of the overall economic output.

1.3 The new Minerals Local Plan for Staffordshire* (‘the new Plan’) identifies suitable land and provides the planning policies that will be used to determine planning applications to develop Staffordshire’s minerals resources during the period 2015 to 2030. When adopted, the new Plan will replace the ‘saved policies’ in the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994 to 2006 (‘the old Plan’).

*Staffordshire means the area of Staffordshire administered by Staffordshire County Council (the Minerals Planning Authority) but excluding those parts of the county within the Peak District National Park. Unlike our old Plan, our new Plan is not a joint Plan so it does not include the City of Stoke-on-Trent.

What is the purpose of this consultation and what will happen next?

1.4 This is an opportunity to comment on the draft version of our new Plan. We would be interested to receive your comments on our vision, objectives, policies and proposals before the new Plan is finalised and submitted for ‘Examination in Public’ by an independent Inspector appointed by the Government. We are aiming to consult on a final version of the Plan in the autumn 2014 and for the examination to take place in mid 2015 with the aim of adopting the new Plan in spring 2016.

How did we get to this stage?

1.5 We consulted on an Issues and Options paper in October 2008 and prior to that consultation, invited the industry and landowners to respond to a ‘call for sites’ in September 2007. We have also documented the options we have appraised in drawing up the new Plan and these are set out in a Sustainability Appraisal that is supported by a Strategic Flood Risk Assessment and Habitats Regulations Assessment which we have published alongside the new Plan. We will continue to update these documents as the new Plan progresses to adoption.
How have we arranged the new Plan?

1.6 In preparing the new Plan four important questions have been considered (What? Where? How? and When?)

1.7 We began by asking…..What mineral resources are likely to be developed in Staffordshire in the period 2015 to 2030?

1.8 The answer – there are three principal categories of minerals that are likely to be developed in Staffordshire over the next 15 years:

- aggregate minerals (sand and gravel and limestone);
- industrial minerals (cement minerals (limestone, clay and shale and anhydrite) and brick clay); and,
- hydrocarbons (methane gas in various forms).

1.9 There are also other mineral resources that may be developed in Staffordshire over the next 15 years that require a brief mention:

- Sandstone (building stone and silica sand)
- Opencast coal

1.10 For each of the three principal categories of mineral resources we then asked:

- Where do these mineral resources occur in Staffordshire?
- How are Staffordshire’s mineral resources likely to be developed? and,
- When are Staffordshire’s mineral resources likely to be developed?

1.11 The new Plan has also had regard to planning policy and guidance published by the Government (currently in the National Planning Policy Framework [abbreviated to NPPF in footnotes] and National Planning Practice Guidance [abbreviated to NPPG]); and the relevant policies and proposals in the adopted or emerging local plans produced by the Staffordshire District and Borough Councils and neighbouring / nearby planning authorities.

1.12 We have therefore arranged the new Plan into chapters that consider the three questions for the three principal categories of mineral resources in Staffordshire. We then set out our vision and strategic objectives for the new Plan and conclude with a set of planning policies and proposals for extensions to existing sites or areas of search to find new sites. A Proposals Map is provided alongside this document to indicate the general location of proposals for mineral working together with Inset Maps that show the site areas in more detail.
Chapter 2: Aggregate Minerals

Where do aggregate minerals occur in Staffordshire?

2.1 There are two principal sources of aggregate mineral in Staffordshire.

2.2 **Sand and Gravel** resources are widely distributed throughout Staffordshire. In 2012 there were 23 permitted quarries, of which 16 were operational.

2.3 Sand and gravel is mainly used locally (within a 25 mile radius of a site) in the production of concrete, mortar and asphalt and in the manufacture of concrete products which have national markets e.g. concrete roof tiles produced at Burton on Trent and bespoke concrete products such as staircases and flooring slabs at Coltman Precast Concrete, adjacent to Moneymore Quarry, Weeford. Sand and gravel is supplied to markets in the West Midlands conurbation as well as within Staffordshire.

2.4 **Limestone** is worked from a single area in the north east of the county and there are 3 limestone quarries with reserves for aggregate use – Cauldon Low, Wardlow/Wredon and Kevin. Currently only Cauldon Low Quarry is operational.

2.5 Limestone is currently used locally (within a 25 mile radius of a site) in the production of concrete, asphalt and uncoated road stone.

2.6 Provision of aggregate minerals supports markets within the county (including Stoke-on-Trent) and markets outside the county. Currently, all aggregate minerals are transported to their markets via road transport but there would be potential for crushed rock from the Cauldon Low Quarry to re-use a rail line that previously served the quarry.

2.7 Figure 1: ‘Aggregate minerals in Staffordshire 2012’ shows the extent of the aggregate mineral resources and the location of the aggregate mineral sites.

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Figure 1: Aggregate minerals in Staffordshire 2012
How are Staffordshire’s aggregate minerals likely to be developed?

2.8 Sand and gravel quarries in Staffordshire are associated with two types of deposits\(^2\) and the nature of the deposits affects how they are likely to be developed.

2.9 **Bedrock deposits**: Staffordshire is one of the few counties in England that has bedrock deposits of sand and gravel. They are typically found in the northern, central and south-eastern parts of the county e.g. Croxden Quarry, near Cheadle; Pottal Pool Quarry, near Cannock (within the Cannock Chase Area of Outstanding Natural Beauty); and Moneymore Quarry, Weeford.

2.10 Bedrock deposits can be deep and so provide greater yields per hectare compared with most superficial deposits. Deep voids can result from the extraction of these deposits but it is possible to restore the land to a beneficial afteruse without the need for backfilling.

2.11 **Superficial deposits**: Significant deposits are associated with river valleys and in Staffordshire they are typically found along the Trent and Tame rivers.

2.12 The progress of quarrying with these shallow deposits is likely to be relatively quick leaving behind shallow voids which can be allowed to fill with water or partially or fully backfilled as preparation for a beneficial after use.

2.13 In the Trent and Tame valleys where sand & gravel has been extracted over many years, the restoration and aftercare of quarries has provided opportunities for the regeneration of the river valley areas including the creation of the National Memorial Arboretum at Alrewas and wetland reserves at Middleton Hall Quarry near Tamworth, now managed by the RSPB. The concentration of sand and gravel workings in the river valleys provides an opportunity to co-ordinate the restoration and aftercare of these workings and to contribute to environmental projects that can enhance biodiversity, geo-diversity and green infrastructure.

2.14 The ramifications of policies for waste reduction and the diversion of waste from disposal could affect the progress of the restoration of sand and gravel workings in the river valleys where there is a need to backfill workings. Quarries for all mineral workings where there is a requirement to backfill with imported wastes are listed in the Appendices to this draft Plan and there is significant landfill capacity associated with these sites. If the effect of waste policy reduces the amount of backfill available to restore quarries, the implications could be that restoring quarries involves a longer duration of operational disturbance or that other options for reclaiming quarries need to be considered.

2.15 **Limestone**: The three limestone quarries in Staffordshire have been operating for many years, are large in scale and found in sensitive landscape areas. Extraction involves blasting and reinstatement of the quarry voids can involve shaping the quarry faces to re-model the landscape. All three sites have permissions to continue working well beyond the plan period.

When are Staffordshire’s aggregate minerals likely to be developed?

2.16 National policy requires that we plan for a steady and adequate supply of aggregates. There are significant permitted reserves of limestone for aggregate use which will be sufficient for the Plan period but we need to plan for additional sand and gravel reserves.

2.17 A level of provision needs to be assessed which supports the needs for a range of construction aggregates to meet planned growth for housing and other development; the manufacture of concrete products; and also makes a contribution towards meeting the needs of areas adjoining or near to Staffordshire where there is a shortfall in supply. The scale of provision needs to be acceptable in terms of the environmental costs associated with quarrying, and should take into account the contribution that secondary and recycled materials would make to the supply of aggregate materials, as well as ‘imports’ from areas outside Staffordshire.

2.18 Production of aggregate minerals has varied significantly over the last ten years due to the economic circumstances in the construction industry. The downturn in the economy since 2008 has reduced the rate of depletion of permitted reserves and affected the 10 years sales average which, in accordance with Government policy, is used as a basis on which future demand is assessed.

Sand and Gravel

2.19 As explained in our Local Aggregate Assessment, during the period 2002 to 2011 the average sales of sand and gravel were 5.4 million tonnes per annum, within a range from 3.7 million tonnes to 6.8 million tonnes. Based on this 10 year average figure, current permitted reserves would be depleted by 2025. To maintain the capacity to produce at 5.4 million tonnes per annum requires additional reserves to be permitted within the next 10 years.

2.20 Interest in developing additional sand and gravel resources in Staffordshire has been shown by quarry operators and landowners and a list of site options for new sand and gravel resources is provided in the Appendices. Most of the site options submitted for consideration involve resources that are available by extending existing quarries but there are other proposals that would require new sites to be established.

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3 Paragraph 145 of the NPPF
4 Refer to Local Aggregate Assessment for Staffordshire (October 2013)
5 Refer to paragraph 145 of the NPPF
2.21 The old Plan favoured the following approach:

“concentrating sand and gravel workings in specified locations by either developing new sites or more particularly extending existing sites where it would be environmentally acceptable”.\(^6\)

Having reviewed this approach, in the light of the Government guidance\(^7\), the pattern of supply and demand for the next 15 years and the accompanying Sustainability Appraisal, it is reasonable to conclude that this approach can continue for the first ten years of the Plan but then needs to change to make provision for a new sand and gravel site from 2025 onwards which has led to the identification of a new area of search (see Policy 1).

**Limestone**

2.22 Limestone reserves used for crushed rock amounted to 163 million tonnes in 2012 and are more than sufficient to meet the anticipated requirements for crushed rock aggregate over the Plan period. All three limestone quarries are now in the control of a single operator (Lafarge Tarmac), and discussions with them suggest that over the Plan period, they will concentrate on working the Cauldon Low Quarry.

**Cauldon Low**

2.23 There are two adjoining quarries at Cauldon Low and the old Plan sought to co-ordinate working and restoration (Policy 54). This led to a joint study by Bowman Planton Associates.\(^8\) However, a successful outcome was hindered at that time by competing interests. Now that both quarries are controlled by Lafarge Tarmac, the opportunity to further the aims of policy 54 has taken a significant step forward. We will encourage Lafarge Tarmac to reconsider the benefits of co-ordinated working and restoration at Cauldon Low.

**Wardlow / Wredon and Kevin**

2.24 JCB has taken a long term interest in the complex of quarries known as Wardlow/Wredon and Kevin to assist them with the development of new vehicles. As a result, it is anticipated that the permitted minerals will remain as a long term reserve. In the event that the quarries are re-activated then we will also encourage Lafarge Tarmac to consider the benefits of co-ordinated working and restoration here.

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\(^6\) Paragraph 8.23 of the Staffordshire and Stoke-on-Trent Minerals Local Plan 1994 - 2006
\(^7\) Refer to paragraph 010 ID: 27-010-20140306 of the NPPG.
\(^8\) Cauldon Low Study – Bowman Planton Associates (1998)
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Chapter 3: Industrial Minerals

Where do industrial minerals occur in Staffordshire?

3.1 The geology of Staffordshire provides minerals that support manufacturing industry where the added value of the manufactured products can be several times the cost of the mineral used. For the period of the Plan, there are two key industrial minerals.

3.2 **Brick Clay** is used for the manufacture of bricks, tiles and other clay products. There are currently 8 operational clay quarries\(^9\) supplying five brick and tile works in the county which are located near to Newcastle under Lyme in north Staffordshire, near to Cannock in the south and Tamworth in the south east of the county. There are also works nearby in Walsall, Warwickshire and Telford that use Staffordshire clay. The Etruria Formation is the principal brick clay resource in Staffordshire and is recognised nationally as a premium clay resource.

3.3 **Cement minerals (limestone, clay, shale)** is used in the manufacture of cement (limestone represents about 80 to 90% of the raw material and clay and shale which represents about 10 to 15% of the raw material). Cauldon cement works, near Waterhouses in the Staffordshire Moorlands is one of only 12 cement kiln works nationally\(^10\).

3.4 **Anhydrite** is used in the manufacture of cement (5% of the raw material). Fauld Mine, near Tutbury in east Staffordshire, supplies 80% of the anhydrite used in the UK cement industry.

3.5 Figure 2: ‘Industrial minerals in Staffordshire 2013’ shows extent of the key industrial mineral resources and the location of the industrial mineral sites and the works that use the minerals to manufacture bricks tiles and cement.

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\(^9\) Refer to "[Minerals sites in Staffordshire](#) December 2013"

\(^10\) Refer to [Minerals Products Association](#) website and Mineral Planning Factsheet for Cement (2008) - BGS
Figure 2: Industrial minerals in Staffordshire 2013
How are Staffordshire’s industrial minerals likely to be developed?

**Brick Clay**

3.6 Clay workings tend to be long term operations and may involve simultaneous workings at different parts of a site to ensure that the correct blend of clays is achieved. Clay working will take place in campaigns rather than on a continuous basis and prior to delivery to the manufacturing plant, there will be a need for the excavated clay to be weathered prior to blending. This requires the creation of stockpiles, often within the quarry, and can involve the blending of material from other sites e.g. other clays and sands.

**Cement minerals**

3.7 The characteristics of limestone quarrying for cement manufacture are similar to the quarrying of crushed rock for aggregates described in chapter 2.

**Anhydrite / gypsum**

3.8 As the anhydrite is associated with underground mining, minimising impacts on the surface are the main considerations, e.g. the potential impacts from subsidence and underground blasting.

When are Staffordshire’s industrial minerals likely to be developed?

3.9 National policy requires that stocks of permitted reserves are provided to support investment in new and existing plant that utilise industrial minerals.11

**Brick Clays**

3.10 Permissions were granted in 2012 and 2013 at Knutton and Keele Quarries to secure sufficient reserves to maintain supplies for more than 25 years at the Keele, Chesterton and Parkhouse works. The brick works at Cannock is supplied from Redhurst Quarry at Essington and has sufficient reserves for the next 25 years. Wilnecote Brickworks at Tamworth is the only works in the county where there is a clay supply of less than 15 years. Currently, there is an undetermined application which would add an additional 2 years of supply for the works and the site operator has indicated that additional resources could be investigated for development to the south east of the quarry’s boundary but at this stage there is insufficient information about this resource area to justify its allocation for future working.

3.11 Clay from the Etruria Formation is also used at works outside Staffordshire and it is known that clay from quarries in south Staffordshire (with long term permissions) is used to supply works in Telford, Walsall and Warwickshire and this is likely to continue during the Plan period. At this stage, there is no need for planned provision for works outside the county and we liaise with the neighbouring planning authorities in Stoke-on-Trent, Telford, Walsall and Warwickshire to monitor cross border requirements for clay.

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11 Refer to paragraph 146 of the NPPF.
3.12 National policy requires that a stock of permitted reserves of 25 years is provided for each works using brick clay and our assessment of the requirements of the local works in Staffordshire indicates that there are sufficient reserves except in relation to the Wilnecote works as explained above. Where recent permissions have been granted for clay reserves, permissions have been granted subject to obligations that secure the use of clays to support the manufacture of clay products at local works. The Plan does not include allocations for additional reserves of brick clay.

3.13 Due to the location of outcrops of the Etruria Formation on the urban periphery of Newcastle under Lyme, Cheslyn Hay and Tamworth, and the relative scarcity of the resource, there is a need to safeguard clays from sterilisation caused by built development. In addition national policy encourages stockpiling so that important minerals remain available for use, for example, where clays may be extracted ancillary to the extraction of coal.\textsuperscript{12}

3.14 As with aggregate minerals, there is a continuing requirement to ensure that the impacts of quarrying are minimised and an important opportunity that affects long term permissions such as those regulating the development of clay workings is provided under the Environment Act 1995 to review mineral planning permissions. Reviews should include assessment of restoration and aftercare proposals particularly where backfill with waste material is required.

\textit{Cement minerals}

3.15 For Cauldon cement works, national policy requires that a stock of reserves (or landbank) sufficient for at least 15 years production is maintained\textsuperscript{13}. There are sufficient permitted reserves of limestone and shale to meet the requirements of the works up to 2030. However, Lafarge Tarmac has indicated that there could be an issue with the quality of the permitted shale reserves and a need to find alternative resources before the end of the Plan period to maintain a 15 year landbank. An area of search was allocated in the old Plan which has been only partly developed following a planning permission issued in 2006. Additional resources could be extracted from within this allocated area.

3.16 On the basis that the mineral from Fauld Mine supports manufacturing at several cement works in the UK, a 15 year landbank has been used to plan for the mine’s future. There are reserves to maintain current production at the mine permitted until 2028 but additional resources will need to be identified towards the end of the Plan period to maintain the mine’s landbank. Resources are available within an unimplemented part of an area of search allocated in the old Plan but in view of increasing knowledge of the resource in and around Newchurch there will be a need to review this area during the Plan period.

3.17 All of these sites have long term planning permissions and so there will be opportunity to periodically review working and restoration. We will review planning conditions to ensure that sites continue to operate to high environmental standards.

\textsuperscript{12} Refer to second bullet point of paragraph 146 of the NPPF.

\textsuperscript{13} Refer to third bullet point of paragraph 146 of the NPPF.
and review the restoration requirements. For example, many of the older planning permissions for the clay quarries currently rely on waste to backfill the site\textsuperscript{14}. 

\textsuperscript{14} Refer to paragraph 5.27 of the Staffordshire and Stoke-on-Trent Joint Waste Local Plan 2010 - 2026
Chapter 4: Hydrocarbons

Where do hydrocarbons occur in Staffordshire?

4.1 Historically, energy was derived from the Staffordshire coal resource but recent interest in energy minerals relates to developing hydrocarbon resources and in particular, gas. There are three potential sources of gas in Staffordshire.

4.2 Conventional gas: This is a term that relates to gas trapped in geological structures and reservoir rocks. Currently, a site at Three Nooks Farm, Horton near Biddulph is being appraised and there is permission to produce electricity from the gas if a viable gas supply is found15.

4.3 Coal Mine Methane (CMM) or Abandoned Mine Methane (AMM) refers to draining methane gas from active or disused underground coal mine workings. In Staffordshire, a site near Barlaston in Stafford Borough is used for generating electricity from methane derived from abandoned mine workings associated with Florence Colliery (in Stoke-on-Trent) that has now closed16.

4.4 Coal Bed Methane (CBM) is contained within unworked coal seams and its extraction is feasible at depths of 200 – 1500m. There has been recent interest in CBM at sites across Staffordshire but mainly in relation to the resource associated with the North Staffordshire coalfield. Several permissions granted for exploration and appraisal, however, have not been implemented but there are valid permissions for further exploration on sites at Keele University and Stafford.

4.5 Hydrocarbon extraction can only take place in areas where the Department of Energy and Climate Change have issued a licence under the Petroleum Act 1998. The current extent of Petroleum Licence Areas in Staffordshire is shown on figure 3 with an indication of the extent of the coal resource suitable for CBM development. The locations of current permitted gas production sites are also shown and details of recent applications for exploration, appraisal and production of hydrocarbons are available on the County Council’s website17.

4.6 With regard to current national interest in the development of gas resources associated with shale rocks, a recent study18 by the BGS included the northern part of Staffordshire within that study. Given that knowledge about the shale resource is limited and that there is a need for more exploration to understand the extent and viability of the gas resource within impermeable shales, the study indicates that other parts of England are likely to be of more immediate interest for development than resources found in Staffordshire.

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15 Refer to permission SM.12/06/161 M
16 Refer to permission S.06/25/401 M
17 Refer to “Summary of recent Coal Bed Methane (CBM), Coal Mine Methane (CMM) and natural Gas sites in Staffordshire”
18 Bowland Shale Gas Study (2013) – British Geological Survey
4.7 Figure 3: ‘Extent of hydrocarbon resources in Staffordshire 2013’ shows the coal resource area, the gas exploration licence areas and the location of the permitted sites for gas production.

**How are Staffordshire’s hydrocarbons likely to be developed?**

4.8 National planning guidance explains the phases of development for onshore hydrocarbon resources which relate to exploration, appraisal and then production of the resource. 19 The different stages involve varying levels of activity at the surface which will include use of rigs to drill the well bore and if a viable resource is found, a production site may require occupation of the land for up to 20 years. Ancillary infrastructure may also be installed to generate electricity or pipelines installed to transport the gas away from the production site.

4.9 In relation to the development of gas resources and in particular shale gas, much attention has been focussed on a process known as hydraulic fracturing, commonly known as “fracking”, which is a technique used to open up fractures within rock to release trapped gas or oil. In the fracturing process, water is pumped under extremely high pressure into a borehole and the water is usually mixed with sand to keep the fractures open (and the oil or gas flowing). Chemicals are also added (around 0.25% of the liquid used) which are required for various purposes, including providing lubrication and purification. There are no current proposals to use hydraulic fracturing techniques in Staffordshire but this technique would be used to improve gas recovery from the exploitation of coal bed methane.

**When are Staffordshire's hydrocarbons likely to be developed?**

4.10 National guidance indicates the need for further exploratory drilling to establish whether unconventional hydrocarbons (e.g. CBM and shale gas) are a viable national energy resource. 20 Over the Plan period, there is anticipated to be further drilling activity to confirm the extent and viability of the gas resource in Staffordshire but it is not possible at this stage to identify potential production sites. For the early stages of developing unconventional hydrocarbons, it is important that the Plan is able to define criteria for the appropriate location of sites used for exploration, appraisal and eventually production sites taking into account that planning applications for exploratory development should be considered on their own merits. 21 Furthermore, it has to be recognised that planning control is one of several regulatory regimes associated with the development of hydrocarbons and national guidance sets out how these regimes should work together. 22

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19 Refer to paragraphs 091 ref: ID: 27-091-201403006 to 103 ref: ID: 27-103-20140306 of the NPPG.
20 Refer to paragraph 091 ref: ID: 27-091-20140306 of the NPPG.
21 Refer to paragraph 120 ref: ID: 27-120-201403006 of the NPPG.
22 Refer to paragraphs 109 ref: ID: 27-109-20140306 to 112 ref: ID: 27-112-20140306 of the NPPG.
Figure 3: Extent of hydrocarbon resources in Staffordshire 2013
Chapter 5: Other Minerals

5.1 The previous chapters have described the three principal categories of minerals in Staffordshire. This chapter briefly describes the other minerals that are likely to be developed over the Plan period.

Where do Staffordshire’s other minerals occur?

5.2 Sandstones with a high proportion of silica have been used for glass making, ceramics, foundry use and horticulture use. The scale of production is now relatively small compared with other minerals as there is no longer any production of silica sand for industrial manufacturing following the recent cessation of quarrying at Moneystone Quarry.

5.3 Silica sand is now only produced at Hurst Quarry, north of Biddulph and the sand from this quarry is used as a horticultural product rather than as industrial sand.

5.4 Building stones are used as a traditional building material and are found widely across the county but are now only worked from four quarries in and around Hollington to the south-east of Cheadle and from a site at Horton near Biddulph.

5.5 Given the extent of permissions and the scale of quarry operations at the remaining sandstone and building stone quarries, it is considered that there is no need to make further provision for sandstones and building stones during the Plan period.

5.6 Opencast coal extraction was last carried out within the county in 2001 but there are remaining shallow coal resources that could be worked together with associated minerals such as fireclays. Options for future opencast coal production have been identified by prospective developers at three sites within the county although two of the sites are cross-border sites - Yorks Bridge near Cannock being associated with land in Walsall and the Anker West proposal near Tamworth being associated with a larger area located in Warwickshire. The third site option is referred to as Great Oak and is situated on land near Bignall End in the Borough of Newcastle under Lyme (the subject of a planning application in 2014 ref: N.14/03/2013 M).

5.7 Figure 4 shows the extent of the other minerals and the location of the sandstone and building stone sites and opencast coal site options.
Figure 4: Other minerals in Staffordshire 2013
How are Staffordshire’s other minerals likely to be developed?

5.8 Sandstones at Hurst Quarry are currently being worked under a permission that expires in 2036 and so there will be opportunities to periodically review the working and restoration during the Plan period.

5.9 Building stones are worked on an intermittent basis within five relatively small quarries, the majority of which have long term permissions. Restoration of these quarries is based on low level restoration and the placement of quarry wastes within the voids to mitigate the impact of quarry faces. There will also be an opportunity to periodically review the working and restoration of these sites during the Plan period.

5.10 Opencast coal mining is normally carried out on a large scale and involves intensive operations over a relatively short period of time. The three site options that have been proposed (two by UK Coal Surface Mines Limited and one by a landowner) do not form part of a programme to develop Staffordshire’s remaining coal resources. There is no need therefore to make specific provision for coal mining in the Plan. In the event that any of these proposals comes forward as a planning application then they will be considered having regard to the relevant Development Plan policies and the National Planning Policy Framework.

When are Staffordshire’s other minerals likely to be developed?

5.11 As there are long term permissions for the sandstone and building stone quarries there is no need to make further provision for these minerals during the Plan period.

5.12 In relation to opencast coal, the site option at Great Oak became the subject of a planning application in February 2014.

5.13 The proposal for opencast coal working at Yorks Bridge has been supported by developers interested in the fireclay potential but it is likely that the fireclay could be only recovered in association with an opencast coal development. An area of search is allocated in the Black Country Joint Core Strategy for the extraction of fireclay on land in Walsall adjacent to the Yorks Bridge site option but there is no indication that an operator is prepared to implement a proposed opencast development within the Plan period.

5.14 No indication has been given as to when the Anker West site option may be brought forward, the majority of which is in Warwickshire.

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23 Including paragraph 149 of the NPPF.
24 Refer to planning application ref. N.14/03/2013 M
25 Refer to policy MIN3 of the Black Country Core Strategy (adopted 2011) and proposal MA6 on the Minerals Key Diagram
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Chapter 6: The Vision, Strategic Objectives and Key Diagram

6.1 Based on what we know, where our mineral resources are, and how and when they are likely to be worked, we have a clear vision and strategic objectives for the Plan that underpin our planning policies in chapter 7. A key diagram illustrates the spatial elements of our vision.

The Vision

By 2030 Staffordshire will be producing minerals to support sustainable economic development from sites that are:

- located where their impact on local communities and the environment has been minimised or mitigated;
- operating to high environmental standards; and,
- later restored and subject to aftercare that enhances local amenity and the environment.

6.2 Our vision anticipates the continued provision of the economic minerals described in the previous chapters.

6.3 Our vision recognises the challenges we face to balance the need for minerals against the impact that mineral working can have on local communities and the environment.

6.4 Our vision also recognises that mineral development can present opportunities to enhance local amenity and the environment and we wish to maximise those opportunities.

The Strategic Objectives

6.5 To achieve our Vision we have identified the following strategic objectives for the Plan.
**Strategic Objective 1 – the sustainable economic development of minerals**

To support sustainable economic development, the provision of minerals shall:

- achieve an acceptable balance with the impact of mineral operations on local communities and the environment;

- so far as is practicable, take account of the contribution that substitute or secondary and recycled material can make as an alternative to primary minerals; and

- ensure that important economic mineral resources are not needlessly sterilised.

6.6 This objective is consistent with the Government’s National Planning Policy Framework which requires a sufficient supply of minerals to be maintained to support sustainable economic growth but at the same time recognises the importance of minimising the impact on local communities and the need to ensure that economically recoverable mineral resources are not needlessly sterilised.  

26 This approach is also consistent with the County Council’s Strategic Plan for growth in Staffordshire’s economy and the desired outcome for the people of Staffordshire to access good jobs and feel the benefits of economic growth.

6.7 The following examples illustrate some of the ways in which this objective has already been achieved:

- Proposals for working additional resources should be prepared by developers in liaison with the local communities taking into account their views in developing working and restoration plans. For example, Aggregate Industries carried out public consultation with the local community in 2011 prior to submitting an application for a large extension to Newbold Quarry;  

27 Refer to application reference ES.12/03/501 MW

- The recently adopted Waste Local Plan provides for additional recycling capacity of construction, demolition and excavation wastes. During the Plan period, more options should be pursued to derive aggregates from waste to supplement the supply from quarries. For example, permission was recently granted for a large scale aggregate recycling operation at the Hollybush Recycling Centre;  

28 Refer to planning permission ref: SS.08/21/619 W dated 12 September 2013

- We are working with district councils, developers and the minerals industry to ensure that economically recoverable mineral resources are not needlessly sterilised. We secured a scheme for the prior extraction of clay and a site for...
long term stockpiling before development of the Chatterley Valley premium employment site. We are also involved in discussions with East Staffordshire Borough Council regarding plans for major development on mineral bearing land to the north of Newbold Quarry.

6.8 The Government’s National Planning Policy Framework requires that planners should conserve and enhance the natural environment and establish a policy framework so that Local Planning Authorities can protect valued landscapes, prevent unacceptable levels of soil and water pollution, and halt the overall decline in biodiversity. This objective seeks to ensure that risks from pollution and other impacts are minimised by managing the development of mineral sites in appropriate locations.

6.9 By way of an example, Lafarge Tarmac have worked with us, Natural England and other key stakeholders to minimise the impact of working the limestone quarry at Cauldon on a Site of Scientific Interest and the visual impact on the nearby Peak District National Park.

6.10 The Government’s National Planning Policy Framework requires that there should be no unacceptable adverse impacts on human health and that new development is in an appropriate location. There is a need to ensure that mineral sites operate to high environmental standards in order to minimise as far as possible the concerns of those communities that are affected by proposals for quarrying and mining.
6.11 When preparing proposals for extensions to existing sites or for new sites, mineral developers will be expected to:

- assess the environmental effects of the development, including the measures to protect and enhance the natural, cultural and built environment;
- liaise with the local community at an early stage;
- design proposals so that the potential adverse impacts are mitigated – for example by:
  - screening the development to minimise the visual impact;
  - providing a safe access onto the public highway and ensure that HCV traffic follows appropriate routes;
  - phasing mineral working and restoration in order to minimise the period over which the land is in use;
  - effectively draining the land so that there is no flood risk;
  - efficiently working the mineral to minimise energy use;
  - surveying for protected species and managing their habitats;
- demonstrate how they will operate to high environmental standards – for example by:
  - monitoring their own operations to ensure compliance with the planning permission and other permits / regulations
  - maintaining close liaison with the local community;
  - maintaining and regularly updating working, restoration and aftercare schemes (this has recently been secured as part of updated Section 106 Legal Agreements at Knutton, Keele, Newbold, Wardlow/Wredon and Kevin quarries).

#### Strategic Objective 4 – restoration that enhances local amenity and the environment

To ensure that Staffordshire’s mineral sites are restored and managed in a way that enhances local amenity and the environment by:

- **Restoring mineral sites at the earliest opportunity**;
- **Achieving high quality restoration and aftercare**;
- **Contributing to national and local environmental initiatives including**:
  - measures to reduce flood risk;
  - measures to manage water supply and demand;
6.12 The Government’s National Planning Policy Framework recognises that mineral sites should be restored at the earliest opportunity to high standards; and that development, including mineral development, should contribute to national and local environmental initiatives e.g. flood mitigation; biodiversity and climate change. The duration of many mineral permissions means it is important to regularly review restoration plans / strategies so that new opportunities or new restoration techniques can be considered.

6.13 The following examples illustrate some of the ways in which this objective has already been achieved:

- At Croxden Quarry, phased working and restoration means that large parts of the site have already been restored to heathland and conservation woodland before the site’s mineral extraction has ceased. Large areas of the site are now subject to extended aftercare where a nature conservation afteruse has been established.

- In recognition of the high standards of restoration and aftercare, a number of sites in Staffordshire have received awards. For example, Alrewas Quarry was awarded the Mineral Product Association’s leading restoration award in 2009 for restoration work associated with the development of the National Memorial Arboretum. This site is one of a number of mineral sites within the Trent and Tame valleys, centred on the National Memorial Arboretum, that has been guided by a strategy developed under the umbrella of the Central Rivers Initiative (CRI). The CRI is a partnership project involving quarry operators, the County and District Councils, national and local environmental groups as well as landowners and the local communities. This joined up approach has led to the creation local ecological networks as part of proposals for “green infrastructure” that are promoted in District Local Plan policies.

- Rugeley Quarry in 2013, was the first ever winner of the Natural England Biodiversity Award, awarded by the Mineral Products Association for work in restoring 80 hectares of high quality wildlife to lowland dry heathland, complementing the adjoining Cannock Chase Special Area of Conservation.

- Middleton Lakes, near Tamworth is a RSPB reserve which was opened in 2011 and is created from the restoration of a former sand and gravel quarry along the River Tame. The site received a restoration award in 2005 and is now regionally important for overwintering wildfowl. The former workings included widening and braiding the river along a 1km section and as well as providing biodiversity benefits the works along the river will assist in managing flood waters.

34 Refer to paragraphs 9, 100, 109 and 143 of the NPPF.
At Knutton Quarry, the permission runs to 2042 and so a regular review of the restoration strategy was secured using a legal agreement. The quarry liaison committee will be actively involved in the review process. Other similar examples include the recent permissions at Keele Quarry, Kevin Quarry, Wardlow/Wredon Quarry and the extension to Newbold Quarry.

### Key Diagram

6.14 Our key diagram illustrates the broad locations for the following strategic developments:

- the mineral sites that will continue to produce mineral during the plan period;
- the proposed extensions to sand and gravel sites;
- the proposed area of search for a new sand and gravel site(s);
- the proposed areas of search for extensions to shale and anhydrite sites; and,
- the areas currently licenced by DECC for exploration and development of potential gas resources.

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35 Refer to permission N.05/20/214 M
36 Refer to paragraph 157 of the NPPF.
37 This relates to all mineral sites with permitted reserves except those sites that are classified as statutorily dormant. Refer to our Local Aggregate Assessment for details of dormant sand and gravel sites.
Figure 5: The Key Diagram
Chapter 7: The Planning Policies

7.1 The Planning Policies in this Chapter underpin our Vision and Strategic Objectives described in Chapter 6 and will be used to help in determining planning applications for mineral development.

7.2 It is important to have in mind the following points when reading the policies:

- The policies are not listed in any order of priority;
- The policies should not be read in isolation;
- Where a policy contains a list of criteria, the criteria are not in any order of importance or priority, unless the policy specifically says so;
- New development will be assessed against all relevant policies in the Minerals Local Plan and in the context of any other relevant development plan policies and material considerations;
- The Government’s National Planning Policy Framework is a material consideration but is not repeated here. The Framework constitutes the Government’s view of what sustainable development means in practice for the planning system and central to the Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan making and decision taking\textsuperscript{38}.

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Policy 1: Provision for Sand and Gravel

Extensions to sand and gravel sites

1.1 During the Plan period provision will be made to maintain permitted reserves of up to 5.4 million tonnes of sand and gravel per annum. This will be achieved initially from existing permitted reserves and by granting planning permissions to extend the following sand and gravel sites:

a) Alrewas
b) Barton
c) Calf Heath (Four Ashes)
d) Captains Barn Farm
e) Cranebrook
f) Croxden
g) Hints / Hopwas

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\textsuperscript{38} Refer to paragraph 14 of the NPPF
Policy 1: Provision for Sand and Gravel (continued)

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<td>k) Weeford (Moneymore)</td>
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(The allocated extension sites listed above are shown on the Proposals Map and accompanying Inset Maps.)

1.2 Any proposals to develop the allocated extension sites will only be supported where it has been demonstrated that they accord with the plan policies, including Policy 4.

1.3 Planning permission to extend a site will normally be conditioned so that the extension area can only be worked following cessation of mineral working within the existing site unless it has been demonstrated that there are operational reasons why this is not practicable.

Proposals for new sand and gravel sites within the area of search

1.4 Proposals for new sites within the area of search to west of the A38 shown on the Proposals Map will only be supported where it has been demonstrated that permitted reserves or allocated extensions to existing sites listed above would not meet the required level of provision stated in paragraph 1.1.

1.5 Any proposals to develop new sites within the area of search to the west of the A38 will only be supported where it has been demonstrated that they accord with the plan policies, including Policy 4.

Proposals for any other sand and gravel sites

1.6 Proposals for any other sand and gravel sites will only be supported where it has been demonstrated that:

a) the permitted reserves, the allocated extensions to existing sites listed above or mineral resources from within the area of search would not meet the required level of provision stated in paragraph 1.1; or,

b) the proposals would secure significant material planning benefits that outweigh any material planning objections
The new Minerals Local Plan for Staffordshire (2015 to 2030)

Draft for consultation – May 2014

Reasons for the Policy

7.3 Chapter 2 described the ‘where’, ‘how’ and ‘when’ for the development of Staffordshire’s aggregate minerals, including the type of aggregate minerals; the distribution of aggregate sites and pattern of supply; the opportunities for co-ordinated restoration of sites; issues with the availability of backfill to restore sites and the effect on timely restoration; the scale of provision of aggregate minerals and the need to meet a shortfall of sand and gravel reserves; and the review of the strategy for identifying additional resources.

7.4 Our Vision and Strategic Objective 1, recognise the importance of aggregate minerals to support sustainable economic development taking into account the need to achieve an acceptable balance with the impact of mineral operations on local communities and the environment.

7.5 Policy 1 aims to achieve this acceptable balance by setting an appropriate level of provision for sand and gravel over the next 15 years and identifying suitable areas for sand and gravel working to meet the anticipated shortfall.

The Level of Provision

7.6 Policy 1.1 provides for 5.4 million tonnes per annum of sand and gravel to be produced over the Plan period. This is the ten years sales average figure for the period 2002 - 2011 as explained in our Local Aggregate Assessment 2013. This average figure has evened out the very high and very low production that the minerals industry has experienced over the 10 year period and is similar to the 5.6 million tonnes per annum that the former West Midlands Regional Assembly set, which was based on an apportionment of the current Government guideline for the West Midlands.39

7.7 We are satisfied that this level of provision will achieve an acceptable balance between the sustainable economic development of sand and gravel and the impacts of sand and gravel working on local communities and the environment (ref. Strategic Objective 1)

7.8 Based on the most recent published survey figures40, to maintain provision of 5.4 million tonnes per annum, it is anticipated that an additional 31 million tonnes of reserves will be required during the Plan period and we are confident that this level of provision is deliverable from the allocated extensions and area of search which were put forward by mineral operators and have been subject to our Sustainability Appraisal.

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39 Refer to Interim Policy Statement for Construction Aggregates (2010) and paragraph 145, 4th bullet point of the NPPF
40 West Midlands Aggregate Working Party Survey 2012
The extensions and area of search

7.9 As explained in Chapter 2, there is no reason to indicate that the existing pattern of supply and demand for sand and gravel will change in Staffordshire over the next 15 years and there is no reason to change the strategy in our old Plan that favoured extensions to existing sites until 2025, when a new site(s) would be needed. The extension sites and area of search to the west of the A38 will maintain the pattern of supply.

7.10 We have identified potential constraints and opportunities that should be taken into account when developing proposals for the allocated extensions or within the area of search. These potential constraints and opportunities are set out alongside the relevant Inset Maps.

Proposals for any other sand and gravel sites

7.11 Policy 1 takes a sequential approach whereby the provision should first be met from the allocated extensions, then from the area of search and thereafter from other sites. However as with the old Plan (Policy 38), the new Plan anticipates that there may be circumstances when sites not allocated in the Plan will be permitted to secure significant material planning benefits that outweigh any material planning objections. The material planning benefits could include proposals that:

a) secure significant benefits from co-ordinated and comprehensive working and restoration;

b) relinquish permitted reserves in more sensitive areas;

c) demonstrate a particular need for the sand and gravel that cannot reasonably be met from elsewhere;

d) work the sand and gravel prior to other development taking place; and,

e) are required as part of a major infrastructure project.

Delivery and Monitoring of the Policy

7.12 Delivery will require the timely submission of planning applications for extensions and new sand and gravel sites that accord with the Development Plan and their implementation. It will be necessary to continue to monitor the sales of sand and gravel and the amount of permitted reserves through the annual Local Aggregate Assessment in order to determine when it will be necessary to review and update the Plan.
Reasons for the Policy

7.13 Chapter 3 described the ‘where’, ‘how’ and ‘when’ for the development of Staffordshire’s industrial minerals, including the type of industrial minerals that will be worked over the next 15 years; the location of sites and where the minerals are used in local manufacturing; the need for additional shale and anhydrite / gypsum resources to be identified; the need for safeguarding resources from non-mineral development; and opportunities to improve standards of operation through review of working and restoration proposals.

7.14 Our Vision and Strategic Objective 1, recognise the importance of industrial minerals to support sustainable economic development taking into account the need to achieve an acceptable balance with the impact of mineral operations on local communities and the environment.

7.15 Policy 2 aims to achieve this balance for industrial minerals used in the manufacture of cement where there is a need to meet a potential shortfall of shale and anhydrite / gypsum over the Plan period.
7.16 The NPPF defines either 15 or 25 year landbanks for industrial minerals used in the manufacture of cement.\footnote{Refer to paragraph 146 of the NPPF.}

**Cauldon Cement Works**

7.17 There is a sufficient permitted reserve of limestone based on maintaining a 15 years landbank\footnote{Refer to report to Planning Committee dated 2 August 2012 for submission of details relating to a revised working scheme at limestone quarry at Cauldon Cement Works (ref: IDO/SM/9/111 MW D3)} (refer to appendices) but towards the end of the Plan period there is anticipated to be an issue in securing additional shale resources to provide a sufficient landbank beyond 2030 particularly if existing permitted reserves are adversely affected by their sulphur content). In the old Plan, as explained in chapter 3, a 15 year landbank was provided and an area of search at New House Farm was allocated. No reasons have been put forward to change our approach to the level of provision or to allocating what remains of the area of search having already granted planning permission for part of the allocation in 2006.\footnote{Refer to planning permission SM.04/06/111 M dated 26 May 2006}

**Fauld Mine**

7.18 On the basis that the mine is producing anhydrite and gypsum for cement manufacture, provision for the mine will continue to be assessed on the basis of a 15 years landbank. Reserves are permitted up to 2028 so that towards the end of the Plan period there is likely to be a requirement to identify additional anhydrite resources to maintain the mine’s production. Again, no reasons have been put forward to change our approach to the level of provision or to allocating what remains of the area of search having already granted planning permission for part of the allocation in 2010.\footnote{Refer to planning permission to extract 6 million tonnes of gypsum and anhydrite from beneath land in the vicinity of Newchurch and Hoar Cross (ES.10/04/504 M)}

**New House Farm Area of Search**

7.19 The old Plan identified an area of search at New House Farm for shale resources and a planning permission was subsequently granted to work the shale from within that area.\footnote{Refer to Proposal 4 – Cauldon Shale Quarry (New House Farm) - Inset Map 11 of the old MLP.} Policy 2 and Inset Map 13 identifies the remaining part of this allocation.

**Newchurch Area of Search**

7.20 The old Plan identified an area of search at Newchurch and a planning permission was subsequently granted to work the mineral from within that area but this has only been partly implemented.\footnote{Refer to Proposal 1 – Fauld Mine (Newchurch) – Inset Map 5 of the old MLP.} Policy 2 and Inset Map 14 identify the remaining part of this allocation.

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7.21 We have identified potential constraints and opportunities that should be taken into account when developing proposals within the areas of search. The potential constraints and opportunities are set out alongside Inset Maps 13 and 14.

**Delivery and Monitoring of the Policy**

7.22 Delivery will require the timely submission of planning applications for sites that accord with the Development Plan and their implementation. It will be necessary to continue to monitor production and the amount of permitted reserves in order to determine when it will be necessary to review and update the Plan.

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**Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure**

**Safeguarding mineral resources**

3.1 During the Plan period the following mineral resources, within the Mineral Safeguarding Areas shown on the Proposals Map, will be safeguarded against needless sterilisation by non-mineral development:

   a) Sand and gravel  
   b) Limestone  
   c) Cement shale  
   d) Etruria Formation clays  
   e) Anhydrite and gypsum  
   f) Hollington Formation building stones  
   g) Silica sand associated with the Rough Rock Formation  
   h) Shallow coal with associated fireclays

3.2 Within a Mineral Safeguarding Area, non-mineral development should not be permitted to go ahead until the prospective developer has produced evidence prior to determination of the planning application to demonstrate:

   a) the existence, the quantity and the quality of the underlying or adjacent mineral resource; and  
   b) that proposals for non-mineral development in the vicinity of permitted mineral sites or mineral site allocations would not unduly restrict the mineral operations.

3.3 Within a Mineral Safeguarding Area, where important mineral resources do exist, non-mineral development should not be permitted to go ahead unless it has been demonstrated that:

   a) the non–mineral development is temporary and does not permanently sterilise the mineral; or,
Policy 3: Safeguarding Minerals of Local and National Importance and Important Infrastructure (continued)

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<td><strong>c)</strong> it is not practicable or environmentally acceptable in the foreseeable future to extract the mineral.</td>
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3.4 Within a Mineral Safeguarding Area, where important minerals do exist and the above criteria have not been met, the non-mineral development should not be permitted to go ahead until the mineral has been extracted.

**Safeguarding important mineral infrastructure sites**

3.5 Where there are mineral infrastructure sites used for mineral processing, handling, and transportation, non-mineral development should not be permitted to go ahead unless it has been demonstrated that:

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<td><strong>a)</strong> the non-mineral development would not unduly restrict the use of the mineral infrastructure site; or</td>
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<td><strong>b)</strong> the material planning benefits of the non-mineral development would outweigh the material planning benefits of the mineral infrastructure site; or,</td>
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<td><strong>c)</strong> the mineral infrastructure can be relocated; or</td>
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<td><strong>d)</strong> alternative capacity can be provided elsewhere.</td>
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**Reasons for the Policy**

7.23 National policy requires that mineral safeguarding areas are designated which “cover known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development”\(^{47}\) and also requires local planning authorities to safeguard mineral infrastructure used for processing, handling and transporting minerals.\(^ {48}\) In accordance with our Vision and Strategic Objective 1, Policy 3 aims to achieve an acceptable balance between non-mineral development and safeguarding Staffordshire’s important minerals and mineral infrastructure sites.

7.24 Policy 3 aims to safeguard a range of mineral resources that are considered to be of economic importance within the foreseeable future, taking into account our old mineral consultation mapping and the review of mineral resources in the county.
Policy 3 also aims to safeguard mineral infrastructure sites, used for mineral processing, handling, and transportation, from non-mineral development which would unduly restrict the use of those sites. A list of the existing mineral infrastructure sites is provided in an appendix to our Local Aggregate Assessment which is updated annually.

7.25 Policy 3 also sets out the requirements for developers, the eight District Planning Authorities and ourselves when assessing proposals for non-mineral development within a MSA or in the vicinity of mineral infrastructure sites. It is expected that developers and the District Planning Authorities will consult us in such circumstances subject to certain planning applications being exempt from this policy, for example, where applications are for alterations and extensions to existing buildings.

**Delivery and Monitoring of the Policy**

7.26 This policy relies on the District Planning Authorities consulting with us as the Mineral Planning Authority when dealing with proposals within an MSA or in the vicinity of mineral infrastructure sites.

7.27 It will also be important that we as the Mineral Planning Authority keep the MSAs and list of mineral infrastructure sites up to date in order to avoid imposing unnecessary constraints upon non-mineral development.

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**Policy 4: Minimising the impact of mineral development**

**The environmental criteria**

4.1 In assessing the impact of proposals for mineral development on people, local communities and the environment, the following potential impacts will be considered, where relevant:

   a) Noise;
   
   b) Air, including dust and fumes;
   
   c) Visual intrusion, including light pollution;
   
   d) Vibration from blasting operations;
   
   e) Traffic on the highway network;
   
   f) Public rights of way and public open space;
   
   g) Green Belt;

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50 Refer to paragraph 5.2.7 of “Mineral Safeguarding in England: good practice advice”(2011) BGS
Policy 4: Minimising the impact of mineral development (continued)

h) The countryside;

i) Landscape, having regard to the relative importance of the Cannock Chase Area of Outstanding Natural Beauty, the Peak District National Park and any locally designated areas, and having regard to the local landscape character assessment;

j) Natural environment, including sites, habitats and species of importance for biodiversity and geodiversity, having regard to the relative importance of international, national and locally designated sites, national and local Biodiversity Action Plans, ecological networks and green infrastructure;

k) Historic environment, having regard to the relative importance of designated and non-designated heritage assets, including historic landscape character;

l) Agricultural land, including soil resources;

m) Stability of land, including tips, quarry slopes, backfilled land and mining subsidence;

n) Flood risk, surface and ground water pollution and water abstraction;

o) Land contamination; and,

p) Cumulative effects resulting from multiple impacts, including those listed above, or from the effects of a series of sites in a locality.

4.2 In assessing proposals for mineral development, appropriate, adequate, or as a last resort, compensatory mitigation measures to overcome or minimise the adverse impacts of the development will be taken into account.

4.3 Having assessed the impacts of the proposals for mineral development, and the mitigation measures, permission will be granted where it has been demonstrated that there are no unacceptable adverse impacts on human health, general amenity and the natural and historic environment, except where the material planning benefits of the proposals outweigh the material planning objections.

Liaison with the local communities

4.4 Mineral operators will be encouraged to liaise with local communities when preparing new proposals and throughout the period of working and restoration of mineral sites.
Policy 4: Minimising the impact of mineral development (continued)

Higher environmental standards

4.5 Mineral operators will be encouraged to introduce higher environmental standards during working, restoration and aftercare when preparing new proposals, or as part of a formal periodic review of an existing planning permission(s).

Ancillary development

4.6 Proposals for ancillary development within or near to a mineral site will be assessed in accordance with this policy and where planning permission is granted, it will be limited to the duration of the mineral site.

Reasons for the Policy

7.28 Policy 4 contributes to that part of the Vision that envisages that all mineral operations are operating to high environmental standards and in accordance with Strategic Objective 3 operations are carried out either to prevent or reduce as far as possible adverse impacts. Mineral development (including the winning and working of minerals and the restoration and aftercare of sites) will have adverse impacts on the environment, some of which may be long term, but these impacts can be mitigated through careful location and management of site operations.

The environmental criteria

7.29 In accordance with national policy, Policy 4 sets out environmental criteria to assess the impacts associated with mineral development on people, local communities and the natural and historic environment when determining planning applications. The assessment involves considering the relevant impacts of the proposals and then assessing whether any adverse impacts can be mitigated. The standards to be applied in assessing impacts and the effectiveness of mitigation measures are based on national guidance and best practice which will be reviewed in a supplementary planning document to be produced to support the implementation of this policy and will replace the Code of Practice that supported our old Plan. In assessing the impacts listed under this policy, the following matters should be taken into consideration.

7.30 **Noise:** National guidance indicates that in support of mineral development proposals a noise impact assessment should be carried out which should include proposals for noise mitigation. Where permission can be granted there will be a need to establish noise limits at noise sensitive properties and the guidance also indicates

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51 Accepting that it is not the role of the planning system to assess the control of processes where these are subject to approval under pollution control regimes.

52 “Code of Practice for Mineral Development - Supplementary Planning Guidance to the Minerals Local Plan”

53 Refer to paragraphs 019 ref: ID 27-019-20140306 to 022 ref: ID: 27-022-201403006 of the NPPG.
limits for short term noisy activities such as soil stripping. National policy also requires that areas of tranquillity should be protected from adverse noise impacts.\textsuperscript{54}

7.31 Dust: National guidance sets out the key stages for dust assessment including fine particulates (PM\textsubscript{10}).\textsuperscript{55} Particular attention to air quality management will be required where proposals affect an Air Quality Management Area (AQMA).

7.32 Blast Vibration: Where blasting is necessary, an assessment will be required of associated ground vibration and whether acceptable limits for vibration can be achieved.\textsuperscript{56}

7.33 Visual intrusion: National guidance suggests that a landscape strategy should accompany applications for mineral development which would include proposals for visual screening and for the sensitive layout of the site.\textsuperscript{57} National policy also requires good design to limit the impact of light pollution.\textsuperscript{58}

7.34 Traffic: National policy requires that any development that generates significant traffic movements should be accompanied by a Transport Assessment (TA) or Transport Statement and national guidance sets out the details required in a TA.\textsuperscript{59} Proposals should also take into account local guidance on traffic impacts provided by the County Council.\textsuperscript{60}

7.35 Public rights of way and open space: National policy requires that public rights of way should be protected and enhanced and existing open space should not be built upon.\textsuperscript{61} There may be a requirement to seek an Order to divert or extinguish a right of way to enable mineral operations to take place but in mitigation there may be opportunities to enhance public rights of way as well as to reinstate open space.

7.36 Green Belt: National policy requires the protection of Green Belt but recognises that mineral extraction need not be inappropriate in the Green Belt provided that the mineral extraction preserves the openness of the Green Belt and does not conflict with the purposes of including land in the Green Belt.\textsuperscript{62}

7.37 The countryside: National policy recognises the importance of the intrinsic character and beauty of the countryside\textsuperscript{63} and so there will be a need to assess proposals in terms of the overall impact on landscape, the natural and historic environment, and rural communities.

\textsuperscript{54} Refer to paragraph 123 of the NPPF.
\textsuperscript{55} Refer to paragraphs 023 ref: ID: 27-023-20140306 to 032 ref: ID: 27-032-20140306 of the NPPG.
\textsuperscript{56} Refer to former guidance in Annex M to MPG14.
\textsuperscript{57} Refer to paragraph 059 ref: ID: 27-059-20140306 of the NPPG.
\textsuperscript{58} Refer to paragraph 125 of the NPPF.
\textsuperscript{59} Refer to paragraphs 013 ref: ID: 42-013-20140306 to 015 ref: ID: 42-015-20140306 of the NPPG.
\textsuperscript{60} Refer to Guidelines for Transport Assessments and Travel Plans required by Staffordshire County Council for Private Development Proposals - January 2008; and Code of Practice for the Assessment of the Impact and Determination of Mitigation Measures arising from HCV generated from Mineral and Waste Developments.
\textsuperscript{61} Refer to paragraphs 74 and 75 of the NPPF
\textsuperscript{62} Refer to paragraph 90 of the NPPF.
\textsuperscript{63} Refer to paragraph 17 of the NPPF.
7.38 **Landscape:** National policy recognises the importance of protecting and enhancing valued landscapes. Staffordshire County Council has produced a county-wide landscape character assessment which should be taken into account by developers to ensure that minerals development proposals are informed by and be sympathetic to landscape character and quality.

7.39 **Natural environment, including sites, habitats and species of importance for biodiversity and geodiversity:** National policy recognises the importance of minimising the impacts on biodiversity, providing net gains in biodiversity, protecting geological conservation interests and requires a distinction to be made between the relative importance of designated sites. Developers will need to demonstrate that they have carried out ecological surveys (including protected species surveys where appropriate) or geological surveys to enable a proper assessment of the potential impact on biodiversity or geodiversity to be carried out. Where necessary, developers will also need to show how they propose to protect, mitigate and/or enhance the biodiversity or geodiversity interest.

7.40 **Historic environment:** National policy recognises the importance of minimising the impacts on designated or non-designated heritage asset and requires a distinction to be made between the relative significance of the heritage assets. Policy 4 requires developers to provide an appropriate level of assessment, evaluation, mitigation and where warranted, interpretation and enhancement.

7.41 **Agricultural land:** National policy requires that the long-term potential of best and most versatile agricultural land should be safeguarded in the restoration of mineral workings. National guidance indicates that the handling and storage of soils is a key aspect of a restoration strategy.

7.42 **Stability of land:** National guidance is provided in relation to slope stability and although quarry ground stability is subject to separate regulation, it is important to ensure that restoration proposals incorporate appropriate assurances of the stability of final landform. In relation to underground mining, proper assessment should be provided to understand the impact of mining and the effect of any ground subsidence.

7.43 **Water environment:** In relation to flood risk, national policy and guidance sets out the requirements for assessing flood risk setting out a sequential, risk-based approach to the location of development. In most cases, a site specific flood risk assessment will be required for mineral proposals. In relation to avoiding pollution and over abstraction, hydrological and hydrogeological assessment would be required which could involve carrying out ground or surface water monitoring.

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64 Refer to paragraphs 109 and 115 of the NPPF.
65 Refer to paragraphs 109 and 113 of the NPPF.
66 Refer to paragraph 118 of the NPPF and paragraph 018 of the NPPG.
67 Refer to paragraph 132 of the NPPF.
68 Refer to “Mineral Extraction and Archaeology: A Practice Guide – English Heritage
69 Refer to paragraphs 025 ref: ID: 8-025-20140306 and 038 ref: ID: 27-038-20140306 of the NPPG
70 Refer to paragraph 033 ref: ID: 27-033-20140306 of the NPPG
71 Refer to section 10 of the NPPF.
7.44 **Land contamination:** National policy indicates that where a site is affected by contamination responsibility for securing a safe development rests with the developer and/or landowner. Where there is a risk of land contamination adequate site investigation information, prepared by a competent person, should be presented.  

7.45 **Cumulative effects:** National policy recognises that it is important to take account of the cumulative effects of mineral development. When assessing proposals account will be taken of the combined impacts of the development and the impacts of concurrent and / or consecutive working in an area.

* Liaison with the local communities*

7.46 In 2012 there were 16 site liaison committees in Staffordshire which provide a forum for site issues to be discussed. National policy encourages pre-application discussion and proactive working. Policy 4 aims to encourage mineral operators to establish and maintain good liaison with local communities.

* Higher environmental standards*

7.47 For longer term permissions, there is an opportunity to review planning permissions every 15 years under the Environment Act 1995 but having carried out reviews of all operational mineral sites subject to old mineral permissions, recent legislation now provides an opportunity for the Mineral Planning Authority to define appropriate timescales for these subsequent periodic reviews subject to those reviews not being undertaken more frequently than every 15 years. This provides an opportunity to defer reviews where existing planning controls are effective in managing adverse impacts. Alternatively, the policy also encourages proposals where environmental improvements can be secured by consolidating existing mineral permissions and by co-ordinating working and restoration; or by developing proposals to work mineral resources in less sensitive areas and relinquishing permitted reserves in more sensitive areas.

* Ancillary development*

7.48 In addition to processing planning applications for the winning and working of minerals, the Mineral Planning Authority will also determine planning applications for ancillary development at or near to a mineral site. Policy 4 requires that ancillary development should be limited to the duration of the mineral site and that the impacts of proposed development will be assessed in accordance with Policy 4.

* Delivery and Monitoring of the Policy*

7.49 Delivery will require developers to prepare proposals that have carefully considered the environmental effects of the development; be willing to establish good liaison with

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72 Refer to paragraph 121 of the NPPF.
73 Refer to paragraph 120 of the NPPF
74 Refer to report to Planning Committee July 2012 relating to Delegated Decisions – Period April 2011 to March 2012.
75 Refer to paragraphs 187 to 189 of the NPPF.
76 Growth and Infrastructure Act 2013
the local community; and, be willing to consider opportunities to review their operations in order to raise environmental standards. It will also require consultees to advise us on the potential effects and mitigation measures, and require us to impose effective controls on the development.

7.50 It will be important to monitor government policy and guidance, together with best practice advice to ensure that the environmental criteria remain up to date and are effectively implemented.

**Policy 5: Planning for Hydrocarbon Extraction**

*Exploration and appraisal*

5.1 Proposals for the exploration and appraisal of hydrocarbons will only be supported where it has been demonstrated that they accord with the plan policies, including Policy 4.

5.2 Where proposals for exploration and appraisal are permitted, there will be no presumption that long term production from those wells will be permitted.

*Production*

5.3 Proposals for the production of hydrocarbons will only be supported where it has been demonstrated that the further works and the surface facilities required to manage the output from the well(s), including facilities for the utilisation of energy, where relevant, accord with the plan policies, including Policy 4.

*Overall assessment*

5.4 Having assessed the impacts of the proposals for the exploration, appraisal and production of hydrocarbons, permission will only be granted where it has been demonstrated that there are no unacceptable adverse impacts on human health, general amenity and the natural and historic environment, except where the material planning benefits of the proposals outweigh the material planning objections.
Reasons for the Policy

7.51 Chapter 4 described the ‘where’, ‘how’ and ‘when’ for the development of Staffordshire’s hydrocarbons, including the type of hydrocarbons, the current sites and licensed areas, the staged nature of development, the various regulatory regimes that control development and the lack of current knowledge about the potential of the resource.

7.52 Our Vision and Strategic Objectives 2 and 3 support the sustainable economic development of hydrocarbons in locations where the impacts have been minimised or mitigated and sites are operating to high environmental standards.

7.53 National policy and guidance requires us to make a clear distinction between the three phases of development (exploration, appraisal and production) and national guidance supports the identification of criteria to assist with the location and assessment of well sites within areas licensed for hydrocarbon development.

7.54 Policy 5 sets out how we would assess proposals at these three distinct stages within the licensed areas.

Delivery and Monitoring of the Policy

7.55 Delivery will require developers to prepare proposals that distinguish between the three phases of the development of hydrocarbons to allow the environmental effects to be carefully considered at the appropriate stage.

7.56 It will be important to monitor government policy and guidance, knowledge about the resource, best practice advice and experience in order to ensure that this Policy continues to be the appropriate way to handle proposals for the development of Staffordshire’s hydrocarbons.

Policy 6: Restoration of Mineral Sites

Restoration requirements

6.1 Proposals for the restoration of mineral sites will only be supported where it has been demonstrated that they accord with the plan policies, including Policy 4.

6.2 Proposals for the restoration of mineral sites, including the review of restoration strategies/ plans will only be supported where it has been demonstrated that the proposals are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales and that:

77 Refer to paragraph 147 of the NPPF and ID: 27-091-20140306 to 27-103-20140306 of the NPPG.
78 Refer to paragraph ID: 27-106-20140306 of the NPPG.
Policy 6: Restoration of Mineral Sites (continued)

| a) | the land affected at any one time would be minimised by including phased working and restoration; |
| b) | the amount of imported backfill would be the minimum necessary to achieve the satisfactory restoration of the site; |
| c) | sufficient backfill materials would be available to restore the site within an acceptable timescale; |
| d) | the long term potential of best and most versatile agricultural land would be safeguarded and the soil resources would be conserved; |
| e) | the flood risk would not be increased and opportunities to reduce flooding would be maximised; |
| f) | net gains in biodiversity would be achieved through ecosystem services and by contributing to the delivery of local objectives for ecological connectivity and green infrastructure; |
| g) | the aftercare provision would be sufficient to secure high quality and sustainable restoration of the site; and, |
| h) | opportunities to increase the provision of public access, public open space and recreational facilities would be maximised, particularly where the proposals would contribute towards development plan policies and proposals, or other local initiatives; |

**Regular review of the restoration strategies / plans**

6.3 Developers will be required to regularly review their restoration strategy / plan at least every 10 years to ensure that it is up to date having regard to Policy 6.2 above.

**Financial Guarantees**

6.4 Developers will be required to demonstrate that adequate financial provision has been made to fulfil the restoration and aftercare requirements when proposals are submitted:

| a) | for a new mineral site; or, |
| b) | to change the working, restoration and aftercare of an existing site, particularly when the proposals involve a change to the ownership or control of the site, or part thereof. |
Policy 6: Restoration of Mineral Sites (continued)

6.5 Alternatively, developers will be required to provide a Restoration Guarantee Bond or other financial guarantee to cover all or part of the restoration and aftercare costs.

Overall assessment

6.6 Having assessed the restoration proposals, permission will only be granted where it has been demonstrated that:

a) the restoration proposals are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales; and,

b) the material planning benefits of the restoration proposals outweigh the material planning objections.

Reasons for the Policy

7.57 Chapters 2 and 3 highlight issues relating to the availability of backfill and the importance of securing up to date restoration strategies / plans and the opportunities this can present to enhance local amenity and the environment.

7.58 Our Vision, and Strategic Objectives 3 and 4, recognise that an important aspect of sustainable economic development of minerals requires high quality restoration and aftercare, sites to be restored at the earliest opportunity, restoration strategies / plans to sites to be regularly reviewed and opportunities to enhance local amenity and the environment are maximised.

7.59 National policy and guidance requires that land is reclaimed at the earliest opportunity and that high quality restoration and aftercare takes place.  

760 Policy 6 sets out how we would assess restoration proposals for new sites or revised restoration strategies / plans for existing sites.

Restoration requirements

7.61 In assessing restoration proposals it will be necessary to have regard to Policy 4 and to be satisfied that the proposals are sufficiently comprehensive, detailed, practicable and achievable within the proposed timescales which should be the earliest opportunity. Our adopted Waste Local Plan highlighted the potential shortfall of suitable backfill to restore mineral sites and the need to review restoration requirements in order to minimise reliance on backfill and achieve timely restoration.

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79 Refer to paragraph 143 of the NPPF
80 Refer to paragraph 5.27 of the Waste Local Plan.
7.62 National policy requires that high quality restoration and aftercare takes place. For example, it is important that best and most versatile agricultural land is safeguarded and soil resources are conserved.

7.63 Restoration can also present opportunities to enhance local amenity and the environment. For example, the causes and impacts of flooding can be reduced by creating flood storage areas; net gains in biodiversity can be achieved by creating habitats that link into local ecological networks, and new public rights of way or new recreational facilities can be provided.

**Regular review of the restoration strategies / plans**

7.64 As part of sustainable economic development of minerals, it is important that every mineral site has an approved restoration strategy / plan. However mineral development can be long term and it is sometimes the case that broad restoration strategies / plans are approved initially with detailed plans / schemes drawn up nearer the time when restoration and aftercare is due to take place. It may therefore be necessary to require the restoration strategy / plan to be regularly reviewed to ensure that it remains up to date and opportunities to enhance local amenity and the environment are maximised. Mineral operators are encouraged to involve the site liaison committee in the review of the strategies / plans. The review process has been achieved by agreement with developers through a Section 106 Legal Agreement.

**Financial Guarantees**

7.65 National policy requires that financial guarantees are only provided in exceptional circumstances and the accompanying guidance explains when guarantees may be required. Large mineral operators tend to be members of trade associations such as the Mineral Products Associate who have their own Restoration Guarantee Fund (although this is limited to £1 million). However recent experience resulting from the globalisation of the minerals industry indicates that many large mineral operators are concentrating their resources on larger sites. They are also selling or transferring smaller sites to smaller operators towards the end of the extraction phase or during the restoration phase. For these reasons it is important to ensure that the developers / land owners left in control of the sites have adequate financial provision to fulfil the final restoration and aftercare requirements. This can be through membership of a trade association with an adequate Restoration Guarantee Fund or by providing their own guarantee bond.

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81 Refer to paragraph 143 of the NPPF.
82 Refer to paragraph 109 of the NPPF.
83 Refer to paragraphs 73 and 75 of the NPPF
84 Refer to paragraph 144 of the NPPF and paragraph 048 ref: ID: 27-048-20140306 of the NPPG

Delivery and Monitoring of the Policy

7.66 Delivery will require developers to prepare restoration proposals that take account of the environmental criteria in Policy 4 and the restoration requirements in Policy 6. Developers will be expected to regularly review their restoration proposals and demonstrate that they have taken account of the financial implications.

7.67 It will be important to monitor restoration proposals to see how effectively this Policy has been implemented in terms of the number of approved and up to date restoration strategies / plans; the number of restoration reviews that have taken place; and examples of net gain to local amenity and the environment such as the creation of new footpaths, recreational facilities and wildlife habitats as a result of proposals for the restoration of new mineral sites or as a result of the review of an existing restoration strategy / plan. It is hoped that the minerals industry will assist us through their own initiatives such as biodiversity audits of sites.