

Topic Note - Provision for Brick Clay and Fireclay

1. This statement has been prepared to inform the Independent Examination for the submitted Core Strategy and Development Control Policies Development Plan Document (DPD) of the Leicestershire Minerals Development Framework.
2. This Statement sets out the Council's response to the Schedule of Issues and Matters for Discussion prepared by the Inspector in respect of the provision for brick clay and fireclay. Where it is appropriate, the Council's response utilises and refers to material in the Core Evidence Base already submitted.
3. The Inspector requested that the topic note should have regard to the related questions in the Issues and Matters for Discussion document (Minerals – Supply: Minerals other than Aggregates) prepared by the Inspector. The note could include a re-examination of Paragraphs 4.30-4.44, and the related policies, but should not draw on new evidence or necessitate revisiting the sustainability appraisal. In particular, the topic note should be clear and specific about the amount of brick clay and fireclay that it is envisaged will be required over the plan period and the locations from which the minerals should be sourced.

Brick Clay

4. Related questions regarding brick clay in the Issues and Matters for Discussion document (Minerals – Supply: Minerals other than Aggregates) prepared by the Inspector are as follows:
 1. With regard to the quantities of mineral sales, are separate figures available for sales of brick clay and building stone (Table 1)?
 2. In Para 4.35 and Policy CS3 (Brick clays), are years of production being confused with years of landbank capacity? Is maintenance of a 25 year landbank an appropriate way forward? How appropriate is the reference to landbanks in Policy CS3? Should Policy CS3 specifically refer to a landbank of 25 years? [Ibstock]
 3. Should there be active support for the extension of workings where there are reserves of less than 25 years / exclusion of support in circumstances where there are extensive reserves? [GOEM]
 4. Is the need for brick clay quantified? Is a greater supply (or lesser supply) justified?
 5. In Policy CS3, does any special provision need to be made in respect of premium brick clays (Para 4.42)?
 6. Does Policy CS3 logically follow on from the text?
 7. Policy CS3 would only allow extensions to existing sites where they are required to support levels of capital expenditure. What about cases where a straightforward continuation of production is required in circumstances where there would be no environmental problems?

8. In respect on new brick clay extraction sites (Policy CS3), how is a minerals operator to know about production capacity at other sites? Is this set down somewhere? Why is there a tie to landbanks / production capacity? Is there an assumption that needs could be met at existing sites?
 9. With regard to Para 4.83, should the whole of the brick clay resource be protected; also shown on the Key Diagram? [GOEM]
 16. Should reference be made to the prior extraction of brick clay (Para 4.84) [GOEM]
5. The Council's responses to these questions are indicated in italics together with the relevant question number.
 6. The County Council envisages that between 600,000 and 700,000 tonnes of brickclay will be required per annum over the plan period. This is however subject to future levels of house building. Policy CS3 provides flexibility to allow for the release of new sites in the event that demand cannot be met.
 7. Existing brickworks within the County generally have sufficient permitted reserves to provide this quantity of material, but the Council recognises that there may be a need to release additional reserves at certain brickworks to meet shortfalls in the 25 year landbank that MPS1 advises should be maintained. The Council considers that additional brickclay resources should be released as close as practicable to the brickworks that it is to be supplied.
 8. There are no national guidelines to indicate future demand for brick clay and therefore, recent levels of production are the best indicator of demand. MPS1 Practice Guide indicates (Para 87) that demand for brick clays has been fairly stable at about 8 million tonnes per annum over recent years. Recent sales figures within Leicestershire are detailed in Table 13 of the Minerals Background Paper. This shows that since 1998 sales have been relatively stable, with total production in the County generally between 600,000 and 700,000 tonnes per annum.
 9. Business Monitor PA1007 indicates that sales of clay and shale in Leicestershire were 920,000 tonnes in 2006, as indicated in Table 1. These sales comprise 680,000 tonnes for brick, pipes and tiles and 241,000 tonnes for cement. The latter would appear to represent the extraction of clay within Rutland associated with the manufacture of cement at Ketton Cement Works. *The figure for clay sales in Table 1 should consequently be amended to exclude clay sales for use in cement. (Qu. 1)*
 10. Annex 2 of MPS1 (Para 3.4 2nd bullet) states that MPAs should take account, as appropriate, of 'the need to meet the likely level of demand for clay at each manufacturing plant'. *The need for brickclay has therefore been assessed in the context of the landbank situation at individual brickworks. (Qu.4)*

11. *The Brickclay Industry has not informed the County Council about any specific "premium" brick clays within the County that would warrant special provision. (Qu.5)*

Landbanks. (Qu.2)

12. It is an objective of MPS1 (Annex 2) "to provide and make available brick clays at a level that reflects the high initial investment in, and high levels of capital expenditure required to maintain and improve, new and existing brick-making plant and equipment". Annex 2 of MPS1 (Para 3.4 2nd bullet) states that MPAs should take account, as appropriate, of 'the need to provide a stock of permitted reserves to support the levels of actual and proposed investment required for each new or existing manufacturing plant and the maintenance and improvement of existing plant and equipment. This will normally be sufficient to provide for 25 years of production.'

13. The 1st bullet point of Policy CS3 indicates that extensions to existing sites will be allowed where they are required to support the levels of capital expenditure required to maintain and improve existing brick-making and equipment. This reflects the wording in MPS1. In order to satisfy this requirement, individual brickworks would need to demonstrate that its landbank falls short of the 25-year period that MPS1 advised should be provided. The Council does not however consider that it is necessary to repeat national guidance regarding the provision of a 25-year landbank for brickworks in CS3.

14. It is considered appropriate to refer to landbanks in the second bullet point of Policy CS3 as the length of landbank at existing sites will be an indicator of when new brickclay extraction sites might be given favourable consideration.

15. The landbank is a stock of planning permissions for the extraction of minerals. This is normally indicated in terms of the years' supply based on estimated annual production from the operating unit. To that extent, the potential years of production from a unit based on the level of permitted reserves is the equivalent of the landbank for that site.

Extensions (Qu.3)

16. MPS1 states that it is generally desirable that brick clay should be extracted as close as practicable to the brickworks that it is supplied to, and that therefore consideration should initially be given to the potential for extraction of brick clay close to the works and the potential for extensions to existing planning permissions to maintain supplies. Local supply is generally desirable in order to reduce costs and the environmental and social impacts of transportation of clay from the pit(s) to the works, as well as to maintain the investment in the factory and local employment.

17. In line with Government guidance, the Council consider that additional brickclay resources should be released as close as practicable to the brickworks that is to be supplied.
18. The Council recognises that there may be a need to release additional reserves to meet potential shortfalls in landbank provision for particular brickworks within the County during the Framework period. Policy CS3 implies that extensions to existing sites with less than 25 years permitted reserves will be considered favourably provided they will not cause unacceptable harm to the environment or communities. The implication is that extensions at sites such as Ellistown will not be considered favourably, but this situation could change were there to be an increase in production levels and/or significant capital investment proposed for the associated brickworks. The Council acknowledges that this matter will need to be closely monitored and the policy reviewed if necessary.
19. Policy CS3 does not preclude extensions to existing sites in circumstances where there are extensive reserves provided that the proposal does not give unacceptable harm to the environment or communities.
20. Policy CS3 does not say that extensions to existing sites would only be allowed where they are required to support levels of capital expenditure. *The Council accepts that there would be no justification in refusing extensions to existing sites where a straightforward continuation of production is required provided that the proposal does not give rise to unacceptable harm to the environment or communities. (Qu.7)*

Locations (Qu.6)

21. The Council considers that Policy CS3 does logically follow on from the text. The text outlines government advice regarding the provision and location for brickclay extraction, before indicating the current position within the County. Para 4.35 concludes that there is a need to release additional reserves to meet potential shortfalls for particular brickworks and that such additional provision should be in close proximity to existing brickworks, in line with Government advice. The 1st bullet point of Policy CS3 reflects this by enabling extensions to existing sites where there is a shortfall in the landbank; the second bullet point indicates that new sites would only be allowed where such provision at existing sites is insufficient.

Productive Capacity (Qu.8)

22. Para 88 of the Practice Guide to MPS1 states that demand for brick has been fairly steady overall, but with some fluctuations, reflecting periods of greater or lesser house building. It goes on to say that trends for future house building and development of sustainable

communities will need to be monitored to determine the extent to which demand is likely to increase in future.

23. Sales of brickclay within Leicestershire have been relatively stable in recent years. The Council, however, acknowledges that the market is nevertheless still sensitive to the cyclic demands of the construction industry. This gives rise to a degree of uncertainty over future levels of demand and therefore of investment in brickmaking plant and units.
24. Given the relatively stable demand for brickclay at the national and local level, the Council has assumed that existing sites can meet future needs, subject to extensions where appropriate. The second bullet point to Policy CS3 however provides a degree of flexibility to allow for the release of new sites in the event that future demand increases to such an extent that existing sites cannot meet needs. The Policy provides the flexibility to consider making further mineral resources available if and when required. The reference to production capacity would allow favourable consideration to be given to new brickworks in such circumstances. Specific details of the production capacity of existing brickworks are not available.

Safeguarding of Brick Clay Resources (Qu. 9)

25. MPS1 Practice Guide states (Para 32): 'The planning system has an important role to play in safeguarding proven deposits of minerals which are, or may become, of economic importance within the foreseeable future, from unnecessary sterilisation by surface development. It is therefore important that mineral safeguarding areas (MSAs) are identified and that appropriate safeguarding policies are incorporated in DPDs. MSAs can be defined objectively using the best available geological and minerals resource information, including that published or held by the British Geological Survey or made available by the industry. However initially defined, areas will generally need to be refined in discussion with the industry and other stakeholders.' 'A guide to mineral safeguarding in England' (BGS – December 2007) states (page 9): 'If the deposit is large it may not be appropriate to safeguard the entire resource'.
26. A report for the Council by BGS (2004) indicated that large parts of the County are underlain by Triassic Mercia Mudstone, the principal brickclay resource in Leicestershire. Given the extensive nature of the resource, BGS advised that there was no justification for safeguarding large areas of the outcrop. Areas were consequently drawn around existing sites taking account of the resource and existing infrastructure and using clear physical boundaries wherever possible.
27. The County Council has identified those mineral deposits which it considers are of economic importance based on work carried out by BGS. Given the extensive nature of the brickclay resources in

Leicestershire (principally the Triassic Mercia Mudstone), the Council does not consider that it is justified to safeguard large areas of the outcrop.

Prior Extraction of Brickclay (Qu. 16)

28. The Council does not consider that it is necessary to make specific reference to the prior extraction of brick clay. Paragraph 4.84 states that sand and gravel and opencast coal are the most likely to be suitable for the prior extraction of minerals. It does not state that these are the only suitable minerals.

Fire Clay

29. Related questions regarding fireclay in the Issues and Matters for Discussion document (Minerals – Supply: Minerals other than Aggregates) prepared by the Inspector are as follows:
10. In Para 4.37, is 1.7m tonnes the size of the stockpile or the reserves? Is the planning permission (that expires in 2012) for extraction? How rapidly is the stockpile being depleted?
 11. What and where is the evidence base setting out information on clay operators (Para 4.39)?
 12. Should there be a study on fireclay reserves (Para 4.41)?
 13. In respect of Para 4.41 and Policy CS4 (Fireclay), what sort of evidence would be required to demonstrate a proven need? [GOEM]
 14. Should Policy CS4 contain a target for fireclay production? [GOEM]
 15. Should the extraction of fireclay be referred to in Policy CS7 as a factor in favour of new opencast coal proposals? [GOEM]
30. The Council's responses to these questions are indicated in italics together with the relevant question number.
31. There are no national and regional targets for fireclay. Sales from Leicestershire have fluctuated in recent years due to the influence of clays released from opencast coaling. With the reduction in levels of opencast coal extraction, high quality fireclays are becoming increasingly scarce. The Council would, therefore, envisage stricter husbandry of available resources over the plan period at a reduced sales rate.
32. The principal source of fireclay in the County has been the Donington Island site. This site is now the only significant clay stocking facility within the County. The site contained around 1.7 million tonnes of clay in stockpiles at the end of 2006. Blending takes place on site to supply various works in the area and beyond. The Council envisages that the provision of a long term stocking and blending facility at this site will benefit local works over the plan period.

33. The Council envisages that the only other viable source of fireclay is likely to be in association with surface coal mining operations. In such circumstances, the amount of fireclay provided and the location of operations will be dictated by suitable coal operations coming forward. Policy CS4 supports the recovery of fireclays where proposals for coal extraction meet the tests in the Policy CS7.
34. *In the absence of national and regional targets for fireclay, the Council does not consider that it is appropriate to set an unjustified target for fireclay extraction within Leicestershire. (Qu. 14)*
35. The MLP Monitoring and Key Issues Report identified the need for a comprehensive survey of clay operators, in order to identify up to date reserve and sales data and inform the review process. This survey (which is referred to in Para 4.39) was undertaken during late 2003, and early 2004, and covered all clay sites including fireclay operations at Albion and Hicks Lodge opencast sites where fireclays were being extracted in conjunction with coal, and the stocking and blending site at Donington Island.
36. Information from individual clay operators was provided on a confidential basis so that specific information regarding particular sites has not been published. *Fireclay sales figures from this survey are shown in Table 15 of Minerals Background Paper. Calculations of fireclay provision based on information from the survey of clay operators were included in the Issues and Options document (June 2005) – Table 4.5; and the Preferred Options document (July 2006) – Box 5. (Qu.11)* Reserve data from the Survey of clay operators was used, amended by adding 2 years average extraction/production taken from 1999 to 2002 figures, to give a baseline reserve figure of 2,421,397 tonnes for the commencement of MDF period at 1/1/2001, the majority of which was stockpiled at the Donington site.
37. *The Donington site contains around 1.7m tonnes of clay, all of which is held in stockpiles. There are no further reserves to be extracted from the site. The planning permission that expires in 2012 is for the stockpiling of clay and not for extraction. In recent years, the stockpile has been depleted at a rate of some 100,000 tonnes per annum. (Qu. 10)*
38. Policy CS4 indicates that proposals for fireclay extraction may be acceptable where the clays are required to meet a proven need. *Advice contained in Para 3.4 of Annex 2 to MPS1 (which also applies to fireclay) refers to various matters related to 'need' that MPAs should take account of, as appropriate, when considering planning applications. (Qu.13)* This includes the following:
- the need for provision of brick clay from a number of different sources to enable appropriate blends to be made;
 - the need to provide a stock of permitted reserves to support the levels of actual and proposed investment required for each new or

existing manufacturing plant and the maintenance and improvement of existing plant and equipment. Separate provision may be needed for particularly scarce clays, such as fireclay, that will serve a number of works, sometimes over long distances;

- the need to meet the likely level of demand for clay at each manufacturing plant; and
- the need to recognise the potential for sales of clay for other uses, particularly engineering purposes, such as lining, daily cover and capping material for landfill sites, the lining of canals, lakes and ponds, as construction fill or as bulk fill suitable for roadway construction or for the manufacture of lightweight aggregate or cement.

39. Whilst the Council does not possess sufficient detailed reserve knowledge to identify potential areas of future fireclay extraction, *it is not considered that it is necessary for a study on fireclay reserves to be carried out as it is unlikely that proposals for the extraction of fireclay alone will be forthcoming.* (Qu.12) The report for the Council by BGS (2004) indicated that fireclay resources are coincident with opencast coal resources, although some parts of the coal resource have more abundant fireclays than others. The extent of the exposed coalfield is illustrated on the Key diagram (Figure 3). The Minerals Planning Fact Sheet on Fireclay (BGS – October 2006) indicates that current and future fireclay supply is crucially dependent on the future of the surface coal mining industry by making available clay that would not likely be economically recoverable. The occurrence of potential fireclays as usually thin, widely spaced beds in close association with coal seams means that surface coal mining operations provide one of the few viable sources of the clay.

40. Policy CS4 supports the recovery of fireclays where proposals for coal extraction meet the tests in the Policy CS7. *As indicated in Para 1.11, individual policies within the DPD should not be interpreted in isolation. Thus, whilst CS7 does not refer to fireclay extraction, the recovery of fireclays during coal extraction is covered by Policy CS4 and this will consequently be considered as a factor in the determination of any proposals for opencast coal extraction.* (Qu.15)