STATEMENT BY SOMERSET COUNTY COUNCIL

September 2014



MATTER 12: OTHER MINERALS

Background Documents referred to within Statement

- National Planning Policy Framework (Doc Ref NE3)
- Mineral Resources Information in Support of National, Regional and Local Planning: Somerset (Doc Ref TD39)
- Mineral profile Barytes (Doc Ref TD78)
- Mineral Planning Factsheet Barytes (Doc Ref TD79)
- Mineral Planning Factsheet Salt (Doc Ref TD80)

Document Control Sheet

	<u>Position</u>	<u>Name</u>	<u>Date</u>
Prepared by:	Consultant geologist to SCC	Dr Andy King	02/09/2014
Reviewed by:	Senior Planning Policy Officer	Guy Robinson	03/09/2014
Approved by:	Service Manager: Planning Policy	P.V. Growing	04/09/2014

For the forthcoming Hearing, the Inspector has requested that Somerset County Council briefly summarise their position on each discussion topic. The following is a brief summary of Somerset County Council's response to Matter 12: Other Minerals, examining the Issue: Whether sufficient opportunities have been provided for the extraction of "Other Minerals"?

1. Should there be a general policy guiding applicants for permission for extraction of other mineral resources in Somerset (clay, gypsum, barites, iron, lead, and salt)?

SCC Response

1.1. It is not considered that a general policy is needed for permission of extraction of other mineral resources in Somerset. There is adequate flexibility in the generic Development Management policies to enable the County Council to determine such applications, when considered alongside the presumption in favour of sustainable development and against the back drop provided by national policy and guidance (in particular the **National Planning Policy Framework (Doc Ref NE3)**).

2. Should coal be included in the strategy for "Other Minerals" or should it be included in the "Energy Minerals" strategy?

SCC Response

2.1. An application for coal extraction would be considered in the same manner as an application for extraction of "other minerals" i.e. with reference to relevant policies in the Development Plan. Consequently, paragraph 12.1 of the Minerals Plan refers to coal in the list of other minerals.

- 2.2. More detail on the position regarding coal extraction is presented in chapter 9 (informed by feedback from and consultation with the Coal Authority amongst others) because it is likely that some readers will expect to find detail on coal extraction in the same section as content on oil and gas. Thus chapter 9 includes coal extraction because it was considered the most logical place for that content.
- 2.3. Somerset County Council is happy to be guided by the Inspector on this issue.

3. Is the approximate extent of the remaining "Other Minerals" resources known? If so, give details.

SCC Response

3.1. The extent of the remaining 'Other Minerals' resources in Somerset is well known, and is typically limited to discrete geographical areas (relating to the underlying geology). Please refer to the individual responses for each mineral in section 4 below for further details.

4. Is it likely that extraction of any of these minerals might become viable over the Plan period?

SCC Response

- 4.1. It is considered unlikely that any of these 'other minerals' will become viable over the Plan period. In assessing this, Somerset County Council is guided by information provided by BGS (for example, Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39). A brief summary of the situation for each mineral is provided below:
- 4.2. <u>Brick clay</u>: The peak development of the Somerset brick industry was essentially within the C18th and C19th. The brickyards declined in the 1960s due to exhaustion of the best clays and availability of cheaper alternatives; the last Somerset brickyard at East Quay, Bridgwater, closed in 1964. Formerly, some of the main areas of brick and tile production in Somerset were around Bridgwater and Highbridge where river alluvium with accessory Triassic Mercia Mudstone ('Keuper Marl') provided the main constituents for local bricks. Several brick and tile clay pits were also worked around Taunton and Wellington (where 'Keuper Marl' also provided the source material) and on the Somerset Levels (where alluvial clays were employed).

The vast majority of the former brick and tile clay pits have now been wholly infilled, overgrown and/or sterilised by subsequent development. It is extremely unlikely that the production of Somerset bricks or tiles from local clays will ever become practical or viable commodities again; the main areas of brick and tile production in the UK have moved from Somerset. BGS (Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39) does not identify brick or tile clays in Somerset as a mineral resource for extraction, exploration or development purposes.

4.3. <u>Barytes</u>: In England, barytes is now only produced as a by-product of fluorspar mining in the Southern Pennine Orefield. In Scotland, barytes is extracted from the Foss Mine near Aberfeldy, but reserves are very limited. The nearby high-quality barytes deposit at Duntanlich has measured resources of 7 million tonnes which would be sufficient to meet the UK's consumption of barytes for many decades and would bring to an end the current need to import the mineral. Other former significant mining areas for barytes were Shropshire, the Lake District, south Devon and central Scotland (BGS and ODPM's Mineral profile – Barytes, Doc Ref TD78; BGS and ODPM's Mineral Planning Factsheet – Barytes (Doc Ref TD79).

The principal planning issue relating to the location and extraction of barytes in Scotland and England is national landscape designations (Loch Tummel National Scenic Area, Peak District National Park) which have prevented mineral development. Consequently, the future of barytes production within the UK remains uncertain (**Mineral profile – Barytes, Doc Ref TD78**).

In Somerset, barytes has been worked on a small scale from steeply inclined veins in Carboniferous Limestone at Cannington Park, near Bridgwater. Barytes was worked by digging out the veins from the quarry face and hand sorting into white and pink varieties, and by trenching in the south-western part of Cannington Park. Before 1920, between 15 and 20 tonnes per month were extracted.

BGS (Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39) does not identify barytes as a mineral resource for extraction, exploration or development purposes in Somerset. Given the current UK need for the mineral being met by imports (noting that potentially extensive barytes reserves within the UK remain subject to sensitive environmental planning issues), it is considered extremely unlikely that the extraction of barytes within Somerset will be required or become viable during the Plan period.

4.4. <u>Fuller's Earth</u>: Fuller's Earth is a type of clay composed mainly of the mineral smectite formed by the complex alteration of volcanic ash deposited in sea water; Fuller's Earth deposits of potential economic interest have a very restricted distribution in the UK. One of the main areas of mining and processing of Fuller's Earth was around Bath, where the deposits were first worked in Roman times. The most recent production was at Combe Hay mine south of Bath, but this closed in 1979 because of the high cost of underground extraction. Resources near Bath amount to several million tonnes, but southwards into Somerset, Fuller's Earth only extends from Faulkland to Frome, and the quality of the deposits reduces (Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39). Fuller's Earth is no longer mined and processed within the UK, as demand for this type of deposit is largely met by imports of the similar clay bentonite from from the USA.

Regarding the Fuller's Earth deposits around Bath and Somerset, BGS states that: "Underground mining is unlikely to prove viable in the foreseeable future and surface extraction would be difficult because of high overburden" (Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39).

- 4.5. <u>Gypsum</u>: Occurs as veins, nodules and pods in the Triassic mudstones of the coast near Watchet. It was formerly dug from the cliffs by hand and taken to Watchet harbour by cart or small boat. The massive form of the mineral, termed Alabaster has been used locally for carving ornaments and monuments. No extraction occurs in the area today, commercial working of gypsum ceased in about 1923.
- 4.6. <u>Metalliferous minerals, copper, iron and lead</u>: Iron, usually in the form of haematite or goethite, was historically worked at quarries south of Bristol where the ochre was extracted for use as a pigment. Minor quarrying of low-grade iron ore also formerly occurred at a few places in Somerset, for example from the Permo-Triassic breccias near Minehead. A number of small copper mines operated during the C19th in west Somerset and the Brendon Hills/eastern Exmoor area. The copper mainly occurred as malachite or chalcopyrite (with very minor amounts of lead and silver) within Devonian limestones and Permo-Triassic sandstones, and were typically low-grade and barely viable. All forms of iron and copper extraction have long been abandoned, and BGS (Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39) states that "Ironstone is not considered a resource in Somerset and is not shown on the map face."
- 4.7. <u>Salt</u>: The UK has huge resources of salt which mainly occur in England. Resources of Triassic age are economically the most important, and account for 90% of total production (between 5 to 6 million tonnes), most of which is now derived from the Cheshire Basin where the largest operation (Winsford Mine) has proven reserves for a further 60 years.

Rock salt in Somerset was discovered accidentally in 1910 at Puriton in a borehole to find coal. Saliferous strata were encountered at depths between 183 m to 220 m within the Mercia Mudstone Formation. Commercial extraction of brine only continued from this area for 11 years before the works finally closed in 1922. The Somerset saltfield was also explored from north of Puriton eastwards towards Wedmore and deep boreholes proved that salt beds occur through as much as 107 m of strata, although the main salt-bearing layers occur at depths between 694 m and 742 m. The Somerset saltfield is estimated to contain 13,000 million tonnes of rock salt.

Regarding the Somerset saltfield, BGS states that: "*The Somerset salt is probably equivalent to the Triassic Dorset Halite Formation, which just extends into the western part of the county. It is unlikely that the salt-bearing strata in Somerset will ever be worked as a source of salt due to its more widespread occurrence elsewhere in England*" (Mineral Resources Information in Support of National, Regional and Local Planning: Somerset, Doc Ref TD39); and

"Triassic saltfields have also been worked in the past at Preesall in Lancashire, in Worcesershire, Staffordshire, on Walney Island in Cumbria and in Somerset. Extensive areas of salt-bearing strata also underlie Dorset. It is highly unlikely that any of these deposits will become of commercial interest as a source of salt in the foreseeable future" (BGS and ODPM's **Mineral Planning Factsheet – Salt, Doc Ref TD80**).

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