

## **Matters, Issues & Questions:**

### **Matter 1: Minerals – Potash, Polyhalite, Sylvinite and Salt**

Question 66 - 72

#### *Potash/Polyhalite/Sylvinite/Salt*

66. Should there be more support for Potash extraction, given its national importance and national scarcity?

Given that the currently available resources of Potash are located within the North York Moors National Park and that the development of these is considered to be "*major development*", it is considered that the Plan strikes the right balance in terms of qualified support within the context of national policy protecting National Parks from such development. Policy M22 is supportive in the following ways:

- Surface development and infrastructure associated with the two existing potash mine developments which is not major development is permitted in principle, with safeguards in terms of its impacts on the National Park;
- It allows for increased volumes, new forms of potash to be extracted and extensions of existing sub-surface areas in principle;
- Proposals for new sites within the National Park or new applications beyond the timeframe of existing permissions will be subject to Policy D04, which, in accordance with national policy allows for such development in exceptional circumstances.

Additionally Policy S01 (*Safeguarding minerals resources*) specifically safeguards the potash resources at Boulby Mine and the new Woodsmith Polyhalite Mine by protecting them from other forms of surface development and also from potential sterilisation from other forms of mineral extraction or deep underground storage.

Potash is one of many minerals listed in the NPPF (NEB01) as being of local and national importance, but it is not a scarce mineral in global terms and is produced across the world in many countries. It should also be noted that the resultant fertiliser product from mining the polyhalite form of potash is planned to be exported to what would be newly established global markets rather than the existing UK market which is substantially made up of "*Muriate of Potash*" produced by processing sylvinite which is the main form of Potash mined at Boulby Mine since the 1970s.

Polyhalite is only currently mined in the world in small amounts at Boulby Mine and has not yet established a significant global market share of potash based fertiliser despite being mined since 2010 at Boulby.

In summary, the policy approach reflects national policy in terms of Paragraph 116 of the NPPF, which effectively introduces a presumption of refusal of major development (including major minerals development) in National Parks, but recognises the existing Planning permissions given as exceptional circumstances and in the public interest, which, in terms of the 2015 permission at Woodsmith Mine (formerly known as Doves Nest Farm) allows for the extraction in Polyhalite for 100 years.

67. Policy M22 ((Potash, polyhalite and salt supply) requires at i) that proposals do not detract from the special qualities of the National Park. As some detraction is likely, should this policy be more flexible by requiring instead (for example) that proposals do not cause unacceptable impacts?

The further intensification of the existing potash developments is intended to be tightly constrained. This should be seen in the context of two major potash mines already permitted within the National Park that demonstrably conflict with the purposes of designation and significantly degrade a number of the National Park's special qualities. The harm associated with these developments could not be mitigated fully and the recent approval provides for very large scale Section 106 compensation payments over a long period of time. These decisions were exceptional and made in the public interest and the intention of the Plan in this respect is to ensure further harm to the National Park does not occur. In the context of the great weight given in the NPPF (NEB01) to National Park purposes (page 115) and the statutory importance of the Special Qualities of National Parks enshrined in the 1995 Environment Act (LPA24) the intention is that there should be no further erosion of Special Qualities from this industry.

68. For reasons of effectiveness, should the justification text explain briefly what the North Yorkshire Polyhalite Project is and its benefits to the local and national economy?

Yes. The point raised in this question is accepted as a reasonable suggestion. A relevant modification to paragraph 5.173 will be included in the '*Main Modifications*' document to reflect this.

69. On the understanding that Polyhalite and Sylvinite are the two main forms of potash mined, to be effective should Policy M22 specifically provide for the extraction of both types or does the generic reference to potash suffice? Should Policy M22 refer to Polyhalite, Sylvinite and other forms of potash?

Potash is the term generically used to refer to potassium-bearing minerals and therefore covers both sylvinite and polyhalite. The *Addendum of Proposed Changes (CD09)* explain this (paragraph 5.172) and set out that the generic term "Potash" can be used in the policy as it covers both forms. Since the Plan preparation the existing mine has publicly announced the imminent exhaustion of its economically and accessible sylvinite resources and from 2019 will transfer over to mining solely polyhalite. The new mine (Woodsmith) sought permission to extract polyhalite only and it is understood that it may not be technically feasible to mine the sylvinite form of potash at the depth it occurs in that location as the mineral is much softer than polyhalite and the mine roads would be subject to significant subsidence.

70. Should the MWJP seek to provide reserves of both main types of potash?

It is not considered to be appropriate or necessary for the Plan to provide reserves of either main types of potash for the following reasons:

- There is no national policy requirement to provide a specific landbank or stock of the mineral unlike, for example, aggregates or silica sand;
- There is no established domestic demand for the polyhalite form of the mineral and both companies future sales of this are destined for overseas export to larger bulk markets which need to be developed in countries in Asia and Africa;
- The 100 year planning permission for mining polyhalite at Woodsmith Mine ensures very long term security of polyhalite supplies well beyond the life of the Plan;
- Cleveland Potash Ltd has announced that the remaining sylvinite reserve will be worked out during 2018 and 2019 and therefore the Plan cannot provide reserves for this form of potash.

71. Whilst great weight should be given to conserving landscape and scenic beauty in National Parks and **planning permission** for major development should only be granted in exceptional circumstances (NPPF paragraphs 115 and 116) is this sufficient justification for not **allocating** potash sites of national importance bearing in mind that great weight should also be given to the benefits of mineral extraction (NPPF paragraph 144 1<sup>st</sup> bullet)? Taking account of the PPG (ID: 27-008-20140306) has the right balance been reached in not allocating specific potash sites of national importance? Should there be allocations to give certainty to when and where development may take place (PPG ID: 27-009-20140306)? (My reference)

The Plan should not allocate sites for potash for the following reasons:

- There is already certainty in terms of when and where potash mining will and does take place due to the existing Planning consents – the Boulby Mine consent extends to 2023 and the Woodsmith mine permission which covers 30% of the National Park extends to 2118.
- There is no national policy requirement to do so, and although listed in the NPPF as one of a number of local and nationally important minerals (and identified in PPAGE as a mineral of recognised national importance) the Framework does not specifically identify it as warranting Planning for a steady and adequate supply in the same way as it does for certain other industrial minerals, specifically silica sand, cement and brick clay.
- Paragraph 144 of the Framework makes it clear that local Planning authorities should, as far as is practical, provide for the maintenance of landbanks of non-energy minerals from outside National Parks.
- The form of potash (polyhalite) to be mined in the Plan period is destined for export and there is therefore no domestic demand to justify allocation – in effect the polyhalite mines are not regarded as “potash sites of national importance”. The recent permission for Sirius Minerals was considered to represent exceptional circumstances only in relation to its transformational economic benefit; both at regional and national level on account of its expected positive trade deficit benefits (see NPA Committee resolution – appendix 1).
- Paragraph 115 of the NPPF introduces a national policy of refusal for major development in National Parks. The exceptional circumstances and public interest in allowing such development needs to be assessed and determined at an application stage when the full details and implications of the proposed major development is known rather than making an advance provision for a future development which assumes it would meet the policy test. In effect national policy dictates that major development cannot be allocated within a protected landscape as its starting point is a presumption against such development.
- NPPF Paragraph 144 advises that great weight should be given to the benefits of mineral extraction however, this is qualified (3rd bullet) by stating that in granting Planning permission for mineral development there

should be no unacceptable adverse impacts on the natural and historic environment. A similar qualification is included in paragraph 143 (6<sup>th</sup> bullet) relating to Plan making, which advises that Plans should set out policies which ensure that development does not have unacceptable adverse impacts on the natural and historic environment or human health. Further, NPPF Paragraph 116 advises that major development (which includes major minerals development) should only be granted in exceptional circumstances and where this is in the public interest, after considering factors which include *“any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated”*. The need to give great weight to the economic benefits of mineral extraction must therefore be considered against other policy relating to environmental protection and does not of itself require that allocations be made to reflect this exercise.

72. In relying on criteria based policies rather than allocations, and taking account of development management policy D04: (Development affecting the North York Moors National Park and the AONBs) does the MWJP provide adequate opportunities to ensure there are reasonable prospects of producing sufficient supplies of Polyhalite, Sylvinite and potash generally to provide the goods that the country needs as per NPPF paragraph 142?

It is considered that the Plan provides adequate opportunities, as far as it can, to ensure there are reasonable prospects of producing sufficient supplies, albeit that this could not be guaranteed to meet the country's needs for sylvinite based fertiliser as a whole. So:-

- The safeguarding policy S01, protects the interests of the two existing potash operators in the areas of their respective consents;
- Boulby Mine has an estimated polyhalite inferred resource of over 80mt, whilst Sirius Minerals have a defined total “Mineral Resource” of 2.66 billion tonnes of polyhalite. Given the existing time periods of the Planning permissions, it is therefore considered that there are more than reasonable prospects of producing sufficient supplies of this form of potash, far beyond the timescale of the Plan;
- Irrespective of the above, Polyhalite does not have an established domestic market and the form of potash demanded by UK fertiliser companies is Muriate of Potash (MoP) created by processing sylvinite. Boulby Mine, as the only current operating UK potash mine was capable of supplying the entire UK demand for MoP over the four decades of its production. In reality it only supplied about 60% of this market as some companies chose to purchase from overseas suppliers. From 2018/19 however, this domestic source will cease and CPL expect a large element of the UK market will

continue to use MoP which will then have to be purchased abroad (CPL is part of Israeli Chemicals who also have potash (sylvinite) mines in Spain, Israel, North and South America and China). The Plan therefore has no influence on securing a domestic source of sylvinite based potash as there are no economically viable reserves of this in the Plan area.

**Prepared by;**

**North Yorkshire County Council  
City of York Council  
North York Moors National Park Authority**

## Appendix

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### Main Modifications

The modifications below are expressed either in the conventional form of ~~strikethrough~~ for deletions and underlining for additions of text.

The page numbers and paragraph numbering below refer to the submission local plan, and do not take account of the deletion or addition of text.

Ref	Page	Policy/ Paragraph	Main Modification
Q68	103	5.173	<p>Add text to the end of Para:</p> <p><u>... in 2016 under the NSIP process. The “North Yorkshire Polyhalite Project” was approved by the North York Moors National Park Authority when it concluded that the potential economic benefits from the proposal represented a transformational economic opportunity at a regional and national level. At the same time it was concluded that the innovative nature of the mine design and associated landscaping would result in an acceptable reduction in the long term environmental impacts of the development. It was also recognised that there was no realistic scope for locating the development elsewhere outside the National Park. (It is important to note that the need for the mineral was not considered to represent exceptional circumstances as this form of potash did not have any established market globally, and in any case was available in significant volumes at the nearby Boulby Potash mine). Construction of the mine began formally on the 4<sup>th</sup> May 2017. At the time of the MWJP Hearing, site preparation works at both the mine site and the Lockwood Beck intermediate tunnel site (located just outside the National Park in the Redcar &amp; Cleveland BC area) will have been substantially completed. The route of the Mineral Transport System tunnel seismic survey will have been almost completed and coring along</u></p>

Ref	Page	Policy/ Paragraph	Main Modification
			<u>the route underway. Diaphragm walling technique construction to create one of the extensive sub-surface mine-head structures will be ongoing and the project will be broadly on target for first Polyhalite production around the end of 2021.</u>