BANKSMining
development with care

HIGHTHORN

Further Environmental Information
T&CP (EIA) Regulations 2011 (as amended)

March 2017 (FEI.2)

BANKS

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1. INTRODUCTION

1.1 The planning application for the Highthorn Surface Mine was submitted to Northumberland County Council (NCC) as Mineral Planning Authority on 12 October 2015 (Planning application Ref. No. 15/03410/CCMEIA). The planning application was accompanied by an Environmental Statement prepared under the terms of the Town & Country Planning (Environmental Impact Assessment) Regulations 2011 (as amended) (the EIA Regulations).

1.2 In March 2016 under the terms of Regulation 22 of the above named regulations Northumberland County Council, having undertaken extensive consultations with statutory and non-statutory bodies, formally requested additional environmental information in support of the findings of the Environmental Statement which accompanied the planning application. This information was submitted in April 2016 (FEI.1) and the application was subsequently considered by the Strategic Planning Committee of NCC on 5th July 2016 when the Committee resolved to approve the planning application.

1.3 On 8 September 2016 the Secretary of State wrote to the Council pursuant to Article 31 of the Town and Country Planning (Development Management Procedure) (England) Order 2015 to prevent the Council from determining the application and to exercise his powers under Section 77 of the Town and Country Planning Act 1990 (as amended) to call-in the planning application for his own determination. The determination process is now being administered on behalf of the Secretary of State by the Planning Inspectorate (PINS)

1.4 On 16 January 2017 Banks Mining wrote to PINS offering to voluntarily provide further environmental information in relation to greenhouse gas emissions and climate change impacts, ecology and cumulative effects to assist the Secretary of State in his consideration of the proposed development.

1.5 On 17 January 2017 PINS wrote to the applicant noting the voluntary information and requesting further environmental information under the terms of Regulation 22 of the above named regulations. This document has been prepared as the formal response to the request and contains the information sought by PINS as well as the information offered voluntarily by the applicant. This document will be referred to hereafter as FEI.2. The way in which the information provided here supplements and relates to the information submitted in the Environmental Statement (dated October 2015) is explained in the table below. For ease of reference, the Environmental Statement will be referred to in this document as ES2015. This document also uses the same terminology and abbreviations as defined in the glossary of ES2015.

Table 1 : Relationship of FEI.2 Information to ES2015

Environmental Statement Chapter	FEI.2 Information	Conclusions of ES2015 affected
The Proposed Development	Y	N
Consultation feedback and consideration of alternatives	N	N
Socio-Economic	Y	N
Landscape and Visual Impact	Y	N
Ecology	Y	N
Archaeology and cultural heritage	N	N
Hydrology and Hydrogeology	N	N
Geotechnical	N	N
Air Quality	N	N
Noise	Y	N
Lighting	N	N
Vibration	N	N
Highways and Transport	N	N
Stythe or Mine Gas	N	N
Soils and ALC	N	N
Conclusions	N	N
Development Control Tool Kit	Y	N

The information contained in this document does not include any amendments or alterations to the description of the proposed development or to the drawings depicting the proposed development.

Where relevant, this document updates our recommendations for the control of the proposed development by means of planning conditions and legal agreements.

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2. THE REQUESTED INFORMATION

PURPOSE AND STRUCTURE OF THIS DOCUMENT

2.1 As noted above, the information requested by the Secretary of State is set down in a letter to Banks Mining dated 17 January 2017. For ease of reference, a full copy of the letter is reproduced at Appendix 1 of this document.

2.2 For the purposes of this submission, the information requested can broadly be categorised into five overall subject areas.

- The proposed development: addressing how the proposed development will connect to off-site utilities and identifying any significant environmental effects which arise as a result of those connections. Clarification is also provided of the proposed working programme and phasing of works on site.

- Socio-economic effects: additional information is provided on the farm businesses affected by the proposed development. Clarification of the reasoning why ES2015 finds significant effects on "tourism" are unlikely to occur is also given.

- Cumulative effects: the effect of Banks Mining's commitment not to work the consented Ferneybeds site on potential cumulative effects with the proposed Highthorn site is addressed. Clarification of cumulative visual effects is also given.

- Noise effects: clarification of which items of large plant proposed to operate on the site will be fitted with Banks Mining's in house noise suppression equipment and the way in which this will be controlled and monitored is addressed.

- Development control toolkit: the toolkit contained in Chapter 26 of ES2015 is clarified and updated to take account of the additional information.

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3. THE VOLUNTARY INFORMATION

3.1 As noted above, in addition to the information formally requested by PINS, the applicant also offered to voluntarily provide additional environmental information. For ease of reference a full copy of the letter from the applicant setting down the information to be provided is reproduced at Appendix 2 of this document.

3.2 The information provided can be broadly summarised as follows :

- Greenhouse gas emissions: information on the greenhouse gas emissions associated with the proposed development and arising from the burning of the coal extracted. The climate change impacts of these emissions.

- Updated ecological survey data: information on updated bat surveys undertaken in accordance with recently published best practice guidance.

3.3 Where relevant, technical advisors to Banks Mining have been asked to provide a written response to the information requested. These responses are reproduced in full as appendices to this submission. The text of this document summarises the findings of the advisors in the context of ES2015.

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4. THE PROPOSED DEVELOPMENT

UTILITIES

4.1 Existing utility services in the vicinity of the application site are shown on drawing PA23 of ES2015. The proposed development will require to be served by the following main utilities :

- Water including sewage
- Electricity
- Telecommunications

4.2 The approach to the provision of these services at the proposed Highthorn site is likely to be the same as for Banks Mining's other operational sites in Northumberland at Brenkley and Shotton.

Water inc. sewage

4.3 Water supplies will be provided to the site compound by means of piped connections to the water main network running along Road A1068 on the western side of the site. Similarly, foul water sewage will be removed from the site by means of pipes connecting to the sewage network in the vicinity of the site. Prior to the installation of the pipes and completion of the site compound, the site will be served by tankers. Any effects caused by installation of this utility infrastructure will be incorporated in the effects of constructing the site access and have already been assessed in ES2015.

Electricity

4.4 Electricity on the site will be provided by a combination of diesel generator and direct connection to the local grid. The Highthorn site is crossed by two overhead lines carried on wooden poles. Both lines require to be diverted by the local DNO (Northern Powergrid) prior to the commencement of site operations. At this time the exact route of the diversion (and whether the lines will be above, or below ground) has not been determined by the DNO.

4.5 The easternmost line operates at 20KV and would be suitable to provide a connection to the site. The infrastructure required to achieve this would be minimal and could be entirely located within the proposed site compound which is located on the western side of the site. A similar arrangement currently exists at the applicants Shotton surface mine. A photograph illustrating the size of the building housing the electricity substation adjacent to the site access is included at Appendix 3. The installation of this utility infrastructure is unlikely to give rise to any effects which have not been considered and reported on in ES2015.

4.6 An alternative to the use of the relocated 20KV line would be to connect the site to the existing underground electricity cables running along Road A1068. Again, as the proposed site compound is located on the western side of the site, the amount of disturbance caused by the connection will be minimal.

Telephones

4.7 Telephony services to the site will be taken from existing underground cables running along road A1068. Cabling will be incorporated into the site entrance and access point and will run to the site office located within the site compound.

Working Programme

4.8 The proposed working programme for the site is described in detail in Chapter 6 of the ES2015 and depicted on drawing PA15. The letter from PINS notes that the headings given in Chapter 6 of ES2015 appear to add up to an overall duration of working of 14 years. This is however an incorrect interpretation of the proposed programme as the time period described in months or years and referred to in headings of each phase is a statement of when they occur within the overall proposed programme and not their duration.

4.9 It is not uncommon on surface mining sites for soil stripping, mining and soil replacement operations all to be taking place at the same time. Indeed, Banks Mining's proposals for the Highthorn site were revised many times during the site design process to take on board feedback received and to minimise environmental effects.

4.10 For clarity, drawing PA15 depicting the proposed working programme has been amended to better reflect the headings used in Chapter 6 of ES2015 (see Drawing PA15 REVA). It remains the case that the development has a maximum proposed duration of 7 years green to green, including a 5 year period of coal extraction and this is what has been assessed in ES2015.

5. SOCIO-ECONOMIC EFFECTS

EFFECTS FARM BUSINESSES

5.1 The ES2015 contained an assessment at Chapter 24 of the effect of the proposed development on the soil resource within the site, including the findings of an agricultural land classification. The assessment found that all of the land within the site can be classified as 3b and is therefore not considered to be "best and most versatile".

5.2 Agricultural consultants H&H Land and Property have been asked by Banks Mining to assess the effect of the proposed development on the agricultural businesses which farm the land within the application site. Their report is reproduced in full at Appendix 4. The main findings of the report are summarised below.

5.3 The land within the application site is currently in agricultural use and is farmed by four agricultural businesses. The proposed development will result in the temporary loss of agricultural land to these businesses while the proposed mining operations take place.

Methodology

5.4 In order to determine the impact of the proposed development on farm business viability, a staged classification system based on previous work by ADAS has been used. This determines impact on business viability based on four categories:

- Major - the viability of the farm business is jeopardised in a typical year due to the project;
- Moderate - in a typical year, the viability of the farm will not be jeopardised, although it may suffer a large financial impact. Some changes will be needed to the farming system, leading to an increase in demands on management;
- Minor - whilst the viability of the farm will not be jeopardised, there will be a small reduction in net income. Modest changes will be required to the farming system and there may be some increasing demand on management;
- Negligible - the viability of the agricultural business would not be unaffected with an insignificant impact upon farming. The flexibility of the farming system would not be compromised and there would be little needed for alteration of the current farming practice.

5.5 For the purposes of EIA, an effect of moderate or higher is considered to be a significant effect on farm viability.

Findings

5.6 The key findings of the assessment by H&H Land and Property can be summarised as follows :

- The farm businesses affected by the proposed development are larger than the average farm size in the North east of England.
- A significant proportion of the land within the site has been subject to the influence of historic mining operations which is adversely impacting on drainage and contributes to difficult working conditions. All farmers interviewed

commented that the land is heavy, suffers from waterlogging and requires careful management.

- Several of the businesses have been able to take action and plan in advance for the temporary loss of land caused by the development.

- Those businesses holding tenancies within the site have sufficiently large holdings elsewhere to minimise the effect of the temporary loss of land caused by the proposed workings.

- One of the farm business (Bell at Hemscott Hill Farm) has diversified into recreational activities at the Farm, including bunk barns, camping and alpaca walking.

- The effects of working the Highthorn site on the viability of 3 of the 4 businesses are classified as minor in nature.

5.7 On the basis of the above findings, the proposed development has the potential to have a significant effect on agricultural businesses at Hemscott Hill Farm. Some changes will be needed to the farming system, likely to be a reduction in cattle numbers, leading to an increase in demands on management. The assessment notes, Mr Bell has negotiated compensation in regard to this effect. With regard to the temporary loss of land caused by the development, the assessment finds that the remaining holding is still large enough to generate significant income with reduced cattle numbers.

5.8 The assessment notes that the proposed development has the potential to have both positive and negative impacts on the diversified farm business at Hemscott Hill Farm. Overall, it is predicted that the proposed development will have minor, non-significant effect on the viability of the diversified farm business: In the longer-term, the benefits should be beneficial to recreational based business interests at Hemscott Hill Farm.

5.9 Setting the effects identified in the context of the regional farming industry, the assessment notes that the temporary removal of 325 ha of land from agricultural production has the potential to be significant locally, the North East of England has a farmed area of 593,000 ha and the loss of land is negligible. The assessment goes on to note that the proposed mitigation and restoration strategy for the site has been designed to include elements which will assist the continued diversification of the rural economy in this part of the region.

TOURISM

5.10 Clarification is sought on how effects on tourism during the operative phase of the proposed development have been considered in ES2015. Chapter 11 and Appendix 1 of ES2015 explain how feedback received during an extended consultation period have shaped both the Highthorn development itself, and the content of the submitted documentation. It is noted that a Scoping Report was submitted to NCC in December 2014 and the Council duly issued a Scoping Opinion on 16 February 2015. This was supplemented by a further scoping opinion dealing with cumulative effects issued in March 2015. Tourism as a specific subject was not identified in the responses.

5.11 ES2015 notes at Chapter 12 that, based on experience of Banks Mining sites elsewhere in Northumberland and the North East Region there is no evidence to suggest the presence of a surface mine alone has an adverse effect on nearby

businesses which rely on visitors or tourists. So far as tourism could be affected by the proposed development, this would only arise as a result of direct effects. Where relevant, receptors associated with the tourism industry in the vicinity of the site have been included in the various assessments contained in ES2015. In particular the assessment of landscape and visual effects includes *inter alia* The Drift Cafe, Ellington Caravan Park, Car Parks along Road C110, Public Rights of Way including the Northumberland Coastal Path and public open spaces such as Druridge Bay Country Park and a number of other areas potentially used by visitors to the area. The assessments of noise, vibration, dust and lighting contained in ES2015 also incorporate receptors which may be used by visitors to the area. Where relevant, the assessments have considered the effects of the proposed development against accepted standards or criteria, in many cases based on the protection of residential amenity.

5.12 In this way potential effects of the operational site on visitors to the area have been comprehensively assessed.

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6. CUMULATIVE EFFECTS

CUMULATIVE EFFECTS UPDATED

6.1 The findings of ES2015 considered the environmental effects of the proposed Highthorn site alone, and in combination with other permitted (and proposed) developments. The scope of developments to be included in the assessment of these cumulative effects was agreed with NCC during the scoping stage. The cumulative effects of the proposal are discussed, where relevant, within the individual chapters and appendices of ES2015.

6.2 In the period since ES2015 was prepared there has been a change in the developments which formerly comprised the cumulative baseline. In particular, Banks Mining has confirmed that it will not proceed with the development of the Ferneybeds surface mine which lies to the west of the proposed Highthorn site. In the same period, no new developments have been added to the baseline.

6.3 Although the planning consent for the Ferneybeds site remains extant, the terms of the agreements between Banks Mining and the owners of the land are such that there is no reasonable prospect that the development will now take place.

6.4 The effect of the removal of Ferneybeds from the cumulative baseline has been considered for the findings of each chapter of ES2015. The only substantive change identified relates to cumulative visual effects.

CUMULATIVE VISUAL EFFECTS

6.5 Clarification has been sought regarding the potential for the proposed site to have significant cumulative visual effects.

6.6 A detailed assessment of the landscape and visual effects of the proposed development is contained in the report at Appendix 2 of ES2015. In section 6 of the report under the heading “Cumulative Effects’, 19 areas of cumulative assessment were assessed (see table 10 of the report). Three of these were assessed as having a greater than moderate level of significance. One of the three areas related to the combined effects of the Highthorn development with the Hemscott Hill sand extraction. The Hemscott Hill sand extraction would be revoked should the Highthorn development be permitted, rendering this area of cumulative effect inapplicable. The other two areas arise as a result of the Highthorn site being worked in conjunction with the Ferneybeds site and would be locally significant.

6.7 As noted above, Banks Mining has confirmed it no longer intends to work the consented Ferneybeds site. As a consequence, the significant cumulative visual effects identified in ES2015 are, on balance, unlikely to occur.

6.8 Further, the report at Appendix 2 of ES2015 has assessed impacts of greater than moderate effect as being significant. Effects of this type may be locally significant or may extend over a wide area. Whilst significant adverse effects may be identified in connection with a proposed development, this does not imply necessarily that the development taken as a whole would be unacceptable in environmental terms.

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7. NOISE EFFECTS

NOISE SUPPRESSED PLANT

7.1 The noise effects of the proposed development are considered in detail in Chapter 19 of ES2015. The chapter notes that the calculations on which the assessment is based have included provision for the fitting of purpose built noise suppression equipment specifically designed by Banks Mining for use on its fleet of ridged dump trucks (CAT 785 or similar) and large mass excavators (RH200, CAT6030).

7.2 Clarification has been sought on whether the suppression equipment will be fitted to the plant operating on the Highthorn site and the means of securing this in any planning consent.

7.3 Chapter 7 of ES2015 includes a description of how the proposed Highthorn site will be operated to the highest environmental standards through the implementation of a site specific Environmental Management Plan (EMP).

7.4 All of Banks Mining's operational sites in Northumberland are operated in accordance with an EMP which is tailored, in consultation with the Mineral Planning Authority and other interested stakeholders, to the specific environmental requirements of the site. Dialogue between parties on the detailed content of the EMP usually only takes place following determination of the planning application. It is for this reason, the version of the EMP contained in Appendix 15 of ES2015 was in draft form.

7.5 The draft EMP has been updated to take into account the outcome of the consideration of the proposed development by NCC and to provide the clarification sought by PINS. It is proposed that the EMP will be an "approved document" against which performance of the proposed site will be measured and required to comply with. The updated EMP at Appendix 5 of this document confirms that noise suppression equipment will be fitted to the ridged dump trucks and mass excavators operating on the proposed Highthorn site.

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8. DEVELOPMENT CONTROL TOOLKIT

UPDATED DEVELOPMENT CONTROL TOOLKIT

8.1 ES2015 included at Chapter 26 a table summarising the mitigation measures identified in each chapter of that document. The table also identified the means by which the mitigation will be secured in any planning consent. In addition to updating the table to take account of the contents of FEI.1 and FEI.2 clarification has been sought of the extent of significant effects identified before and after the application of mitigation.

8.2 Development Control Toolkit – Updated Summary of Significant Effects Identified in ES2015 (as Amended by FEI.1 and FEI.2) including Mitigation Proposed and Measures to Secure Mitigation

Chapter of ES2015	Potential Significant Effects Identified*	Mitigation Proposed	Residual Effect	How is mitigation secured
12. Socio-Economic	Effects on the socio economic priorities for the South East Northumberland Delivery Area as defined in the Northumberland Economic Strategy.	The employment opportunities created including support for existing employment levels, payment wages, investment with local suppliers, continued use of local rail infrastructure and at a national level, support for UK balance of payments through the use of indigenously produced coal are all inherent benefits of the proposed development taking place. In addition to the above, mitigation is proposed in the form of a skills fund to be used to provide training and employment opportunities to local people.	Not Significant	The obligation to establish a Skills Fund is set down in the S106 Agreement
13.Landscape and visual impact	Visual effects on Highthorn Cottage	The restoration scheme of the site as is show in drawing PA13 will put in place an improved field pattern with hedgerows and trees along with small wooded copses. There would also be new footpaths and interpretation improving public access and enjoyment of the heritage of the area. The proposals allow for the funding of a wider landscape scale scheme of enhancements "Discover Druridge" that will strengthen and link the various features and attractions within the bay	Not Significant	Planning conditions
	Visual effects from Footpath Widdrington 011		Not Significant	The obligation to establish and fund the Discover Druridge Partnership is set down in the S106 Agreement
	Cumulative visual effects from Road C100	As noted in Chapter 6 of this document, these cumulative effects relate to combined effects with sand extraction at Hemscott Hill and Ferneybeds surface mine. The right to work sand at Hemscott will be revoked in the event that the proposed development takes place. Banks Mining has confirmed it will not commence the Ferneybeds Surface Mine.	None	
	Cumulative visual effects from roads C120 and A1068 Ulgham Grange to Widdrington Station		None	
	Cumulative visual effects from Widdrington Station to Widdrington via Mile Road		None	

Chapter of ES2015	Potential Significant Effects Identified*	Mitigation Proposed	Residual Effect	How is mitigation secured
		No mitigation required		
14. Ecology	Effects on Pink Footed Geese	Operational phase - Management of undisturbed land in early phases of surface mine to improve habitat quality for pink-footed geese (see Appendix 3 of FEI.1) and incorporation of management for pink-footed geese in grazed coastal pasture. Restoration phase - Reinstatement of agricultural land-use within Highthorn site, including some fields >5ha in area to allow future use by geese.	Not Significant	Site Environmental Management Plan (controls on noise emissions) Biodiversity Action Plan (control of land management regimes on undisturbed areas within the application site) Both approved documents. Planning conditions
	Effects on Wagtail	Operational phase - Creation of wet scrapes in grazed coastal pasture, adjoining arable fields in the area marked as “Druridge Ponds” and “Hemscott Ponds” on drawing PA12. Restoration phase - Reinstatement of wet grassland with scrapes along the Hemscott Burn	Not Significant	The obligation to create and retain “Druridge Ponds” is secured through the S.39 agreement under the Wildlife and Countryside Act which in turn is secured through the S106 agreement Planning conditions and legal agreement

Chapter of ES2015	Potential Significant Effects Identified*	Mitigation Proposed	Residual Effect	How is mitigation secured
15. Archaeology and Cultural Heritage	Removal of the World War II decoy building, ridge and furrow field features, flint assemblage, pre-historic deposits and mining features particularly bell pits.	Pre-Commencement Phase - A programme of archaeological recording, including creation of 3D model of decoy building.	Not Significant	Planning conditions
	Affect the setting of Hemscott Hill Farmhouse Grade II) minimal effects on setting but moderate effect on visual amenity (see findings for Chapter 13 above).	Improved field pattern with hedgerows and trees along with small copses and the potential removal of the linear tree belts that interrupt views. There would also be new footpaths and interpretation improving public access and enjoyment of the heritage of the area.	Not Significant	Planning Conditions
16. Hydrology, and Hydrogeology	Non-compliance with NPPF and NPPG for minerals Paragraph: 013 Reference ID: 27-013-20140306 Effects on flood risk both during working and at restoration, effects on coastal erosion Impacts on quality and flow of both surface water and ground water inc. any private water supplies. Possible contamination effects associated with a nearby Foot and Mouth burial site.	The re-instatement of the Hemscott Burn as shown the site restoration plan PA13 Restoration of the site with greenfield run off rate characteristics (mixture of agricultural and increased biodiversity) Working site proposals shown on drawings PA06 to PA11 all located above flood level of 4m AOD. The site drainage plan (PA18) shows the location of water treatment areas and drainage routes throughout the working areas of the site The monitoring of the water quality and drainage infrastructure of the site is covered by the draft site EMP contained in Appendix 15 Water collected on site will be discharged at a green-field run off rate. The final details of the quality and quantity of the water leaving the site will be addressed as part of the separate discharge consent process undertaken post planning by the EA and the LLFA.	Not Significant	Planning conditions EA and LLFA consents

Chapter of ES2015	Potential Significant Effects Identified*	Mitigation Proposed	Residual Effect	How is mitigation secured
17. Geotechnical	Non-compliance with NPPF and NPPG for minerals Paragraph: 033 Reference ID: 27-033-20140306. Effects on the stability of land within and surrounding the site. Safety effects.	The site will be worked in full accordance with the working plans (PA06 to PA11), which include details of the depths and location of the excavations as well as the gradients and position of the soil and overburden mounds.	Not Significant	Planning condition
18. Air Quality	Non-compliance with NPPF and NPPG for minerals. Exceedance of Air Quality Objectives as set out in The Air Quality (England) Regulations (as amended 2002), UK Air Quality Strategy (2007) and Air Quality Standard Regulations (2010) for locations surrounding the site.	The site will be worked in full accordance with the draft site EMP contained in Appendix 15 which outlines a number of measures to ensure that air quality emissions are minimised. The site working method plans (drawings PA06 to PA11) limit the areas that will be subject to operations that have the potential to create air quality emissions. The site compound drawing (PA16) shows the location and layout of the processing and HGV loading facilities within the compound area of the site.	Not significant	Planning condition
19. Noise	Non-compliance with NPPF and NPPG for minerals. Exceedance of limits agreed with NCC, taking account of advice of the Planning Practice Guidance (PPG) (Paragraph 021, ID: 27-021-20140306).	The site will be worked in full accordance with the draft site EMP contained in Appendix 15 which outlines a number of measures to ensure that noise emissions are minimised. The site working method plans (drawings PA06 to PA11) limit the areas that will be subject to operations that have the potential to create noise emissions The site working plans also highlight the location of the soil and overburden mounds around the site that will screen site generated noise The site working hours will be restricted in line with the assessment	Not significant	Planning condition

Chapter of ES2015	Potential Significant Effects Identified*	Mitigation Proposed	Residual Effect	How is mitigation secured
		The overburden mounds will be constructed in line with the methodology shown on drawing PA19 which will reduced the noise effect of those operations		
20. Lighting	Non-compliance with NPPF and NPPG for minerals. Non-compliance with guideline criteria appropriate for the relevant ELZ based on Commission Internationale de l'Eclairage (CIE) Environmental Lighting Zones (ELZ).	The site will be worked in full accordance with the draft site EMP contained in Appendix 15 which outlines a number of measures to ensure that lighting emissions are minimized The site working method plans (drawings PA06 to PA11) limit the areas that will be subject to operations that have the potential to create lighting impacts. The working method plans also show the location and position of the perimeter screening mounds that will provide a screen for site operations The site compound drawing (PA16) shows the location of the buildings and processing areas within the compound as well as the position and height of the surrounding screening mounds. These details will be important to ensure that the site minimizes the effect of upon light levels outside of the site.	Not Significant	Planning condition
21. Vibration	Non-compliance with NPPF and NPPG for minerals. Exceedance of levels agreed with NCC taking account of British Standard BS 7385-2:1993 and British Standard BS 6472-2: 2008.	The production blasting on site will be strictly controlled and monitored in accordance with the draft site EMP contained in Appendix 15 to ensure it meets the criteria outlined.	Not significant	Planning condition
22. Highways and transport	Non-compliance with NPPF. Exceedance of highway network capacity.	The draft EMP (Appendix 5 of this document) outlines measures for implementation and monitoring of traffic management measures. There are no physical mitigation measures considered necessary in relation to the effects of the Highthorn proposals upon the surrounding road network.	Not Significant	Planning Condition

Chapter of ES2015	Potential Significant Effects Identified*	Mitigation Proposed	Residual Effect	How is mitigation secured
23. Stythe or Mine gas	Creation of a potential hazard at locations surrounding the proposed site.	The draft site EMP (Appendix 15) outlines measures to be employed to monitor oxygen levels at a number of locations surrounding the site. These locations will be agreed with NCC as part of the determination process.	Not Significant	Planning condition
24. Soil and ALC	Non-compliance with NPPF and NPPG for minerals. The temporary loss of > 20 ha ALC grades 1,2,3a.	The handling of soil resources only when sufficiently dry, generally limiting soil operations to the months May to September (although this period may be extended during dry periods). The stripping, handling and storage of topsoil (top 30 cm) separately from subsoil movements; Appropriate seeding of soil storage mounds required on site for a period longer than six months, to prevent erosion and to maintain soil structure, nutrient content and biological activity; Subsoil, overburden and other superficial materials handled during operations would only be stockpiled in areas previously stripped of topsoil; The handling of all soils by low ground pressure bulldozer, 360° excavator and dump truck; Minimising the number of machine movements across topsoil; Adoption of a bed/strip system for soil stripping, to minimise compaction; and The definition of all site haul roads and storage areas. Installation of perimeter drainage ditch to catch surface water run-off from the site and channel it into the water treatment areas	Not significant	Planning condition

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9. GREENHOUSE GAS EMISSIONS

INTRODUCTION

9.1 As set down in the letter from the applicant to PINS dated 16 January 2017, in the interests of expediting determination of this application and in response to requests received by third parties, Banks Mining volunteered to provide information on the greenhouse gas emissions associated with the proposed development.

9.2 It is reiterated that Banks Mining does not consider this information is necessary for the environmental information contained in ES2015 to be considered sufficient in terms of the aforementioned EIA Regulations.

9.3 The additional environmental information on the greenhouse gas emissions and climate change impacts associated with the proposed development encompasses the following:

- Greenhouse gas emissions arising directly from activities undertaken on the Highthorn site;
- Greenhouse gas emissions arising from the transport of coal extracted at Highthorn;
- Greenhouse gas emissions arising from the burning of the coal extracted from the Highthorn site, to include an indicative comparison with emissions from coal obtained from reasonable alternative sources; and
- The climate change impacts of the above.

9.4 Environmental consultants Wardell Armstrong has prepared a report addressing the above matters. The report is reproduced in full at Appendix 6.

METHODOLOGY

9.5 The predicted GHG emissions have been calculated in accordance with the following established guidelines and methodologies:

- World Business Council for Sustainable Development (WBCSD) and the World Resource Institute (WRI) 'Greenhouse Gas Protocol' (2013). A Corporate Accounting and Reporting Standard ';
- Department for Environment Food and Rural Affairs' (DEFRA) 'Guidance on how to measure and report your greenhouse gas emissions' September 2009;
- DEFRA's 'Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance' June 2013; and
- Intergovernmental Panel on Climate Change (IPCC) Guidelines for National GHG Inventories from 1996 and 2006, as well as Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories from 2000.

9.6 The direct and indirect greenhouse gas emissions associated with the proposed development have been identified and classified into the following three groups (referred to in the report at Appendix 6 as “Scopes”):

9.7 Direct GHG emissions (“Scope 1 emissions”) are those that occur from sources owned or controlled by the operator of the proposed site. For Highthorn the following direct emissions have been considered:

- Emissions from onsite power generation (e.g. diesel generators);
- Emissions from plant equipment and machinery;
- Emissions from use of explosives; and
- Fugitive emissions from coal mining and handling.

9.8 Indirect GHG emissions (“Scope 2 emissions”) are those GHG emissions from the generation of purchased electricity consumed at the proposed site. As noted above, it is anticipated that the Highthorn site will be served by a connection to the local electricity grid network which will supply power to the offices and buildings in the site compound.

9.9 Emissions not controlled by the applicant company (“Scope 3 emissions”) are those indirect emissions (not included in Scope 2) that occur both upstream and downstream of the proposed development and are an optional reporting category. For the proposed development, the following Scope 3 emissions have been considered:

- Emissions from transportation of raw materials to the site;
- Emissions from employee commuting to and from the site;
- Emissions due to the disposal of wastes arising from the site;
- Emissions from transportation of the coal and by-products (fireclay and sandstone); and
- Emissions that occur from the burning of the coal extracted from the site.

GHG EMISSIONS FOR THE PROPOSED DEVELOPMENT

9.10 A detailed description of the direct and indirect (Scope 1 and Scope 2) emission sources is provided in Appendix 1 of the report at Appendix 6. The table below summarises the Scope 1, Scope 2 and Scope 3 emissions for the proposed development.

Table 1 : GHG emissions for the proposed development (tCO_2e/Year)[1]								
Emission Source		**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**
Scope 1 Emissions								
a1.	Stationary Combustion (Onsite power generation)	30.03	30.03	30.03	30.03	30.03	30.03	30.03
a2.	Mobile Combustion (plant Equipment and machinery)	4,091.46	24,923.41	24,704.80	24,340.77	24,140.57	13,532.20	2,187.19
a3	Explosives	-	96.20	96.20	96.20	96.20	96.20	-
a4.	Fugitive Emissions	-	5,194.45	5,666.67	5,666.67	5,666.67	3,305.56	-
	Total Scope 1 Emissions	***4,121.50***	***30,244.10***	***30,497.70***	***30,133.67***	***29,933.47***	***16,963.39***	***2,217.22***
Scope 2 Emissions								
b1.	Electricity Purchased from the grid	329.64	329.64	329.64	329.64	329.64	329.64	329.64
	Total Scope 2 Emissions	***329.64***	***329.64***	***329.64***	***329.64***	***329.64***	***329.64***	***329.64***
	Scope 1 and Scope 2 Emissions	***4,451***	***30,574***	***30,827***	***30,463***	***30,263***	***17,294***	***2,547***
Scope 3 Emissions								
Upstream Activities								
c1.	Purchased goods and services	27.22	191.14	189.71	187.33	186.02	116.65	14.77
c2.	Employee Commuting	630.94	630.94	630.94	630.94	630.94	630.94	630.94
c3.	Waste generation	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Downstream Activities								
c4.	Transportation and distribution (road and rail transport of coal and other by-products)	-	7,369.56	8,037.18	8,037.18	8,037.18	4,673.352	-
c5.	Processing of sold products (Coal Combustion)	-	1,427,616.55	1,557,397.62	1,557,397.62	1,557,397.62	908,482.20	-
	Total Scope 3 Emissions	***659.32***	***1,435,809.36***	***1,566,256.60***	***1,566,254.22***	***1,566,252.91***	***913,904.30***	***646.87***
	Scope 1, 2 and 3 Emissions	***5,110***	***1,466,383***	***1,597,084***	***1,596,718***	***1,596,516***	***931,198***	***3,194***

[1] This table refers to the financial years in accordance with Defra's 'Guidance on how to measure and report your greenhouse gas emissions' September 2009. HJ Banks and Co Ltd financial year runs from September 1st to August 31st.

Scope 1 and Scope 2 Emissions

9.11 The direct and indirect GHG emissions associated with the proposed development (Scope 1 and Scope 2 emissions) have been estimated to be 146,419 tonnes of CO2e. The GHG emissions for the project peak in Year 2 to Year 6 which is consistent with the peak coal production figures. The annual average emissions for the project (Scope 1 and 2) have been estimated to be approximately 20,917 tonnes of CO2e.

Scope 1, Scope 2 and Scope 3 Emissions

9.12 The total GHG emissions for the entire life of the mine have been estimated to be 7.19 million tonnes of CO2e. This estimate includes emissions associated with the upstream and downstream activities associated with the mine such as transportation of raw materials, transportation of coal and other by-products (sandstone and fireclay), employee commuting, disposal of waste and subsequent combustion of coal for thermal power generation, domestic heating and for industrial uses. The combustion of the coal accounts for 99.4 % of the total Scope 3 emissions.

9.13 The WA report notes that the Scope 1 and Scope 2 emissions constitute 2.03% of the total GHG emissions associated with the proposed development (Scope 1, 2 and 3 emissions). Consequently, Scope 3 emissions make up 97.96% of the total predicted GHG emissions from the proposed development

Emissions associated with the proposed development in context of the total UK and European GHG emissions

9.14 Placing the calculated emissions in context, the WA report notes DECC has estimated the UK's 2016 GHG emissions to be approximately 483 million tonnes of CO2e whereas the European Union, in 2015, emitted 3.47 billion tonnes of CO2e . The contribution of the proposed development to the UK's and Europe's total GHG emissions is estimated to be 0.004%. and 0.0006% respectively.

9.15 Chapter 2 of ES2015 notes the burning of coal is necessary to meet the energy requirements of the UK and is likely to remain necessary for the foreseeable future. This process does generate GHG emissions and will continue regardless of the Highthorn site generating coal, as supply would inevitably have to be met from imports.

9.16 In the context of the UK's GHG emissions arising from the production of electricity for the UK national grid, the WA report notes that Scope 1 and Scope 2 emissions from Highthorn are estimated to be in the range of 0.005-0.045% of the UK figure. If the Scope 3 emissions are also considered, the coal from the Highthorn site will contribute to a maximum of 2.37% of the UK's GHG emissions from production of electricity.

10. UPDATED ECOLOGICAL SURVEYS

INTRODUCTION

10.1 The findings of a comprehensive suite of ecological surveys of the application site were reported in Chapter 14 of ES2015. In view of the delay in determination of the application caused by the call-in procedure Banks Mining sought the advice of Argus Ecology as the ecologists responsible for undertaking the survey work.

10.2 The response of Argus noted that the suite of surveys reported in ES2015 included a programme of bat activity surveys. At that time there was no evidence of use of the site by roosting bats, although a number of trees within the application site were assessed as providing potential opportunities. It was recommended in the Ecological Assessment undertaken by Argus Ecology and reproduced in full at Appendix 3 of ES2015 that, as utilisation of roosts can change between survey and implementation of planning permission, prior to felling further surveys would be required.

10.3 In the period since the surveys were undertaken the Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition) has been published by the Bat Conservation Trust. In order to comply with this best practice a detailed aerial inspection of trees within the application site identified as potential roosts has been undertaken by suitably qualified surveyors. The results of the survey are reproduced in full at Appendix 7.

10.4 No signs of current or previous use of the trees by bats was identified. A single tree had potential roosting features which it was not safe to inspect however holes present appeared to be shallow and the tree is likely to fail in the near future because of its poor condition. The findings of the ecological assessments reported in Chapter 14 of ES2015 are not therefore considered to have changed.