



RECOMMENDATION REPORT RELATING TO THE DETERMINATION OF CONDITIONAL UNDERGROUND MINING LICENCE APPLICATIONS

APPLICATION DETAILS

Name/references of applications: Woodhouse Colliery On-shore (CA11/UND/0193/N), Woodhouse Colliery North (CA11/UND/0194/N) and Woodhouse Colliery South (CA11/UND/0195/N) (together “**the Applications**”)

Applicant: West Cumbria Mining Limited (“**WCML**”)

Date of applications: 28 February 2023

Date applications deemed complete: 6 June 2023

Date applications advertised: 6 June 2023

Date of financial determination: 23 September 2024

Total licence area: 19,387 ha (across 3 licence areas)

Conditional licence term requested: 5 years

SUMMARY

1. This is a report to the Operations and Sustainability Director, recommending that the Applications are refused and that the conditional coal mining licences applied for by WCML are not granted.
2. Unless otherwise specified all sections referenced below apply to all of the Applications.
3. The Coal Authority’s (“**CA**”) determination process of the Applications has involved utilising internal expertise on the matters of mining, subsidence and finance at the CA and the engagement of Wardell Armstrong (“**WA**”) and the British Geological Survey (“**BGS**”) to provide subject matter and technical expertise and advice. WA and BGS have acted as expert advisors to allow the CA to reach an informed and reasonable decision in relation to the Applications.
4. The sections below detail the CA’s assessment of the Applications, concluding in the recommendation of the refusal of conditional underground mining licences.

THE APPLICATIONS

5. WCML submitted the Applications on 28 February 2023 in support of their Woodhouse Colliery mining project for a new underground coal mine near Whitehaven in Cumbria (the “**Project**”). By the Applications WCML are seeking three conditional coal mining licences

to replace former conditional licences, relating to the same project that expired on 14 October 2022.

6. Due to the scale of the proposed mining operations forming part of the Project, WCML has had to submit three licence applications as a result of the limitation of the maximum licence area that can be applied for, 10,000 ha, in line with the CA's published charging structure – <https://www.gov.uk/government/organisations/the-coal-authority/about/about-our-services>. Despite three licence applications being received, they all relate to the same single mining project, i.e. the Project.
7. The Applications relate to three areas located along the Cumbrian coast line with one being situated onshore and the remaining two being offshore. The area covered by the Applications has been checked internally by the CA and the Applications, in total, cover an area of 19,387 ha, of which 524 ha is located onshore. WCML originally requested a conditional licence period of three years in the Applications, but subsequently revised this to five years on 5 January 2024. This revised period is within the maximum term of eight years that can be requested for a conditional licence¹.
8. Further details were requested by the CA from WCML on several occasions, to review the Applications before they were deemed complete on 6 June 2023.
9. As part of the CA's consideration of the Applications additional further details were requested by the CA from WCML. Please refer to Appendix A that list what requests were made for further information and when this information was provided.

BACKGROUND

Previous decisions

10. WCML has previously held conditional licences granted by the CA relating to the Project dating back to 2010. At that time, the Project was focused on developing an underground coal gasification scheme. In 2013, further licences were granted which again were primarily associated with an underground coal gasification scheme but also licensed conventional underground mining.
11. These earlier licences were granted to Riverside Energy (West Cumbria) Limited who changed their company name to WCML in 2014. In 2015, the underground coal gasification licences were reclassified as conditional underground mining licences as WCML ceased

¹ As set out in the Guidance Notes for Underground Coal Mining licences, paragraph 2: [Guidance Notes for Underground Coal Mining Licences - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/guidance-notes-for-underground-coal-mining-licences)

pursuing the underground coal gasification element of the Project. The three conditional underground mining licences continued until they all expired on 14 October 2022. The current Applications are seeking to replace the former licences.

12. At the time the conditional licences expired in 2022, the planning application for the Project was still being determined by the then Secretary of State for Levelling Up, Housing and Communities. WCML were fully aware of the expiration with a preference of waiting for a decision on planning permission before deciding on the appropriate course of action. Planning permission was granted on 7 December 2022 and WCML subsequently submitted three new conditional underground mining licence applications on 28 February 2023.

Planning process

13. A planning application to develop an underground coal mine, which included an Environmental Impact Assessment, was first submitted to Cumbria County Council (the “**Council**”) by WCML on 31 May 2017.
14. The planning application was consulted on and considered by the Council’s Development Control and Regulation Committee several times over the following years, but no determination of the planning application was made by the Council.
15. The then Secretary of State for Levelling Up, Housing and Communities “called-in” the planning application for determination and a public planning inquiry was held in September 2021. This led to the application being approved on 7 December 2022 by the Secretary of State.
16. Under the terms of the planning permission, the proposed development would have had to commence within three years of the date of the approval, with the operational mining phase ceasing no later than 31 December 2049, and the site being restored in accordance with the approved scheme within 24 months of the date of cessation.
17. When granting the planning permission, the Secretary of State made it clear that the application for planning permission only covered those parts of the proposed development that would take place onshore and that a separate process for offshore development would apply.
18. Following the grant of the planning permission, legal challenges were made pursuant to section 288 of the Town and Country Planning Act 1990, comprising a joint challenge made by Friends of the Earth (“**FoE**”) and South Lakes Action on Climate Change (“**SLACC**”) in May 2023. The challenge was considered at a hearing in the High Court in July 2024, with

judgment being handed down on 13 September 2024. The grant of planning permission was quashed.

LEGISLATIVE FRAMEWORK

Power to grant licences for coal mining operations

19. Part II of the Coal Industry Act 1994 (“**CIA 1994**”) contains the principal legislative provisions concerning the licensing of coal mining operations. The following matters are particularly important.
20. Pursuant to section 25 CIA 1994 coal mining operations shall not be accrued on by any person except under and in accordance with a licence under Part II of the CIA 1994.
21. Pursuant to section 26 CIA 1994 the CA has the power to grant licences under Part II of the CIA 1994. An application for a licence may be made by any person who has acquired, or is proposing to acquire, such an interest in land comprised in the area with respect to which the application is made, or such rights in relation to coal in that area, as, apart from the need for a licence, would entitle him to carry on the coal-mining operations to which the application relates.
22. Pursuant to section 26(5) CIA 1994 (and subject to the duties in sections 2 – 4 CIA 1994, as discussed below) the CA may take into account all such factors as it thinks fit in determining whether, and subject to what conditions, to grant a licence under Part II of the CIA 1994. Further, the factors that may be taken into account shall include, in particular, the terms on which the applicant, or any other applicant with respect to the same area, is offering to acquire from the CA any such interest or rights as are mentioned in section 26(2) CIA 1994.
23. Pursuant to section 27(1) CIA 1994 the provision of a licence under Part II of the CIA 1994 shall specify or describe the coal-mining operations which, subject to its conditions, are authorised by the licence. The provisions of a licence may restrict the authorisation contained in the licence to operations carried on within such period as may be specified in the licence or as may be determined in a manner so specified: see section 27(2)(b). Further, a licence under Part II of the CIA 1994 may provide for the coming into force of the authorisation contained in the licence, or of any conditions or other provisions of the licence, to be postponed until after the acquisition by the holder of the licence of any interest or right in or in relation to any land or other property or until after such other requirements as may be specified or described in the licence have been satisfied: see section 27(3)(a).

24. Pursuant to section 28(1) CIA 1994 a licence under Part II of the CIA 1994 may include such conditions as the CA, subject to having regard to its duties under sections 2 – 4 CIA 1994 and the provisions in Part II of the CIA 1994, may think fit.

Nature of licences granted by the CA

25. The CA grants two types of licence, namely:
- 25.1. an Operating Licence, where the applicant satisfies all of the CA's statutory licensing requirements and where all the other necessary, rights permissions and consents to carry out underground coal mining operations are in place; and
- 25.2. a Conditional Licence.
26. The CA's guidance (see below) describes a conditional licence as follows:
- “An applicant who has not secured all the necessary permissions and consents (e.g. planning permission) might be reluctant to commit themselves irrevocably to substantial expenditure in developing a project without some assurance that they will be granted an Operating Licence and associated Lease when these permissions and consents are obtained.*
- A Conditional Licence caters for these circumstances and defers the coming into effect of the authorisation to mine until the specified requirements have been satisfied. It will lapse if these requirements are not fulfilled within a specified period, normally a maximum of 8 years.”*
27. The Applications seek conditional licences, i.e. licences where the coming into force of the authorisation contained in the licence is postponed pursuant to section 27(3)(a) CIA 1994 until the requirements specified or described in the licence (for example by way of a condition pursuant to section 28 CIA 1994) have been satisfied.
28. Before granting a conditional licence, the CA must be satisfied on the balance of probabilities that coal mining operations are capable of being carried on acceptably once the authorisation contained in the licence has come into force after the satisfaction of the requirements specified or described in the licence. A conditional licence establishes the in-principle acceptability of the proposed coal mining operations.

Duties on the CA

29. Pursuant to section 2(1) CIA 1994, it is the duty of the CA to carry out its functions under Part II of the CIA 1994 (including the grant of licences pursuant to section 26) in the manner that it considers is best calculated to secure, so far as practicable:
 - 29.1. that an economically viable coal-mining industry in Great Britain is maintained and developed by the persons authorised by virtue of that Part to carry on coal-mining operations;
 - 29.2. that such persons are able to finance both the proper carrying on of the coal-mining operations that they are authorised to carry on and the discharge of liabilities arising from the carrying on of those operations; and
 - 29.3. that persons to whom obligations are owed in respect of subsidence damage caused at any time (whether before or after the passing of this Act) do not sustain loss in consequence of any failure by a person who is or has been a licensed operator to make such financial provision for meeting present and future liabilities as might reasonably have been required of that person.

30. Further, subject to the duty on the Authority in respect of safety contained in section 4 CIA 1994, it is the duty of the CA in carrying out its functions under Part II of the CIA 1994 (including the grant of licences pursuant to section 26) to have regard to the desirability of securing:
 - 30.1. that persons authorised by virtue of that Part to carry on coal-mining operations are persons who have at their disposal such experience and expertise in the carrying on of such operations as are appropriate for ensuring that any authorised operations are properly carried on; and
 - 30.2. that competition is promoted between the different persons carrying on, or seeking to carry on, coal-mining operations.

31. In addition, it is also the duty of the CA, in carrying out its functions under Part II of the CIA 1994 (including the grant of licences pursuant to section 26) in cases where it appears that subsidence damage may be caused to any land or other property that does not consist in unworked coal or in coal mining, to have regard:
 - 31.1. to the extent of the damage which is likely to be caused; and
 - 31.2. to the character of the land or other property in question and to the uses to which it is or is likely to be put.

32. The Authority has further duties with respect to property (see section 3 CIA 1994) and with respect to safety (see section 4 CIA 1994).

Public sector equality duty

33. Under section 149 of the Equality Act 2010, the CA must, in the exercise of its functions, have due regard to the need to:
- 33.1. Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act;
 - 33.2. Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - 33.3. Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
34. The relevant protected characteristics are age; disability; gender reassignment; pregnancy and maternity; race; religion or belief; sex; and sexual orientation.
35. Having due regard to the need to advance equality of opportunity involves having due regard, in particular, to the need to:
- 35.1. Remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic;
 - 35.2. Take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;
 - 35.3. Encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.
36. The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities. Compliance with the duties in section 149 may involve treating some persons more favourably than others. The duty cannot be delegated and must be discharged by the decision-maker. To discharge the statutory duty the decision-maker must analyse all the relevant material with the specific statutory obligations in mind. If a risk of adverse impact is identified consideration must be given to measures to avoid that impact as part of the decision-making process.

37. In the current circumstances it is not considered that the determination of the Applications would impact upon any individual with any protected characteristic in a way that requires mitigation in the context of the matters covered by the duty in section 149 of the Equality Act 2010 beyond that which would otherwise apply in relation to individuals who do not share such protected characteristic.

Guidance published by the CA

38. The CA is required pursuant to section 30 CIA 1994 to publish such details as it thinks fit of the manner in which it proposes to exercise and perform its powers and duties in relation to licensing of coal mining operations, and the arrangements it has made for the purposes connected with the exercise and performance of those powers and duties. The CA has published Guidance Notes in relation to the application for licences to carry out coal mining operations on the gov.uk website. Relevant forms as well as published guidance relating to both surface and underground coal mining licences can be found at: [Surface and underground coal mining licences - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/surface-and-underground-coal-mining-licences).

EXTERNAL INPUT AND REPRESENTATIONS

Advice from external experts

39. Given the significance, complexity and scale of the Project, it was determined reasonable to seek additional expert advice on the issues identified below.
40. Wardell Armstrong (“**WA**”) and the British Geological Survey (“**BGS**”) were procured by the CA to provide expert advice on the Applications, to assist the CA in making an informed and reasonable decision in relation to the Applications.
41. WA’s financial advice and review services and mining expertise services were procured in August 2023. WA’s initial scope included:
- 41.1. Financial matters: A financial analysis including a critical analysis of the global coal market throughout the Project’s production phase. The analysis focused principally on matters relating to the financial viability of the Project, including a financial assessment of the capital and revenue costs for the full life of the Project through to restoration and closure of the mine, and a review of the current and future price of coal in a global market, particularly with regard to political and regulatory environments which may support or deter the future use of coal and impact on the project’s revenue and profitability.

41.2. Subsidence matters:

- 41.2.1. A review of the mining proposals to determine the extent to which subsidence damage could occur, based on direct mining subsidence, fault reactivation, seismic activity, coastal erosion and hydrogeological effects;
- 41.2.2. A review of the mining proposals to determine the potential impacts associated with that subsidence damage;
- 41.2.3. A review of the phasing of the mining proposals to determine the cost of remedying subsidence damage forecasted on an annual basis throughout the whole production lifecycle;
- 41.2.4. A review of the phasing of the mining proposals to determine the extent of the boundary of the Area of Responsibility (that is associated with the licence) on an annual basis throughout the whole production lifecycle;
- 41.2.5. A review of the cost of remedying subsidence damage that could occur for up to a period of six years after the permanent cessation of mining;
- 41.2.6. Consider other post mining effects – rebounding/rising mine water, its potential for pollution e.g. aquifers etc

41.3. Experience/expertise matters:

- 41.3.1. A review of the organisational structure to understand key appointments;
- 41.3.2. A review to determine what relevant qualifications and experience each key appointment holds;
- 41.3.3. In consideration of the wider workforce, a review to determine the nature of their training programmes.

42. BGS's services were procured in October 2023, and BGS were instructed to review the possible effects that mining might have on the area's structural geology, including subsidence, fault reactivation, seismicity, water and coastal erosion. BGS's initial scope was to:

- 42.1. Review WCML's geological impact assessment in relation to seismic activity, subsidence, fault reactivation, coastal erosion and water, against known geological features in the area and the potential to cause other issues, e.g., noise and vibration;

- 42.2. Review the approach adopted and supporting assumptions of WA's assessment; and
- 42.3. Provide guidance and support in considering other activities / facilities in the area and any potential for interactions based on the relevant geology and related aspects.
43. This scope has evolved throughout the process to include consideration of the Sellafield nuclear site and the removal of the need to review the assumptions of WA.
44. The BGS report does not include an assessment for the potential impact of the Woodhouse Colliery project on any proposed Geological Disposal Facilities ("GDF") for radioactive waste, though BGS notes that two of the three Community Partnerships interested in hosting a GDF are [Mid Copeland](#) and [South Copeland](#) and that Nuclear Waste Services ("NWS") have begun studies to evaluate the suitability of the onshore and inshore subsurface of these areas for hosting a GDF. As the proposed GDF's are at a stage where NWS are undertaking studies to evaluate the suitability of the location for constructing such a facility, the CA is unable to consider this into the determination of Applications and therefore this matter is not considered further.
45. The internal experts within the CA, including those with mining, subsidence and financial expertise, reviewed both of the reports prepared by WA and BGS, and representatives from the CA attended various meetings with both WA and BGS to interrogate and discuss the content of the reports and to test their understanding before contributing their views to the positions set out in this report.

Statutory publication

46. One of the primary duties of the CA is to have regard to the desirability of securing that competition is promoted between different persons carrying on, or seeking to carry on, coal mining operations. Pursuant to this duty the CA advertised the Applications on 6 June 2023 (the date on which the applications were accepted as complete) under licensing newsletters 0603, 0604 and 0605 (see Appendix B). The CA has also adopted a transparent approach to publication of the licence documentation, which was published in redacted form, so as to protect commercially confidential information, here: [Coal mining licence applications - GOV.UK \(www.gov.uk\)](#).
47. In line with the CA's published guidance, a period of 30 days from the date on which the Applications were accepted as complete was allowed for expressions of interest to be submitted by anybody who sought to potentially advance a competing application. On 6 July 2023 an expression of interest was made by [REDACTED] (see Appendix C).

This was the only expression of interest received by the CA. In line with CA published guidance a further period of 30 days was allowed for [REDACTED] to submit a competing application(s). No competing application(s) were received from [REDACTED] or any other third party.

Non-statutory notification

48. The CA is not subject to any statutory duty to consult with any third party in the determination of applications for licences to carry out coal mining licences, nor is such consultation required as a matter of fairness in the context of the task to be undertaken by the CA as an expert regulator. The CA did however inform the following bodies of the receipt of the Applications. No substantive correspondence was received from any of these bodies in relation to the Applications:

48.1. The Health and Safety Executive;

48.2. The Marine Management Organisation;

48.3. The North Sea Transition Authority;

48.4. The Department for Energy Security and Net Zero (sponsor body);

48.5. The Crown Estates;

48.6. The Local Mineral Planning Authority.

49. Following the determination of the Applications by the CA, all of the above bodies will be notified of the outcome. Whilst WA has advised the CA on a number of potential health and safety risks that are particular to WCML's proposed methods of working set out in the Applications, this liaison with the HSE does not impact or influence the determination process and is not a relevant factor in the CA's decision making as this is outside of the CA's statutory remit.

Representations received

50. Whilst the CA is not required to, and did not in relation to these Applications, consult with or otherwise seek representations from any wider group of stakeholders, a letter was received from FoE on 18 July 2023 (see Appendix D). The CA responded on 23 July 2023 (see Appendix E) stating its position with regard to representations made by third party stakeholders in relation to the Applications. The letter from FoE requested that the CA take into account certain matters relating to economic viability of the proposed coal mining

operations, carefully scrutinise the financial position of the WCML, consult with experts on the issue of subsidence, adopt a precautionary approach to the grant of licences, and consider the impacts of climate change in reaching its decision.

51. The contents of the letter from FoE are not accepted in all respects. However, given the nature of the issues for determination, it is not necessary to set out any further reasoning on this matter at this time.

MAIN ISSUES FOR CONSIDERATION

52. As detailed above, as part of its assessment of the Applications, the CA has itself considered the Applications, including the technical supporting documents provided, utilising internal expertise on the matters of mining, subsidence and finance. It has also engaged the expert advice of WA and BGS.
53. As part of the overall assessment of the Applications, and taking into account its statutory duties and functions as detailed in the section of this report titled “Legislative Framework”, the CA has identified a number of key factors which are relevant to consider when determining the Applications. These are detailed below.

Geology

54. Geology is a relevant consideration in light of the CA’s statutory duties relating to subsidence as set out in section 2(3) of the CIA 1994.
55. BGS have undertaken an assessment of the geology for both the onshore and offshore Application areas which is largely based on borehole data (including core and geophysical logs), mine data, seismic data and to a limited degree onshore outcrop data.
56. Although BGS advised that the geological investigations made within the Applications are reasonable and proportionate and are sufficient to interpret the geology of the licence areas to an adequate level of confidence, they have advised that additional borehole investigations could be undertaken further offshore to validate the seismic interpretations and to provide additional confidence in the interpretation of lithological variability and thicknesses of geological units across the licence areas.
57. Whilst noting the recommendations made by BGS, it is not considered appropriate by the CA to mandate WCML to undertake further exploratory drilling at this point in time, as this is a matter for them to determine that they have sufficient drilling information to take the Project forwards. Therefore, on the matter of geology (and noting that this report considers matters relating to reserves, resources and subsidence separately), there are no

outstanding geological concerns associated with the investigations detailed in the Applications that would prevent the Applications being approved and licences granted.

Operator's Mining Experience & Expertise

58. The Operator's mining experience and expertise is a relevant consideration in light of the CA's statutory duties as set out in section 2(2)(a) of the 1994 Act.
59. WCML have provided information regarding the personnel that are currently employed to support the Project including company organogram and details on the personnel working on the project which includes members of the board, executive team, project team and key advisors. A summary of the qualifications and experience of each team member has also been submitted as part of the Applications.
60. Although it would appear that the personnel who are currently supporting the Project have the appropriate expertise, it is recognised that the structure and personnel will change and evolve as the Project develops through to development stage when a full workforce needs to be in place.
61. The CA notes that, in the event that coal mining operations were to commence, the Operator must be mindful of the Mines Regulations 2014 (MR2014) where WCML must satisfy the qualification and competency requirements as detailed under Regulations 10/11 (see Appendix F).
62. WA have also undertaken an assessment of WCML's proposed organisational structure in order to understand the capability and experience of key appointments and considered the wider workforce requirements for the proposed project. WA have advised that WCML propose to form a suitable management structure, as required by the MR2014 and that the provisions of the MR2014 are being taken into account by WCML.
63. WA also advised that the regulation of Health & Safety for mines is a matter devolved to the HSE. Although it is no longer specifically required by the MR2014 it is expected that the HSE would have some role to review the competency and experience of key health and safety appointments, but that it is the responsibility of the mine operator to ensure that appropriately qualified and experienced persons are in post if and when the mine commences operations.
64. WA advised that whilst the detail for all posts are not included in the information provided, WA is satisfied that WCML intends to ensure that all management and operatives are suitably qualified and trained and that HSE has the responsibility to ensure that this requirement is fulfilled.

65. The CA accept the advice provided by WA on the matter of the Operator's mining experience and expertise, and are of the view that it is reasonable to accept that WCML does not have all appointments in place at this time. It remains, however, the CA's position that updated information on the expertise and experience of those who will be holding key operational posts would need to be provided and approved by the CA prior to coal mining operations commencing.
66. Therefore, on the matter of the Operator's mining experience and expertise, in the event that the Applications were to be approved and licences granted, a condition would be required in each licence requiring the provision of, and approval by, the CA of updated information prior to coal mining operations commencing.

Offshore Installations & Apparatus

67. Offshore installations and apparatus is a relevant consideration in light of the CA's statutory duties relating to subsidence and damage to property as set out in section 2(3) of the CIA 1994.
68. WA have advised of a potential risk associated with the presence of existing or proposed offshore installations or facilities that could be affected by the mining operations. WCML have confirmed that there is no sub-sea infrastructure or any other sensitive facilities/features across the offshore mining area. The CA have also undertaken an assessment of the North Sea Transition Authority's (NSTA) interactive map viewer² which does not identify any existing or proposed offshore installations within the licence application areas.
69. However, the CA recognises that whilst there are no known or identifiable concerns at this point in time, as time elapses, new offshore installations could be consented or constructed. Therefore, on the matter of offshore installations and apparatus, in the event that the Applications were to be approved and licences granted, a condition would be required in the two licences relating to the Woodhouse Colliery North and Woodhouse Colliery South Applications requiring an up-to-date assessment to be provided to, and approved by, the CA prior to coal mining operations commencing.

Mine Design & Operations

70. Mine design and operations is a relevant consideration in light of the CA's statutory duties relating to both (i) subsidence and damage to land and property as set out in section 2(3)

² [UKCS Lease Agreements \(arcgis.com\)](https://arcgis.com)

of the 1994 Act; and (ii) viability considerations as provided for in section 2(1) of the 1994 Act.

71. WCML have provided revised Life of Mine (LoM) plan layouts for both the Main Band and Bannock Band seams. The CA have identified that these plans have attempted to take into account the location of some of the proven and conjectured faulting by the presence of sterilised areas in the layout of the proposed working panels. However, it is observed that not all known and conjectured faulting has been reflected in the proposed working layout which will impact the working layout and potentially significantly detrimentally effect the estimated recoverable reserves. This issue has also been identified by WA and BGS.
72. WA note that the proposed method of working utilises partial extraction mining techniques adopting a 'run-out and pocket' method which is akin to a modified 'room and pillar' method but for which an increased extraction ratio is applied. The CA recognise that this form of mining is adaptable when compared against other forms of mining, specifically longwall mining and therefore this will afford some operational flexibility as workings progress.
73. As referenced below in the section titled "Reserves & Resources", [REDACTED], WCML have advised that the coal pillars being left in situ will limit the effects of roof caving and that the backfilling of mine workings with [REDACTED] will help limit ground movement. The effectiveness of using [REDACTED] is referenced at paragraph 76 and this issue has the potential to significantly impact the available coal reserves.
74. WA have identified that the working layout of both seams will mirror one another which follows a conventional approach. However, they go on to indicate that this creates the risk of generating excessive tensile strains at the surface or seabed. Considering the mining technique adopted WA suggest that the [REDACTED] Whilst the CA note that the [REDACTED], which is something that WCML would be able to accommodate in a proposed design, it is anticipated that through the inherent way mining adapts and develops it is considered likely that the mining layout will naturally be different in any case. WCML have not provided any information to support an assessment of this issue.
75. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

76. [REDACTED] [REDACTED] [REDACTED]. WCML have provided information confirming they have observed this [REDACTED] in comparable coal mines in China. Although WA have confirmed that the [REDACTED] emplacement method is feasible and there would be more than sufficient space underground to accommodate the waste, they consider that the [REDACTED] will only provide minimal support for the [REDACTED] area, and with the risk that some of the working areas will be fully caved before the [REDACTED] is deposited.
77. WA also note that the amount of mine discard will be highly variable and largely dependent on the proportion of rock that is cut during coal mining operations. Similarly, the processing of the coal, primarily to achieve the saleable quality required, will result in variable quantities of discard coal material being incorporated into the [REDACTED] again resulting in variability of mine discard volumes.
78. Whilst it is important the CA note that, according to WCML, comparable [REDACTED] [REDACTED] have been observed by WCML in a coal mine in China, the CA's previous concerns regarding the effectiveness of using [REDACTED], combined with WA's uncertainty on the feasibility to be able to deposit the [REDACTED] and the availability of [REDACTED] material at any given time, brings the matter of using such a technique into further doubt.
79. This matter impacts on both subsidence and viability, should WCML not be able to effectively place [REDACTED] as they propose. The CA's position on viability and subsidence are set out below, and the uncertainty introduced by WCML's proposed mine design and operations contribute to the positions considered below.

Subsidence

80. Subsidence is a relevant consideration in light of the CA's statutory duties relating to subsidence and damage to land as set out in sections 2(1)(c) and 2(3) of the 1994 Act.
81. From the information provided by WCML, WA have undertaken an assessment of the potential for subsidence to occur. Further detailed subsidence modelling information was reasonably requested from WCML, but has not been provided, with WCML citing confidentiality grounds as a reason for not providing their subsidence modelling information.
82. WA have therefore undertaken their own assessment based on professional assumptions, using their subsidence modelling software (MULPAN) and applying their professional experience and expertise. This basic modelling has allowed WA to undertake an

assessment of the potential effects of subsidence (see further information regarding WA's assessment below). WA have only been able to undertake this assessment using the limited information available.

83. The additional subsidence assessment information requested from WCML, but not provided, is a significant factor in the determination of the Applications. WCML have not provided the information requested, however they did offer the opportunity for the CA and its consultants to view this data at WCML's offices under their supervision. This offer was not taken up by the CA as it was not considered reasonable to be able to verify this technical information and would not allow for an independent review. In order to properly interrogate data, the CA experts (and experts from WA and BGS) would need to have access to the full model. The testing and analysis that the CA, WA and/or BGS would need to undertake on the subsidence modelling information could not be undertaken at WCML's offices. Viewing the data is insufficient, especially in light of the statutory duties associated with subsidence considerations that the CA is required to discharge³. The CA is also aware of the importance of making transparent decisions that can withstand scrutiny – and therefore being able to justify its decision, with reference to data and evidence is critical. WCML's proposal would not allow this fundamental principle to be achieved.
84. WCML did offer to provide further information relating to their previous exploration drilling, including borehole core photos, Vulcan based geological model files (which require bespoke software to open), seismic study raw data files, downhole borehole log raw data files historic borehole data (e.g. inherited but not part of WCML's exploration), however this information was not requested. This information would not have refined the CA's assessment of subsidence and the CA's mining and subsidence experts are of the view, exercising their professional judgement, that this type of data and information would not have impacted the advice provided by WA or BGS.
85. The CA has procured WA, in part, to undertake a subsidence assessment. If the subsidence information requested from WCML had been provided, a much more detailed assessment could have been undertaken by WA.
86. WA have advised that the Definitive Feasibility Study (the "**DFS**") indicates that the mining operations give rise to the potential for mining subsidence to occur both onshore and offshore, but this advice is based on a dispersal of boreholes concentrated both onshore and nearshore. Although WA do advise that additional offshore exploratory drilling would provide greater clarity and confidence in regard to assessing subsidence risk, they also recognise that the cost of these works would be significant. WA confirm that the DFS notes

³ Sections 2(1)(c) and 2(3) of the CIA 1994

that the typical roof strata has 'easy caving' potential such that roadways are expected to require support as soon as the excavation is made and therefore where support is not provided roof caving is expected to occur.

87. Whilst the CA are mindful that WA have advised that additional offshore exploratory drilling would provide greater clarity and confidence in assessing subsidence risk, this decision is undertaken on the information available at the time of the licences determination. The conclusion of which is detailed at the end of this section.
88. WA also advise that WCML has assessed the stability of pillars within the proposed mine design based on empirical methods and that the mine design includes for pillars that will be considered long term stable ([REDACTED] [REDACTED] [REDACTED]). Although the approach appears to be [REDACTED], it is anticipated that much larger pillars will be adopted at the early stages, until the in-seam conditions are proven.
89. WCML have based their subsidence assessment on a mining cut height of [REDACTED]. It is anticipated by WA that the remnant coal to be left between the working areas will not remain stable long-term and will yield shortly after mining is completed. Based on additional information received, WCML are predicting an overall extraction ratio of [REDACTED] which WA have verified.
90. WCML's summary subsidence assessment has been identified to be based on a degree of [REDACTED] across the proposed mining area which does not reflect the dispersal of borehole investigations. Furthermore, the assessment does not include detail regarding [REDACTED] [REDACTED].
91. Additionally, WA do not agree with the potential maximum amount of subsidence that WCML have calculated, in either a [REDACTED] layout scenario. WA consider that up to [REDACTED] of subsidence could occur where both the Main Band and Bannock Band seams are worked based on a partial extraction scenario, compared with the [REDACTED] maximum subsidence that WCML have predicted. This increases to [REDACTED] of subsidence where total extraction is undertaken. Furthermore, there appears to be a discrepancy with the seam depth contours on the LoM plans not aligning with the borehole record data provided by the applicant, [REDACTED] [REDACTED].

92. BGS have also reviewed WCML's subsidence assessment. They note that subsidence assessments have been carried out for both the onshore and offshore areas and that maps of potential subsidence have been produced which demonstrate limited effects both vertically and horizontally from the proposed mining. However, they advise that there are gaps to WCML's analysis, these being:

92.1. [REDACTED]
[REDACTED]
[REDACTED];

92.2. [REDACTED];

92.3. [REDACTED]
[REDACTED];

92.4. [REDACTED]
[REDACTED].

93. BGS have advised that WCML's subsidence modelling associated with the proposed offshore mining suggests that the effects of subsidence will not impact on the Sellafield site, but this needs to be stated explicitly in WCML's reports. In doing so, it is also important that the modelling takes account of the points raised above to ensure that cumulative effects do not expand the spatial extent of subsidence to an area that could potentially affect Sellafield.

94. Although the CA note the advice from BGS the CA have taken a view that there will be no impact on the Sellafield site from mining subsidence within the application area. This is based on the depth of proposed mining and distance between the application boundary and Sellafield site.

95. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

96. The CA has considered the subsidence assessments undertaken by both WA and BGS. Both have concluded that additional information is required in order that a more thorough

and detailed understanding of the potential scale and impact of the level of subsidence that could occur.

97. WA have used subsidence modelling software to model the potential effects of subsidence, based on the information that has been provided, but WA advise that further data would provide clarity and confidence in their subsidence assessment. They have been able to identify a number of issues that cast doubt on the conclusions made by WCML on the assessment they have undertaken. [REDACTED]

98. Without having further information to support the conclusions of WCML on the subsidence assessment the CA have a significant concern that the potential scale and impact of mining subsidence are not currently fully understood and therefore the level of confidence in determining which subsidence assessment should be relied upon is low. In light of the CA's statutory duties requiring it to secure, as far as practicable, adequate security so that those affected by subsidence damage do not sustain a loss and to have regard to the extent of damage that is likely to be caused⁴, the lack of certainty on the scale and impact that may be caused by the Project in the context of subsidence is a significant concern.

Hydrogeology

99. Hydrogeology is a relevant consideration in light of the CA's statutory duties relating to subsidence and damage to land as set out in section 2(3) of the CIA 1994.
100. BGS have undertaken an assessment with regards to hydrogeological and hydrogeochemical investigation and interpretation by WCML. This assessment primarily focusses on the information provided under Chapter 16: Environmental Studies of the Definitive Feasibility Study Technical Report but also includes assessments of other sections and supporting information where necessary and practical.
101. BGS have advised that the hydrogeological and hydrogeochemical investigations made within the Applications are generally reasonable and proportionate, with appropriate evaluation of available data. However, BGS have identified that further detail and clarification should be provided [REDACTED]

⁴ Sections 2(1)(c) and section 2(3) of the CIA 1994

102. The CA recognise the possible issues created by mining on the regional water regime. BGS have advised that there are gaps in the information provided by WCML that are sufficient to require the need for further information to be provided.
103. The CA also recognise that the gaps in information relating to the impacts of fractures on permeability could also have an influence on the potential effects of mining subsidence, the associated concerns of which are referred to above.

Geotechnical Assessment

104. Geotechnical assessment is a relevant consideration in light of the CA's statutory duties relating to subsidence and damage to land as set out in section 2(3) of the CIA 1994.
105. BGS have undertaken an assessment of the geotechnical characterisation and interpretation undertaken by WCML. They have advised that the assessment by WCML in general is reasonable and proportionate, and that there is a considerable amount of geotechnical data for which most of the conclusions are supported. However, BGS have identified that there are several factors that potentially undermine the [REDACTED] and [REDACTED] of the data that has been presented. They also have further reservations about how [REDACTED]
[REDACTED]
106. Furthermore, BGS have identified a potential issue with regards to [REDACTED]
[REDACTED] and that no information has been presented which demonstrates that an associated assessment has been undertaken by WCML.
107. The CA recognise that BGS are experts on this subject matter and have accepted their conclusions. BGS have advised that further [REDACTED], whilst applying consistent terminology should be undertaken.
108. The issues identified by BGS on the geotechnical assessment directly influence the potential effects of mining subsidence, the associated concerns of which are referred to under the "Subsidence" heading.

Coastal Erosion

109. BGS have undertaken a review of WCML's submitted information to determine what, if any, assessment has been undertaken to determine the effects of coastal erosion from the proposed mining operation. BGS have advised that WCML have not identified coastal erosion as a potential risk and that no attempt has been made to [REDACTED]

[REDACTED]

110. BGS have stated that statistical approaches and software tools are available that would support an associated analysis and have therefore recommended that further study could be undertaken to provide an indication of expected coastal erosion at the region, including any effects to the Sellafield site.

111. The CA consider that the potential effect of mining induced coastal erosion could be significant. Although WCML have identified that mining induced coastal erosion could occur, they have concluded the effects would be negligible. However, this conclusion is based on WCML's subsidence assessment that concludes that minimal subsidence will occur, which differs from the conclusions made by WA (see the section of this report titled "Subsidence"). Therefore, the CA have concluded the true effects of coastal erosion cannot be currently assessed with any degree of confidence.

Seismicity

112. BGS have undertaken a seismicity assessment to understand the potential impacts from the possibility of mining induced seismic activity. This also includes an assessment of the possible effects on the Sellafield nuclear site.

113. BGS have advised that WCML have undertaken an assessment on natural seismicity in the Cumbria region, mining induced seismicity in the UK and the potential for induced seismicity to occur from the proposed operations.

114. WCML consider that as a result of the mining method proposed ('run-out and pocket') less induced seismicity will occur compared with other forms of mining, more specifically longwall mining, and that the risk of induced seismicity from their mining operations is low.

115. BGS confirm that in the main there are two types of mining induced seismicity. The first type being those events directly connected to mining operations and associated with the formation of fractures at the mining face, and the second type being those associated with movement along geological faults which could be some distance from the mining operations.

116. [REDACTED]

[REDACTED]

117. BGS go on to advise that previous mining induced seismicity in the UK has resulted in ground shaking that was strongly felt by the local population and, in some cases, reports of superficial damage such as cracks in plaster. However, BGS have recognised that although such events are too small to result in significant structural damage, they may have the potential to cause public concern. [REDACTED]

[REDACTED]

118. With regards to the Sellafield nuclear site, BGS advise that mining induced seismicity is unlikely to present a risk at the Sellafield site, where critical infrastructure should be engineered to withstand strong ground shaking from earthquakes very roughly equivalent to magnitude six earthquake. A magnitude three earthquake at the southern limit of the proposed mining operations closest to Sellafield, is likely to be felt at the site, but unlikely to produce any damage.

119. BGS have therefore advised that WCML provide further evidence to support their conclusions on seismicity. [REDACTED]

[REDACTED]

120. BGS also note that information presented could benefit from improvement to key definitions and descriptions and referencing of key material. However the CA consider that this is not a material matter and is therefore something which does not need to be addressed as part of this licence determination.

121. Although the CA acknowledge that the mining operations are unlikely to result in significant structural damage, the public concern that would result from any seismic event is significant enough for this matter to warrant further detailed consideration via the provision of further supporting information by WCML to substantiate the conclusions that they have made which could be accommodated via a licence condition.

Fault Structures & Fault Reactivation

122. BGS have undertaken an assessment to identify fault structures and fault reactivation as a geological hazard and have advised that WCML acknowledge faulting to be the principal geological risk and that fault reactivation may occur. Whilst BGS have identified that

considerable effort has been undertaken in the offshore region, using some of the available data to identify faults that were not previously mapped, BGS have identified a number of factors that potentially undermine the [REDACTED] of the data and the arising interpretations and conclusions presented by WCML.

123. BGS considers that the potential impact of [REDACTED] [REDACTED] is not fully recognised or accounted for in the Applications. BGS have therefore advised that further studies should be undertaken in order that greater certainty can be applied to any conclusions drawn.

124. The issue of faulting has been previously referred to in the section titled “Mine design and operations”. In this section, it was concluded by the CA that the absence of [REDACTED] [REDACTED] [REDACTED]

Summary of the subsidence concerns

125. There is a substantial disparity between the subsidence assessment of WCML and that of the CA, and the following concerns remain about the WCML subsidence position:

125.1. [REDACTED]
[REDACTED]
[REDACTED];

125.2. [REDACTED];

125.3. [REDACTED]
[REDACTED];

125.4. [REDACTED]
[REDACTED]
[REDACTED];

125.5. [REDACTED]
[REDACTED]
[REDACTED];

125.6. [REDACTED]
[REDACTED]

125.7. [REDACTED]
[REDACTED],

- [REDACTED]
[REDACTED];
- 125.8. [REDACTED]
[REDACTED];
- 125.9. [REDACTED]
[REDACTED];
- 125.10. [REDACTED]
[REDACTED];
- 125.11. [REDACTED];
- 125.12. [REDACTED]
[REDACTED];
- 125.13. [REDACTED];
- 125.14. [REDACTED]
[REDACTED].

126. It appears that subsidence damage may be caused to any land or other property that does not consist in unworked coal or in a coal mine at and in the vicinity of the proposed mine, but as a result of the material inadequacy of the subsidence assessment submitted by WCML, the CA has been unable to discharge its statutory duty to have regard to the extent of the damage which is likely to be caused to any land or other property, having regard to the character of the land or other property in question and to the uses to which it is or is likely to be put⁵.

Finance and viability

127. The overall viability of WCML's proposals has been assessed by the CA's Finance Department. The Finance Department's Financial Appraisal is appended to the Report at Appendix G

128. The summary position is as follows:

- 128.1. [REDACTED]
[REDACTED]
[REDACTED]

⁵ Section 2(3) of the CIA 1994

[REDACTED]

128.2. WA produced a comparator to the financial model provided by WCML, to evaluate the financial viability of the Project against a set of adjusted assumptions based on WA's experience of underground mining projects within the UK. [REDACTED]

128.3. WA recognised that their financial appraisal could still be subject to adverse fluctuations. A sensitivity analysis was conducted to determine the financial impacts of any changes in these variables. [REDACTED]

129. Further consideration of these key variable factors has been undertaken and in summary the views are as follows:

Operating Costs

130. WA used two remotely similar operations in the UK but noted that "neither of the contemporary UK operations are required to process and [REDACTED] [REDACTED]

131. [REDACTED]

132. [REDACTED]

Discount Rate

133. [REDACTED]

Output

134. [REDACTED]
[REDACTED].

Coal Quality

135. Sulphur content impacts the quality of coal, and is a major consideration for the saleability of the coal into the metallurgical coal market. WA have reviewed this from a marketing and saleability perspective and advised the CA on their findings. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

136. Whilst noting WA's concerns regarding coal quality, the CA has balanced WA's advice and concern alongside the evidence that WCML supplied on this matter. WCML have provided supporting information confirming they have entered into a Heads of Terms Agreement with Javelin Global Commodities (UK) Ltd (JGC), who will act as WCML's coal sales and marketing agent. As well as this JGC have also confirmed, as part of submissions made to the planning inquiry, that they remain fully supportive of the need for this project to proceed, that there is a clear long term demand/requirement for coking coal and that an alternative local source of high volatile metallurgical coal would be strategically beneficial for the UK and EU steelmakers.

137. [REDACTED]
[REDACTED]
[REDACTED]. Despite WCML entering into a Heads of Terms Agreement with JGC, the WA Report gives reason to doubt the WCML's assumptions in relation to [REDACTED] which if such transpired would have negative consequences to [REDACTED]
[REDACTED]

Reserves & Resources

138. WCML are proposing to work two seams of coal by underground working methods, predominantly offshore beneath the Irish Sea. The Bannock Band and Main Band coal seams are both typically 2-3m in thickness, with the Bannock Band seam overlying the Main Band seam. The coal seams are separated by up to 30m of mainly siltstone, mudstone and sandstone strata. WA note that the DFS states a combined probable reserve total of [REDACTED] tonnes for both coal seams, but that the latest financial model

assumes [REDACTED] tonnes will be mined and therefore [REDACTED] of this tonnage will be extracted from outside of the indicated reserve area.

139. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

140. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

141. The CA has raised the matter of [REDACTED]
[REDACTED]
[REDACTED] [REDACTED], which will form part of a process of iteration and selection during the life of the mine as main roadways are developed and pass through the different seams and fault zones. Furthermore, WCML confirmed that they have undertaken extensive laboratory testing and interpretation of the rock properties above and below the target seams to further reinforce the level of confidence in being able to mine the seams with no interaction issues, as well as confirming that the run-out and pocket mining method to be adopted has been specifically designed to ensure barrier pillars are maintained so that there will only be very limited local collapse of the working zones. [REDACTED]
[REDACTED]
[REDACTED]

142. The WCML financial model is premised upon [REDACTED] tonnes of coal reserves which is [REDACTED] tonnes or [REDACTED] higher than the figure of [REDACTED] tonnes included in the reserve statement which accompanies the DFS supplied with the licence applications.

143. WA summarise:
"It is our opinion that, if this study were to be completed now, under one of the recognised Resource/Reserve standards such as JORC, the only allowable ROM tonnage would be [REDACTED], at best", and:

[REDACTED]

- 144. There is significant risk and insufficient evidence to support [REDACTED] of reserves which are required to underpin a financial plan that demonstrates a financially viable mine. Indeed, the available evidence does not demonstrate sufficient resources - see the WA report at paragraphs 6.40 and 6.41 and note 3.21 - 3.26 also.
- 145. This factor casts further significant doubt on the financial viability of the mine. [REDACTED]
[REDACTED]
- 146. Accordingly, it is considered that the overall financial prospects for this Project are unacceptable as a result. It is considered that the Project is not best calculated to secure, so far as practicable, that an economically viable coal-mining industry in Great Britain is maintained and developed (as required pursuant to section 2(1)(a) of the CIA 1994).
- 147. The CA is unable to demonstrate that WCML is able to finance both the proper carrying on of the coal-mining operations that they seek to be authorised to carry on and the discharge of liabilities arising from the carrying on of those operations.

CONCLUSION AND RECOMMENDATION

- 148. A series of issues have been identified concerning these Applications.
- 149. Although a number of the issues are capable of being addressed through the use of conditions, there are two fundamental issues, namely subsidence and viability, which are considered in turn below.

Subsidence

- 150. There is a substantial disparity between the subsidence assessment of WCML and that of the CA, with several concerns remaining about WCML's subsidence position and this disparity also impacts other matters related to the mining operation. These are explored above in more detail, but include.
 - 150.1. The significant disparity between the level of subsidence predicted by WCML and that modelled by WA ([REDACTED]
[REDACTED]
[REDACTED]). This

significant difference in modelling results does not provide a sufficient level of certainty that allows the CA to be confident, on what the scale of subsidence would be, to reasonably grant a conditional licence;

- 150.2. The uncertainty of the scale of subsidence does not reasonably allow the CA to assess the potential subsidence damage that could occur;
 - 150.3. The uncertainty of the scale of subsidence does not reasonably allow the CA to assess the potential scale of coastal erosion;
 - 150.4. The uncertainty of the scale of subsidence does not reasonably allow the CA to assess the potential scale of seismic activity and fault reactivation.
151. These above concerns cannot, in the CA's reasonable view and on the balance of probabilities, be sufficiently addressed through the imposition of conditions in a conditional licence. When considering the inclusion of conditions, the CA adopts the following principles:
- 151.1. the detail submitted now must be sufficient to understand the nature and extent of what is proposed, even if the finer detail is being developed;
 - 151.2. the detail submitted now must be sufficient to assess all relevant matters, subject to later control on the fine detail, in particular it must be sufficient to be satisfied on the CA's statutory duties; and
 - 151.3. where matters are left over to conditions, there must be satisfaction that they can, in principle, be addressed successfully at a later stage through the discharge of conditions to ensure such condition is considered reasonable.
152. When considering the identified concerns relating to subsidence and the information available in the Applications, the CA does not believe, on the balance of probabilities, that it can include conditions that would meet the above principles. In particular, the significant disparity between the level of subsidence predicted by WCML and that modelled by WA prevents the CA from having a sufficient and reasonable understanding on the nature and extent of subsidence that may be caused by the Project. This prevents the CA from being able to discharge its statutory duties in a proper manner when considering the extent of subsidence damage that could be caused and the loss that could be suffered because of this⁶. The CA cannot satisfy itself, as is required in the CIA 1994, that adequate security is in place so that those affected by subsidence damage do not sustain a loss if there is

⁶ Section 2(1)(c) CIA 1994

insufficient clarity on the degree of damage that is predicted⁷. Furthermore, the CA cannot have regard to the extent of damage which is likely to be caused or the character of the land or property that may be affected as a result of the uncertainty around the extent of subsidence that is being predicted⁸. The geological make-up of the land that may be impacted by subsidence, including the geological faults, is not something that WCML can directly influence or change.

Viability

153. An analysis of WCML and its parent company accounts and credit files give no cause for concern. The company is financially backed by EMR Capital (a parent company) which has a record of raising finance to date. WCML has presented the options it is considering to raise future finance, although it is not known how these may be affected by a potential perception of increasing headwinds, including for instance the recent High Court judgment in respect of the operator's planning application.
154. [REDACTED]. When recalculated based on a more conventional basis against industry experience, the proposed mining operation appears marginally financially [REDACTED] [REDACTED]. The BGS and WA reports highlight several material issues which include [REDACTED]. These give reason to believe that even WA's adjusted factors, when considered as a whole, are too optimistic to realistically conclude that the mine is financially viable.
155. In addition, there is significant risk and insufficient evidence to support [REDACTED] tonnes of reserves which are required to underpin a financial plan that demonstrates a financially viable mine.
156. Based on the information received from WCML and the reports provided by WA and BGS, the CA have concluded that WCML's financial plans do not demonstrate that the Project is financially viable.
157. The CA are therefore unable to demonstrate, as required by the CIA 1994, that the proposed mining operation of WCML is best calculated to secure, so far as practicable, that an economically viable coal-mining industry in Great Britain is maintained and

⁷ Section 2(1)(c) CIA 1994 and expressly referred to in the Guidance Notes, paragraph 5: [Guidance Notes for Underground Coal Mining Licences - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

⁸ Section 2(3) CIA 1994

developed and that WCML is able to finance both the proper carrying on of the coal-mining operations that they seek authority to carry on and the discharge of liabilities arising from the carrying on of those operations.

158. These fundamental viability concerns cannot, in the CA's reasonable view and on the balance of probabilities, be sufficiently addressed through the imposition of conditions in a conditional licence. When considering the inclusion of conditions, the CA adopts the principles:

158.1. the detail submitted now must be sufficient to understand the nature and extent of what is proposed, even if the finer detail is being developed;

158.2. the detail submitted now must be sufficient to assess all relevant matters, subject to later control on the fine detail. In particular it must be sufficient to be satisfied on the CA's statutory duties; and

158.3. where matters are left over to conditions, there must be satisfaction that they can, in principle, be addressed successfully at a later stage through the discharge of conditions to ensure such condition is considered reasonable.

159. When considering the identified concerns relating to financial viability and the information available in the Applications, the CA does not believe, on the balance of probabilities, that it can include conditions that would meet the above principles. As identified, there are significant uncertainties which can adversely affect financial viability including the following: working methods, subsidence risk, quality of coal available, geological conditions, market for the coal produced and the level of reserves which exist and will be able to be extracted. Conditions in respect of these specific issues and financial viability would be inadequate and ineffective by reference to the CA's duties to be best calculated to secure, so far as practicable, that an economically viable coal-mining industry in Great Britain is maintained and developed and that WCML is able to finance both the proper carrying on of the coal-mining operations that they seek authority to carry on and the discharge of liabilities arising from the carrying on of those operations.

160. The CA is conscious of the fact that decisions were previously taken to grant conditional underground coal mining licences in relation to the Project. The fact that such licences were previously granted by the CA is a material consideration to which the CA has had regard when determining the Applications. It must also be recognised however that matters are not frozen at the point at which a decision to grant a licence is taken. The previous licences were granted in 2013. The decision of the CA in relation to the Applications must

be taken having regard to circumstances as at the point of the determination of the Applications and the information available at the current time.



161. The CA has taken into account learning since the time of the previous licence applications in ensuring it has adopted a robust approach to the determination of the Applications taking into account such learning, and the need to be able to reach a reasoned and justifiable decision in the context of the complexities of the Applications.
162. The CA has therefore balanced all relevant factors in their determination of the Applications and when reaching a conclusion on whether conditional licences could be granted in respect of the Applications. The CA expressly recognises that mining is an inherently risky operation and there will always be uncertainties and unknowns at this stage of a project. This principle is accepted by the CA and has been applied throughout the determination process, with express consideration being given to whether conditions could reasonably be applied to sufficiently mitigate concerns, unknowns or uncertainties based on the information made available by WCML in their Applications.
163. This report expressly acknowledges that for a number of material considerations, whilst there are a number of unknowns and areas where BGS, WA and/or the CA's own internal experts believe further details would be required prior to coal mining operations commencing, these concerns could be addressed sufficiently through the imposition of conditions in the event licences were capable of being granted.
164. However, notwithstanding that some considerations detailed in this report pose no significant concern to the CA and a number can be sufficiently addressed through reasonable conditions, these must be weighed up against the significant concerns detailed herein relating to subsidence and viability.
165. On the matter of subsidence and viability, the CA has formed the view that the uncertainties and details presented in the Applications by WCML are not capable of being sufficiently addressed through conditions and therefore do not allow for conditional licences to be lawfully granted in light of its statutory duties in the CIA 1994. These duties cannot lawfully be discharged whilst the concerns set out above remain.

Recommendation

166. As a result of the above concerns, it is recommended that the Applications are refused for the following reasons:
 - 166.1. The proposed mining operation of WCML is not best calculated to secure, so far as practicable, that an economically viable coal-mining industry in Great Britain is

maintained and developed. The Authority is not satisfied that WCML is able to finance both the proper carrying on of the Project that they propose to carry on, through these Applications, and the discharge of liabilities arising from the carrying on of those operations; and

166.2. It appears that subsidence damage may be caused to any land or other property that does not consist in unworked coal or in a coal mine at and in the vicinity of the proposed mine, but as a result of the material inadequacy of the subsidence assessment submitted by WCML, the CA has been unable to discharge its duty to have regard to the extent of the damage which is likely to be caused to any land or other property, having regard to the character of the land or other property in question and to the uses to which it is or is likely to be put. The CA is not satisfied that persons to whom obligations are or will be owed in respect of subsidence damage caused by the proposed operations will not sustain loss in consequence of any failure by WCML to make such financial provision for meeting present and future liabilities as might reasonably be required of WCML.

Recommended by:.....Date:23/09/2024.....
 - Principal Licensing Manager

Reviewed by:.....Date: 23/09/2024
 - Head of Development

In accordance with the framework of strategic control I have read the report and agree with the recommendations presented above.

I therefore direct my team to issue, in my name, the relevant documents to WCML confirming that their Applications are refused providing a copy of this report to provide the CA's reason for this decision.

Approved by: ... Date: 24/09/2024

Carl Banton – Operations and Sustainability Director

Appendix

Appendix	Subject
A	Request for Information Questions
B	Licensing newsletters
C	Expression of interest letter
D	Letter from Friends of the Earth
E	Response to letter from Friends of the Earth
F	The Mines Regulations 2014 – Regulations 10 & 11
G	Financial Report

Appendix A – Request for Information Questions

	Date information requested by CA	Date information received from WCML
Request for information 1	22/09/2023	10/10/2023
Request for information 2	06/11/2023	27/11/2023
Request for information 3	05/12/2024	20/12/2023
Request for information 4	03/01/2024	05/01/2024
Notes:-		
RFI-3 requested during catch-up meeting with WCML, i.e., no written request		



1. [Requests for information relating to mine viability](#)

a) Reserves, market and mining method

1. [Redacted]
2. [Redacted]
3. [Redacted]
4. [Redacted]
5. [Redacted]
6. [Redacted]
7. [Redacted]
8. [Redacted]

Notes:

- *JORC - Joint Ore Reserve Committee – the recognised standard to assess mineral reserves*
- *DFS – Defined Feasibility Study*
- *ROM – Run of mine – mix of raw coal and rock leaving the mine*
- *Vend – percentage of coal within the ROM*

*Making a better future for people
and the environment in mining areas*



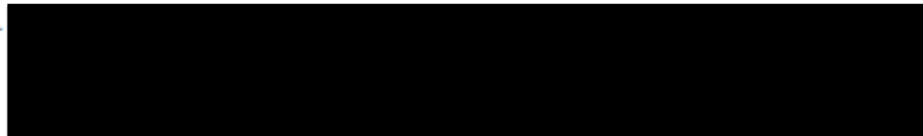
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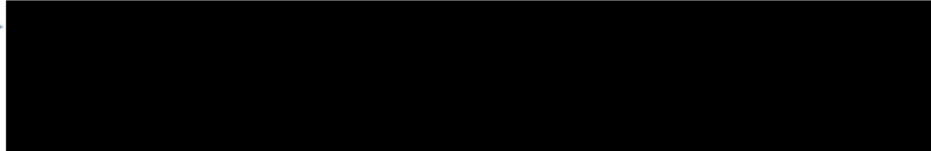
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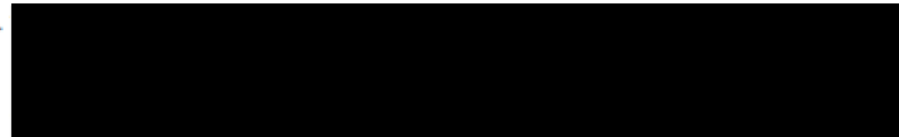


b) Financial model

15.



16.



Notes:

- *JORC - Joint Ore Reserve Committee – the recognised standard to assess mineral reserves*
- *DFS – Defined Feasibility Study*
- *ROM – Run of mine – mix of raw coal and rock leaving the mine*
- *Vend – percentage of coal within the ROM*

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17.

[Redacted]

18.

[Redacted]

19.

[Redacted]

20.

[Redacted]

21.

[Redacted]

22.

[Redacted]

2. Requests for information relating to subsidence

1.

[Redacted]

2.

[Redacted]

Notes:

- JORC - Joint Ore Reserve Committee – the recognised standard to assess mineral reserves
- DFS – Defined Feasibility Study
- ROM – Run of mine – mix of raw coal and rock leaving the mine
- Vend – percentage of coal within the ROM

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The Coal
Authority

Official: Sensitive: Commercial: Request for Information
Woodhouse Colliery

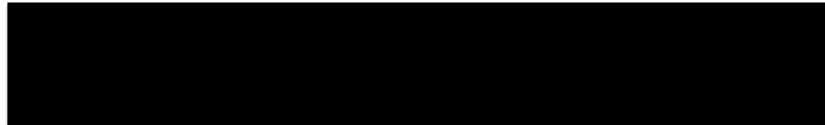
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4.



5.



Notes:

- *JORC - Joint Ore Reserve Committee – the recognised standard to assess mineral reserves*
- *DFS – Defined Feasibility Study*
- *ROM – Run of mine – mix of raw coal and rock leaving the mine*
- *Vend – percentage of coal within the ROM*

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Requests for information relating to mine viability

a) Mine Layout/Proposals

1. [Redacted]

2. [Redacted]

3. [Redacted]

4. [Redacted]

b) Costs

1. [Redacted]

2. [Redacted]

Notes:

- DFS – Defined Feasibility Study

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3.

[Redacted]

c) Coal Quality

1.

[Redacted]

2.

[Redacted]

3.

[Redacted]

4.

[Redacted]

d) Subsidence

1.

[Redacted]

2.

[Redacted]

3.

[Redacted]

4.

[Redacted]

Notes:

- DFS – Defined Feasibility Study

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Woodhouse Colliery



5.



Notes:

- *DFS – Defined Feasibility Study*

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[REDACTED]

From: [REDACTED]
Sent: 03 January 2024 13:44
To: [REDACTED]
Subject: RE: [External] WCM: Additional Information

[REDACTED]

Thank you for your time earlier this morning.

Just to add one further point to our conversation around ROM figures and further detail to support a forecast ROM of [REDACTED] please can you also provide an update financial model that reflects this current thinking?

Thanks,

[REDACTED]

From: [REDACTED]<[REDACTED]@westcumbriamining.com>
Sent: 20 December 2023 13:39
To: [REDACTED]<[REDACTED]@coal.gov.uk>
Subject: [External] WCM: Additional Information

WARNING: This email originated outside of the Coal Authority. DO NOT CLICK any links or open any file attachments unless you recognise the sender and know the content is safe. Check the spelling of any email addresses carefully for anything unusual. If you are unsure please contact the ICT Service Desk for guidance.

Dear [REDACTED]

Please find attached three additional documents as discussed:

1. [REDACTED]
2. [REDACTED]
3. [REDACTED]

I trust that these are all helpful, apologies for the delay, [REDACTED]

Best regards

[REDACTED]

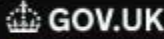
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WCM


M: [REDACTED]
E: [REDACTED]
W: www.westcumbriamining.com

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Appendix B – Licensing newsletters

MenuQ

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Coal
Authority

Notice

Licensing newsletter 0603 - 6 June 2023

Published 6 June 2023

In order to promote competition within the coal industry, the Coal Authority publicises the following application for rights and interests in coal within the specified location.

Underground mining conditional licence

An application has been submitted for a new conditional operating licence to work coal and for the rights and interests in coal within the specified radius around the following National Grid co-ordinates.

Location	Easting	Northing	Radius
Cumbria	295600	513900	2.0km

Alternative expressions of interest in submitting other applications for an agreement and bids for interests in coal in relation to this area should be submitted to the Coal Authority within 30 days of the date of this notice.

Formal detailed and completed applications should be submitted to the Coal Authority within 60 days of the date of this notice.

The appropriate guidance notes, application forms and scale of fees can be obtained from the Coal Authority's Licensing Department on request by telephoning 01623 637339 or by visiting <https://www.gov.uk/government/collections/coal-mining-licence-applications>

Where applications have been recorded on the Register of Statutory Licences, for Underground, Surface Mining or Underground Coal Gasification applications, these may be inspected by prior appointment.

Enquiries regarding the Register of Statutory Licences should be made to the Coal Authority's Mines Record Office by telephoning 01623 637228.

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Notice

Licensing newsletter 0604 - 6 June 2023

Published 6 June 2023

In order to promote competition within the coal industry, the Coal Authority publicises the following application for rights and interests in coal within the specified location.

Underground mining conditional licence

An application has been submitted for a new conditional operating licence to work coal and for the rights and interests in coal within the specified radius around the following National Grid co-ordinates.

Location	Easting	Northing	Radius
Cumbria	287000	516025	7.4km

Alternative expressions of interest in submitting other applications for an agreement and bids for interests in coal in relation to this area should be submitted to the Coal Authority within 30 days of the date of this notice.

Formal detailed and completed applications should be submitted to the Coal Authority within 60 days of the date of this notice.

The appropriate guidance notes, application forms and scale of fees can be obtained from the Coal Authority's Licensing Department on request by telephoning 01623 637339 or by visiting <https://www.gov.uk/government/collections/coal-mining-licence-applications>

Where applications have been recorded on the Register of Statutory Licences, for Underground, Surface Mining or Underground Coal Gasification applications, these may be inspected by prior appointment.

Enquiries regarding the Register of Statutory Licences should be made to the Coal Authority's Mines Record Office by telephoning 01623 637228.

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Coal
Authority

Notice

Licensing newsletter 0605 - 6 June 2023

Published 6 June 2023

In order to promote competition within the coal industry, the Coal Authority publicises the following application for rights and interests in coal within the specified location.

Underground mining conditional licence

An application has been submitted for a new conditional operating licence to work coal and for the rights and interests in coal within the specified radius around the following National Grid co-ordinates.

Location	Easting	Northing	Radius
Cumbria	291250	506800	8.2km

Alternative expressions of interest in submitting other applications for an agreement and bids for interests in coal in relation to this area should be submitted to the Coal Authority within 30 days of the date of this notice.

Formal detailed and completed applications should be submitted to the Coal Authority within 60 days of the date of this notice.

The appropriate guidance notes, application forms and scale of fees can be obtained from the Coal Authority's Licensing Department on request by telephoning 01623 637339 or by visiting <https://www.gov.uk/government/collections/coal-mining-licence-applications>

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Enquiries regarding the Register of Statutory Licences should be made to the Coal Authority's Mines Record Office by telephoning 01623 637228.

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Appendix C – Expression of interest e-mail

[REDACTED]

From: Licensing & Permissions
Sent: 07 July 2023 07:32
To: [REDACTED]
Cc:
Subject: FW: [External] Licensing newsletters 0603-5 - 6 June 2023

From: [REDACTED]
Sent: 06 July 2023 18:01
To: Licensing & Permissions <permissions@coal.gov.uk>
Subject: [External] Licensing newsletters 0603-5 - 6 June 2023

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Good afternoon,

This is an alternative expression of interest in submitting other applications for an agreement regarding the area identified in Licensing newsletters 0603-5 - 6 June 2023.

We are an unincorporated association. Should formal detailed and completed applications be submitted subsequently they will be from a special purpose vehicle (SPV) that is not yet registered. The working name for the SPV is [REDACTED]

We note that there is ongoing litigation in relation to natural resource extraction. If the litigation is not resolved in time we will ask you for an extension to the 60 day period referred to in the three Newsletters.

for

[REDACTED]

Appendix D – Letter from Friends of the Earth



To: Lisa Pinney MBE, Chief Executive Coal Authority

Address: Coal Authority
200 Lichfield Lane
Mansfield
Nottinghamshire

By email only to: customerservice@coal.gov.uk

Copied to: [REDACTED] Coal Action Network
Email: [REDACTED] coalaction.org.uk

Date: 18 July 2023

By email only

Dear Ms. Pinney,

1. We write in relation to the proposed development of a coal mine by West Cumbria Mining Ltd ("WCM") in Whitehaven, Cumbria. The area to be mined extends over the land and sea. The landward site is at the former Marchon site, Pow Beck Valley and area from the former Marchon Site to the St Bees Coast. Planning permission for the landward part of the development was granted in December 2022,¹ and is the subject of live High Court proceedings. We note that the Coal Authority ("CA") has accepted three applications for coal mining licences from WCM as completed on 6 June 2023 (reference numbers CA11/UND/0193/N, CA11/UND/0194/N and CA11/UND/0195/N).²
2. As you will know, section 2 of the Coal Industry Act 1994 sets out the duties of the CA with respect to licensing. When considering whether to grant a coal mining licence, the CA must consider:
 - a. that an economically viable coal-mining industry in Great Britain is maintained and developed by the persons authorised by virtue of that Part to carry on coal-mining operations;
 - b. that such persons are able to finance both the proper carrying on of the coal-mining operations that they are authorised to carry on and the discharge of liabilities arising from the carrying on of those operations; and
 - c. that persons to whom obligations are owed in respect of subsidence damage caused at any time (whether before or after the passing of this Act) do not sustain loss in consequence of any failure by a person who is or has been a licensed operator to make such financial provision for meeting present and future liabilities as might reasonably have been required of that person;

¹ Link to the Secretary of State's Decision Letter dated 7 December 2022: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1122625/22-12-07_Whitehaven_-_Decision_Letter_and_IR.pdf

² See here: <https://www.gov.uk/government/publications/coal-mining-licence-applications/coal-mining-licence-applications>.

- d. that persons authorised by virtue of that Part to carry on coal-mining operations are persons who have at their disposal such experience and expertise in the carrying on of such operations as are appropriate for ensuring that any authorised operations are properly carried.

S.2 does not limit the consideration to these points. Moreover S 26(5) makes clear that the Authority has power “to take into account **all such factors as it thinks fit** in determining whether, and subject to what conditions, to grant a licence”. It is FoE’s view that, therefore, the CA should also take into consideration other factors, such as the impacts of climate change, when considering whether to grant these licences, as these are material factors for that decision.

3. The purpose of this letter is to detail some of our concerns regarding the considerations set out in the previous paragraph, and to ensure that the CA is vested with all relevant information when deciding on whether to grant the conditional coal mining licences in question.

Background to Friends of the Earth

4. Friends of the Earth England, Wales and Northern Ireland is the largest grassroots environmental campaigning community in the UK. We are dedicated to protecting the natural world and the wellbeing of everyone in it. At the planning inquiry into the proposed Whitehaven mine we were one of the two main objectors, raising concerns on behalf of our supporters about the mine’s climate and other environmental impacts.

Economic Viability

5. Pursuant to Section 2(1)(a) of the Coal Industry Act 1994, the CA is under a duty to carry out its functions in the manner that it considers is best calculated to secure, so far as practicable— (a) that an **economically viable coal-mining industry in Great Britain** is maintained and developed by the persons authorised by virtue of that Part to carry on coal-mining operations.
6. Considering the economic viability of the proposed Whitehaven coal mine first, it is important to draw the CA’s attention to the letter of Lord Deben, written as Chair of the Climate Change Committee, dated 29 January 2021.³ In that letter, Lord Deben states the following:

“The opening of a new deep coking coal mine in Cumbria will increase global emissions and have an appreciable impact on the UK’s legally binding carbon budgets. The mine is projected to increase UK emissions by 0.4Mt CO₂e per year.¹ This is greater than the level of annual emissions we have projected from all open UK coal mines to 2050.

The decision to award planning permission to 2049 will commit the UK to emissions from coking coal, for which there may be no domestic use after 2035. 85% of the coal is planned for export to Europe. Our recent Sixth Carbon Budget Advice² has the following implications for coking coal use in the UK:

³ Lord Deben, Climate Change Committee, “Deep Coal Mining in the UK” dated 29 January 2021 <<https://www.thecc.org.uk/publication/letter-deep-coal-mining-in-the-uk/>>

- Coking coal should only be used in steelmaking beyond 2035 if a very high proportion of the associated carbon emissions is captured and stored.
 - Coking coal use in steelmaking could be displaced completely by 2035, using a combination of hydrogen direct reduction and electric arc furnace technology to meet our recommendation that UK ore-based steelmaking be near-zero emissions by 2035."
7. Thus, Lord Deben recognises the economic viability of the proposed coal mine is dubious at best, to the extent it will supply the domestic market. To the extent it will supply steelworks in mainland Europe, those steelworks are moving away from coking coal at an even quicker pace than their UK counterparts.
8. The CA is under a separate duty to that of the Secretary of State, who granted planning permission for the Whitehaven coal mine (subject to conditions). We urge the CA to consider the economic viability of the coal-mining industry in Great Britain realistically. The only logical conclusion is that the proposed Whitehaven coal mine is not viable over the long term and that there is a real risk that significant investment in this mine shortly thereafter becomes a "stranded asset" as the UK and the world seek to adhere to a pathway that avoids catastrophic climate change, such as by adhering to pledges in the Paris Agreement. Granting the licences will not, therefore, secure that an economically viable coal-mining industry in Great Britain is maintained and developed and would be inconsistent, therefore, with the section 2(1)(a) duty.

Finances of the proposed operator

9. The CA must also consider that persons authorised to carry on coal-mining operations are able to finance the proper carrying on of the coal-mining operations and the discharge of liabilities arising from the carrying on of such operations, as well as the liabilities from subsidence damage. We therefore encourage the CA to conduct a thorough analysis of the finances of West Cumbria Mining Ltd and its parent company West Cumbria Mining (Holdings) Ltd, especially in light of the following.
10. In the main proof of evidence of Mark Kirkbride, the CEO of WCM Ltd, from the planning inquiry, in appendix 5 on p105, in the 'Construction CAPEX up to financial completion' section, Mr Kirkbride gives a total sum needed for the Whitehaven coalmine as £241.7 million. This figure is from 2021 and does not account for the entirely different economic situation we are in – which includes soaring rates of inflation. Thus, the amount needed could be significantly more than the £241.7 million previously estimated.
11. Currently, looking at the latest accounts of WCM Ltd, filed at Companies House on 10 July 2023 and covering the period to 31 December 2022, there are legitimate and serious concerns with WCM's finances. The directors themselves recognise that there is a "...material uncertainty that may cast significant doubt on the Parent Company's and Company's ability to continue as a going concern" (page 4). This is a view which is echoed by the independent auditors (pages 3 and 5).

12. It is recognised that the directors of WCM Ltd expect that the uncertainty can be managed to a successful outcome (page 4), but there is no real evidence to support this assertion. The directors of WCM Ltd state that “the Company and its immediate Parent Company currently have no income” (page 3). Currently, WCM Ltd only has sufficient money to continue for the next 12-months and “...the Group will require access to additional funds in order to fully develop Woodhouse Colliery” (page 3). The latest accounts do not provide any certainty that WCM Ltd’s parent company will be able to raise the finance needed.
13. Equally, the fact that WCM Holdings managed to raise equity of £10.37 million (£9.72 million net of expenses) subsequent to the years end, cannot provide the CA with any confidence that WCM will be able to raise the capital they need in Q3 (the period in which WCM itself states the capital needs to be raised in on page 2).
14. In these circumstances, we believe that the CA cannot have any confidence that WCM Ltd are able to finance the proper carrying on of the coal-mining operations at the proposed Whitehaven coalmine and discharge any liabilities arising from the carrying on of such operations, as well as the liabilities from subsidence damage (which is discussed in more detail below).

Risk of Subsidence

15. Under the Coal Industry Act 1994, the CA must be satisfied “that persons to whom obligations are owed in respect of subsidence damage caused at any time (whether before or after the passing of this Act) do not sustain loss in consequence of any failure by a person who is or has been a licensed operator to make such financial provision for meeting present and future liabilities as might reasonably have been required of that person.”
16. Here, we set out some preliminary evidence which substantiate our concerns regarding the risk of subsidence, should the CA provide WCM with conditional coal licences for the proposed coal mine. We note that under section 2(3) Coal Industry Act 1994:

“It shall also be the duty of the Authority, in carrying out its functions under Part II of this Act in cases where it appears that subsidence damage may be caused to any land or other property that does not consist in unworked coal or in a coal mine, to have regard—

- (a) to **the extent of the damage** which is **likely to be caused**; and
- (b) to **the character of the land** or other property in question **and to the uses to which it is or is likely to be put.**”

17. In considering section 2(3), we draw your attention to data from the British Geological Society (“BGS”) and a report dated June 2020 into the proposed coal mine at Whitehaven, authored by Marine Consultant Tim Deere-Jones (a copy of which has been attached).

18. The main conclusion of Tim Deere-Jones' report is that there is a real risk of subsidence if the coal mine were to become operational. There are several factors and issues that feed into this conclusion, including, but not limited to:
- a. There is a lack of data about the status of the existing historical galleries and workings of the West Cumbrian Coalfield. There is therefore a real risk of running into or close to old workings of the West Cumbria coalfield, increasing the risk of subsidence and tunnel collapse, and the risk of fault re-activation.
 - b. There is a lack of accurate data about the history and status of any subsidence seismicity in the coalfield
 - c. BGS have concluded that the coalfield is heavily faulted and has a long history of subsidence. BGS refer to the proposed coal mine area as having "severe geological problems" and "particularly, faulting".
 - d. BGS have also stated that "the high methane content of the seams is known to be a problem"
 - e. The mass removal of material and the creation of extensive sub-sea void spaces, crates a real risk of subsidence. This subsidence could generate earthquake liquefaction effects
19. It is also worth noting that, the impact on the character of the land and its uses from any subsidence would be substantial because (non-exhaustively):
- a. any collapse of the seabed may be in the Marine Conservation Zone ("MCZ");
 - b. There would be a risk of high levels of pollution to the marine environment and could lead to something akin to the orange harbour at Whitehaven, which was likely caused by pollution from a historic coal mine, or worse. We refer to the Environment River Basin Management Plan which states the following of relevance⁴:
 - i. Most of these mines closed well over 100 years ago but they still pollute our rivers, harm fish, river insects and ecosystems and can have an adverse impact on economic activity. (pg 1)
 - ii. Pollution from coal mines is easy to see, because the iron rich water they discharge causes rivers to turn orange. The ochreous deposits smother riverbeds, impacting the ecosystem with significant localised harm. In some coalfield areas mine waters pollute groundwater and threaten drinking water supplies (pg 1)
 - iii. Pollution from mining activities is particularly difficult to deal with because it lasts for such a long time – ancient mines are still discharging highly polluting metal-rich waters today.
 - c. Any pollution of the marine environment may impact its users' ability to fish;
 - d. any repair work to the seabed following a subsidence event would be extremely difficult if it is at all possible to restore the environment and seabed to the position it was pre-subsidence event;
 - e. Any on-land collapse would visually impact the Cumbrian coastline, which many place a high aesthetic value on, and which has been recognised as being of national importance by its designation as the St Bees Heritage Coast.
20. We are sure that the CA will be well aware of the precautionary principle, which we say should be applied by the CA in considering WCM's application for conditional licences. This is particularly important when the expertly constituted

⁴ Environment Agency, 2021 River Basin Management Plan: <<https://consult.environment-agency.gov.uk/environment-and-business/challenges-and-choices/usef.../tution-from-abandoned-mines-challenge-rbmp-2021-1.pdf>>

BGS, as well as others with relevant expertise, have raised significant concerns and risks that are directly relevant to the licence applications before the CA.

Climate Change

21. First, it is important to restate the importance of climate change in relation to coalmining. We would again refer the CA to the letter of Lord Deben cited above, who sets out the implications of the Whitehaven coal mine on climate change and, in particular, the carbon budgets.
22. Additionally, the 2023 Progress in Reducing Emissions Climate Change Committee ("CCC") Report to Parliament states the following regarding the Whitehaven coal mine: "**Expansion of fossil fuel production is not in line with Net Zero.** As well as pushing forward strongly with new low-carbon industries, Net Zero also makes it necessary to move away from high-carbon developments. The decision on the Cumbrian coal mine sent a very concerning signal on the Government's priorities..."⁵. There are additional references to the Whitehaven coal mine in the report, all of which are damning and establish a basis for refusing to grant coal licences for Whitehaven on climate grounds alone. For example, the CCC also stated: "In a range of areas, planning and statutory frameworks are outdated and do not reflect the declining role of coal in the context of binding UK and international greenhouse gas emission targets."⁶
23. We are aware of the recent judgment in *The King (on the application of Coal Action Network) v Welsh Ministers and Coal Authority* [2023] EWHC 1194 (Admin) given by the High Court of Justice on 19 May 2023. We note the claimant contended that due to its misinterpretation of the scope of its statutory powers, the CA failed to consider whether the following were material factors:
 - a. "The potentially very significant adverse climate change impacts of the granting of a licence. The claimant notes that the Coal Authority does not assert that the climate change impacts of its decision-making are excluded from consideration by the 1994 Act" [para 114 (ii)]
 - b. "These adverse climate change impacts, and their knock-on effect on the ability of Welsh Ministers to meet their climate change targets, pulled against the Coal Authority's duties to secure "as far as practicable" various outcomes, including maintenance of an economically viable coal industry, such that there was a question for the Coal Authority whether it was not "practicable" to secure those outcomes through the grant of Energybuild's application." [para 114(iii)]
24. We note that the primary objection to considering climate change, raised by the CA in the above-mentioned case, was that the issue of climate change is not relevant to the question of whether the conditions precedent in that existing conditional licence had been satisfied. As there is no issue as to condition satisfaction in relation to these initial licence applications made by WCM, that argument falls away and cannot be relied upon by the CA in this matter. We further note that the Judge was very concerned about climate change, which is

⁵ Climate Change Committee, Progress Report 2023 <<https://www.theccc.org.uk/wp-content/uploads/2023/06/Progress-in-reducing-UK-emissions-2023-Report-to-Parliament.pdf>> accessed 28 June 2023

⁶ Ibid.

evident from her judgment and engagement with the claimant's submissions on this point (for example, see para [94]).

25. The second objection to the consideration of climate change seems to centre on the CA's interpretation and reliance on *Finch*, which is currently before the Supreme Court for determination. We note that the CA did not contend that they were prohibited from considering climate change, but instead sought to rely on *Finch* as a proposition that it is not obliged to take into consideration "downstream emissions" as a mandatory material consideration. In any event, the Judge did not adopt this submission in her judgment. She only found that the exercise that the Coal Authority was carrying out, in considering whether conditions precedent had been satisfied, was a limited one and thus other considerations were not material. (See para 132.) Thus, we say that as a basic proposition, the CA should consider climate change as an issue in the determination of WCM's application for coal licences.
26. The key issue is the extent to which the CA may consider climate change and whether they should consider "downstream emissions" in addition to Scope 1 and Scope 2 emissions. We say that the CA must consider all emissions, including downstream emissions. In support of this proposition, we rely on there being no statutory bar or wording that even *could* limit the CA's consideration of different types of emissions (noting that the dispute in *Finch* centres on statutory interpretation of the Environmental Impact Regulations 2017, an issue that does not apply here).
27. Unlike the EIA Regulations 2017, the Coal Industry Act 1994 sets out mandatory factors which the CA must consider. This is a non-exhaustive list and does not prohibit the CA from considering other factors. The CA must consider all material matters, which we assert, and the CA seems to accept as part of its case in the Coal Action Network Judicial Review, includes climate change. In this context, climate change must include consideration of scope 1, 2 and 3 emissions.
28. We note that the Coal Action Network Judicial Review decision is subject to a potential appeal. Therefore, we reserve the right to review our position in light of any subsequent judgment on the relevant issues.

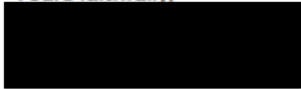
Our request to the CA

29. In light of the above, please could you confirm:
 - a. That the CA will factor Lord Deben's letter into its evaluation as to the economic viability of the Whitehaven coal mine;
 - b. That the CA will factor the Climate Change Committee's June 2023 Progress in Reducing Emissions Report to Parliament, including its analysis, findings and recommendations, into its evaluation as to the economic viability of the Whitehaven coal mine, and the CA's evaluation of the climate impacts of the Whitehaven coal mine;
 - c. That the CA will carefully scrutinise WCM's finances and, in particular, their ability to fund the project (including compliance with pre and post operational planning conditions), their ability to compensate and meet any liabilities resulting from or associated with the Whitehaven coal mine;

- d. That the CA will consult with experts regarding the risk of subsidence and allow Friends of the Earth to submit any further expert evidence it obtains which is relevant to this issue and the CA's statutory duty;
- e. That the CA will apply the precautionary principle when considering an application for a conditional licence, in circumstances where the evidence of risk is not fully known;
- f. That the CA will consider the climate change impacts, including but not limited to scope 1, 2 and 3 impacts, when considering whether to grant a conditional coal licence.

30. We would be grateful if you could respond to these questions within 14 days, that is, by 4pm on 1 August 2023. Please let me know if anything is unclear in the above request.

Thank you,
Yours faithfully,



Lawyer at Friends of the Earth

Appendix E – Response to letter from Friends of the Earth



200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

T: [REDACTED]

E: [REDACTED]@coal.gov.uk

W: www.gov.uk/coalauthority

Our reference: CA02/2022/26/2/13

Your reference:

[REDACTED]
Friends of the Earth
The Printworks
First Floor
139 Clapham Road
London
SW9 0HP

Response sent via email: [REDACTED]@foe.co.uk

27 July 2023

Dear [REDACTED]

Woodhouse Colliery Whitehaven

We write further to your letter of 18 July 2023.

The Coal Authority ("the Authority") is currently in the process of considering the application and appointing third party consultants to assist in those considerations and in compliance with its duties in the Coal Industry Act 1994 in the determination of the application. The contents of your letter are noted.

Whilst the Authority is not inviting representations in relation to the application, should any be received then the relevance of such representations will be considered by the Authority and taken into account as is considered to be appropriate.

We hope that this response is of assistance to you.

Yours sincerely

[REDACTED]
Head of Legal and Records



Making a **better future** for people
and the environment **in mining areas**

Appendix F – The Mines Regulations 2014 – Regulations 10 & 11

Guidance 9

consider the document as a demonstration that all necessary measures are in place.

36 The document must be made available to all employers and all employees at the mine. This does not mean it has to be given to everybody, but a copy should be available on site so that people who have to comply with it, or parts of it, or with procedures etc to which it refers, have access to it.

Regulation 10 Management structure

Regulation 10

(1) *With a view to securing the health and safety of persons at work at the mine, the mine operator must –*

- (a) *establish a management structure which enables the mine to be operated in accordance with the relevant statutory provisions;*
- (b) *make a record of the management structure and the extent of the authority and duties of persons in that structure;*
- (c) *appoint a competent individual to be responsible for the overall management of the mine, provided that where the mine operator is an individual and is competent, the mine operator may discharge the functions of that competent individual;*
- (d) *ensure that when, for whatever reason, the individual appointed in accordance with sub-paragraph (c) is not readily available, a competent individual is nominated as a substitute to hold the authority and perform the duties of the first named individual;*
- (e) *ensure that a competent individual is present at and in charge of the operation of the mine at all times when persons are working at the mine; and*
- (f) *ensure that sufficient competent individuals are appointed to the management structure to manage the mine safely.*

(2) *Without prejudice to the generality of paragraph (1), the management structure must be established to provide in particular that all persons working in the mine come under the authority of a competent person in the management structure who has a duty to exercise such supervision as is appropriate to ensure the health and safety of those persons and of all others who may be affected by their activities.*

(3) *The mine operator must ensure that the management structure is reviewed regularly and revised where necessary and in particular if the mine undergoes significant changes, extensions or conversions.*

(4) *The mine operator must ensure that each person who forms part of the management structure is provided with a copy of those parts of the health and safety document which describe that person's authority and duties.*

(5) *The reference to a competent individual in charge in paragraph (1)(c) is a reference to that individual in charge subject to the overall control exercised by the mine operator.*

Guidance 10

37 The competent individual referred to in regulation 10(1)(c) is normally referred to as the mine manager.

38 A well-defined management structure is an integral part of the mine operator's SMS. The mine operator should make sure that within the company and the mine management structure, roles and responsibilities for all the risk control measures

Guidance

10

are clearly defined and carried out. This includes clear, direct reporting systems between the mine operator, mine manager and, where necessary, individuals in the management structure.

39 The mine operator should have a clear understanding of the difference between health and safety leadership and management. Competence in both leadership and management is an essential requirement. The directors of the undertaking or the mine operator (if they are an individual) should lead by example in demonstrating health and safety leadership and management. The various levels of management should have clearly defined health and safety leadership and competence management skills, with appropriate indicators used to evaluate performance. A competency management system (CMS) should be an integral part of the SMS and should specifically cover necessary management skills.

40 The SMS should identify those posts / individuals needed to exercise leadership at strategic, operational and team levels. Leaders at all levels should possess appropriate core leadership qualities and their skills should be demonstrated by appropriate behaviours commensurate with the role, and assessed to a leadership competence standard.

41 The mine operator must set out the extent of the authority and duties of the people within the management structure. This should include their health and safety management responsibilities.

42 The management structure should be designed to address the mining hazards and include the:

- (a) organisation and personnel necessary to control these hazards at the mine;
- (b) roles and responsibilities at relevant levels in the organisation;
- (c) identification of competence requirements of such personnel.

43 The roles, responsibilities, accountability, authority and interrelation of all people who manage, perform or verify work affecting safety should be defined. For example, mine operators should give consideration to:

- (a) defining and implementing preventative, protective and mitigating measures for the control of the risks arising from major mining hazards;
- (b) the inspection and maintenance of the mine;
- (c) the design, operation and maintenance of mechanical and electrical plant;
- (d) the action required to ensure staff awareness of hazards, and compliance with the mine emergency procedures;
- (e) identification, recording and follow-up of corrective or improvement actions;
- (f) control of abnormal situations, including emergencies;
- (g) identifying training needs, provision of training and assessment and evaluation of its effectiveness;
- (h) provision of resources, including human resources, for SMS development and implementation;
- (i) co-ordinating the implementation of the SMS and reporting to senior management.

44 All employees and contractors should be made aware of the management structure and key roles and responsibilities of the people within it, relative to them, and to whom they should report.

45 In the case of visitors to a mine it is important that they know who has responsibility for them.

Guidance

10

46 To comply with regulation 10(1)(c) the mine operator must appoint a competent person to be responsible for managing the operation of the mine at all times when it is working. This is the role traditionally fulfilled by the mine manager. This person should have the authority to control and co-ordinate the activities of all those who work at the mine (including any contractors) and exercise control in the event of an emergency. It is important to note that the ultimate legal responsibility for the safe operation of the mine and connected activities continues to lie with the mine operator and other relevant employers. The requirement to appoint this competent person does not affect this responsibility. A mine operator who is an individual may appoint themselves if they are competent to undertake the role.

47 When the mine manager is not readily available, or the post is vacant, a suitably qualified and competent person must be appointed by the mine operator as a substitute. The mine manager cannot be considered readily available if unable to be contacted and able to take charge of an incident. The substitute carries the duties of the manager and will be regarded as the mine manager during the period that they act as substitute and should be capable of undertaking all of the manager's duties.

48 All people in all parts of the mine must be appropriately supervised. A supervisor should be appointed for each shift for each area of the mine and should be on duty in that area while people are in it. The duties and responsibilities of all such supervisors should be reviewed as often as is necessary to keep pace with the changing geography and activities of the mine. The person appointed to carry out inspections under regulation 14 may also be appointed as the supervisor.

49 The extent of a supervisor's area will depend on the potential risks present in that area and the competence of the people involved. Circumstances may arise when, for safety reasons, the supervisor should justifiably restrict their personal supervision during a shift to areas which are smaller than their area of command, for example, when excessive flammable gas concentrations or falls of ground are an urgent problem demanding their full attention. In such cases, other arrangements must be made for the continued supervision of others elsewhere in the district.

50 Each supervisor should have an up-to-date record of the names of the people in their area of command, including visitors. People having roving commissions, eg technicians, should notify the supervisor of their presence.

51 All appropriate health and safety information should be passed from one shift supervisor to the next.

52 In addition, functional supervisors, eg for mechanical and electrical work, may be required.

Regulation 11 Competence

Regulation

11

The mine operator must ensure that –

- (a) no person undertakes any work at the mine unless the person either is competent to do that work or does so under the instruction and supervision of some other person who is competent to give instruction in, and to supervise, the doing of that work; and
- (b) no work is undertaken at the mine unless a sufficient number of persons are present who have the requisite competence to perform the tasks assigned to them.

Appendix G – Financial Report

The Coal Authority Finance Department

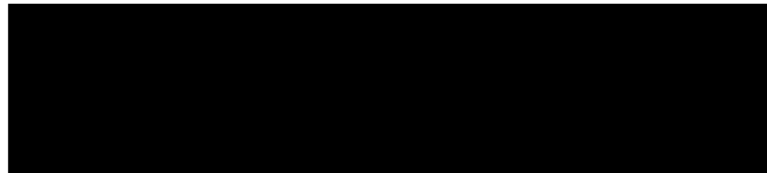
Licence Applications – Financial Appraisal

Applicant:

Site:

Licence Type:

Review Date:

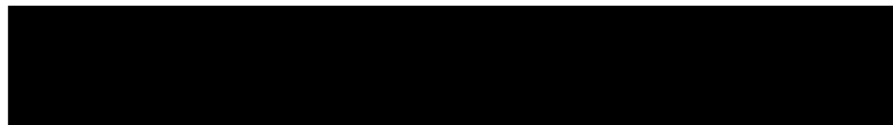


Organisation structure

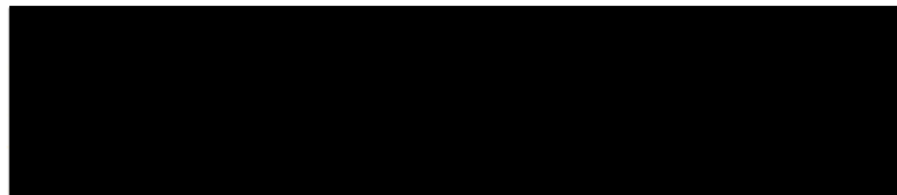
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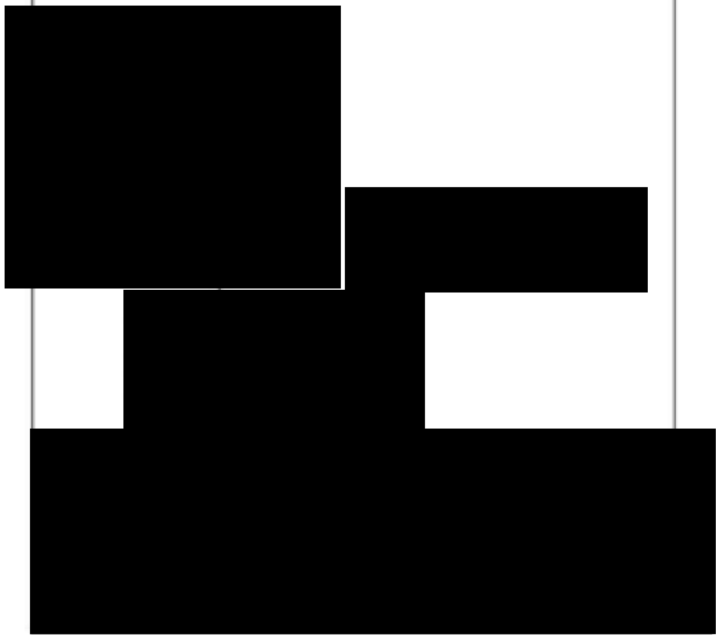
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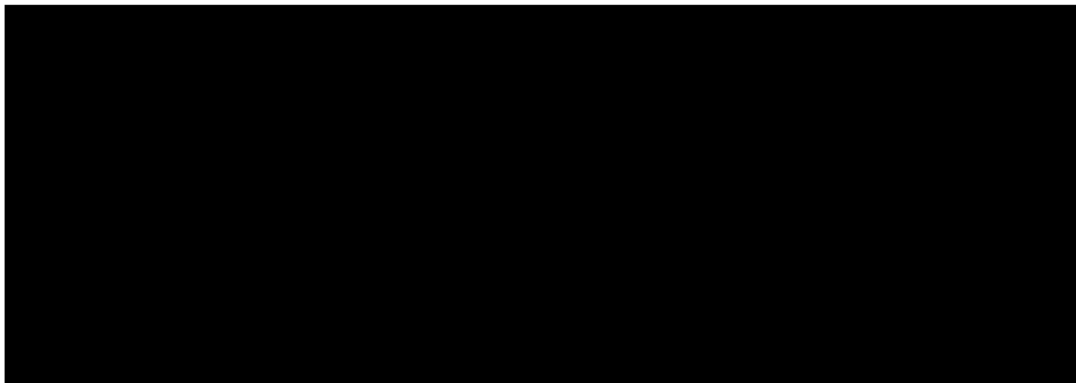


Form of Ultimate Beneficial Owner Letter
Organisational chart setting out the structure of the Company to the top parent company in the group.



Review of Financial Accounts

- 5. [Redacted]
- 6. [Redacted]



7. [Redacted]

8. [Redacted]

9. [Redacted]

10. [Redacted]

[Redacted]

11. [Redacted]

Credit report

12. [Redacted]

[Redacted]

13.

[Redacted]

14.

[Redacted]

[Redacted]

Evidence of funding

15.

[Redacted]

[Redacted]

16.

[Redacted]

17.

[Redacted]

18.

[Redacted]

19.

[Redacted]

19.1.

[Redacted]

19.2.

[Redacted]

19.3.

[Redacted]

19.4.

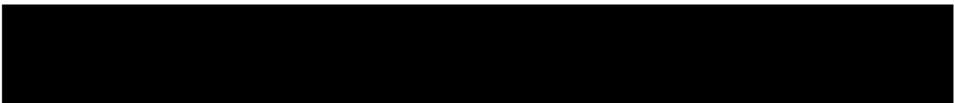


Financial viability / 5 year development plans

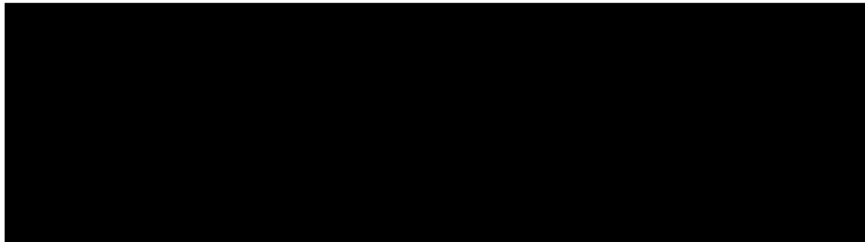
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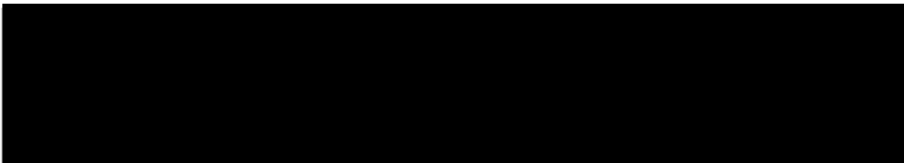
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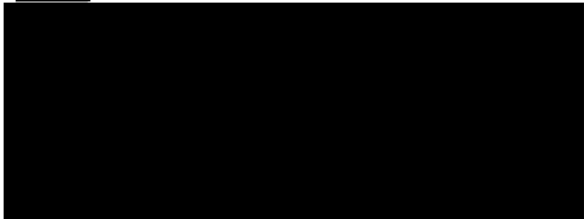
22.



23.



24.



25. Note:

25.1. Mtpa – million tonnes per annum

25.2. ROM = Rate of Mine

26.

[Redacted]

27.

[Redacted]

28.

[Redacted]

29.

[Redacted]

30.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

31.

[Redacted]

32.

[Redacted]

33.

[Redacted]

34.

[Redacted]

34.1.

[Redacted]

35.

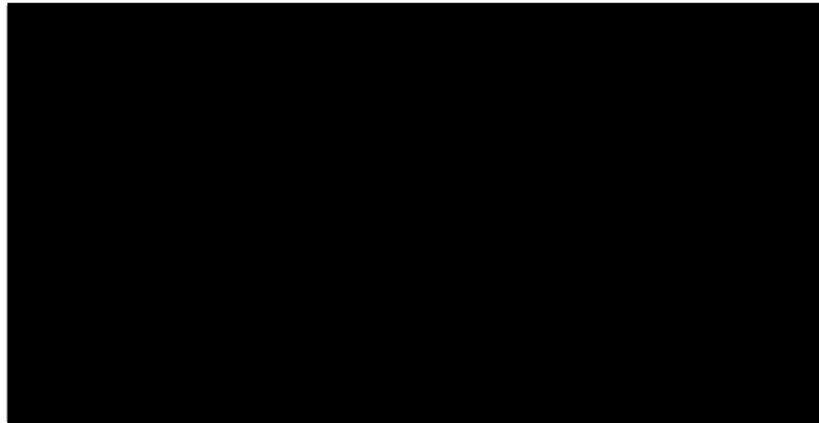


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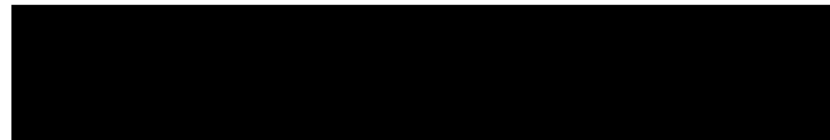


Operating Costs

36.1.



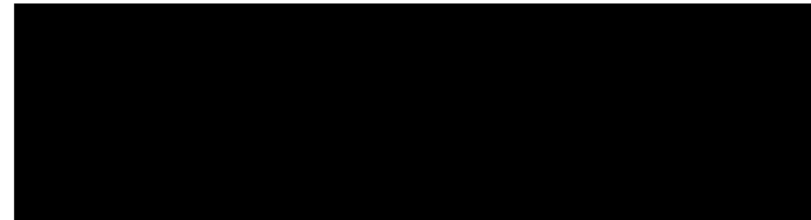
36.2.



36.3.



36.4.



[Redacted]

36.5. [Redacted]

36.6. [Redacted]

Output

36.7. [Redacted]

36.8. [Redacted]

36.9. [Redacted]

36.10. [Redacted]

36.11. [Redacted]

Selling Price and market

36.12. [Redacted]

[Redacted]

36.13.

[Redacted]

36.14.

[Redacted]

36.15.

[Redacted]

[Redacted]

36.16.

[Redacted]

36.17.

[Redacted]

Discount Rate

- 36.18. [Redacted]
- 36.19. [Redacted]
- 36.20. [Redacted]
- 36.21. [Redacted]
- 36.22. [Redacted]

Reserves and the impact on financial viability

- 37. [Redacted]
- 38. [Redacted]

[Redacted]

39.

[Redacted]

[Redacted]

40.

[Redacted]

Conclusions

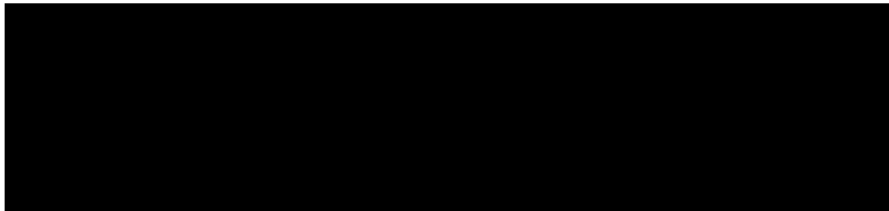
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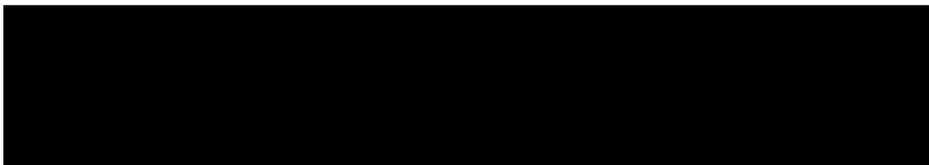
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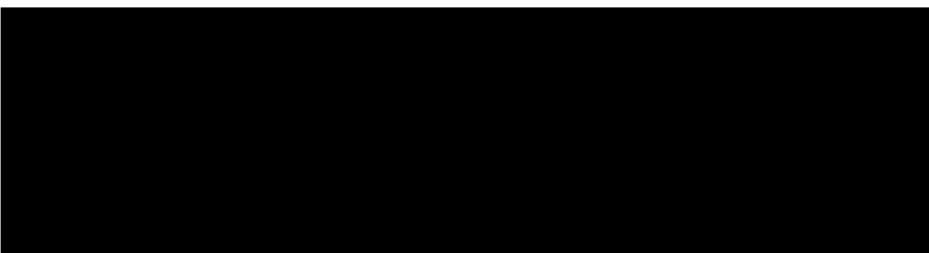


Recommendation

45.



46.



Recommended by: ..



- Principal Finance Manager

Date 23 September 2024

I have read the report and agree with the recommendations presented above.

Approved by:.....



Paul Frammingham – Chief Finance and Information Officer

Date 23 September 2024