# APPLICATION FOR AN UNDERGROUND COAL MINING CONDITIONAL LICENCE

The complete application form (either as a pdf or in hard copy) should be sent to the Authority at : -

# licensing@coal.gov.uk or

#### **Licensing Team**

# The Coal Authority, 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG

The appropriate application fee should be paid by electronic transfer or credit card as outlined in the scale of charges annexed to these notes.

Please complete the following information. If there is insufficient space in a relevant box please indicate and append the additional details.

# 1. Applicant

Company / Name	West Cumbria Mining Ltd		
Contact Name	Kevin Murphy	Contact E-mail	
Address	Haig Mining Museum Solway Rd Kells		
Post Town	Whitehaven	Tel No.	
Post Code	CA28 9BG	Fax No.	N/A
Company No.	07144109	(if applicable)	

#### Consultant for the purposes of managing the application (if any)

Company / Name		
Contact Name	Contact E-mail	
Address		
Post Town	Tel No.	
Post Code	Fax No.	

#### Legal Representative (if any)

Name		
Contact Name	Contact E-mail	
Address		
Post Town	Tel No.	
Post Code	Fax No.	

# 2. General

2.1 Please provide the following information. Items in blue italics are not essential but should be provided if known at this stage.

Name given to the proposed Licence applied for		Woodhouse Colliery North	
		(CA11/UND/0185/N)	
National gri	d reference of the centre of the application area	-3.75, 54.5 WGS84 (SRID 4326)	
The applicat	ion area in hectares (Max. area = 10,000 ha)	10,000	
The relevant	t Planning Authority	Cumbria County Council	
Type of	New Conditional Licence	Conditional Licence	
Application	Extension of licence term		
The estimat	ed reserves in the project area		
The anticipa	ted annual rate of extraction	Up to 4mtpa ROM	
The proposed date of commencement of operations		Q2 2025	
The conditional term requested for the Licence (Max. 8 years)		3	

# 3. Corporate Structure

3.1 Where the Applicant is not an existing licence holder please provide :-



Details of any other directorships, offices, or employment of the Directors of the Applicant including whether they are directors, officers or employees of other companies with direct or indirect interests in coal mining.

The schedule below includes summarises other Director or employment interests. the only coal related interest is in bold:

Name	WCMH	WCM	Other
D A Carroll	Director	Director	Queensland Coal Investment Holdings (private) – Director (Family Trust)
			Director of Magnum Mining and Exploration (ASX listed)
			Kogi Iron Ltd - Director
			Cremorne Capital Pty Ltd - Director (Family Trust)
			Phoenix Water (Australia) Ltd – Director (Family Trust)
O Hegarty	Director	Director	Chairman, EMR Capital
			Non-Executive Director, Kestrel Coal
R Round	Director	Director	Anglo Asian Mining PLC – Board Adviser
			Rambler Metals and Mining PLC – Non-executive Director
			Rimar Services Limited – Director
M A Kirkbride	Director	Director	Committee member on UK Government technical advisory panel CoRWM (Committee on Radioactive Waste Management) to BEIS

Where the Applicant is not a corporate body (e.g. individual or partnership)

Details of any other directorships, offices, employments or similar interests (either current or intended after the grant of a licence), including whether they are directors, officers or employees of other companies with direct or indirect interests in coal mining.

See above in bold

# 4. Technical Information to be provided

# 4.1 Please provide the following (appended to the application where necessary) :-

		Appended
An Ordnance Survey	The licence application area defined by a red line	Fig. 1
based plan showing	The proposed location of the mine outlets	Fig. 2 & 3
the features described to the right (on a scale suitable for accurately delineating those features)	The proposed location of the mine offices and the means of road access	Fig. 3
	Current surface and major sub-surface structures and features above and at least full depth outside the licence application area (sub-surface features such as oil and gas pipelines; trunk sewers; water mains to be shown but not domestic services)	Note 2 & Fig 4
A generalised vertical s application area togeth seam statina vertical di	ection representative of the seams and strata relevant to the ner with details of the seams above and below each application istances if not shown on the generalised vertical section	Fig. 5

Known details of the quality and intended market of the coal seam(s) to be worked

WCM is targeting a High Volatile Hard Coking Coal (HV HCC) product, suitable for blending with other coals to make coke for use in iron and steel production. (pg 55 Part A DFS)

Details of any other minerals e.g. fireclay, to be extracted in the course of coal-mining operations

None

A brief summary of the geology of the application area including the sequence of coal seams to be worked, the geological structure, dips, faults etc

Appendix - Note 3. (also, Fig. 5, and Chapter 5 DFS)

		Appended
Plan (s) showing the features described to the right (on a scale suitable for accurately delineating the features)	The surface geology within and at least full depth outside the licence application area	Note 4, 5, 6
	The outcrop position of any coal seams to be worked	Note 5
	Areas of unconsolidated deposits or material likely to flow when wet and any rock or stratum containing or likely to contain water	Note 6
	The surface position of faults or known lines of weakness	Fig. 6.2

Plan (s) showing the features described to the right (on a scale suitable for accurately delineating the features)	Any old workings in the seams in the application area	Fig. 7.1/7 2
	Any old workings (with abandonment references if possible) which are themselves, or could be, connected to other old workings close to the surface which could allow the emission of gases or water at the surface if affected by the working of the application seams	
	The location and details of all known abandoned mine outlets in or above the area to be worked	Fig. 8.2 & Note 8.
	Details of any surface or underground boreholes which intersect the seams	Fig. 8.1 & 8.2

Sufficient interpolated seam contours to enable the gradient and geological structure of the seam to be determined	Fig. 9
Details of seam sections and proposed working section(s) at intervals through the application area	Fig 10 & Note 9
The outline of method and proposed phasing of coal mining operations to be undertaken during the first 5 years	Note 10 Fig 11-13

An assessment of any interaction effects with other coal mining operations likely to be caused by the proposed operations

The are no other mining operations within or close to the proposed mining area, and WCM will maintain an 80 m standoff from historic workings.

Appended

# 5. Other necessary rights, permissions or consents obtained

# 5.1 Please provide the following (appended to the application where necessary) :-

Details of the access rights obtained or needed for the proposed operations. Such access rights include the mine surface and other mineral rights if required and should include a certified Ordnance Survey based plan, on a scale suitable for accurately delineating the features, showing the area of the rights needed. If not yet obtained please give the anticipated timing for obtaining these rights A conv of (or the relevant electronic link to) the planning application for the proposed

A copy of (or the relevant electronic link to) the planning application for the proposed operation, including the certified application plan, or the anticipated timing for obtaining that consent

Link Minerals, Waste and County Council Planning Applications | Cumbria County Council

# 6. Financial Information

# 6.1 Please provide the following (appended to the application where necessary) :-

	Appended
A projected statement of year by year income and expenditure for the development of the project during the conditional phase (or the first five years if the project development is longer). This statement should be accompanied by any key assumptions on timing of exploration works, acquisition of planning consent and access rights etc.	Note 12
Details of how the Applicant is proposing to finance the development of the project during the conditional phase. This evidence can include current bank statements if working capital is to be utilised; letters of confirmation from the bank or other fund providers or formal Director's guarantees.	Note 13

Depending on the details provided, we may require further clarification or confirmation of individual elements of the Applicant's projections.

6.2 Where the Applicant is <u>not an existing licence holder</u> please provide (copies appended to the application or the relevant electronic link) :-

	Appended
most recent three years' audited accounts of the Applicant, where available. Where y are not available alternative supporting documentation must be provided.	
Please find provided as separate documents the last three years of audited accounts for the West Cumbria Mining Limited.	
- Year ended 31 <sup>st</sup> December 2021	
- Year ended 30 <sup>th</sup> June 2020	
- Year ended 30 <sup>th</sup> June 2019	
- Year ended 30 <sup>th</sup> June 2018 The Company recently changed its year end reporting date to 31 <sup>st</sup> December and the accounts for the 18 months ended 31 <sup>st</sup> December 2021 are currently in an advanced stage of audit and drafting. These will be signed and filed in December 2022.	
	<ul> <li>most recent three years' audited accounts of the Applicant, where available. Where y are not available alternative supporting documentation must be provided.</li> <li>Please find provided as separate documents the last three years of audited accounts for the West Cumbria Mining Limited. <ul> <li>Year ended 31<sup>st</sup> December 2021</li> <li>Year ended 30<sup>th</sup> June 2020</li> <li>Year ended 30<sup>th</sup> June 2019</li> <li>Year ended 30<sup>th</sup> June 2018</li> </ul> </li> <li>The Company recently changed its year end reporting date to 31<sup>st</sup> December and the accounts for the 18 months ended 31<sup>st</sup> December 2021 are currently in an advanced stage of audit and drafting. These will be signed and filed in December 2022.</li> </ul>

Any acco	consolidated accounts for the most recent three years of which the Applicant's unts form part.
Link	See below
The cons	most recent three years' accounts of any ultimate holding company if not part of such olidated accounts.
	Please find provided as separate documents the last three years of audited accounts for the West Cumbria Mining (Holdings) Limited, which incorporates the group including West Cumbria Mining Limited.
	- Year ended 31 <sup>st</sup> December 2021
	- Year ended 30 <sup>th</sup> June 2020
Link	- Year ended 30 <sup>th</sup> June 2019
	- Year ended 30 <sup>th</sup> June 2018 The Company recently changed its year end reporting date to 31 <sup>st</sup> December and the accounts for the 18 months ended 31 <sup>st</sup> December 2021 are currently in an advanced stage of audit and drafting. These will be signed and filed in December 2022.
Any State hold	Interim Statements subsequently published (including any Notes, the Chairman's ement and Report of the Directors), in respect of the Applicant and any ultimate ing company.
Link	WCM is a private company and as a result does not issue any formal interim statements.
	We have supplied as separate documents updates which the company issues to shareholders and noteholders.

The information provided under 6.1 and 6.2 above will be treated as confidential

# 7. Security

- 7.1 We take security against any liabilities that could fall on the Authority through non-compliance by the operator of the terms of the Licence and associated Lease. This security level is assessed when an application is made to de-conditionalise a conditional licence.
- 7.2 The Authority will stipulate the Area of Responsibility for subsidence damage when an application is made to de-conditionalise a conditional licence.
- 7.3 The level of security and the Area of Responsibility for subsidence damage will be reviewed annually once a licence is de-conditionalised and becomes operational.

# 8. Technical Competence

Please give details of relevant expertise and experience which will be available to the Applicant for the proposed development of the project during the conditional phase.

See Note 14

# 9. Surface Hazards

9.1 A Surface Hazard in this context can be a surface collapse; flooding; landslip; the escape of gas or the effects of spontaneous combustion on or near the surface, due wholly or partly to Coal Mining Operations, which constitutes an imminent danger or hazard to any person. The management systems and contact details for surface hazards will be determined when an application is made to deconditionalise a conditional licence.

# 10. Financial terms for acquisition of interests or rights in coal and other minerals

- 10.1 We charge a standard rate for the terms on which the Applicant will acquire an Option for Leasehold rights in relation to coal (and other minerals) owned by the Authority. The current rates, which are subject to periodic review, are shown in the scale of charges at Annex C.
- 10.2 If we revise our charges these Guidance Notes will be revised and the information will be published on our website (<u>https://www.gov.uk/government/organisations/the-coal-authority</u>).

# 11. Declaration

The Applicant as named in Section 1 above, hereby:-

- (a) submits an application to the Coal Authority for an Underground Coal Mining conditional licence, associated option for lease and non-exclusive exploration licence as described above;
- (b) certifies that the information provided is correct and not misleading;
- (c) certifies that the required application fee has been paid to the Coal Authority.

Print Name	Kevin Murphy	Date	07 February 2023
	On behalf of the Applicant		

# Woodhouse Colliery North



Figure 1: Licence Area



Figure 2: Location of Proposed Mine Outlets



Figure 3: Mine Site Proposed Plan Offices and Road Access



Figure 4: Plan of Main Mine Site, Conveyor Route and Rail Loading Facility, Including Major Utilities.

	HERIA NG	General Stratigraphic Column St Bees, Cumbria, UK			Golder	
Age	Succession	Major Lithology	Coal Seam	Thickness Range (m)	Model Code	
QUATERNARY	Superficial Deposits	Till: Gravel		0 to >50 where relevant	ΩΤ	
	St Bees Sandstone	Sandstone		Up to 300	SBSS	
PERMIAN-TRIASSIC	St Bees Shales	Mudstones, siltstones and sandstones		0 to 70	SBSH	
	St Bees Evaponte	Anhydrite and/or Gypsum		0 to 40	SBEV	
	Brockram Breccia	S. W. Breada		10 to 50	BRBR	
	Whitehaven Sandstone	Sandstone		Up to 75	WHSS	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Mudstone	Upper Metal Band	1m to 1.5m 12m	UM1/UM2	
		Mudstone	Siaty	30m	SL	
		Mudstone sandstone	Tenquarters	1m to 1.5m	10	
	Pennine Middle Coal Measures	Siltstone	Bannock Band	2m to 3m	00-	
		- Hudebash	Main Band	2m to 3m	ME	
10050		Those and the second se	Yard Band	<1m	YB	
CARBONIFEROUS		Mudstope	Little Main	Up to 1m	LM	
		Sandstone	Potasi	c. 1m Up to 30m		
	Basers	Mudstone, sandstone	Lickbank	c. 0.5m to 1m Zero to 10m	LB	
	remme Lower Cas Leasures	Siltstone		25m to 30m		
		Mudstones, sitstones and sandstones	Upper Threequarters	<1m 5m to 10m	UTQ	
		Mudstone	Albrighton	<1m 15m to 20m	Al	
		Mudstone, sandstone		20m		
	Stainmore Formation	Mudstones, sitstones, sandstones and minor poal	Hamington Pour Poor	<1m to 1.5m	HG	
LOWER CARBONIFEROUS	Limestone Supergroup	Limestones with shales		100 to c. 220	GLS	
LOWER PALAEOZOIC	Basement Beds	+ + + + + + + + + + + + + + + + + + +			BSMT	

Figure 5: Generalised Stratigraphic Column



Figure 6.1: Surface Position of Faults within WCM's Onshore Licence Area.



Figure 6.2: Position of Faults within WCM's Offshore Licence Areas



Figure 7.1: Historic Working in the Seams in the Application Area



Figure 7.2: Historic Working in the Seams in the Application Area, and Abandoned Mine Outlets

# Woodhouse Colliery North



Figure 8.1: Surface and Underground Boreholes Which Intersect Coal Seams.



Figure 8.2: Surface and Underground Boreholes Which Intersect Coal Seams



Figure 9: Interpreted Seam Contours with Structures - Main Band

Woodhouse Colliery North

# PHASE 4 OFFSHORE EXPLORATION BOREHOLES\_GEOTECHNICAL SAMPLES\_ROOF AND FLOOR OF TARGET SEAMS Coal (CO) Slitstone (ST) Sandstone (SS) GEOLOGICAL KEY 7 X Seatearth Carbonaceous Mudstone (XM) Mudstone (MIS) UCS, Bulk Density, Youngs Modulus & Poissons Ratio UCS, Bulk Density, Youngs Modulus, Poissons Ratio & Slake GEOTECHNICAL TESTING

Figure 10: Details of Target Seam Sections in the Primary Offshore Mining Area.

Woodhouse Colliery North



Figure 11 Run-out and Pocket Extraction.



Figure 12: Development / Production Concept

**Commercial-In Confidence** 



Figure 13: Mine Layout and 5-Year Phasing

Woodhouse Colliery North

Commercial-In Confidence

# Notes Section 4

#### The estimated reserves in the project area

1. Probable Reserve. From a JORC resource comprising, Exploration Target, Exploration Target, Inferred Resource and Indicated Resource.

Current surface and major sub-surface structures and features above and at least full depth outside the licence application area (sub-surface features such as oil and gas pipelines; trunk sewers; water mains to be shown but not domestic services)

2. The total licence area is under the sea, Crown Estates mapping has no record of surface or subsurface infrastructure under the sea in the licence area.

# A brief summary of the geology of the application area including the sequence of coal seams to be worked, the geological structure, dips, faults etc

3. The stratigraphic sequence is well established and is summarized in Figure 5. The target coal succession is typical of Upper Carboniferous deposits and is analogous to those seen elsewhere in UK coalfields. The main coal succession lies in the Middle and Upper Coal Measures and comprises of 14 named seams in a succession dominated by grey mudstones and siltstones, with minor fluvial sandstone beds. The target coal seams are the Bannock Band and Main Band. The grey strata are overlain by later Carboniferous red beds, which are further unconformably overlain by a succession of Permo-Triassic sediments. Fault density is believed to decrease westward, Figures 6.1 and 6.2 show major mapped faults. The bedding dips of the coal seams were historically recorded as being gentle over wide areas, with dip increases on approach to key fault zones. Overall bedding dips are typically west/southwest.

# The surface geology within and at least full depth outside the licence application area

4. The British Geological Survey (BGS) published (in 2004) a surface geology map at a scale of 1: 50,000 for the Whitehaven area. WCM usage has shown that this has uncertain accuracy in places, particularly regarding fault traces, although the general surface geology depiction is useful for background work.

# The outcrop position of any coal seams to be worked

5. The total licence area is under the sea, no coal outcrops in the licence area are recorded.

# Areas of unconsolidated deposits or material likely to flow when wet and any rock or stratum containing or likely to contain water

6. No such areas have been identified to date by WCM during the phases of exploration and design works.

Any old workings (with abandonment references if possible) which are themselves, or could be, connected to other old workings close to the surface which could allow the emission of gases or water at the surface if affected by the working of the application seams

7. Figures 7.1 and 7.2 shows existing coal and anhydrite workings in the area of WCM's licence areas. WCM's planned seam workings will maintain an 80m standoff from historic coal workings and should not affect these old workings.

# The location and details of all known abandoned mine outlets in or above the area to be worked

8. Although there are existing mine outlets within the onshore licence area, there are none within or above the area that is planned to be worked. (Fig. 7.2)

# Details of seam sections and proposed working section(s) at intervals through the application area

9. WCM plans to work the entire thickness of the Main Band seam section. Fig. 10 shows offshore seam details from WCM boreholes.

The outline of method and proposed phasing of coal mining operations to be undertaken during the first 5 years

10. Full detail of the outline of method and proposed phasing of coal mining operations to be undertaken during the first 5 years can be found in Chapters 09 and 10 of WCM's DFS provided.

WCM intends to conduct a partial extraction method (Fig. 11), using a run-out and pocket design with a continuous miner / bolter miner arrangement, for secondary partial extraction of board and pillar systems (Fig. 12). Run-out and pocket involves developing supported short-life and length roadways. A continuous miner takes pockets off both sides of the roadway on retreat, in conjunction with mobile breaker-line supports. Figure 13 shows a the DFS mine plan and 5-year phasing of workings.

# Section 5

Details of the access rights obtained or needed for the proposed operations. Such access rights include the mine surface and other mineral rights if required and should include a certified Ordnance Survey based plan, on a scale suitable for accurately delineating the features, showing the area of the rights needed. If not yet obtained, please give the anticipated timing for obtaining these rights

11. During the Planning process a Section 106 agreement was developed and agreed by all related landowners to secure access rights to the mine surface areas including the Main Mine Site, the Buried Conveyor and the Rail Loading system. The Section 106 agreement has been formally signed off by all parties.

WCM has also historically agreed access rights for re-entry into the Sandwith Anhydrite mine, for various exploration works with both landowners and mineral rights owners.

Three plans have been provided (Figs 14, 15, 16) showing surface ownership and mineral ownership (lease and freehold).

At present WCM is of the view that it does not require any licence from the Marine Management Organisation for the coal mining activities beneath the seabed, as there is no operations within the Irish Sea, or any structures or other impacts to the seabed itself, nor any construction activity below the seabed.

# Section 6.1

A projected statement of year by year income and expenditure for the development of the project during the conditional phase (or the first five years if the project development is longer). This statement should be accompanied by any key assumptions on timing of exploration works, acquisition of planning consent and access rights etc.

12. The exploration phase of the project was carried out during the period 2014 to 2017 WCM, at which time WCM originally held the conditional licence for the onshore area and the two adjacent offshore areas. As a result, a JORC compliant DFS was produced and used as the basis to take the project forward.

In parallel with the exploration work WCM prepared a full EIS (Environmental Impact Assessment) based planning application.

The application was submitted to the Council on 31st May 2017. The application was approved by the CCC DC&R Committee on 19th March 2019, again on 30th October 2019 and for a third time on 2nd October 2020. On 11 March 2021 the Secretary of State "called in" the project and a Public Inquiry opened on 7th September 2021. The Public Inquiry concluded on 1<sup>st</sup> October 2021 with a report by the Inspector submitted to the Secretary of State on 7<sup>th</sup> April 2022. The decision by the Secretary of State was originally scheduled for 7<sup>th</sup> July 2022, but was postponed.

The final decision and approval of planning permission was issued by the Secretary of State on 7<sup>th</sup> Dec 2022.

From the point at which the project was called in in March 2021 WCM have not been permitted to progress the development as a consequence the conditional licence expired on 17<sup>th</sup> October 2022.

Cumbrian Metallurgical Coal Project - June 2014 to Oct 2022 Expenditure



- Since June 2014 WCM has been supported by a staged equity investment from its 82% Private Equity shareholder, EMR Capital and from minority shareholders. In addition EMR and others have invested staged of loan notes convertible in to equity.
- EMR Capital is an Australian-based Private Equity firm specialising in Investments in mining projects
- EMR Capital is fully supportive of the development of the Cumbrian Metallurgial Coal Project ('CMCP')
- To Nov 2020, has been invested in the CMCP based on Management Accounts

Details of how the Applicant is proposing to finance the development of the project during the conditional phase. This evidence can include current bank statements if working capital is to be utilised; letters of confirmation from the bank or other fund providers or formal Director's guarantees.

13. WCM received a positive determination of the planning permission on 7<sup>th</sup> December 2022. Subsequently, the company has restarted the programme to discharge the anticipated planning conditions and construct the mine and look to deconditionalise the licences once construction is under way.

WCM cash position of **Control**, as at 8 December 2022, is sufficient to meet short term costs ahead of Phase 1 financial close in March 2023. Currently monthly spend is circa

WCM has sufficient funding within the budget requirements and within the intended timeframe for issue and deconditionalising of the three Woodhouse Colliery Project licences.

WCM is concluding the work to close Phase 1 funding **construction** by 15 March 2023. This funding will cover the initial 8-month period for the project to move into construction.

Phase 2 funding (full mine construction) is currently anticipated to be **service and**, scheduled to close by end September 2023. This is anticipated to be formed from a combination of equity (from a new investor) and supported by debt, if required.

# Section 8

Please give details of relevant expertise and experience which will be available to the Applicant for the proposed development of the project during the conditional phase.

14. WCM has a Board made up of individuals with a strong background in underground Coal Mining who have been with the project from its inception.

# Don Carroll

Don is a senior resources executive with over 37 years' experience in a variety of leadership, technical, strategy, marketing and business development roles across a diversified range of commodities including iron ore, coal and aluminium. Don was a key member of the BHP Billiton merger and BHP Rio merger team and held roles including Country Head and President BHP India, Vice President and General Manager – Minerals Marketing and Vice President Investor Relations (Asia and Australia). Don graduated from Sydney University with a Bachelor of Engineering (Mining) and is a member of the Australian Institute of Mining and Metallurgy and the Australian Institute of Company Directors.

# **Owen Hegarty**

Owen has more than 50 years experience in the global mining industry: including 25 years with the Rio Tinto group where he worked in most of their commodities, companies, and countries, and ultimately was Managing Director of Rio Tinto Asia and the Australian copper and gold business from 1989 to 1994.

Owen was the founder and Managing Director of Oxiana Limited, where he led the growth of Oxiana from a junior explorer to a major Asia Pacific base and precious metals producer. Oxiana became OZ Minerals which remains one of the top performing resources stocks over the past 25 years. Owen was Chairman of the Tigers Realm Minerals Group and until end of 2016 was Vice Chairman of Fortescue Metals Group; and he was also the Executive Vice- Chairman of Hong Kong-listed G-Resources and CST Mining.

Owen holds a Bachelor of Economics (Hons) from Monash University, is a Honorary Fellow of and former Director of the Australasian Institute of Mining and Metallurgy (AUSIMM), and a fellow of the Australian Institute of Company Directors (AICD).

Owen has served and continues to serve as a member of a number of Government and industry mining advisory bodies; and is the recipient of a number of awards and citations for his achievements and leadership in the mining industry. He was also awarded the Order of Australia Medal (OAM) in the June 2021 Queen's Birthday Honours List for service to the mining and minerals sector..

# **Richard Round**

Richard has a successful track record in senior finance and leadership roles in a range of quoted and private companies. Most recently Richard, as CEO, led the strategy and ultimate sale of a specialist small scale hydro-energy developer, Green Highland Renewables. Richard now holds several Non-Executive and advisory roles, including Chairman of Cyberhawk Innovations and Non-Executive Director at Anglo Asian Mining plc. Previously, Richard was Acting Chief Executive at quoted Novera Energy plc where he led the sale of the landfill gas, wind and hydro group; prior to this he held a series of finance director roles in the coal, mining and energy sectors, and has specific knowledge and experience in the UK coal sector.

# Mark Kirkbride

Mark is a Chartered Mining Engineer and has acquired a wealth of senior management experience in the mining

and civil engineering sectors during his career. Before joining West Cumbria Mining, Mark held a series of senior roles including CEO at a specialist service provider to the infrastructure and engineering markets where he oversaw major expansion. Prior to that Mark spent 17 years with Skanska and Cementation Mining in a wide range of roles, including his formative years working in the UK underground coal mining industry as an engineer, as well as overseas on major mine construction projects. He holds a postgraduate research degree in mechanical rock cutting with machines. Mark is also a member of the WCM board.

On receipt of a positive planning determination WCM will also be able to utilise the following resources