MC MINING LIMITED ABN 98 008 905 388

NOTICE OF MEETING & EXPLANATORY STATEMENT

Date of Meeting 15 July 2022

Time of Meeting

9am (London time)

Place of Meeting

The Meeting will be held as a virtual meeting by way of a live webcast. Details on how to attend the Meeting and participate in it are included in the Notice of Meeting.

A Proxy Form is enclosed

If you are unable to attend the Meeting please complete and return the enclosed Proxy Form in accordance with the instructions specified on that form.

Independent Expert

The Independent Expert has concluded that the transaction the subject of Resolution 2 is **NOT FAIR BUT REASONABLE**.

THIS DOCUMENT IS IMPORTANT AND AS SUCH SHOULD BE READ CAREFULLY AND IN ITS ENTIRETY.

If you do not understand any part of this document, please contact your financial or other professional adviser without delay.

MC Mining Limited NOTICE OF MEETING

Notice is hereby given that a Meeting of Shareholders of MC Mining Limited ABN 98 008 905 388 (ASX: MCM) (**Company**) will be held virtually at 9am (London time) on 15 July 2022.

Information on the proposals to which the business relates is set out in the Explanatory Statement which accompanies this Notice of Meeting. This Notice of Meeting should be read in conjunction with the accompanying Explanatory Statement.

The business to be considered at the Meeting is set out below.

BUSINESS

Resolution 1 - Ratification of Prior Issue of Shares

To consider, and if thought fit, to pass, with or without amendment, the following Resolution as an **ordinary resolution**:

"That, for the purposes of Listing Rule 7.4 (and for all other purposes), Shareholders ratify the 6 April 2022 issuance by the Company of 38,363,909 new Shares to SGIH on the terms and subject to the conditions set out in the Explanatory Statement."

Voting Exclusion Statement: The Company will disregard any votes cast in favour of this Resolution 1 by or on behalf of Senosi Group Investment Holdings Proprietary Limited (**SGIH**) and by or on behalf of any "associate" (as that term is defined in the Corporations Act) of SGIH.

However, the Company need not disregard a vote on this Resolution 1 if:

- it is cast by a person as a proxy for a person who is entitled to vote in accordance with the directions on the Proxy Form;
- it is cast by the person chairing the Meeting as proxy for a person who is entitled to vote in accordance with a direction on the Proxy Form to vote as the proxy decides; or
- it is cast by a holder acting solely in a nominee, trustee, custodial or other fiduciary capacity on behalf of a beneficiary provided the following conditions are met:
 - the beneficiary provides written confirmation to the holder that the beneficiary is not excluded from voting, and is not an associate of a person excluded from voting, on Resolution 1; and
 - the holder votes on Resolution 1 in accordance with directions given by the beneficiary to the holder to vote in that way.

Resolution 2 - Approval for Acquisition of Relevant Interest in Shares

To consider, and if thought fit, to pass, with or without amendment, the following Resolution as an **ordinary resolution**:

"That, for the purposes of Item 7 of section 611 of the Corporations Act (and for all other purposes), Shareholders approve the acquisition by SGIH (or its nominee) of a relevant interest in a further 33,333,333 new Shares to be issued to it by the Company on the terms and subject to the conditions set out in the Explanatory Statement."

Voting Exclusion Statement: The Company will disregard any votes cast in favour of this Resolution 2 by or on behalf of SGIH and by or on behalf of any "associate" (as that term is defined in the Corporations Act) of SGIH.

However, the Company need not disregard a vote on this Resolution 2 if:

- it is cast by a person as a proxy for a person who is entitled to vote in accordance with the directions on the Proxy Form;
- it is cast by the person chairing the Meeting as proxy for a person who is entitled to vote in accordance with a direction on the Proxy Form to vote as the proxy decides; or
- it is cast by a holder acting solely in a nominee, trustee, custodial or other fiduciary capacity on behalf of a beneficiary provided the following conditions are met:
 - the beneficiary provides written confirmation to the holder that the beneficiary is not excluded from voting, and is not an associate of a person excluded from voting, on Resolution 2; and
 - the holder votes on Resolution 2 in accordance with directions given by the beneficiary to the holder to vote in that way.

ADDITIONAL INFORMATION

This Notice of Meeting is accompanied by the Explanatory Statement which provides a detailed explanation of the business of the Meeting. Shareholders should read the Notice of Meeting and the Explanatory Statement carefully and in full.

Independent Expert's Report

The Independent Expert has concluded that the transaction the subject of Resolution 2 is **NOT FAIR BUT REASONABLE** to "Non-Associated Shareholders" (i.e. Shareholders other than SGIH and those associated with SGIH).

Shareholders should also carefully consider the report prepared by the Independent Expert for the purposes of deciding how to vote on Resolution 2. A copy of this report accompanies the Explanatory Statement.

Virtual Meeting

The Meeting will be held online by way of video conference. To facilitate this, Shareholders must register their attendance with the Company by emailing¹ the Company Secretary at tonyb@endeavourcorp.com.au</sup> before 5pm (London time) on 13 July 2022.

Your Vote is Important

As the matters to be considered at the Meeting affect your Shareholding, your vote is important. As such, the Company strongly encourages all Shareholders to attend and cast their votes in relation to each of the matters to be considered at the Meeting.

Voting Entitlement

For the purpose of voting at the Meeting, the Board has determined, in accordance with regulation 7.11.37 of the *Corporations Regulations 2001* (Cth), that Shares will be taken to be held at 10am (London time) on Wednesday, 13 July 2022².

Voting by Proxy

Each Shareholder who is entitled to attend and vote at the Meeting may appoint a proxy to attend and vote on behalf of that Shareholder. The proxy need not be a Shareholder. Please note that a proxyholder cannot vote on a show of hands but can speak at the Meeting and can vote on a poll.

A Shareholder who is entitled to cast two or more votes may appoint one or two proxies and may specify the number of votes that each proxy is entitled to exercise. If a Shareholder appoints two proxies and that appointment does not specify the number of votes each proxy is to cast, each proxy may exercise half the Shareholder's votes.

In the event that a Shareholder appoints a proxy and specifies the way the proxy is to vote on a particular Resolution:

- where the proxy is not the Chair:
 - the proxy need not vote on a poll but if the proxy does so then the proxy must vote the way that the Shareholder who appointed the proxy specifies; and
 - if a poll is demanded at the Meeting and the proxy does not attend or vote, then the Chair is taken to have been appointed as the relevant Shareholder's proxy; and
- where the Chair is the proxy (including where the Chair is taken to have been appointed by the proxy as set out above) the Chair must vote on a poll and must vote the way that the appointing Shareholder specifies.

¹ Please include the name, registered address and HIN (or SRN) of the Shareholder in this email. The Company Secretary will reply to your email with access details for the Meeting.

² If you are not a registered Shareholder at this time & date (i.e. 10am, London time on 13 July 2022 (which is 5pm, Perth time on 13 July 2022)), you will not be entitled to attend or vote at the Meeting.

Impact of your Proxy Appointment

If you appoint the Chair as your proxy and have not directed the Chair how to vote, you are authorising the Chair to cast any undirected votes on both Resolutions in accordance with Chair's intentions set out below.

The Chair's Voting Intentions

The Chair intends to vote all undirected proxies on, and in favour of, Resolution 1. However, and because of the conclusion of the Independent Expert in relation to Resolution 2, the Chair will abstain from voting undirected proxies on that Resolution.

If there is a change to how the Chair intends to vote undirected proxies, the Company will make an announcement to ASX. The Chair's decision on the validity of a direct vote, vote cast by a proxy or vote cast in person, is final.

Online Proxy Appointment

You may appoint and direct your proxy online, by using your smartphone or by visiting <u>www.investorvote.com.au</u>.

To use this option, you will need your Securityholder Reference Number (**SRN**) or Holder Identification Number (**HIN**) and your allocated Control Number as shown on your Proxy Form. You will be taken to have signed the Proxy Form if you lodge it in accordance with the instructions on the <u>www.investorvote.com.au</u> website. To use your smartphone voting service, scan the QR code which appears on your Proxy Form and follow the instructions provided. When scanned, the QR code will take you directly to the mobile voting site. A proxy cannot be appointed electronically if they are appointed under a power of attorney or similar authority. The online proxy facility may not be suitable for shareholders who wish to appoint two proxies with different voting directions. Please read the instructions for online proxy submissions carefully before you lodge your proxy.

Custodians and other intermediaries may appoint and direct their proxy online by visiting <u>www.intermediaryonline.com</u> (subscribers only).

Proxy Appointment

A proxy can also be appointed by using the Proxy Form enclosed with this Notice of Meeting. Information on how to complete the Proxy Form is included on the form.

For the appointment of a proxy using a Proxy Form, the following documents must be lodged:

- the completed Proxy Form; and
- if the Proxy Form is signed by the appointer's attorney the authority under which the Proxy Form was signed or a certified copy of the authority.

Lodgement of Proxy Appointments

For the appointment of a proxy to be effective, the Company must receive an online proxy appointment through the relevant website referred to above or a duly completed Proxy Form (and if signed by an attorney, the attorney's authority or a certified copy) by mail or by fax, in either case by 9am (London time), Wednesday, 13 July 2022.

Corporate Representatives

A corporate Shareholder wishing to appoint a person to act as its representative at the Meeting may do so by providing that person with:

- a properly executed letter, certificate, form, or other document, such as an "Appointment of Corporate Representative" confirming that they are authorised to act as the corporate Shareholder's representative. A form may be obtained from <u>www.investorcentre.com</u> under the tab "Need a printable form?"; or
- a copy of the resolution appointing the representative, certified by a director or secretary of the corporate Shareholder.

A copy of the signed document must be produced prior to admission to the Meeting.

Voting by Poll

Both Resolutions at the Meeting will be voted on by way of a poll. Shareholders who are entitled to vote may vote either prior to the Meeting by appointing a proxy or by poll (which will be conducted electronically) during the Meeting.

Shareholders who wish to vote during the Meeting must first notify the Company of their intention to do so by emailing the Company Secretary at tonyb@endeavourcorp.com.au before 5pm (London time) on 13 July 2022.

Shareholders who wish to vote during the Meeting will be able to do so (via email) immediately after the Chair calls for a vote on each Resolution. Voting (via email) will remain open for 1 hour after the Meeting concludes.

Questions

Shareholders may submit questions to the Company in advance of the Meeting. Questions must be submitted via email to the Company Secretary at tonyb@endeavourcorp.com.au.

Questions must be received before 5pm (London time) on 13 July 2022. Responses to all valid questions will be lodged with each financial market on which the Company's shares are able to be traded³.

By order of the Board of MC Mining Limited

Tony Bevan Company Secretary 15 June 2022

³ Shareholders will also have the opportunity to submit questions during the Meeting in respect of the formal matters to be considered at the Meeting.

MC MINING LIMITED EXPLANATORY STATEMENT

Explanatory Statement

This Explanatory Statement has been prepared for the benefit of MC Mining Limited ABN 98 008 905 388 (ASX: MCM) (**Company**) Shareholders in connection with the business to be conducted at the virtual Meeting to be held at 9am (London time) on Friday, 15 July 2022.

Important Information

The purpose of this Explanatory Statement is to provide Shareholders with all information that the Directors believe to be relevant to their (i.e. Shareholder's) decision in relation to how to vote on the Resolutions. This Explanatory Statement also includes certain information prescribed by the Corporations Act and the Listing Rules.

You Should Read this Document Carefully

This Explanatory Statement and the accompanying Notice of Meeting are important documents. You should read each document carefully and in their entirety before deciding how to vote on the Resolutions. If you are in any doubt as to what you should do, you should consult your legal, financial or other professional adviser without delay.

Independent Expert

Shareholders should also read the Independent Expert's Report (a copy of which is attached to this Explanatory Statement at Annexure B) carefully and in its entirety before deciding how to vote in relation Resolution 2.

The Independent Expert's Report considers the fairness and reasonableness of the transaction the subject of Resolution 2 to "Non-Associated" Shareholders⁴.

The Independent Expert has concluded that the transaction the subject of Resolution 2 is **NOT FAIR BUT REASONABLE**.

Role of ASIC and ASX

These Meeting Documents⁵ have been lodged with ASIC as suggested by paragraph 109 of RG 74 and with ASX as required by Listing Rule 15.1.

Neither ASIC nor ASX (or any of their respective officers or employees) take any responsibility for the contents of any of the Meeting Documents.

⁴ In this context, a "Non-Associated" Shareholder is a Shareholder other than SGIH and/or any other Shareholder that is an "associate" (as that term is defined in sections 11 to 17 of the Corporations Act) of SGIH.

⁵ A reference to the "Meeting Documents" in either of the Notice of Meeting or the Explanatory Statement includes a reference to the Notice of Meeting, the Explanatory Statement, the Proxy Form and/or the Independent Expert's Report either singly or collectively and as the context requires.

Not Investment Advice

This Explanatory Statement does not constitute financial product advice and it does not purport to contain all of the information that an investor in the Company may require. This Explanatory Statement has been prepared without taking account of any person's particular investment objectives, financial situation or needs.

AIM & JSE Admission

The 38,363,909 new Shares the subject of Resolution 1 were admitted to trading on AIM on 11 April 2022. Furthermore, if Shareholders approve Resolution 2, the Company will apply for the new Shares the subject of that resolution to be admitted to trading on AIM as soon as possible following their issuance.

A similar process was (and will be) followed in relation to the Australian Stock Exchange (**ASX**) and the Johannesburg Stock Exchange (**JSE**).

<u>Glossary</u>

Unless otherwise defined in a Meeting Document, capitalised words and terms used in a particular Meeting Document have the meaning set out in the Glossary at the end of this Explanatory Statement.

Resolution 1 - Ratification of Prior Issue of Shares

Background Information

On 1 February 2022, the Company announced that it had entered into a Convertible Advance and Subscription Agreement with SGIH (**Agreement**) pursuant to which SGIH would advance to the Company a total of ZAR 86,036,691 (equivalent to A\$7.9 million) in convertible debt in exchange for the (subsequent) issuance to SGIH of up to a total of 71,697,242 new Shares.

In order to comply with the Listing Rules and other relevant legal and regulatory obligations (both in Australia and in the Republic of South Africa) applicable to the Company however, this financing, as well as the corresponding issuances of new Shares to SGIH, have been separated into the following individual convertible "advances"⁶ and (subsequent) share issuance "tranches"⁷:

Event	Date of Event	Sum Advanced	Shares Issued	
Advance 1	2 February 2022	ZAR 10 million	N/A	
Advance 2	23 February 2022	ZAR 30 million	N/A	
Advance 3	31 March 2022	ZAR 6,036,691	N/A	
Sum Total	N/A	ZAR 46,036,691	N/A	
Issuance Tranche 1	6 April 2022	N/A	38,363,909	
Sum Total	N/A	N/A	<u>38,363,909</u>	
Event	Date of Event	Sum Advanced	Shares Issued	
Advance 4	30 April 2022	ZAR 10 million	N/A	
Advance 5	31 May 2022	ZAR 10 million	N/A	
Advance 6 ⁸ (expected)	30 June 2022	ZAR 10 million	N/A	
Advance 7 (expected)	31 July 2022	ZAR 10 million	N/A	
Sum Total	N/A	ZAR 40 million	N/A	
Issuance Tranche 2	Following Shareholder approval	N/A	33,333,333	
Sum Total	N/A	<u>N/A</u>	<u>33,333,333</u>	
Grand total	N/A	ZAR 86,036,691	<u>71,697,242</u>	

⁶ Please note that Advances 1 to 6 and Issuance Tranche 1 (which resulted in the conversion of the then outstanding ZAR 36,036,691 in debt into equity) have now been provided/occurred.

⁷ The occurrence of Issuance Tranche 2 (i.e. the proposed issuance of a further 33,333,333 Shares to SGIH on conversion of the debt constituted by Advances 4 to 7) is the subject of Resolution 2.

⁸ To the extent that Shareholder approval is received prior to the due date for an expected Advance, that particular Advance will become a direct subscription for the relevant Shares rather than a loan.

Accordingly, and as announced by the Company on 6 April 2022, and following the satisfaction of certain conditions precedent required by the Agreement (as to which, please see Schedule 1), as well as the provision of ZAR 46,036,691 in funding to the Company, the Company issued SGIH 38,363,909 new Shares at the agreed issue ("conversion") price of ZAR 1.2 (equivalent to A\$0.11 per new Share). This issue resulted in the extinguishment of the ZAR 46,036,691 (then) owing to SGIH⁹.

Shareholders should note that 23,162,933 of the 38,363,909 new Shares issued to SGIH were issued under the Company's then available Listing Rule 7.1 placement "capacity" with the remainder (i.e. of 15,200,976 new Shares) being issued to SGIH under the Company's then available Listing Rule 7.1A placement "capacity".

Information Required by the Listing Rules

Broadly speaking, and subject to a limited number of exceptions, Listing Rule 7.1 limits the number of equity securities that a listed company can issue without the approval of its shareholders over any 12 month period to 15% of the number of fully paid ordinary shares that the listed company had on issue at the start of that period.

Similarly, Listing Rule 7.1A allows a listed company to seek shareholder approval at its AGM to permit it to issue an additional 10% (i.e. in addition to the above noted 15% limitation) of that listed company's issued ordinary share capital over the 12 months following that approval subject to a number of conditions. The Company obtained approval of this 10% "mandate" at its last AGM (held on 14 December 2021).

Since the issue of the 38,363,909 Shares to SGIH on 6 April 2022 did not fit within any of the "exceptions" to Listing Rule 7.1 (as to which, see Listing Rule 7.2), the Company effectively "used up" its remaining Listing Rule 7.1 and Listing Rule 7.1A placement "capacities", thereby reducing the Company's ability to issue further equity securities without approval under either of those rules.

Listing Rule 7.4 allows shareholders to ratify an issue of equity securities after it has been made or agreed to be made so long as that earlier issue or agreement to issue did not breach Listing Rule 7.1 or Listing Rule 7.1A¹⁰. If the relevant resolution is passed, the relevant issue is taken to have been approved under Listing Rule 7.1 (and/or, if applicable, Listing Rule 7.1A) and so does not reduce the company's capacity to issue further equity securities without approval¹¹.

The Company wishes to retain as much flexibility as possible to issue additional equity securities in the future without having to obtain Shareholder approval for such future issues under Listing Rule 7.1 and/or Listing Rule 7.1A. To this end, Resolution 1 seeks Shareholder ratification under Listing Rule 7.4 of the issue of the 38,363,909 Shares to SGIH (which occurred on 6 April 2022).

⁹ All security interests (and ancillary guarantee arrangements) associated with this component of the financing have now been released and are of no further force or effect.

¹⁰ In this regard, the Company confirms that the Share issuance the subject of Resolution 1 did not breach Listing Rule 7.1, Listing Rule 7.1A or any other Listing Rule.

¹¹ Shareholders should note though that a ratification under Listing Rule 7.1A will mean that the relevant issuance will be excluded from variable E in Listing Rule 7.1A.2.

If Resolution 1 is passed by Shareholders, the issue of the 23,162,933 Shares will be excluded in calculating the Company's 15% capacity under Listing Rule 7.1 and the issue of the 15,200,976 Shares will be excluded in calculating the Company's capacity under Rule 7.1A, in either case, without Shareholder approval.

The following information is prescribed in Listing Rule 7.5 in relation to Resolution 1:

Listing Rule	Required Information
7.5.1	The Company issued the Shares the subject of Resolution 1 to South African investment company Senosi Group Investment Holdings Proprietary Limited (i.e. "SGIH").
7.5.2	The Company issued 38,363,909 fully paid ordinary shares, each of which ranked equally with all other Shares on issue at the time of their issue.
7.5.3	N/A
7.5.4	The Shares the subject of Resolution 1 were issued by the Company on 6 April 2022.
7.5.5	The Shares the subject of Resolution 1 were issued by the Company for an issue ("conversion") Price of A\$0.11 per Share.
7.5.6	The funds raised from the issuance of the Shares the subject of Resolution 1 were used by the Company (either directly or via one of its subsidiaries) to settle the balance owing to the vendors of the Lukin & Salaita properties & for working capital purposes ¹² .
7.5.7	A concise summary of the Agreement is set out in Schedule 1.
7.5.8	The voting exclusion statement set out in the Notice of Meeting.
Other	If Shareholders do not approve Resolution 1, the Company's placement capacity will be reduced by 23,162,933 Shares under Listing Rule 7.1 and by 15,200,976 under Listing Rule 7.1A until 6 April 2023.

Recommendation

The Directors (other than Mr Senosi, who abstains from making a recommendation¹³) recommend that Shareholders vote in favour of Resolution 1.

¹² For further detail in relation to the Lukin and Salaita properties as well as the amount payable by the Company (or its wholly-owned subsidiary, Baobab Mining & Exploration (Pty) Ltd) to the vendors, please see the Company announcement dated and given to ASX on 11 January 2022.

¹³ Mr Senosi (a Director) has abstained from making a recommendation in relation to Resolution 1 on the basis that since he is a director SGIH he has a material personal interest in the outcome of Resolution 1 (and in any event, is precluded from voting on that Resolution by Listing Rule 14.11).

Resolution 2 - Approval for Acquisition of Relevant Interest in Shares

Background Information

As at the date of this Explanatory Statement, and following:

- the entry by the parties into the Agreement (a summary of which is set out in Schedule 1);
- the provision by SGIH of Advances 1 to 3 to the Company as required by the Agreement;
- the issue of 38,363,909 Shares to SGIH on conversion of Advances 1 to 3 (which debt-for-equity conversion occurred on 6 April 2022);
- the provision by SGIH of Advances 4 and 5 to the Company as required by the Agreement; and
- the expected provision by SGIH of Advance 6 to the Company on or before 30 June 2022¹⁴,

SGIH holds a total of 38,363,909 Shares (equivalent to 19.41% of the Company's existing Shares¹⁵) and is entitled to be issued, subject to Shareholder approval, with a further 33,333,333¹⁶ new Shares (which, when combined with SGIH's current Shareholding, would result in SGIH holding a total of 71,697,242 Shares (equivalent to 31.04% of the Company's (post-issue) Share capital¹⁷)). The issue of the additional 33,333,333 Shares to SGIH by the Company will result in the (then expected) total indebtedness of ZAR 40 million owed to SGIH being converted (and therefore extinguished) into equity (i.e. into the new Shares the subject of Resolution 2)¹⁸.

As noted in the Company's announcement of 1 February 2022 (as to which, please see <u>www.asx.com.au</u>), SGIH is a South Africa-based investment company with experience in investing in and assisting in the development of South African resource projects¹⁹. The convertible advances (i.e. as detailed in the Explanatory Statement in relation to Resolution 1) provided by SGIH to the Company have been critical in allowing the Company to settle its outstanding obligations to the vendors of the Lukin & Salaita properties (as to which, please see the Company's announcement to ASX dated 28 February) and to continue to fund the development of the Makhado Project²⁰.

¹⁴ Advance 7 is expected to be to received either at the same time as or immediately before the issuance of the Shares the subject of Resolution 2 (assuming this Resolution is approved by Shareholders).

¹⁵ As at the date of this Explanatory Statement, the Company has 197,654,870 Shares, 9,312,012 Performance Rights and 2,408,752 (soon to be expiring) Warrants on issue.

¹⁶ Please note that while the number of Shares to be issued to SGIH will not change (i.e. it will remain at 33,333,333), the amount to be repaid may depending on the date on which the Meeting is held.

¹⁷ This percentage assumes that there are no further issuances of Shares between the date of this Explanatory Statement and the date these Shares are issued (if applicable).

¹⁸ To the extent that Shareholder approval is received prior to the due date for an expected Advance, that particular Advance will become a direct subscription for the relevant Shares rather than a loan.

¹⁹ For further detail in relation to SGIH please see the information under the heading "SGIH and its associates" (immediately below) and elsewhere in this Explanatory Statement.

²⁰ The Company has a 68% interest in the outstanding Makhado Project via its wholly-owned subsidiary Baobab Mining & Exploration (Pty) Ltd.

SGIH and its "associates"²¹

The persons noted in the table below are "associates" (as that term is defined in sections 11 to 17 of the Corporations Act) of SGIH for the purposes of the transaction the subject of Resolution 2. The circumstances giving rise to that "association" are also noted in the table.

Person	Nature of Association
Mr Ontiretse Mathews Senosi ²²	Mr Senosi is a director of SGIH and of a trustee company that acts as trustee (Trustee) for his family trust (Trust). Mr Senosi controls the Trustee (which, in turn, controls SGIH).
Trustee as trustee for the Trust	The Trustee owns 100% of the issued share capital of SGIH on behalf of various beneficiaries (which includes Mr Senosi) of the Trust.

The Company's current and indicative equity capital structure

The following table sets out the Company's equity capital structure as at the date of this Explanatory Statement as well as the Company's indicative equity capital structure on completion of the Share issuance the subject of Resolution 2 (assuming this Resolution is approved by Shareholders).

	Total Number on Issue (as at date of Explanatory Statement)	Number to be Issued (assuming Resolution 2 is passed)	Total Number on Issue (on completion of the proposed issuance)	
Shares	197,654,870	33,333,333	230,988,203	
Performance Rights ²³	9,312,012	Nil	9,312,012	
Options	N/A	Nil	N/A	
Warrants	2,408,752	Nil	Nil ²⁴	

NB: The above table has been prepared on the assumption that none of the Performance Rights referred to therein are exercised (or are cancelled) before the completion of the Share issuance the subject of Resolution 2 or that any Shares or other equity securities are issued by the Company in the period between the date of this Explanatory Statement and the actual issue of the Shares to SGIH.

For further information in relation to the Company's issued equity capital structure, please see the Company's annual report for the financial year ended 30 June 2021 given to ASX on 1 November 2021 and the Company's subsequent periodic and continuous disclosures available either on ASX's website (<u>www.asx.com.au</u>) or on the Company's website (<u>www.mcmining.co.za</u>).

²¹ SGIH and each of its "associates" will be excluded from voting on Resolutions 1 and 2.

²² Mr Senosi (who is a Director) does not own any Shares (or any shares in SGIH) in his own name.

²³ These Performance Rights have various vesting and other conditions.

²⁴ Please note that these Warrants have an expiry date of 30 June 2022.

The Company's current and indicative ownership structure

The below table sets out the number of Shares directly held (and the "relevant interests"²⁵ of) SGIH and its "associates" (which includes Mr Senosi) as at the date of this Explanatory Statement as well as on completion of the Share issuance the subject of Resolution 2.

Name	Name Number of Percentage of Shares Held		Relevant Interest	Number of Shares Held	Percentage of Shares Held	Relevant Interest
	(as at date of Meeting Documents)	(as at date of Meeting Documents)	(as at date of Meeting Documents)	(on completion of proposed issuance)	(on completion of proposed issuance)	(on completion of proposed issuance)
SGIH	38,363,909	19.41%	38,363,909	71,697,242	31.04%	71,697,242
Mr Senosi	Nil	0%	38,363,909	Nil	0%	71,697,242
Trustee	Nil	0%	38,363,909	Nil	0%	71,697,242

If Shareholders approve Resolution 2, Mr Senosi (who is a Director) and the Trustee will also be deemed to acquire a relevant interest in more than 20% of the Company's voting shares given their control over SGIH as detailed in this Explanatory Statement under the heading "SGIH and its associates".

Independent Expert's Report

The Company has engaged the Independent Expert to provide an opinion as to whether the transaction the subject of Resolution 2 is "fair and reasonable" to "Non-Associated" Shareholders (i.e. Shareholders other than SGIH and its associates).

The Independent Expert's Report was prepared to satisfy the recommendations of ASIC Regulatory Guide 74 (titled "Acquisitions approved by members") (**RG 74**) in relation to Resolution 2.

The Independent Expert has assessed that the transaction the subject of Resolution 2 is **NOT FAIR BUT REASONABLE**.

The Directors recommend that you read the Independent Expert's Report carefully and in full before making any decision in relation to Resolution 2.

Specific disclosures required by the Corporations Act and ASIC

<u>General</u>

Subject to Shareholders approving Resolution 2, SGIH (and therefore, technically, Mr Senosi and the Trustee) will acquire a "relevant interest" in an additional 33,333,333 Shares in consideration for the repayment and extinguishment of the ZAR 40 million in debt that will be owed by the Company to SGIH following the provision of Advance 7²⁶.

²⁵ Under section 608(1) of the Corporations Act, a person has a "relevant interest" in securities if they (i) are the holder of the securities, (ii) have the power to exercise, or control the exercise of, a right to vote attached to the securities or (iii) have the power to dispose of, or control the exercise of a power to dispose of, the securities.

²⁶ To the extent that Shareholder approval is received prior to the due date for an expected Advance, that particular Advance will become a direct subscription for the relevant Shares rather than a loan.

This issuance of Shares (assuming Shareholders approve Resolution 2) to SGIH will result in SGIH (and therefore, technically, Mr Senosi and the Trustee) having a "relevant interest" in a total of 71,697,242 Shares (equivalent to a total of 31.04% of the Company's then issued Share capital).

Listing Rule 10.11

Listing Rule 10.11 provides that unless one of the exceptions in Listing Rule 10.12 applies, a listed company must not issue or agree to issue any equity securities to:

- (a) a "related party" (i.e. a person that is a related party (as that term is defined in section 228 of the Corporations Act) of the listed company);
- (b) a person who is, or was at any time in the 6 months before the issue or agreement to issue, a substantial (i.e. 30%+) holder of the company's shares;
- (c) a person who is, or was at any time in the 6 months before the issue or agreement to issue, a substantial (i.e. 10%+) holder of the company's shares and who has nominated a director to the board of the company pursuant to a relevant agreement which gives them a right or expectation to do so;
- (d) an "associate" of a person referred to in Listing Rules 10.11.1 to 10.11.3 (i.e. a person listed in any of paragraphs (a) to (c) above); or
- (e) a person whose relationship with the company is such that, in ASX's opinion, the issue or agreement to issue should be approved by its shareholders,

unless the listed company obtains approval from its shareholders.

The Company is not proposing to seek Shareholder approval under Listing Rule 10.11 in reliance on Listing Rule 10.12 (Exception 6). Listing Rule 10.12 (Exception 6) exempts listed companies from seeking approval under Listing Rule 10.11 if the issue of securities is approved by shareholders pursuant to Item 7 of section 611.

In this regard, the Company is seeking shareholder approval for SGIH (and also, as a technical securities law matter, for Mr Senosi and the Trustee) to acquire a relevant interest in the 33,333,333 new Shares the subject of Resolution 2 under and in accordance with the requirements of Item 7 of section 611 of the Corporations Act.

The Board considers it is unnecessary therefore to also seek a separate Shareholder approvals under either Listing Rule 10.11 or Listing Rule 7.1 because of the operation and availability of Listing Rule 10.12 (Exception 6) and Listing Rule 7.2 (Exception 8), respectively.

Section 611 of the Corporations Act

Unless a specific exemption in section 611 of the Corporations Act applies, section 606 of the Corporations Act prevents a person from acquiring a relevant interest in issued voting shares in a listed company through a transaction which results in the person's voting power in the Company:

- (a) increasing from below 20% to more than 20%; or
- (b) increasing from a starting point of more than 20% to a higher percentage.

The voting power of a person in a body corporate is determined in accordance with section 610 of the Corporations Act. The calculation of a person's voting power in a company involves determining the voting shares in the company in which the person and the person's associates have a relevant interest.

For the purposes of determining voting power under the Corporations Act, a person (the "**second person**") is an "associate" of the other person (the "**first person**") if:

- (a) (*pursuant to section 12(2) of the Corporations Act*) the first person is a body corporate and the second person is:
 - (i) a body corporate the first person controls;
 - (ii) a body corporate that controls the first person; or
 - (iii) a body corporate that is controlled by an entity that controls the person;
- (b) the second person has entered or proposes to enter into a relevant agreement with the first person for the purpose of controlling or influencing the composition of the company's board or the conduct of the company's affairs; or
- (c) the second person is a person with whom the first person is acting or proposes to act, in concert in relation to the company's affairs.

"Associates" are, therefore, determined as a matter of fact. For example where a person controls or influences the board or the conduct of a company's business affairs, or acts "in concert" with a person in relation to the entity's business affairs, that person would be considered to be an "associate" of the first person.

Furthermore, section 608(1) of the Corporations Act provides that a person has a "relevant interest" in securities if they:

- (a) are the holder of the securities;
- (b) have the power to exercise, or control the exercise of, a right to vote attached to the securities; or
- (c) have power to dispose of, or control the exercise of a power to dispose of, the securities.

It does not matter how remote the relevant interest is or how it arises. If two or more people can jointly exercise one of the powers, each of them is taken to have that power.

In addition, section 608(3) of the Corporations Act provides that a person has a relevant interest in securities that any of the following has:

- (a) a body corporate in which the person's voting power is above 20%;
- (b) a body corporate that the person controls.

An acquisition of a relevant interest (such as the acquisition of the 33,333,333 Shares by SGIH as is contemplated in these Meeting Documents) is not prohibited under section 606 if it has been approved by a resolution at a general meeting of the listed company under and in accordance with Item 7 of section 611 of the Corporations Act.

Accordingly, and in order to permit the issuance of 33,333,333 Shares in consideration for the conversion of the ZAR 40 million debt currently (or that will, on or before 31 July 2022, be) owed by the Company to SGIH pursuant to the Agreement, the Company is seeking Shareholder approval under Item 7 of section 611 of the Corporations Act.

Specific disclosures required by RG 74

Specific information is required to be provided to Shareholders in relation to an acquisition being approved under Item 7 of section 611 of the Corporations Act. In particular, Item 7 of section 611 of the Corporations Act and RG 74 requires the following information be provided to Shareholders:

(a) The identity of the person proposing to make the acquisition and their associates

Subject to Shareholders passing Resolution 2, the Company will issue Senosi Group Investment Holdings Proprietary Limited²⁷ (or its nominee) (i.e. "SGIH") with an additional 33,333,333 new Shares which will result in SGIH having a direct interest (and voting power) in a total of 71,697,242 Shares (equivalent to 31.04% of the Company's total post-Share issue issued Share capital).

As noted above under the heading "SGIH and its associates" Mr Senosi (who is also a Director²⁸) and the Trustee are "associates" of SGIH.

As noted elsewhere in this Document, because Mr Senosi and the Trustee "control" (as that term defined in section 50AA of the Corporations Act) SGIH, and, because of section 608(3)(b), both Mr Senosi and the Trustee will be deemed to also acquire a relevant interest in the 33,333,333 Shares to be issued to (and the total number of Shares that will ultimately be held by) SGIH.

(b) The maximum extent of the increase in that person's voting power in the company that would result from the acquisition

The maximum extent of the increase in SGIH's voting power is 33,333,333 Shares (equivalent to 16.86% of the Company's pre-issue Share capital and 14.43% of the Company's post-issue Share capital).

Please see the table under the heading "The Company's current and indicative ownership structure" for further details.

(c) The voting power that person will have as a result of the acquisition

On completion of the proposed issue of Shares to SGIH, SGIH's voting power will increase from 38,363,909 Shares (equivalent to 19.41% of the Company's pre-issue Share capital) to 71,697,242 Shares (equivalent to 31.04% of the Company's post-issue Share capital).

Please see the table under the heading "The Company's current and indicative ownership structure" for further details.

²⁷ SGIH is incorporated in South Africa under the registration number 2016/286906/07 and has a registered office on the 6th Floor, Park Lane West, 197 Amarand Avenue, Menlyn Main, Pretoria, 0081.

²⁸ Mr Senosi was appointed as a Director (i.e. a director of the Company) on 28 April 2022.

(d) The maximum extent of the increase in the voting power of each of that person's associates that would result from the acquisition

As noted in the table under the heading "The Company's current and indicative ownership structure", the maximum extent of the increase in the voting power of each of SGIH's associates is as follows:

Name	Relevant Interest in Shares (as at date of Meeting Documents)	Relevant Interest (as a %) (as at date of Meeting Documents)	Maximum Increase (assuming Resolution 2 is passed)	Relevant Interest in shares (on completion of proposed transactions)	Relevant Interest (as a %) (on completion of proposed transactions)
Mr Senosi	38,363,909	19.41%	33,333,333	71,697,242	31.04%
Trustee	38,363,909	19.41%	33,333,333	71,697,242	31.04%

(e) The voting power that each of that person's associates would have as a result of the acquisition

Please refer to the table immediate above for detail of each of SGIH's associate's voting power on completion of the Share issuance the subject of Resolution 2.

(f) An explanation of the reasons for the proposed acquisition

The Company will, subject to Shareholders passing Resolution 2, issue 33,333,333 Shares (at a deemed issue/conversion price of A\$0.11 per Share) to SGIH in consideration for the conversion (and extinguishment) of the ZAR 40 million (equivalent to approximately A\$3.6 million) debt that is currently (or that will, on or before 31 July 2022, be) owed by the Company to SGIH as a result of the provision by SGIH of Advances 4 to 7 and otherwise as per the terms of the Agreement. Shareholder approval in accordance with Item 7 of section 611 of the Corporations Act is required before this issuance can occur because it will result in SGIH's relevant interesting increasing from below 20% (i.e. SGIH has, as at the date of the Meeting Documents, a relevant interest in 19.41% of the Company's Shares) to above 20% (i.e. SGIH will have, immediately following the issuance of the Shares the subject of Resolution 2, a relevant interest in 31.04% of the Company's Shares).

(g) When the proposed acquisition is to occur

Assuming Shareholders pass Resolution 2 (and provided that Advances 6 and 7 have been received), it is expected that the Company will issue the Shares the subject of that Resolution to SGIH as soon as possible following the Meeting and in any event by no later than 1 month following the date of the Meeting.

(h) The material terms of the proposed acquisition

There are no material terms in relation to any agreement or other arrangement in relation to the issuance the subject of Resolution 2 that have not been disclosed in these Meeting Documents. (i) Details of any other relevant agreement between the acquirer and the target entity or vendor (or any of their associates) that is conditional on (or directly depends on) member approval of the proposed acquisition

N/A.

(j) A statement of the acquirer's intentions regarding the future of the target entity if members approve the acquisition

The Board understands (except as disclosed in these Meeting Documents) that SGIH does not have any present intention to:

- change the business of the Company;
- inject additional capital into the Company, other than, potentially, by participating in future debt or equity capital raisings conducted by the Company to further fund the development of the Makhado Project²⁹;
- o change the Board;
- make any changes in relation to the future employment arrangements of any current employees of the Company; or
- transfer, or redeploy, any assets of the company.

(k) Any intention of the acquirer to significantly change the financial or dividend policies of the entity

The Board understands that SGIH does not have any present intention to change the financial or operating policies of the Company.

(I) The interests that any director has in the acquisition or any relevant agreement disclosed under paragraph (i) above

N/A.

(m) Details about any person who it is intended will become a director if members approve the acquisition

N/A.

(n) The advantages and disadvantages of passing the resolution

The advantages and disadvantages of passing Resolution 2 are outlined in section 13 of the Independent Expert's Report. However, Shareholders should note that if Resolution 2 is not passed, the Company will be required to repay the (up to) ZAR 40 million owing to SGIH on or before the end of July 2022.

²⁹ While no decision has been made, the Company is presently considering its capital raising options for the purposes of further funding the development of the Makhado Project. In this regard, and subject to compliance with the Corporations Act and Listing Rules (and any other applicable rules and regulations), the Company expects (although it cannot be definitive at this time), that SGIH will be invited to (and will) participate in any such further capital raising. Shareholders should note however that the extent of any such participation (if any) by SGIH is not known at this time and that there can be no guarantee that the Company will ultimately be able to raise its proportion of the requisite development capital for the Makhado Project on terms that are acceptable to the Company or at all.

Board recommendation

The Board is not aware of any other information that Shareholders might reasonably require to make a decision whether it is in the best interest of the Company to pass Resolution 2.

However, and because of the conclusion of the Independent Expert (i.e. that the transaction the subject of Resolution 2 is <u>NOT FAIR BUT REASONABLE</u>), the Board has decided not to make a recommendation in relation to that Resolution.

Glossary

АІМ	means the AIM market operated by the London Stock Exchange plc				
AGM	means annual general meeting				
ASIC	means the Australian Securities and Investments Commission				
Board	means the board of Directors of the Company from time to time				
Chair	means the person appointed as chairperson of the Meeting				
Company	means MC Mining Limited ABN 98 008 905 388 (ASX: MCM)				
Corporations Act	means the Corporations Act 2001 (Cth)				
Director	means a director of the Company				
Explanatory Statement	means the explanatory statement accompanying the Notice of Meeting				
Independent Expert	means BDO Corporate Finance (WA) Pty Ltd ABN 27 124 031 045				
Independent Expert's Report	means the report, a copy of which is attached to this Explanatory Statement at Annexure B				
Listing Rules	means the official listing rules of ASX, as amended or waived from time to time				
Meeting	means the meeting convened by the Notice of Meeting				
Notice of Meeting	means the notice of meeting accompanying this Explanatory Statement				
Proxy Form	means the proxy form attached to this Explanatory Statement at Annexure A				
Resolution	means a resolution set out in the Notice of Meeting				
Share	means a fully paid ordinary share of the Company (and a " Shareholder " is a person who holds one or more Shares)				

Schedule 1 - Summary of the Agreement

Name of Agreement	Convertible Advance & Subscription Agreement
Parties to Agreement	MC Mining Limited, Limpopo Coal Company Proprietary Limited (Limpopo Coal), Harrisia Investment Holdings Proprietary Limited (Harrisia) and Senosi Group Investment Holdings Proprietary Limited (i.e. "SGIH").
Execution Date	On or about 31 January 2022
Loan Amount	ZAR 86,036,691 (approximately A\$7.9 million)
Use of Loan Amount	The ZAR 46,036,691 first "tranche" (which is comprised of Advances 1, 2 & 3):
	 (ZAR 35 million) to be used to pay the vendors of the Lukin and Salaita properties; and
	• (ZAR 11,036,692) to be used for general working capital purposes.
	The ZAR 40 million second "tranche" (which is (or will be) comprised of Advances 4, 5, 6 & 7) will be used to advance the Company's Makhado hard coking and thermal coal project (and for working capital).
Interest	All amounts advanced to the Company under the Agreement are interest free - unless any of the relevant approvals required in order to issue any of the Shares on conversion of any amounts advanced are not obtained - in which case, any outstanding amounts provided by SGIH to the Company will bear interest at the South African prime rate.
Condition of Conversion	Subject to the rules of ASX, AIM & JSE and the receipt of South African Reserve Bank approval (& provided that the full amount of the first "tranche" of ZAR 46,031,691 has been advanced by SGIH to the Company) (amongst other conditions) the first tranche will be converted into Shares at the "conversion" price of A\$0.11 per Share.
	Subject to the rules of ASX, AIM & JSE and the receipt of South African Reserve Bank approval (& provided that the full amount of the second "tranche" of ZAR 40 million has also been advanced) (amongst other conditions) the second tranche will also be converted into Shares at the "conversion" price of A\$0.11 per Share ³⁰ .

³⁰ South African Reserve Bank approval of the second tranche of ZAR 40 million has now been received by the Company.

Conversion or Repayment Dates	Any amounts advanced will convert when the respective conditions for conversion (as set out above) have been satisfied, provided that:					
	 if the first tranche conversion conditions have no been satisfied on or before 29 June 2022 (or such later date agreed by the parties), the first tranche sum advanced (plus interest) shall be repaid within 30 calendar days after 29 June 2022; and 					
	• if the second tranche conversion conditions have not been satisfied on or before 29 June 2022 (or such later date agreed by the parties), the second tranche sum advanced (plus interest) shall be repaid within 30 calendar days after 29 June 2022.					
Security	As security for the repayment of the first tranche, the Company has agreed:					
	• to pledge and cede in security all of its right title and interest in and to its shares in the Limpopo and Harrisia. Enforcement by SGIH will be subject to compliance with the requirements of the Mineral and Petroleum Resources Development Act or other regulatory approvals, as applicable; and					
	• to subordinate the intercompany loans in the Limpopo and Harrisia in favour of SGIH.					
	The security will be released as soon as the first tranche is repaid or converted.					
	The second tranche will not be secured.					

 $\ensuremath{\textbf{NB}}\xspace$: The exchange rates used in the Agreement were:

- US\$1.00 = ZAR15.24; and
- A\$1.00 = ZAR10.90.

Annexures to the Explanatory Statement

Α	Proxy Form
В	Independent Expert's Report

MC Mining Limited

ABN 98 008 905 388

Need assistance?

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Phone: 1300 850 505 (within Australia) +61 3 9415 4000 (outside Australia)

Online: www.investorcentre.com/contact

MCM

MR SAM SAMPLE FLAT 123 123 SAMPLE STREET THE SAMPLE HILL SAMPLE ESTATE SAMPLEVILLE VIC 3030



YOUR VOTE IS IMPORTANT

For your proxy appointment to be effective it must be received by **4:00pm (AWST) on** Wednesday, 13 July 2022.

Proxy Form

How to Vote on Items of Business

All your securities will be voted in accordance with your directions.

APPOINTMENT OF PROXY

Voting 100% of your holding: Direct your proxy how to vote by marking one of the boxes opposite each item of business. If you do not mark a box your proxy may vote or abstain as they choose (to the extent permitted by law). If you mark more than one box on an item your vote will be invalid on that item.

Voting a portion of your holding: Indicate a portion of your voting rights by inserting the percentage or number of securities you wish to vote in the For, Against or Abstain box or boxes. The sum of the votes cast must not exceed your voting entitlement or 100%.

Appointing a second proxy: You are entitled to appoint up to two proxies to attend the meeting and vote on a poll. If you appoint two proxies you must specify the percentage of votes or number of securities for each proxy, otherwise each proxy may exercise half of the votes. When appointing a second proxy write both names and the percentage of votes or number of securities for each in Step 1 overleaf.

A proxy need not be a securityholder of the Company.

SIGNING INSTRUCTIONS FOR POSTAL FORMS

Individual: Where the holding is in one name, the securityholder must sign.

Joint Holding: Where the holding is in more than one name, all of the securityholders should sign.

Power of Attorney: If you have not already lodged the Power of Attorney with the registry, please attach a certified photocopy of the Power of Attorney to this form when you return it.

Companies: Where the company has a Sole Director who is also the Sole Company Secretary, this form must be signed by that person. If the company (pursuant to section 204A of the Corporations Act 2001) does not have a Company Secretary, a Sole Director can also sign alone. Otherwise this form must be signed by a Director jointly with either another Director or a Company Secretary. Please sign in the appropriate place to indicate the office held. Delete titles as applicable.

PARTICIPATING IN THE MEETING

Corporate Representative

If a representative of a corporate securityholder or proxy is to participate in the meeting you will need to provide the appropriate "Appointment of Corporate Representative". A form may be obtained from Computershare or online at www.investorcentre.com/au and select "Printable Forms".

Lodge your Proxy Form:

Online:

Lodge your vote online at

www.investorvote.com.au using your secure access information or use your mobile device to scan the personalised QR code.

Your secure access information is



Control Number: 999999 SRN/HIN: 199999999999 PIN: 99999 XX

For Intermediary Online subscribers (custodians) go to www.intermediaryonline.com

By Mail:

Computershare Investor Services Pty Limited GPO Box 242 Melbourne VIC 3001 Australia

By Fax:

1800 783 447 within Australia or +61 3 9473 2555 outside Australia



PLEASE NOTE: For security reasons it is important that you keep your SRN/HIN confidential.

You may elect to receive meeting-related documents, or request a particular one, in electronic or physical form and may elect not to receive annual reports. To do so, contact Computershare.



Change of address. If incorrect.

MR SAM SAMPLE

FLAT 123

Resolution 1	Ratification of Prior Issue of Shares		
Resolution 2	Approval for Acquisition of Relevant Interest in Shares		

The Chairman of the Meeting intends to vote undirected proxies in favour of each item of business. In exceptional circumstances, the Chairman of the Meeting may change his/her voting intention on any resolution, in which case an ASX announcement will be made.

Step 3 Signature of S	Securityholde	er(s) This se	ection must be completed.		
Individual or Securityholder 1	Securityholder 2		Securityholder 3		
Sole Director & Sole Company Secretary	Director		Director/Company Se	ecretary	Date
Update your communication de	tails (Optional)		By providing your email add	ress, you consent to rec	eive future Notice
Mobile Number		Email Address	of Meeting & Proxy commun	ications electronically	
МСМ	2885	502A		Compute	rshare 🕂

MC Mining Limited



All Correspondence to:

The office of the Depositary Computershare Investor Services PLC The Pavilions, Bridgwater Road, Bristol, BS99 6ZY

MR A SAMPLE < DESIGNATION> SAMPLE STREET SAMPLE TOWN SAMPLE CITY SAMPLE COUNTY AA11 1AA



Form of Instruction - Annual General Meeting to be held on Friday, 15 July 2022

To be effective, all forms of instruction must be lodged at the office of the Depositary at: Computershare Investor Services PLC, The Pavilions, Bridgwater Road, Bristol BS99 6ZY by 12 July 2022 at 10.00 am.

Explanatory Notes:

- 1. Please indicate, by placing 'X' in the appropriate space overleaf, how you wish your votes to be cast in respect of the Resolution. If this form is duly signed and returned, but without specific direction as to how you wish your votes to be cast, the form will be rejected.
- 2. The 'Abstain' option overleaf is provided to enable you to vote withheld on the Resolution. However, it should be noted that a 'Abstain' is not a vote in law and will not be counted in the calculation of the proportion of the votes 'For' and 'Against' a Resolution.
- 3. Any alterations made in this form should be initialled.
- 4. The 2021 Integrated Report and Notice of Meeting is available online, simply visit: www.mcmining.co.za.

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Kindly Note: This form is issued only to the addressee(s) and is specific to the chird designated account printed hereon. This personalised form is not transferable between different: (i) account holders; or (ii) uniquely designated accounts. Come tershare Investor Services PLC (the "Depositary") and the Custodian accept the lian lift for any instruction that does not comply with these conditions.

All Named Holders

MR A SAMPLE < Designation> Additional Holder 1 Additional Holder 2 Additional Holder 3 Additional Holder 4

Form of Instruction

Please use a **black** pen. Mark with an **X** inside the box as shown in this example.



C000000000

I/We hereby instruct the Custodian "Computershare Clearing PTY Limited A/c CCNL DI" to vote on my/our behalf at the Annual General Meeting of MC Mining Limited to be held via virtual meeting, on 15 July 2022 at 10.00 am and at any adjournment to equal to be held via virtual meeting.



Ordinary Business

1. Ratification of Prior Issue of Shares

2. Approval for Acquisition of Relevant Interest in Shares



Against Abstain

For

Signature



In the case of joint holders, only one holder need sign. In the case of a corporation, the Form of Instruction should be signed by a duly authorised official whose capacity should be stated, or by an attorney.

H 8 8 9

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MC MINING LIMITED



(Incorporated and registered in Australia) (Registration number: ABN 98 008 905 388) Share code on the JSE Limited: "MCZ", AIM and ASX: "MCM" ISIN: AU000000MCM9 ("MC Mining" or "the Company")

FORM OF PROXY – GENERAL MEETING OF SHAREHOLDERS TO BE HELD ON FRIDAY, 15th JULY 2022 AT 09:00 AM (LONDON TIME) and 10:00 AM (SOUTH AFRICAN TIME)

Only for use by certificated shareholders or dematerialised shareholders of MC Mining Limited who have selected "own-name" registration.

For use by MC Mining shareholders at the General Meeting of shareholders to be held exclusively as a virtual meeting by way of a live webcast on Friday, 15th July 2022 at 09:00 AM (London Time) and 10:00 AM (South African Time) and at any adjournment or postponement of that Meeting.

If you have dematerialised your shares with a Central Securities Depository Participant ("CSD Participant") or broker and have not selected "own-name" registration, you must arrange with your CSD Participant or broker to provide you with the necessary letter of representation to attend the Annual General Meeting or you must instruct them as to how you wish to vote in this regard. This must be done in terms of the agreement entered into between you and the CSD Participant or broker.

I/We (Names in full - please print)

of (address - please print):

being the holder of		shares in MC Mining hereby appoint:
1.	of	or failing him/her,
2.	of	or failing him/her,

or if no person is named, the Chairman of the Meeting, as my/our proxy to attend and vote for me/us at the General Meeting of shareholders to be held on General Meeting of shareholders to be held exclusively as a virtual meeting by way of a live webcast on Wednesday, 15th July 2022 at 09:00 AM (London Time) and 10:00 AM (South African Time) and at any adjournment or postponement of that Meeting.and at any adjournment or postponement thereof, and, if deemed fit, passing, with or without modification, the resolutions to be proposed thereat in accordance with the following instructions (or if no directions have been given, and to the extent permitted by law, as the proxy sees fit) (see notes).

The Explanatory Memorandum that accompanies and forms part of this Notice of Annual General Meeting describes the matters to be considered at the Annual General Meeting.

	For	Against	Abstain
Resolution 1 Ratification of Prior Issue of Shares			
Resolution 2 Approval for Acquisition of Relevant Interest in Shares			

Signed at	on	2022
Name		
(In block letters)		
Signature/s		
Assisted by me		
(If applicable)		
Full name/s of signatory/ies if signing in a representation	tive capacity	
(In block latters and authority to be attached as a no	240 11)	

(In block letters and authority to be attached – see note 11)

Notes

- (1) Each shareholder is entitled to appoint one or more proxies (none of whom need be a shareholder of MC Mining) to attend, speak, vote or abstain from voting in place of that shareholder at the Annual General Meeting of shareholders.
- (2) A shareholder may insert the name of a proxy or the names of two alternative proxies of the shareholder's choice in the space/s provided, with or without deleting "the Chairman of the Meeting," but any such deletion must be initialled by the shareholder. The person whose name stands first on the form of proxy and who is present at the Annual General Meeting of shareholders will be entitled to act as proxy to the exclusion of those whose names follow.
- (3) Forms of proxy must be lodged with or posted to the transfer secretaries, Computershare Investor Services (Proprietary) Limited, Rosebank Towers, 15 Biermann Avenue, Rosebank, 2196, South Africa, (Private Bag X9000, Saxonwold, 2132, South Africa), faxed to +27 11 688-5238 or emailed to <u>Proxy@Computershare.co.za</u> to be received by no later than Wednesday, 13 July 2022 at 09:00 AM (London Time) and 10:00 AM (South African Time).
- (4) The completion and lodging of this form of proxy will not preclude the shareholder from attending the Annual General Meeting and speaking and voting in person to the exclusion of any proxy appointed in terms hereof, should such shareholder wish to do so.
- (5) If the signatory does not indicate in the appropriate place on the face hereof how he/she wishes to vote in respect of any resolutions, his/her proxy shall be entitled to vote as he/she deems fit in respect of that resolution. The Chairman intends to vote all available undirected proxies in favour of all Resolutions.
- (6) The Chairman of the Meeting shall be entitled to decline to accept the authority of a person signing this form of proxy:
 - under a power of attorney; or
 - on behalf of a company;

unless the power of attorney or authority is deposited at the office of MC Mining's transfer secretaries, not less than 48 hours before the time appointed for the holding of the Annual General Meeting.

- (7) The Chairman of the Meeting may reject or accept any form of proxy, which is completed and/or received other than in accordance with these notes, provided that the Chairman is satisfied as to the manner in which the shareholder concerned wishes to vote.
- (8) Subject to note (2) above, a deletion of any printed matter and the completion of any blank spaces need not be signed or initialled. Any alterations must be signed, not initialled.
- (9) If the shareholding is not indicated on the form of proxy, the proxy will be deemed to be authorised to vote the total shareholding registered in the shareholder's name.
- (10) A vote given in terms of an instrument of proxy shall be valid in relation to the Annual General Meeting, notwithstanding the death of the person granting it, or the revocation of the proxy, or the transfer of the shares in MC Mining in respect of which the vote is given, unless an intimation in writing of such death, revocation or transfer is received by the transfer secretaries no less than 48 hours before the commencement of the Annual General Meeting.
- (11) Documentary evidence establishing the authority of a person signing this form of proxy in a representative capacity (e.g. for a company, close corporation, trust, pension fund, deceased estate, etc.) must be attached to this form of proxy unless previously recorded by MC Mining or its transfer secretaries or waived by the Chairman of the Meeting.
- (12) Where this form of proxy is signed under power of attorney, such power of attorney must accompany this form of proxy, unless it has previously been registered with MC Mining or the transfer secretaries.
- (13) Where there are joint holders of shares and if more than one such joint holder is present or represented thereat, then the person whose name appears first in the register of such shares or his/her proxy, as the case may be, shall alone be entitled to vote in respect thereof.
- (14) Where shares are held jointly, all joint holders are required to sign.
- (15) A minor must be assisted by his/her parent or guardian, unless the relevant documents establishing his/her legal capacity are produced or have been registered by the transfer secretaries of MC Mining.
- (16) Dematerialised shareholders who have not selected "own-name" registration and who wish to attend the Annual General Meeting or to vote by way of proxy, must advise their CSD Participant or broker who will issue the necessary letter of representation in writing, for a dematerialised shareholder or proxy to do so.

Transfer Secretaries Computershare Investor Services (Proprietary) Limited Reg. No. 2004/003647/07 Proxy Dept. Private Bag X9000, Saxonwold, 2132, South Africa Fax: +27 11 688-5238 Email: Proxy@Computershare.co.za

MC MINING LIMITED Independent Expert's Report

13 June 2022









Financial Services Guide

13 June 2022

BDO Corporate Finance (WA) Pty Ltd ABN 27 124 031 045 ('we' or 'us' or 'ours' as appropriate) has been engaged by MC Mining Limited ('MC Mining') to provide an independent expert's report on the proposal to issue up to 71,697,242 new shares in MC Mining to SGIH, increasing the voting interest of SGIH in MC Mining to 31.04%. You are being provided with a copy of our report because you are a shareholder of MC Mining and this Financial Services Guide ('FSG') is included in the event you are also classified under the Corporations Act 2001 ('the Act') as a retail client.

Our report and this FSG accompanies the Notice of Meeting required to be provided to you by MC Mining to assist you in deciding on whether or not to approve the proposal.

Financial Services Guide

This FSG is designed to help retail clients make a decision as to their use of our general financial product advice and to ensure that we comply with our obligations as a financial services licensee.

This FSG includes information about:

- Who we are and how we can be contacted;
- The services we are authorised to provide under our Australian Financial Services Licence No. 316158;
- Remuneration that we and/or our staff and any associates receive in connection with the general financial product advice;
- Any relevant associations or relationships we have; and
- Our internal and external complaints handling procedures and how you may access them.

Information about us

We are a member firm of the BDO network in Australia, a national association of separate entities (each of which has appointed BDO (Australia) Limited ACN 050 110 275 to represent it in BDO International). The financial product advice in our report is provided by BDO Corporate Finance (WA) Pty Ltd and not by BDO or its related entities. BDO and its related entities provide professional services primarily in the areas of audit, tax, consulting, mergers and acquisition, and financial advisory services.

We and BDO (and its related entities) might from time to time provide professional services to financial product issuers in the ordinary course of business and the directors of BDO Corporate Finance (WA) Pty Ltd may receive a share in the profits of related entities that provide these services.

Financial services we are licensed to provide

We hold an Australian Financial Services Licence that authorises us to provide general financial product advice for securities to retail and wholesale clients, and deal in securities for wholesale clients. The authorisation relevant to this report is general financial product advice.

When we provide this financial service we are engaged to provide an expert report in connection with the financial product of another person. Our reports explain who has engaged us and the nature of the report we have been engaged to provide. When we provide the authorised services we are not acting for you.

General Financial Product Advice

We only provide general financial product advice, not personal financial product advice. Our report does not take into account your personal objectives, financial situation or needs. You should consider the appropriateness of this general advice having regard to your own objectives, financial situation and needs before you act on the advice. If you have any questions, or don't fully understand our report you should seek professional financial advice.

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Fees, commissions and other benefits that we may receive

We charge fees for providing reports, including this report. These fees are negotiated and agreed with the person who engages us to provide the report. Fees are agreed on an hourly basis or as a fixed amount depending on the terms of the agreement. The fee payable to BDO Corporate Finance (WA) Pty Ltd for this engagement is approximately \$70,000.

Except for the fees referred to above, neither BDO, nor any of its directors, employees or related entities, receive any pecuniary benefit or other benefit, directly or indirectly, for or in connection with the provision of the report and our directors do not hold any shares in MC Mining.

Other Assignments - BDO Corporate Finance (WA) Pty Ltd provided share-based payment valuation services to MC Mining over the past two-years for total fees of \$9,350.

Remuneration or other benefits received by our employees

All our employees receive a salary. Our employees are eligible for bonuses based on overall productivity but not directly in connection with any engagement for the provision of a report. We have received a fee from MC Mining for our professional services in providing this report. That fee is not linked in any way with our opinion as expressed in this report.

Referrals

We do not pay commissions or provide any other benefits to any person for referring customers to us in connection with the reports that we are licensed to provide.

Complaints resolution

Internal complaints resolution process

As the holder of an Australian Financial Services Licence, we are required to have a system for handling complaints from persons to whom we provide financial product advice. Complaints can be in writing addressed to The Complaints Officer, BDO Corporate Finance (WA) Pty Ltd, PO Box 700, West Perth WA 6872 or, by telephone or email using the contact details within the following report.

When we receive a complaint we will record the complaint, acknowledge receipt of the complaint in writing within 1 business day or, if the timeline cannot be met, then as soon as practicable and investigate the issues raised. As soon as practical, and not more than 30 days after receiving the complaint, we will advise the complainant in writing of our determination.

Referral to External Dispute Resolution Scheme

If a complaint is made and the complainant is dissatisfied with the outcome of the above process, or our determination, the complainant has the right to refer the matter to the Australian Financial Complaints Authority Limited ('AFCA').

AFCA is an independent company that has been established to impartially resolve disputes between consumers and participating financial services providers.

Our AFCA Membership Number is 12561. Further details about AFCA are available on its website <u>www.afca.org.au</u> or by contacting it directly via the details set out below.

Australian Financial Complaints Authority Limited GPO Box 3 Melbourne VIC 3001 AFCA Free call: 1800 931 678 Website: www.afca.org.au Email: info@afca.org.au

You may contact us using the details set out on page 1 of the accompanying report.



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13 June 2022

The Directors MC Mining Limited 7 The Esplanade Mt Pleasant, WA, 6153

Dear Directors

INDEPENDENT EXPERT'S REPORT

1. Introduction

On 1 February 2022, MC Mining Limited ('MC Mining' or 'the Company') announced that it had entered into a staged convertible advance and subscription agreement ('Agreement') with Senosi Group Investment Holdings Proprietary Limited ('SGIH'), to raise 86,036,691 South African Rand ('ZAR') through the issue of up to 71,697,242 new ordinary shares at a price of ZAR1.20 per share ('Proposed Transaction').

Using the ZAR to Australian dollar ('A\$', '\$' or 'AUD') exchange rate of 0.0919, and the ZAR to United States dollar ('US\$' or 'USD') exchange rate of 0.0655 as at 1 February 2022 as sourced from Bloomberg, this equates to a raise of approximately \$7.91 million or US\$5.64 million through the issue of new ordinary shares in MC Mining at a price of \$0.11 or US\$0.08, respectively.

The Proposed Transaction is to be undertaken in two stages, with the first being the issue of 38,363,909 new ordinary shares in MC Mining to SGIH at an issue price of ZAR1.20 per share ('Issue Price'), to raise ZAR46,036,691 ('Tranche 1'). Tranche 1 of the Proposed Transaction was completed on 6 April 2022, and resulted in SGIH gaining an interest in 19.90% of MC Mining's issued capital. This was subsequently reduced to 19.41% following the issue of shares under the Company's performance rights plan to other parties.

SGIH has also conditionally agreed to subscribe for a second tranche of shares, being 33,333,333 ordinary shares in MC Mining at the Issue Price, for the consideration of ZAR40,000,000 (**'Tranche 2'**). The issue of the Tranche 2 shares will result in SGIH increasing its interest to 31.04% of MC Mining's issued capital.

As Tranche 1 of the Proposed Transaction only increased SGIH's maximum interest in MC Mining to 19.90%, only Australian and South African regulatory approvals, including South African Reserve Bank ('SARB') approval was required for the Company to complete Tranche 1. MC Mining did not require approval from MC Mining shareholders not associated with SGIH ('Shareholders') to enter into Tranche 1 of the Proposed Transaction. Therefore, in our assessment of the value of MC Mining prior to the Proposed Transaction, we have assumed the prior completion of Tranche 1.

Tranche 2 of the Proposed Transaction will result in the maximum interest of SGIH increasing from 19.41% to 31.04%. As Tranche 2 will result in the interest of SGIH increasing from below 20% to 31.04%, approval from Shareholders is required.

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Further details of the Proposed Transaction are outlined in Section 4 of our Report. Figures in this report are quoted in Australian Dollars unless otherwise stated.

2. Summary and Opinion

2.1 Requirement for the report

The directors of MC Mining have requested that BDO Corporate Finance (WA) Pty Ltd ('**BDO**') prepare an independent expert's report ('**our Report**') to express an opinion as to whether or not the Proposed Transaction is fair and reasonable to Shareholders.

Our Report is prepared pursuant to item 7 of section 611 of the Corporations Act 2001 Cth ('**Corporations Act**' or '**the Act**') and is to be included in the Notice of Meeting for MC Mining in order to assist Shareholders in their decision whether to approve the Proposed Transaction.

2.2 Approach

Our Report has been prepared having regard to Australian Securities and Investments Commission ('ASIC') Regulatory Guides Regulatory Guide 74 'Acquisitions Approved by Members' ('RG 74'), Regulatory Guide 111 'Content of Expert's Reports' ('RG 111') and Regulatory Guide 112 'Independence of Experts' ('RG 112').

In arriving at our opinion, we have assessed the terms of the Proposed Transaction as outlined in the body of this report. We have considered:

- How the value of an MC Mining share prior to the Proposed Transaction on a control basis compares to the value of an MC Mining share following the Proposed Transaction on a minority interest basis;
- The likelihood of an alternative offer being made to MC Mining;
- Other factors which we consider to be relevant to Shareholders in their assessment of the Proposed Transaction; and
- The position of Shareholders should the Proposed Transaction not proceed.

2.3 Opinion

We have considered the terms of the Proposed Transaction as outlined in the body of this report and have concluded that, in the absence of an alternative offer, the Proposed Transaction is not fair but reasonable to Shareholders.

In our opinion, the Proposed Transaction is not fair because the value of a MC Mining share prior to the Proposed Transaction on a control basis is greater than the value of a MC Mining share following the Proposed Transaction on a minority interest basis. However, we consider the Proposed Transaction to be reasonable because the advantages of the Proposed Transaction to Shareholders are greater than the disadvantages.

In particular, MC Mining will gain support from a cornerstone investor, SGIH and Mr. Senosi, as well as the diversified mining expertise, relationships, experience and synergies that they possess. Additionally, the Proposed Transaction will provide financing support for the development of the Makhado Project, which, based on the recently completed BFS is estimated to have a post-tax net present value of US\$268 million.

Further, we note that if the Proposed Transaction is not approved by Shareholders, MC Mining will be required to repay the ZAR40,000,000 of funds which have already been advanced pursuant to Tranche 2,


and may need to raise capital to cover the shortfall required to progress the development of Makhado. This may result in a greater dilutionary effect on Shareholders than under the Proposed Transaction.

2.4 Fairness

In section 12 we determined that the value of an MC Mining share prior to the Proposed Transaction compares to the value of an MC Mining share following the Proposed Transaction, as detailed below.

	Ref	Low US\$	Preferred US\$	High US\$
Value of a MC Mining share prior to the Proposed Transaction on a control basis	10.1	0.427	0.620	0.878
Value of a MC Mining share following the Proposed Transaction on a minority basis	11.1	0.303	0.454	0.659

Source: BDO analysis

The above valuation ranges are graphically presented below:



The above pricing indicates that, in the absence of any other relevant information, and an alternative offer, the Proposed Transaction is not fair for Shareholders.

We note that RG 111 states that an offer is fair if the value of the offer price or consideration is equal to or greater than the value of the securities which are the subject of the offer. Despite this, our assessment is that the Proposed Transaction is not fair as our valuation of an MC Mining share following the Proposed Transaction is less than our valuation of an MC Mining share prior to the Proposed Transaction at each of the low, preferred, and high points of our valuation ranges.

Further, we note that whilst the valuation ranges overlap, it would be inappropriate to compare different points within the ranges, as our valuation of MC Mining prior to the Proposed Transaction is assessed at different levels of possible dilution. As a result, comparing different points across the range would imply a different number of shares on issue for the same company. Therefore, the above valuations must be compared on a like for like basis at individual points, rather than across the range.

Accordingly, we consider the Proposed Transaction to be not fair for Shareholders.



2.5 Reasonableness

We have considered the analysis in section 13 of this report, in terms of both

- advantages and disadvantages of the Proposed Transaction; and
- other considerations, including the position of Shareholders if the Proposed Transaction does not proceed and the consequences of not approving the Proposed Transaction.

In our opinion, the position of Shareholders if the Proposed Transaction is approved is more advantageous than the position if the Proposed Transaction is not approved. Accordingly, in the absence of any other relevant information and/or an alternative proposal we believe that the Proposed Transaction is reasonable for Shareholders.

The respective advantages and disadvantages considered are summarised below:

ADVANTAGES AND DISADVANTAGES					
Section	Advantages	Section	Disadvantages		
13.4.1	Access to mining expertise and experience of SGIH and Mr. Senosi	13.5.1	Dilution of Shareholders' interests		
13.4.2	Financing support for the development of the Makhado Project	13.5.2	Restriction on special resolutions		
13.4.3	Raising funds through the issue of equity, rather than debt will not have a negative impact on MC Mining's working capital	13.5.3	Presence of a large cornerstone investor may reduce the possibility of a takeover offer being received in the future		
13.4.4	Support from a cornerstone investor				

Other key matters we have considered include:

Section	Description
13.1	Alternative Proposal
13.2	Practical Level of Control
13.3	Consequences of not approving the Proposed Transaction



3. Scope of the Report

3.1 Purpose of the Report

Section 606 of the Corporations Act ('**Section 606**') expressly prohibits the acquisition of further shares by a party if the party acquiring the interest does so through a transaction and because of the transaction, that party's (or someone else's) voting power in the company increases from 20% or below to more than 20%.

Section 611 of the Corporations Act ('Section 611') provides exceptions to the Section 606 prohibition and item 7 Section 611 ('item 7 s611') permits such an acquisition if the shareholders of MC Mining have agreed to the acquisition. This agreement must be by resolution passed at a general meeting at which no votes are cast in favour of the resolution by the party to the acquisition or any party associated with the acquiring party.

Item 7 s611 states that shareholders of the company must be given all information that is material to the decision on how to vote at the meeting.

RG 74 states that to satisfy the obligation to provide all material information on how to vote on the item 7 s611 resolution, MC Mining can commission an Independent Expert's Report.

Therefore, the directors of MC Mining have commissioned this Independent Expert's Report to satisfy this obligation.

3.2 Regulatory guidance

Neither the Listing Rules nor the Corporations Act defines the meaning of 'fair and reasonable'. In determining whether the Proposed Transaction is fair and reasonable, we have had regard to the views expressed by ASIC in RG 111. RG 111 provides guidance as to what matters an independent expert should consider to assist security holders to make informed decisions about transactions.

RG111 suggests that where the transaction is a control transaction, the expert should focus on the substance of the control transaction rather than the legal mechanism used to effect it. RG 111 further suggests that where a transaction is a control transaction, it should be analysed on a basis consistent with a takeover bid.

In our opinion, the Proposed Transaction is a control transaction as defined by RG 111 and we have therefore assessed the Proposed Transaction as a control transaction to consider whether, in our opinion, it is fair and reasonable to Shareholders.

3.3 Adopted basis of evaluation

RG 111 states that a transaction is fair if the value of the offer price or consideration is equal to or greater than the value of the securities which are the subject of the offer. This comparison should be made assuming a knowledgeable and willing, but not anxious, buyer and a knowledgeable and willing, but not anxious, seller acting at arm's length. When considering the value of the securities which are the subject of the offer in a control transaction it is inappropriate for the expert to apply a discount on the basis that the shares being acquired represent a minority or portfolio interest. So the expert should consider this value inclusive of a control premium. Further to this, RG 111 states that a transaction is reasonable if it is fair. It might also be reasonable if despite being 'not fair' the expert believes that there are sufficient reasons for security holders to accept the offer in the absence of any higher bid.



Having regard to the above, BDO has completed this comparison in two parts:

- A comparison between the value of an MC Mining share prior to the Proposed Transaction on a control basis and the value of an MC Mining share following the Proposed Transaction on a minority interest basis (fairness see Section 12 'Is the Proposed Transaction Fair?'); and
- An investigation into other significant factors to which Shareholders might give consideration, prior to approving the Proposed Transaction, after reference to the value derived above (reasonableness see Section 13 'Is the Proposed Transaction Reasonable?').

This assignment is a Valuation Engagement as defined by Accounting Professional & Ethical Standards Board professional standard APES 225 'Valuation Services' ('APES 225').

A Valuation Engagement is defined by APES 225 as follows:

'an Engagement or Assignment to perform a Valuation and provide a Valuation Report where the Valuer is free to employ the Valuation Approaches, Valuation Methods, and Valuation Procedures that a reasonable and informed third party would perform taking into consideration all the specific facts and circumstances of the Engagement or Assignment available to the Valuer at that time.'

This Valuation Engagement has been undertaken in accordance with the requirements set out in APES 225.



4. Outline of the Proposed Transaction

On 1 February 2022, MC Mining announced that it had entered into the Agreement to raise ZAR86,036,691 through the issue of 71,697,242 new ordinary shares in MC Mining to SGIH. SGIH is a South African mining house with existing interests in coal, contract mining, commodity trading, gold mining, energy, engineering and property.

Under the terms of the Proposed Transaction, the consideration payable to MC Mining by SGIH will be split into two tranches. Tranche 1, being the issue of 38,363,909 shares in MC Mining for the consideration of ZAR46,036,691, was advanced to the Company by way of an interest free loan, and subsequently converted into Tranche 1 shares following SARB, ASX, Alternative Investment Market of the London Stock Exchange ('AIM'), and Johannesburg Stock Exchange ('JSE') approvals. Tranche 1 funding is secured against MC Mining's wholly owned subsidiaries, Limpopo Coal Company (Pty) Ltd, and Harrisia Investment Holdings (Pty) Ltd ('Harrisia'). Using exchange rates sourced from Bloomberg as at the date of the announcement of the Proposed Transaction, Tranche 1 raised approximately \$4.23 million, or US\$3.02 million. The Issue Price represented an 11.1% premium to the closing price of MC Mining on the last practicable date prior to the announcement of the Proposed Transaction (as quoted on the ASX).

Tranche 2, being the issue of 33,333,333 shares for the consideration of ZAR40,000,000, will convert into Tranche 2 shares as and when SARB and Shareholder approvals have been obtained. This equates to approximately \$3.68 million or US\$2.62 million, using exchange rates sourced from Bloomberg.

MC Mining stated that it intended to use the Tranche 1 funding to settle the balance owing (approximately ZAR35,000,000) to the vendors of the Lukin and Salaita properties at the Makhado project ('Makhado' or 'Makhado Project'), and to supplement the working capital requirements of the Company. On 1 March 2022, following the advance of the Tranche 1 funding to MC Mining, the balance owing was settled. Subsequently, on 7 April 2022, MC Mining announced that relevant approvals had been obtained, and as such the Tranche 1 shares had been issued to SGIH.

Tranche 2 funding is intended to be used to advance the development of Makhado and for working capital requirements. Additionally, as part of the Agreement, Mr. Ontiretse Mathews Senosi ('Mr. Senosi') was appointed to the Board of MC Mining following the completion of Tranche 1 of the Proposed Transaction.

Following the issue of the Tranche 1 shares, SGIH held a relevant interest in MC Mining of 19.90%. The table below shows the change in holding in MC Mining by SGIH as a result of the issue of shares as part of the Proposed Transaction.

Description	Existing Shareholders	SGIH	Total
Shares on issue prior to the Proposed Transaction	154,419,555	-	154,419,555
% holdings prior to the Proposed Transaction	100.00%	0.00%	100%
Tranche 1 Shares issued	-	38,363,909	38,363,909
Shares on issue following Tranche 1 issue	154,419,555	38,363,909	192,783,464
% holdings following Tranche 1 issue	80.10%	19.90 %	100%
Tranche 2 Shares to be issued	-	33,333,333	33,333,333
Shares on issue following Tranche 2 issue	154,419,555	71,697,242	226,116,797
% holdings following the Proposed Transaction	68.29%	31.71%	100%

Source: MC Mining announcement dated 1 February 2022 and BDO analysis



The above table excludes the 4,871,406 shares issued on 16 May 2022 pursuant to the Company's performance rights plan. SGIH's relevant interest in MC Mining reduced to 19.41% upon the issue of these shares. Following the completion of Tranche 2 of the Proposed Transaction, assuming no further issues of shares, SGIH will hold a 31.04% interest in MC Mining.



5. Profile of MC Mining

5.1 History

MC Mining is a dual-listed coal exploration and development company, with metallurgical and thermal coal assets located primarily in the Limpopo province of South Africa. The Company's flagship asset is the Makhado Project, located approximately 36 kilometres ('kms') north of the town of Louis Trichardt, and 80km southeast of the Company's 100% owned Vele Colliery. The Company additionally holds interests in the Uitkomst Colliery, and the Greater Soutpansberg Projects ('GSP'). The Company's head office is located in Mount Pleasant, Western Australia ('WA'), with its primary listing being on the ASX. MC Mining also has secondary listings on the AIM and JSE.

The Company's board of directors are:

- Mr. Nhlanhla Nene Chairman;
- Mr. Godfrey Gomwe Chief Executive Officer and Executive Director;
- Mr. Khomotso Mosehla Non-Executive Director;
- Mr. An Chee Sin Non-Executive Director;
- Mr. Andrew Mifflin Non-Executive Director;
- Mr. Brian He Zhen Non-Executive Director;
- Mr. Junchao Liu Non-Executive Director; and
- Mr. Ontiretse Mathews Senosi Non-Executive Director.

Mr. Bernard Pryor resigned from the MC Mining Board, effective 11 March 2022, whilst Mr. Sam Randazzo resigned from the MC Mining Board, effective 8 April 2022.

MC Mining has a number of wholly owned subsidiaries as outlined below:



The Company also holds significant interests in the following entities:





5.2 Projects

Makhado Project

The Makhado Project is a hard coking and thermal coal project located in the Soutpansberg coalfield in the Limpopo province of South Africa. Makhado spans an area of over 60 square kilometres ('km²') across five farms, with MC Mining owning the relevant four properties that comprise the planned mining area.

MC Mining initially acquired Makhado in August 2006, following the execution of a binding heads of agreement to merge the coal interests of MC Mining (formerly GVM Metals Limited) and Motjoli Resources Pty Ltd, resulting in the Company acquiring a 50% interest in Makhado. The remaining 50% was acquired in December 2006 through the acquisition of Baobab Mining and Exploration Pty Ltd ('**Baobab**'), for the consideration of 2.5 million Great British pounds in cash.

MC Mining completed a definitive feasibility study ('**DFS**') in June 2013, which highlighted the economic feasibility of mining operations at Makhado based on a total minable resource of 344.8 million tonnes ('**Mt**') of coal, and total reserves of 188.3Mt. The DFS defined a 16 year life-of-mine ('**LOM**') on the production of 12.6Mt per annum ('**Mtpa**') of run-of-mine ('**ROM**') coal, which was estimated to produce 2.3Mtpa of hard coking coal and 3.2Mtpa of thermal coal. The resource was to be mined on an opencast basis with the potential for further expansion underground.

In November 2018, MC Mining announced that it had secured the surface rights over the Lukin and Salaita properties at Makhado for the consideration of ZAR70 million, completing the suite of surface rights for the fully permitted Makhado Project. In addition, in April 2019, MC Mining executed an offtake agreement with ArcelorMittal South Africa Ltd, resulting in the purchase of up to 0.45Mpta of hard coking coal from Makhado annually, with prices to be linked to a published, international index.

The Company's development plan for Makhado is separated into two phases, with phase 1 entailing opencast mining in the western pit with processing at the existing Vele Colliery to produce approximately 0.54Mtpa of hard coking coal and 0.57Mtpa of thermal coal by-product, of which the existing offtake agreement would account for approximately 85%. Dependent on future funding and favourable market conditions, phase 2 would comprise the development of the east and central pits, as well as the construction of a new processing plant and associated infrastructure to produce an estimated 4.0Mpta of ROM yielding over 0.8Mtpa of hard coking coal.

In April 2022, MC Mining announced the completion of a bankable feasibility study ('**BFS**'), which highlighted 25.6Mt of saleable coal produced over a 22 year LOM at Makhado. The production estimates were based on a Joint Ore Reserves Committee ('**JORC**') 2012 compliant 296Mt of Measured and Indicated coal Resources, 7.2Mt of Inferred coal Resources, and 69.3Mt of Proved and Probable coal Reserves under the proposed open pit mining and coal processing methods. Management of MC Mining stated that the BFS confirmed the economic viability of Makhado, with construction expected to commence in the following quarters, dependent on the achievement of appropriate funding.

MC Mining agreed to sell 20% of the Makhado Project to the Makhado Colliery Community Development Trust, for the purposes of ensuring that project operations would benefit local and surrounding communities. Further, the Company agreed to sell a 6.0% interest to a black industrialist, whilst a 6.7% interest was acquired by the Industrial Development Corporation of South Africa Ltd ('IDC') as part of the terms of MC Mining's existing loan facility. As a result, the Company retains a 67.3% interest in Makhado.



Once operational, MC Mining expects Makhado to be the only significant hard coking coal producing asset in South Africa. Funding to progress the Project is expected to be generated from Tranche 2 of the Proposed Transaction.

Uitkomst Colliery

The Uitkomst Colliery ('**Uitkomst**') is a high-grade underground thermal coal mine located in the Utrecht coalfields in the KwaZulu-Natal province of South Africa. Uitkomst comprises established infrastructure, including a processing plant, and has pending applications for the renewal of its water license, currently being processed by the relevant regulatory authority.

Uitkomst was acquired by MC Mining in April 2017 through the execution of a sale of shares and claims agreement with Pan African Resources Plc, to acquire 100% of the shares in and claims against Pan African Resources Coal Holdings Pty Ltd, which held a 91% interest in Uitkomst, for a purchase price of ZAR275 million. MC Mining currently holds a 70% interest in Uitkomst, with the remaining stake held by a black industrialist and two broad based black economic empowerment trusts representing host communities and employees.

MC Mining commenced operations at the south adit of Uitkomst in the September quarter of 2017. During the financial year ended 30 June 2021, Uitkomst produced 0.49Mt and sold 0.29Mt of coal product, generating US\$20.7 million in sales revenue. The Company has attempted to strategically position Uitkomst to take advantage of higher international coal prices with exposure to both US dollar and South African rand denominated sales.

Uitkomst has a total coal Resource of approximately 23.6Mt, with approximately 14.4Mt in Reserves. A number of different products are produced from Uitkomst, including small zero-to-40 millimetre coal products, which are predominantly sold to the domestic market for use as pulverised coal, whilst larger sized coal products are supplied to local energy generation facilities. Additionally, MC Mining also sells a high ash, coarse discard produced from Uitkomst.

MC Mining currently only mines the south adit of Uitkomst, with the development of the north adit being subject to regulatory approval. The extension to the north adit is expected to commence in 2023, which is expected to extend the LOM.

Vele Colliery

The 100% owned Vele Colliery ('**Vele**') is situated in the Tuli coalfield, in the Limpopo province of South Africa. Vele formerly produced thermal coal, however, it has been in care and maintenance since October 2013 following a review of Vele's cost structures and processing plant capabilities.

The Vele processing plant will be modified to include circuits to capture fine coal fractions, and facilitate the simultaneous production of hard coking coal and thermal coal by-product as part of phase 1 of the Makhado development plan. Additionally, MC Mining has all the required regulatory approvals to recommence operations at Vele, if and when the Company decides to.

Greater Soutpansberg Project (GSP)

Contiguous to the Makhado Project, the GSP is situated to the north of the Soutpansberg mountains. The GSP comprises three early-stage exploration projects, being the Chapudi, Generaal and Mopane projects. Operating on an opencast basis, the projects contain approximately 7,200Mt of inferred coal Resources, with over 1,500Mt of hard coking coal, semi-soft coking coal and thermal coal by-products.



The GSP is jointly owned, with MC Mining holding a 74% interest, and Rothe Investments (Pty) Ltd, its Black Economic Empowerment partner, holding the remaining 26% stake. The exploration and development of the GSP is expected by management to facilitate the long-term growth of the Company.

During 2013, the Company applied for mining rights for the GSP locations, with the Chapudi mining rights being granted in December 2018, the Generaal mining rights being granted in November 2019, and the mining rights for Mopane being granted in February 2021. Once the funding for phase 1 of the Makhado Project has been secured, the Company expects to commence the various studies required for the outstanding environmental and water approvals at the GSP.

Further information on Makhado, Uitkomst, Vele and the GSP can be found in the independent technical assessment and valuation report prepared by SRK Consulting (Australasia) Pty Ltd ('SRK') ('Technical Specialist Report') in Appendix 5 of our Report.

Western Australian Tenements

MC Mining also holds an interest in a number of tenements in the Eastern Goldfields region of WA. The Company's current interest is such that they may receive royalty payments in the future, should these tenements be developed. MC Mining currently attributes no value to these tenements.

Further information on the WA tenements can be found in the Technical Specialist Report in Appendix 5 of our Report.

5.3 Recent Corporate Events

Loan Facility

On 6 June 2022, MC Mining announced that it had entered into a US\$3.9 million loan facility with Dendocept (Proprietary) Limited ('**Dendocept**'), for the purposes of progressing early works at Makhado, enhancing specific areas of the Makhado BFS and geotechnical confirmatory drilling programmes, as well as to fund working capital. The facility is available for 12 months from the date of first drawdown, with interest to be calculated as the prevailing South African Prime interest rate plus 3%.

Notice under Section 249D of the Corporations Act

On 14 February 2022, MC Mining announced that it had received notice under section 249D of the Corporations Act from shareholders that held approximately 6.8% of the Company's share capital, requisitioning that a General Meeting be held. The General Meeting request was made such that Shareholders could consider the following resolutions:

- Removal of Mr. Bernard Pryor as a director of the Company;
- Removal of Mr. Sam Randazzo as a director of the Company;
- Removal of any other director of the Company appointed after the date of notice;
- Appointment of Mr. Nhlanhla Nene as a director of the Company; and
- Appointment of Mr. Godfrey Gomwe as a director of the Company.

On 4 March 2022, the Company released a Notice of Extraordinary General Meeting for Shareholders to consider the above resolutions. On 11 March 2022, Mr. Bernard Pryor resigned as Chairman of MC Mining, with Mr. Khomotso Mosehla appointed as interim Chairman pending the outcome of the General Meeting. Mr. Sam Randazzo also stepped down from the MC Mining Board, effective 8 April 2022. Subsequently, at



the General Meeting on 11 April 2022, resolutions regarding the removal of existing directors were withdrawn, whilst the elections of Mr. Nhlanhla Nene and Mr. Godfrey Gomwe were approved.

On 28 April 2022, it was announced that Mr. Nhlanhla Nene had been appointed as Chairman of MC Mining, whilst Mr. Godfrey Gomwe was appointed as Managing Director and Chief Executive Officer.

IDC Loan Update

In March 2017, MC Mining secured a loan facility for up to ZAR240 million (approximately US17.6 million) from the IDC to be used to fund operations at Makhado. MC Mining subsequently utilised ZAR160 million of this facility and the balance was cancelled. In January 2022, MC Mining announced that the IDC had extended the repayment date for the remaining balance of the loan, with interest thereon to 30 November 2022. Additionally, the terminal drawdown date of the new US\$15.8 million loan facility for the development of phase 1 of the Makhado Project was also extended to 30 November 2022, remaining subject to due diligence, being confirmed by the IDC.

5.4 Historical Statement of Financial Position

Statement of Financial Position	Reviewed as at 31-Dec-21	Audited as at 30-Jun-21	Audited as at 30-Jun-20
	US\$'000	US\$'000	US\$'000
CURRENT ASSETS			
Cash and cash equivalents	1,986	3,226	2,678
Trade and other receivables	992	3,430	1,311
Inventories	1,428	834	1,109
Tax receivable	-	4	162
TOTAL CURRENT ASSETS	4,406	7,494	5,260
NON-CURRENT ASSETS			
Exploration and evaluation assets	84,844	93,467	78,714
Development assets	17,260	19,055	20,720
Property, plant and equipment	24,194	27,370	24,396
Right-of-use assets	2,968	2,588	1,819
Other financial assets	4,624	4,708	3,743
Restricted cash	159	95	57
TOTAL NON-CURRENT ASSETS	134,049	147,283	129,449
ASSETS CLASSIFIED AS HELD FOR SALE	-	-	274
TOTAL ASSETS	138,455	154,777	134,983
CURRENT LIABILITIES			
Deferred consideration	2,560	2,796	101
Current borrowings	17,462	19,231	13,029
Trade and other payables	7,410	9,394	6,463
Bank overdraft	80	2,203	2,214
Current provisions	143	195	197
Contract liability	1,307	-	-
Current tax liabilities	371	413	341
Current lease liabilities	231	855	213
TOTAL CURRENT LIABILITIES	29,564	35,087	22,558
NON-CURRENT LIABILITIES			
Deferred consideration	-	-	2,220



Statement of Financial Position	Reviewed as at 31-Dec-21	Audited as at 30-Jun-21	Audited as at 30-Jun-20
	US\$'000	US\$'000	US\$'000
Borrowings	-	251	566
Provisions	6,459	6,689	4,996
Deferred tax liability	3,743	4,669	4,078
Lease liabilities	2,534	1,557	1,622
TOTAL NON-CURRENT LIABILITIES	12,736	13,166	13,482
TOTAL LIABILITIES	42,300	48,253	36,040
NET ASSETS	96,155	106,524	98,943
EQUITY			
Issued capital	1,041,884	1,041,884	1,041,080
Accumulated losses	(907,607)	(907,202)	(895,591)
Reserves	(37,346)	(27,437)	(45,918)
Non-controlling interests	(776)	(721)	(628)
TOTAL EQUITY	96,155	106,524	98,943

Source: MC Mining's audited financial statements for the years ended 30 June 2020 and 30 June 2021, and reviewed financial statements for the half-year ended 31 December 2021.

We note that the Company's auditor highlighted the ability of MC Mining to continue as a going concern as a key audit matter, in its reports for the years ended 30 June 2020 and 30 June 2021, and the half-year ended 31 December 2021.

Commentary on Historical Statement of Financial Position

• The significant cash flow movements in the cash and cash equivalents balance over the assessed periods are outlined in the table below:

Significant cash flow movements	Reviewed as at 31-Dec-21 US\$'000	Audited as at 30-Jun-21 US\$'000	Audited as at 30-Jun-20 US\$'000
Opening cash and cash equivalents	1,023	464	8,811
Receipts from customers	17,798	21,983	20,950
Payments to suppliers and employees	(15,179)	(23,400)	(26,000)
Proceeds from the sale of property, plant and equipment	-	487	1,719
Investment in investment assets	(30)	(99)	(1,266)
Proceeds from the issue of new shares	-	2,347	-
Other cash flow movements	(1,706)	(759)	(3,750)
Closing cash and cash equivalents	1,906	1,023	464
Add: Bank overdraft	80	2,203	2,214
Cash and cash equivalents for reporting purposes	1,986	3,226	2,678



• Property, plant and equipment over the assessed period comprises the following:

Property, plant and equipment	Reviewed as at 31-Dec-21 US\$'000	Audited as at 30-Jun-21 US\$'000	Audited as at 30-Jun-20 US\$'000
Mining property, plant and equipment	4,905	5,359	4,753
Mining rights	12,699	14,639	12,966
Land and buildings	6,262	7,096	6,384
Motor vehicle	241	251	251
Other	87	25	42
Total	24,194	27,370	24,396

MC Mining classifies mining rights as property, plant and equipment on commencement of commercial production. As such, mining rights are assessed for impairment if circumstances indicate impairment may exist. Mining rights of US\$12.70 million as at 31 December 2021 comprise the Uitkomst Colliery mining rights.

• Exploration and evaluation assets over the assessed period is comprised as follows:

	Reviewed as at	Audited as at	Audited as at
Exploration and Evaluation assets	31-Dec-21	30-Jun-21	30-Jun-20
	US\$'000	US\$'000	US\$'000
Greater Soutpansberg Project	53,853	54,147	49,573
Makhado Project	30,684	34,520	28,109
Uitkomst North adit	308	343	281
Vele Colliery	-	5,194	751
Total impairment	(1)	(737)	-
Total	84,844	94,204	78,714

• Development assets of US\$17.26 million as at 31 December 2021 comprises the book value of Vele. We note that the value of the Uitkmost south adit currently being developed is comprised within property, plant and equipment.

- Other financial assets of US\$4.62 million as at 31 December 2021 comprise investment funds for rehabilitation provisions and Eskom guarantees. Eskom is the provider of electricity at the Company's Vele and Uitkomst collieries.
- Current and non-current borrowings relate to the following loan agreements entered into by the Company:

Borrowings	Reviewed as at 31-Dec-21 US\$'000	Audited as at 30-Jun-21 US\$'000	Audited as at 30-Jun-20 US\$'000
Industrial Development Corporation of South Africa (IDC)	16,923	18,547	12,587
Pan African Resources Management Services	539	935	1,008
Total	17,462	19,482	13,595
Current portion	17,462	19,231	13,029
Non-current portion	-	251	566



The IDC loan was entered into to fund the progression of Makhado in March 2017, with the repayment date recently being extended to 30 November 2022.

- Current deferred consideration of US\$2.56 million as at 31 December 2021 comprises consideration for the acquisition of key surface rights at the Makhado Project by the Company's subsidiary, Baobab. The deferred consideration was settled on 1 March 2022.
- Provisions over the assessed period comprise employee provisions, biodiversity offset provisions and rehabilitation provisions. Rehabilitation provisions totalled US\$6.39 million as at 31 December 2021, and are comprised below:

Rehabilitation provisions	Reviewed as at 31-Dec-21 US\$'000
Makhado	190
GSP	-
Vele	5,338
Uitkomst	858
Total	6,386

5.5 Historical Statement of Profit or Loss and Other Comprehensive Income

Statement of Profit or Loss and Other Comprehensive Income	Reviewed for the half-year ended 31-Dec-21	Audited for the year ended 30-Jun-21	Audited for the year ended 30-Jun-20
Continuing operations		032 000	
Revenue	13,030	20,702	17,155
Cost of sales	(10,913)	(20,302)	(18,269)
Gross profit	2,117	400	(1,114)
Other operating income	42	176	192
Other operating gains /(losses)	188	757	(184)
Net impairment expense	-	(6,759)	(1,257)
Administrative expenses	(2,909)	(5,250)	(7,578)
Operating loss	(562)	(10,676)	(9,941)
Interest income	73	187	250
Finance costs	(850)	(1,618)	(3,159)
Loss before income tax	(1,339)	(12,107)	(12,850)
Income tax benefit	510	270	660
Loss for the year from continuing operations	(829)	(11,837)	(12,190)
Exchange differences on translating foreign operations	(9,817)	18,404	(20,742)
Total comprehensive loss for the period, net of tax	(10,646)	6,567	(32,932)

Source: MC Mining's audited financial statements for the years ended 30 June 2020 and 30 June 2021, and reviewed financial statements for the half-year ended 31 December 2021.

As noted above, the Company's auditor highlighted the ability of MC Mining to continue as a going concern as a key audit matter, in its reports for the years ended 30 June 2020 and 30 June 2021, and the half-year ended 31 December 2021.



Commentary on Historical Statement of Profit or Loss and Other Comprehensive Income

- Revenue of US\$13.0 million for the half-year ended 31 December 2021 was generated from the sale of coal from Uitkomst. All sales of coal from Uitkomst were made to South African customers over the period, primarily in the steel industry.
- Cost of sales over the assessed period is comprised of the following expenses:

Cost of sales	Reviewed for the period ended 31-Dec-21 US\$'000	Audited for the year ended 30-Jun-21 US\$'000	Audited for the year ended 30-Jun-20 US\$'000
Employee costs	(4,537)	(7,936)	(7,168)
Depreciation and amortisation	(1,245)	(2,533)	(2,494)
Underground mining	(2,048)	(3,637)	(2,544)
Administration	-	(1,101)	(1,422)
Engineering	-	(1,870)	(2,087)
Other	(3,083)	(3,225)	(2,554)
Total	(10,913)	(20,302)	(18,269)

We note that in the reviewed financial statements for the half-year ended 31 December 2021, cost of sales are presented differently to the audited financial statements. Whilst this doesn't impact the overall balance, individual line items may be allocated differently.

- The Company's gross profit has grown substantially, increasing from negative US\$1.11 million for the year ended 30 June 2020 to US\$0.40 million for the year ended 30 June 2021 and US\$2.12 million for the half-year ended 31 December 2021, respectively. This is largely the result of an increase in revenue generated from the sale of coal.
- Net impairment expenses of US\$6.76 million for the year ended 30 June 2021 are outlined in the table below:

Net impairment expense	Audited for the year ended 30-Jun-21
	US\$'000
Vele Project	(6,497)
Fumaria Property Holdings (Pty) Ltd	(434)
Reversal	172
Total	(6,759)

The impairment of US\$0.43 million was in relation to a property held by Fumaria Property Holdings (Pty) Ltd following the grant of a call option for the purchase of the property, whilst Vele was impaired by US\$6.50 million. Impairment reversal of US\$0.17 million relates to the sale of a property that was previously impaired.

• Finance costs reduced by almost 50% to US\$1.62 million for the year ended 30 June 2021. This was primarily the result of the Company paying less interest on borrowings, decreasing from US\$2.16 million in the previous period to US\$0.62 million for the year ended 30 June 2021.



In the year ended 30 June 2021, Baobab drew down ZAR40 million from the IDC facility, leading to an increase in borrowings. During the year, the interest accrued on the initial drawdown of ZAR120 million in 2017 matched the original capital amount of the loan, and as a result, Baobab stopped accruing interest on this capital portion of the loan.

5.6 Capital Structure

The share structure of MC Mining immediately following the issue of the Tranche 1 shares is outlined below:

	Number
Total ordinary shares on issue	192,783,464
Top 20 shareholders	149,391,709
Top 20 shareholders - % of shares on issue	77.49%
Source: MC Mining's share registry information, 31 March 2022, BDO analysis	

The ordinary shares held by the most significant shareholders immediately following the issue of the Tranche 1 shares are detailed below:

Name	No. of Ordinary Shares	Percentage of Issued Shares (%)
Senosi Group Investment Holdings Proprietary Limited	38,363,909	19.90%
Haohua Energy International (Hong Kong) Resources Co., Ltd	23,120,879	11.99%
Ying He Yuan Investment (S) Pte Ltd	21,413,462	11.11%
Pan African Resources, Plc.	15,432,581	8.01%
Subtotal	98,330,831	51.01%
Others	94,452,633	48.99%
Total ordinary shares on Issue	192,783,464	100.00%

Source: MC Mining's share registry information, 31 March 2022, BDO analysis

As at the date of our Report, MC Mining has 9,312,092 performance rights on issue, vesting subject to market and non-market based vesting conditions, and expiring at different dates across 2022 and 2023. Full details of the vesting conditions attached to the performance rights on issue can be found in the Company's financial statements, and in its Notice of Annual General Meetings released on the ASX.

We note that subsequent to the issue of the Tranche 1 shares, on 16 May 2022, 4,087,406 shares were issued to the Company's former CEO and Executive Director, Mr. Sam Randazzo, which we have accounted for in Section 10 of our Report.



6. Profile of SGIH

SGIH is a South African diversified mining investment company, with current interests in coal, gold and energy, as well as contract mining, commodity trading, engineering and property. Together with its subsidiaries, SGIH controls over 300Mt of coal Resources and Reserves in the Highveld and Witbank coalfields of the Mpumalanga Province of South Africa. SGIH produces over 8Mt of ROM coal per year, and is targeting an increase of production to approximately 12Mt in 2022. Of this production, approximately 4Mt is supplied to the local electricity utility, Eskom, whilst 3.5Mt is exported through the Richards Bay terminal. SGIH was founded in July 2016, and is domiciled in Mpumalanga, South Africa.

Mr. Ontiretse Mathews Senosi

Mr. Senosi is the Chief Executive Officer and controlling shareholder of SGIH. He is a mining engineer and executive in the South African mining industry, with over 20 years of experience in the resources sector. Mr. Senosi completed a degree and a Graduate Diploma in engineering at the University of Witwatersrand in South Africa.

Following the completion of his studies at Witwatersrand, Mr. Senosi began his professional career at Anglo American Coal South Africa, before leaving to become founder and director of Ekusasa Mining (Pty) Ltd ('**Ekusasa**'), a mining construction company based in South Africa. In 2008, following his time at Ekusasa, Mr. Senosi became a director at SBS Mining (Pty) Ltd ('**SBS Mining**'), a contract mining company located in South Africa, a position which he still holds today. SBS Mining is contracted to mine approximately 0.8Mtpa of steam coal for Total Mining South Africa, generating more than US\$11 million in revenue per annum.

In addition to his above roles, Mr. Senosi is also a director of Senosi Trading, Overlooked Group Management Services, Balindi Mining, Blue Mining Services, Boachabela Mining, and Dalirox, amongst a number of other similar mining companies based in South Africa.

As part of the Proposed Transaction, SGIH will acquire a 31.04% interest in MC Mining through the acquisition of 71,697,242 ordinary shares in MC Mining at the Issue Price. Additionally, Mr. Senosi was appointed to the Board of MC Mining following the completion of Tranche 1 of the Proposed Transaction.



7. Economic analysis

MC Mining is primarily exposed to the risks and opportunities of the South African market, due to its coal operations at Uitkomst, the Makhado Project, Vele and GSP. As a result, we have presented an economic analysis on South Africa.

7.1 South Africa

Overview

In a statement released on 19 May 2022, the South African Reserve Bank's ('SARB') Monetary Policy Committee ('MPC') stated that the country's economic growth rate over 2021 was marginally higher than expected at 4.9%. It also downgraded its forecast of economic growth for 2022 from 2.0% (anticipated earlier during the year) to 1.7%, driven by the flooding in Kwa-Zulu Natal and continued electricity supply constraints. Longer term, growth is expected to moderate to 1.9% in both 2023 and 2024 with weak government sector investment somewhat offset by household spending and private sector investments.

South Africa is recovering from its fourth wave of the COVID-19 virus at a national level, which was mainly driven by the Omicron variant. Analysis undertaken by the South African government suggested that the country has largely passed the peak of this wave, and although the economic impact from the virus continues to fade, the war between Russia and Ukraine is expected to reduce global economic growth and contribute to higher inflation.

South Africa experienced a slow vaccine rollout due to long-standing structural constraints. South Africa substantially missed its target of vaccinating its entire adult population of 40 million by the end of 2021. A fifth wave of the virus is also looming as new COVID-19 cases have risen to approximately 10,000 per day.

The South African government's extension of the COVID-19 relief grants and one-off cash allowances to civil servants have aided in strong recovery of South Africa's household consumption, however these are both set to expire in 2022. These, together with sustained weakness in the labour market are forecast to slow consumption growth into 2022. The South African Treasury plans to reduce the budget deficit by more than 400 billion ZAR (or 8% of GDP) over the next two years to stabilise debt, which is likely to have an impact on future growth figures.

Important commodity export prices such as for coal, iron ore, platinum and rhodium generally decreased in the latter half of 2021. However, the start of 2022 has seen the improvement of some commodity and export prices with the outbreak of hostilities in Europe. As a result, South Africa's current account surplus is expected to increase to about 2% of GDP this year, before easing to 0.8% in 2023 and 0% in 2024.

In November 2021, the African National Congress (**'ANC'**) retained a decreased parliamentary majority. The ANC experienced a substantial decline in ballots as a result of widespread corruption, high unemployment and regular power blackouts. This followed the incarceration of former ANC leader, Jacob Zuma in July 2021, who was jailed after failing to appear at a corruption inquiry, triggering protests, mass looting, violence and riots. This resulted in a substantial disruption to economic activity that amplified the existing effects of the global pandemic.

Economic Indicators

In March 2022, South Africa reported that its unemployment rate in the fourth quarter of 2021 rose to 35.3% from 34.9%. This is a result of several constraints including strict labour laws, stagnant productivity, bureaucratic hurdles and a skills shortage.



In the near term, headline inflation has increased well above the mid-point of the MPC's inflation target band and is only expected to return to close to the mid-point in the fourth quarter of 2024. Forecast core inflation was revised higher by the MPC during May 2022, with the rate now expected to reach 5.1% in 2022 and 2023, before easing to 4.8% in 2024. Headline inflation for 2021 was 4.5% and is forecast to be 5.9% in 2022 and 5.0% in 2023, primarily due to elevated food and fuel prices. Against this backdrop, the MPC decided to increase the repurchase rate to 4.75%, effective 20 May 2022.

Currency movements

The below chart outlines the fluctuations in the ZAR:USD currency pair over the past 10 years.



United States Dollar against South African Rand

Source: Bloomberg

After a strong start to 2021, global and domestic factors contributed to a weaker ZAR:USD exchange rate causing the Rand to sit below its equilibrium level in the first two months of 2022. Since then, stronger commodity export prices have appreciated the Rand against the US dollar, although the large South African bank, Nedbank, expects the Rand to come under pressure later in 2022 as domestic economic growth rates fade. Based on Nedbank's forecast of exchange rates at 19 May 2022, it expects the Rand to weaken against the US dollar to around 16.15 over 2023 from an expected average 2022 rate of 15.97.

The Company's current operations at Uitkomst, and future operations at Makhado are highly sensitive to changes in the South African exchange rate, and the relative coal prices.

Source: Statement of the Monetary Policy Committee 19 May 2022, Republic of South Africa National Department of Health, Bloomberg and Nedbank.

8. Industry analysis

MC Mining an exploration and development company listed on the ASX, AIM and JSE, operating in the coal industry through its South African coal operations. As such, we have presented an update on ASX-listed exploration companies, as well as an analysis on the coal industry.

8.1 Exploration Sector

BDO reports on the financial health and cash positions of ASX-listed exploration companies based on the quarterly Appendix 5B reports lodged with the ASX. ASX-listed mining and oil and gas exploration companies are required to lodge an Appendix 5B report each quarter, outlining the company's cash flows, their financing facilities available and management's expectation of future funding requirements. BDO's



report for the December quarter of 2021 identified positive signs for the exploration sector, with increases recorded across financing cash inflows, IPO activity, exploration expenditure and most notably, investment spending.

Net investing cash outflows increased by 263% from the September 2021 quarter to \$1.00 billion, reflecting an influx in investment activity within the sector. Larger investment outflows were observed to be undertaken primarily by lithium exploration and development companies in relation to project development, new asset acquisitions and investment into supporting infrastructure and plant and equipment.



Net Investing Cash Outflows (\$M)

Exploration expenditure increased 11% over the December 2021 quarter, with total exploration spending hitting an eight-year high of \$973 million. The increase in exploration expenditure was considered to be a function of both the increased level of exploration activity within the sector as well as the rising costs for drilling, labour mobilisation and equipment hire.

The graph below outlines the change in exploration expenditure since the commencement of BDO's exploration analysis in June 2013.



Total Exploration Expenditure - Since Start of BDO Analysis (\$M)



Despite the increase in investment and exploration expenditure, cash balances across the sector remained strong with 88% of exploration companies having reported a cash balance of over \$1 million as at 31 December 2021. Strong cash balances were supported by the sector's ability to raise \$3.75 billion over the December 2021 quarter, which represented a 47% increase in financing cash inflows from the \$2.55 billion raised in the prior September quarter.

A total of 71 companies raised \$10 million or more within the December 2021 quarter and made up 79% of the total funds raised. Of these 71 companies, lithium explorers raised the largest amount of funds, followed closely by gold explorers. The \$879 million raised by gold companies comprised of large equity raisings for project development as well as substantial IPOs and fund raisings for exploration activities.



Financing Inflow by Commodity - Top 71 Explorers December Quarter 2021

Battery mineral companies continued to be a prominent group in the December 2021 quarter, particularly with respect to the uptick in investment and financing. The rise of battery minerals is clearly linked to the global trends of rising electric vehicle adoption and lower carbon emission targets. This ties largely into the central theme of Environmental, Social and Governance, which is at the forefront of the minds of explorers and investors alike.

Source: BDO Explorer Quarterly Cash Update: December 2021.



8.2 Coal

Coal is a combustible sedimentary rock found below the earth's surface and comprises mostly carbon (50-98%), hydrogen (3-13%), oxygen and small amounts of other elements including nitrogen and sulphur. When burnt, coal releases energy as heat which can be utilised in a variety of processes, including energy generation. The quality of a coal deposit is determined by the temperature and pressure at which the deposit is formed in addition to the length of time in formation, commonly known as its 'organic maturity'. There are two methods generally used to mine coal, being opencast mining and underground mining, with the choice of extraction method largely determined by the geology of the coal deposit.

The rank of coal refers to the physical and chemical properties that coals of different maturities possess. Lower rank brown coals such as Lignite generally possess a much lower organic maturity, have a soft texture, a dull earthly appearance and are characterized by high moisture levels and low energy (carbon) content. Higher ranked black coals such as Anthracite, which is the highest quality and scarcest type of coal, are harder, stronger, contain less moisture, and produce more energy. Black coal can be categorised into two main types, metallurgical (coking) coal and thermal (steaming) coal.

Due to its high carbon content and coking ability, metallurgical coal is used in the production of both iron and steel and to a lesser extent, for the smelting and casting of base metals. Of the different types of metallurgical coal, hard coal is the most valuable as it has the lowest ash and moisture content and produces the highest quality coke and most energy. Semi soft coking coal and pulverised coal injection are used more in blending with hard coking coal to be used as an auxiliary fuel source to increase the effectiveness of blast furnaces.

Thermal coal generally contains less carbon than metallurgical coal and consequently cannot be used in the production of steel. Its primary use is therefore as an energy source for coal-fired power plants where it is pulverised and burnt to heat steam generating boilers. Globally, the major producers of thermal coal are China, United States of America and India, with the largest importers being China, India, Japan and South Korea.

South African Coal Industry

Black coal deposits are found all over the world, with South Africa being one of the top 10 largest coal producers globally. South Africa's coal-mining industry has evolved due to its ability to exploit deposits at extremely favourable costs. South Africa is the fourth largest exporter of coal globally, with approximately 28% of production being exported, primarily through the Richards Bay Coal Terminal. South Africa is also highly reliant on coal. In 2020, 86% of its total energy production was derived from coal, compared to the global average of 34%. International recognition of South Africa's high carbonisation has led to the country securing funding worth US\$8.4 billion from a deal announced in November 2021, in order to assist in a reduction of the country's coal usage.

South Africa's coal deposits are primarily located in the northeast of the country, with a relatively even proportion of South African coal mines being underground and opencast. The coal resources are generally found in shallow, un-faulted and lightly inclined areas, making extraction suitable for opencast mines. Across Africa as a whole, the five largest coal mining companies are responsible for approximately 85% of the total coal production, being Anglo American Plc, Sasol Mining, Glencore Xstrata, Exxaro and South32's South Africa Energy Coal.

Volatile trading conditions have affected industry players over the past few years. Tighter production regulations in China contributed to world coking coal prices increasing over the three years through 2019.



However, world thermal and coking coal prices fell over 2020, as global energy demand declined and supply chains were disrupted by the COVID-19 pandemic. Prices have since increased, resulting from a strong recovery in global demand, supply constraints and global gas shortages. Upward price pressure is expected to continue over the next year from recovering global electricity demand and growth in global steel production.

Coking Coal

Coking coal is used primarily in the production of steel. Coking coal has different quality grades inclusive of hard coking coal, semi-hard coking-coal, semi-soft coking coal and pulverised coal for injection which are all used in steel production. Coking coal typically contains more carbon, less ash and less moisture than thermal coal. It takes approximately 770kg of coal to make 1 ton of steel. The challenge in steel production is producing steel to generate growth whilst simultaneously reducing emissions in the process. The coking coal market only has approximately a third of the volume of the global thermal coal market, as such, South Africa produces no high-quality coking coal in comparison, and therefore primarily imports the commodity.

Coking coal prices plummeted prior to 2016, in line with weaker steel production activity in major export destinations such as China. However, coking coal prices rebounded significantly in 2016/2017, largely due to industrial policy changes in China. In April 2016, the Chinese Government announced it would restrict the number of production days per year at Chinese coal mines from 330 to 276. In July 2016, torrential rain in the major coal-producing province of Shanxi in northern China also caused a coking coal supply disruption. This disruption benefited South African and international producers, as the loss of Chinese supply significantly increased global prices of coking coal.

The outbreak of COVID-19 led to a significant reduction in economic activity, ultimately leading to lower demand for energy and steel, which are products derived from coal. Prices for coking coal declined over 2020, but increased in 2021, with strong steel demand from China contributing to the price rises.

Thermal Coal

Thermal coal or steaming coal is used to generate electricity in much of the world, but due to its high carbon and sulphur content it is a major emission contributor. For over five decades, thermal coal has been the dominant fuel source used in power generation, representing almost 40% of the global market. Owing to its low cost and availability, coal's role as a major fuel source for power generation is expected to persist into the future, although its share is expected to decline due to the rise of renewables.

While South Africa demands a significantly higher portion of thermal coal compared to the rest of the world, this quantity will decline over time as renewable energy sources increasingly contribute to South Africa's total electricity generation. As a result of decarbonisation trends, many of the large coal mining companies in South Africa have indicated they plan to exit the industry to focus on more sustainable energy practices. However, it is unlikely this will affect the quantity of coal produced, as these companies intend to sell off assets to smaller industry players rather than shutting them down completely. Notably, whilst coal is forecast to be substituted by alternative energy sources, it is forecast to represent 31% of global power generation in 2030, only a slight decline from 35% in 2020.



Coal Prices

Set out in the graph below, we have depicted the price of thermal coal (RB Coal Terminal in South Africa) and coking coal (TSI Hard Coking Coal Australia Export FOB East Coast) over the last seven years, together with coking and thermal coal forecasts from Consensus Economics.



Source: Capital IQ Pro, Bloomberg and Consensus Economics

Coking coal prices over 2016 and 2017 increased sharply, driven by supply side disruptions in China resulting from restrictions to coal production and torrential rain in a major coal-producing province. Coal prices were on a downward trend in 2019, but stabilised at the beginning of 2020. Prices then resumed a downwards trajectory, with subdued global energy demand and steelmaking activity as a result of the COVID-19 pandemic.

The price of coal has been volatile over the past few years, with subdued global energy demand due to the COVID-19 pandemic weighing on prices in 2020. In 2021 the spot prices of both thermal and coking coal rose significantly. There were several contributing factors, but the primary cause was the resurgence of demand for coal from China and other emerging Asian markets. Demand pressure coupled with shortages of coal in China have seen prices significantly rise. China's coal shortage stemmed from the fact it had not been able to fully replace the volumes normally imported from Australia with supply from its domestic mines or other nations, following an unofficial ban of Australian coal in December 2020.

Prior to 2022, it was expected that prices would fall as a result of no long-term supply issues, given that the main producing countries have not curtailed their production or export capacities. However, the conflict between Russia and Ukraine sent the prices of thermal coal skyrocketing as European and Asian customers looked for alternatives to Russian fossil fuels. This resulted in thermal coal prices more than doubling to US\$460/tonne in early March 2022, before falling back to approximately US\$300/tonne in May 2022, which is still an elevated position compared to recent pricing.

Coal prices were relatively stable prior to 2021 but have been increasingly volatile in the subsequent period. Coking coal prices have displayed an annualised volatility of 47% since the beginning of 2021, up from just 30% over the past five years. Thermal coal prices have been even more volatile, largely on the back of conflict between Russia and Ukraine, with annualised volatility increasing from just 50% over the



past five years to above 80% since 2021. As a result, pricing forecasts are marred with uncertainty as the future impact of the conflict and associated sanctions on Russia are unknown.

Public concerns over fossil fuels

Global carbon emissions have increased significantly over the past 150 years, with the largest driver being the rise in global energy consumption fuel. Fossil fuels, the major source of carbon emissions, have been the largest contributor to the supply of global energy.

In a global effort to reduce carbon emissions, governments have begun setting emissions targets to reduce the impacts of global warming. The impact of net-zero emissions targets on global fossil fuel exports is uncertain as the policies to achieve them have not been fully articulated. Despite coal being a key global export, growing pressures from shareholders and climate activists have influenced global banks, insurers and other industries to reduce their support for coal mining projects. This movement has had a noticeable impact on coal companies' ability to obtain insurance and secure adequate access to finance. As support for fossil fuels slows, future demand will be shaped by the speed of transition towards renewable energy sources, technological advancement and economic growth.

Sources: IBIS World, EIA, Bloomberg Intelligence, Capital IQ Pro, Mining Technology, Mining Africa, Worldometer.



9. Valuation approach adopted

There are a number of methodologies which can be used to value a business or the shares in a company. The principal methodologies which can be used are as follows:

- Capitalisation of future maintainable earnings ('FME')
- Discounted cash flow ('DCF')
- Quoted market price basis ('QMP')
- Net asset value ('NAV')
- Market based assessment.

A summary of each of these methodologies is outlined in Appendix 2.

Different methodologies are appropriate in valuing particular companies, based on the individual circumstances of that company and available information.

It is possible for a combination of different methodologies to be used together to determine an overall value where separate assets and liabilities are valued using different methodologies. When such a combination of methodologies is used, it is referred to as a 'sum-of-parts' ('**Sum-of-Parts**') valuation.

The approach using the Sum-of-Parts involves separately valuing each asset and liability of the company. The value of each asset may be determined using different methods as described above. The component parts are then valued using the NAV methodology, which involves aggregating the estimated fair market value of each individual company's assets and liabilities.

9.1 Value of MC Mining prior to the Proposed Transaction

In our assessment of the value of a MC Mining share prior to the Proposed Transaction, we have chosen to employ the following methodologies:

- Sum-of-Parts as our primary methodology, which estimates the market value of a company by assessing the realisable value of its identifiable assets and liabilities. The value of each asset and liability may be determined using different methods and the component parts are then aggregated using the NAV methodology. The value derived from this methodology reflects a control value; and
- QMP as our secondary methodology, as this represents the value that a Shareholder may receive for a share if it were sold on market. The value derived from this methodology reflects a minority interest value.

We have employed the Sum-of-Parts methodology in estimating the fair market value of MC Mining by aggregating the estimated fair market values of its underlying assets and liabilities, having consideration for:

- The value of Uitkomst and Makhado, applying the DCF methodology;
- The value of MC Mining's other mineral assets, and Resources outside of the Uitkomst and Makhado LOM models, having reliance on the valuations carried out by an independent technical specialist;
- Assumptions around the funding required for the Makhado Project, as determined by BDO and discussions with MC Mining; and
- The value of MC Mining's other assets and liabilities, applying the cost approach under the NAV method. As outlined in Section 1 of our Report, we have assumed the completion of Tranche 1 of the Proposed Transaction as part of the value of MC Mining prior to the Proposed Transaction.



We have chosen these methodologies for the following reasons:

- As Uitkomst is a producing asset, we can assess the core value of the project based on the estimated future cash flows. Similarly, we consider Makhado to be an advanced stage project as a result of the completion of the recent BFS. Cash flows from Uitkomst and Makhado have a finite life and may vary substantially from year to year, rendering it suitable for a DCF valuation and not a FME valuation;
- The other mineral assets held by MC Mining, and the residual Resources not included in the DCF, are valued using alternative valuation methodologies by an independent technical specialist, as contained in the Technical Specialist Report in Appendix 5. We do not believe there to be sufficient reasonable grounds to estimate the future cash flows of operations at Vele and GSP in accordance with Regulatory Guide 170 'Prospective Financial Information' ('RG 170') and Information Sheet 214: Mining and Resources: Forward-looking Statements ('IS 214'), therefore we do not consider the application of the DCF approach to be appropriate for the valuation of these mineral assets;
- The FME methodology is most commonly applicable to profitable businesses with steady growth histories and forecasts. The FME methodology is also not considered appropriate for valuing finite life assets, such as mining assets; and
- The QMP basis is a relevant methodology to consider because MC Mining's shares are listed on the ASX. This means there is a regulated and observable market where MC Mining's shares can be traded, therefore reflecting the value that a Shareholder will receive for a share sold on the market. However, in order for the QMP methodology to be considered appropriate, the listed shares should be liquid and the market should be fully informed of the Company's activities.

9.2 Value of MC Mining following the Proposed Transaction

In our assessment of the value of a MC Mining share following the Proposed Transaction, we have also adopted the Sum-of-Parts methodology. As discussed in Section 9.1 above, this approach involves separately valuing each asset and liability of the company using different methodologies. The value of a MC Mining share following the Proposed Transaction consists of:

- The value of MC Mining prior to the Proposed Transaction;
- Adjustments to the value of MC Mining following the Proposed Transaction; and
- Adjustments to the number of shares on issue as a result of the Proposed Transaction.

The consistent use of the Sum-of-Parts approach before and after the approval of the Proposed Transaction provides Shareholders with the best indicator of the change in value per share.

Technical Expert

In performing our valuation of MC Mining's mineral assets, we have relied on the Technical Specialist Report prepared by SRK. The Technical Specialist Report has been prepared in accordance with the Australasian Code for Public Reporting of Technical Assessments and Valuation of Mineral Assets (2015 Edition) ('VALMIN Code') and the JORC Code. We are satisfied with the valuation methodologies adopted by SRK which we believe are in accordance with industry practices and are compliant with the requirements of the VALMIN Code. The specific valuation methodologies used by SRK are referred to in the respective sections of our Report and in further detail in the Technical Specialist Report contained in Appendix 5.



10. Valuation of MC Mining prior to the Proposed Transaction

10.1 Sum-of-Parts

We have employed the Sum-of-Parts methodology in estimating the fair market value of a MC Mining share on a control basis prior to the Proposed Transaction, by aggregating the estimated fair market values of its underlying assets and liabilities, having consideration of the following:

- Value of MC Mining's mineral assets; and
- Value of MC Mining's other assets and liabilities.

Our Sum-of-Parts valuation is set out in the table below:

Valuation of MC Mining prior to the Proposed Transaction	Ref	Low value US\$	Preferred value US\$	High value US\$
Value of the Uitkomst Project	10.1.2	18,140,000	20,050,000	21,960,000
Value of the Makhado Project	10.1.3	73,110,000	82,250,000	91,390,000
Value of MC Mining's other mineral assets	10.1.4	218,350,000	277,350,000	336,350,000
Value of MC Mining's other assets and liabilities	10.1.6	(49,184,242)	(49,184,242)	(49,184,242)
Total value of MC Mining prior to the Proposed Transaction (control)		260,415,758	330,465,758	400,515,758
Number of shares outstanding	10.1.7	609,330,214	532,645,591	455,960,968
Value per share prior to the Proposed Transaction (control)		0.427	0.620	0.878

Source: BDO analysis

We have assessed the value of a MC Mining share prior to the Proposed Transaction (on a controlling interest basis) to be in the range of US\$0.427 to US\$0.878 with a preferred value of US\$0.620.

10.1.1. Uitkomst and Makhado financial models

The management of MC Mining have prepared a forecast cash flow model for Uitkomst for impairment purposes ('**Uitkomst Model**'). The Uitkomst Model estimates the future cash flows expected from production over a 15-year LOM. The Uitkomst Model forecasts nominal post-tax cash flows over the LOM on an annual basis, in ZAR terms.

We have also been provided with a forecast cash flow model for Makhado which was prepared as part of the recent BFS ('Makhado Model'). The Makhado Model estimates the future cash flows expected from production over a 22-year LOM. The Makhado Model forecasts nominal post-tax cash flows over the LOM on an annual basis, in ZAR terms (the Uitkomst Model and the Makhado Model are referred to collectively as 'the Models').

We have assessed the reasonableness of the Models and the material assumptions that underpin them. We have made certain adjustments to the Models where it was considered appropriate, to arrive at an adjusted model for each project ('Adjusted Uitkomst Model' and 'Adjusted Makhado Model') (collectively, 'Adjusted Models') at a valuation date of 1 April 2022. We have adjusted the Models to reflect any changes to technical assumptions as a result of SRK's review, in addition to any changes to the economic and other input assumptions that we consider appropriate as a result of our research.



The Models were prepared based on estimates of the respective production profiles, operating costs and capital expenditure. The main assumptions underpinning the Models and the Adjusted Models include:

- mining and processing volumes;
- commodity prices;
- operating costs;
- development capital expenditure;
- foreign exchange rates;
- royalties;
- corporate tax; and
- discount rate.

We undertook the following analysis on the Models:

- analysed the Models to confirm their integrity and mathematical accuracy;
- appointed SRK as technical expert to review, and where required, provide changes to the technical assumptions underpinning the Models;
- conducted independent research on certain economic and other inputs such as commodity prices, exchange rates, inflation, and the discount rate applicable to the future cash flows of the Company;
- held discussions with SRK to confirm the reasonableness of the technical inputs underpinning the Models; and
- performed sensitivity analysis on the value of Uitkomst and Makhado as a result of flexing key assumptions and inputs.

We have not undertaken a review of the cash flow forecast in accordance with the Standards on Assurance Engagement ASAE 3450 'Assurance Engagements involving Corporate Fundraising and/or Prospective Financial Information' and do not express an opinion on the achievability of the forecast. However, nothing has come to our attention as a result of our procedures to suggest that the assumptions on which the Models have been based have not been prepared on a reasonable basis.

Appointment of a technical expert

SRK was engaged to prepare a report providing a technical assessment of the assumptions underlying the Models. SRK's assessment involved the review and provision of opinion on the reasonableness of the assumptions adopted in the Models, including but not limited to:

- mining physicals (including volume mined, recovery, and grade);
- mineral resource and reserves included in the Models;
- processing assumptions (including products recovery);
- operating costs (comprising mining, processing and administration costs);
- capital expenditure (development and sustaining capital required); and
- other relevant assumptions.

SRK's Technical Specialist Report is included in Appendix 5.



Limitations

Since forecasts relate to the future, they may be affected by unforeseen events and they depend, in part, on the effectiveness of management's actions in implementing the plans on which the forecasts are based. Accordingly, actual results may vary materially from the forecasts included in the Adjusted Models, as it is often the case that some events and circumstances frequently do not occur as expected, or are not anticipated, and those differences may be material.

Economic assumptions

Inflation

We have valued Uitkomst and Makhado on a nominal basis. As such, in the Adjusted Models, we have specified a forecast inflation rate to convert costs into nominal terms.

Uitkomst and Makhado are situated in South Africa, and as such, costs and capital expenditure in the Adjusted Models are denominated in ZAR. Therefore, we have applied a South African inflation rate to the assumed real costs in the Adjusted Models, whilst also considering the US inflation rate in order to adjust the exchange rate on an inflationary basis.

Having regard to the above, we have adopted a South African annual inflation rate of 5.0%, and a US annual inflation rate of 2.5% for the Adjusted Models. This is based on forecast inflation rates as sourced from Bloomberg, whilst also giving consideration to historical inflation rates, and inflationary targeting policies.

Although the Models support the specification of different inflation rates for the various costs such as labour, electricity and others, we have applied a single inflation rate across each cost component.

Foreign Exchange

Coal prices obtained from our research are quoted in nominal USD terms. All operating and capital expenditures are denominated in ZAR in the Models. Therefore, the Adjusted Models require assumptions on the ZAR foreign exchange rate pair against the USD. We have applied the following forecast exchange rates in the Adjusted Models for the forecast financial year ('FY') periods:

Exchange Rates	FY23	FY24	FY25+
USD:ZAR	15.1	15.6	15.7

Source: Bloomberg and BDO analysis

In our assessment of foreign exchange rates, we have considered forecasts prepared by bank and economic analysts and other publicly available information including broker consensus to arrive at our foreign exchange rate assumptions.

In addition, as there is a notable inflation differential forecasted between the economies of these currency pairs, where required we have adjusted the long-term exchange rates to account for this, in order to maintain purchasing power parity. After 2025, the USD:ZAR is assumed to increase in line with the difference in long term inflation rates between the United States' inflation rate, to South Africa's inflation rate. This inflation differential is approximately 2.5%.

Coal Prices

In forming our view of the forecast price for thermal and hard coking coal, we have had regard to both historical prices obtained from Bloomberg, futures pricing from the ICE Futures Europe Commodities



exchange as sourced from Bloomberg, as well as consensus analyst views on forecast pricing, as published by Consensus Economics.

Based on our analysis, we have adopted the following nominal forecast prices over the forecast FY periods:

Coal price	FY23	FY24	FY25	FY26+
Thermal Coal (US\$/t)	159.8	113.6	87.9	86.9
HCC (US\$/t)	302.2	234.0	179.4	175.9

Source: Consensus Economics, Bloomberg, BDO analysis

We note that in the Adjusted Models, we have adjusted the above prices for existing discounts or premiums relating to the quality/grade of coal and associated costs, as provided by MC Mining and SRK.

Discount rate

In our assessment of an appropriate discount rate to apply to the cash flows of Uitkomst and Makhado, we consider the most appropriate discount rate to be MC Mining's weighted average cost of capital ('WACC'). This is because the Adjusted Models do not include debt cash flows, and therefore the cash flows in the Adjusted Models represent cash flows to the firm from which payments to debt and equity providers must be made.

We have selected a nominal WACC of 12.00% in our base case. In selecting this base discount rate, we have considered the following:

- the rate of return for comparable coal mining companies; and
- the risk profile of MC Mining as compared to the comparable companies identified.

A detailed consideration of how we arrived at our adopted discount rate range is shown in Appendix 3.

Royalties

MC Mining is liable to pay government royalties of between 0.5% and 7% levied on Uitkomst's and Makhado's unrefined coal products as stipulated in South Africa's Mineral and Petroleum Resources Royalties Act (2008). Further details are provided in SRK's Independent Technical Assessment and Valuation Report.

Taxation

Taxation has been applied at the notional rate of 27% which represents the current corporate tax rate for companies operating in South Africa. We note that we have accounted for unredeemed capital expenditure at Uitkomst based on an opening balance of ZAR14.1 million as at 1 April 2022, based on assumptions provided by Management in the Uitkomst Model. For Makhado, we have accounted for unredeemed capital expenditure of ZAR518 million, based on assumptions provided in the Makhado Model.



10.1.2. Valuation of Uitkomst

We outline below the material assumptions underpinning the Adjusted Uitkomst Model.

Mining physicals and production assumptions

Uitkomst is a currently producing asset, with a remaining production outlook of approximately 15 years. The graphs below show the forecast coal to be mined, and the saleable yield of the mined coal over the production outlook period, for each financial year assuming a 1 April 2022 valuation date.



ROM Coal Production (t)

Source: Adjusted Uitkmost Model and BDO analysis

Saleable Yield (%)

Source: Adjusted Uitkomst Model and BDO analysis

We note that based on SRK's review, we have removed course discard sales from the Adjusted Uitkomst Model as SRK consider that this revenue is not proven.

Operating costs

The operating costs included in the Adjusted Model include underground mining costs, operating expenditure, distribution costs, surface and plant costs, and other costs. In preparing the Adjusted Model,



we have applied our inflation assumption of 5.0% per annum to the forecast operating costs. SRK has confirmed the reasonableness of the forecast operating cost assumptions having considered the costs incurred historically and by assessing the forecast per tonne operating costs in the context of their experience with mining projects in similar jurisdictions. The forecast operating costs for Uitkomst are illustrated in the charts below.



Operating Costs

Source: Adjusted Uitkomst Model and BDO analysis

Capital expenditure

Uitkomst is forecast to require development capital expenditure of approximately ZAR260 million in nominal terms over the forecast period. The capital expenditure associated with a discard conveyor has been removed from the Adjusted Uitkomst Model, as suggested by SRK.

Forecast total capital expenditure, in nominal terms, is set out in the graph below.



Capital Expenditure

Source: Adjusted Uitkmost Model and BDO analysis



Rehabilitation Costs

No rehabilitation costs are included in the Uitkomst Model. However, SRK considers that a rehabilitation provision of ZAR20 million should be included in the Adjusted Uitkomst Model, which we have added as a lump-sum payment to final year operating costs. We have therefore removed the value of rehabilitation costs associated with Uitkomst from MC Mining's balance sheet in Section 10.1.6 below.

Sensitivity analysis

Our valuation of Uitkomst is sensitive to changes in forecast commodity prices, operating expenditure, capital expenditure and foreign exchange rates. We have therefore included a sensitivity analysis to consider the value of Uitkomst under various pricing scenarios and in applying:

- a change of +/- 10% to the coal price;
- a change of +/- 10% to operating costs;
- a change of +/- 10% to capital costs; and
- a discount rate in the range of 10.0% to 14.0%.

We note that we have not considered the sensitivity of the USD/ZAR exchange rate pair, as the only variable this impacts is the coal price. Therefore, this yields the same result as flexing coal prices. The following sensitivities have been prepared to assist Shareholders in considering the potential effects to the value of Uitkomst if our base case assumptions change:

Currency: ZAR ('000)	Sensitivity Analysis of the value of Uitkomst			
Percentage change	Coal price (US\$/t)	Capital costs	Operating costs	
-10%	217,368	432,841	638,042	
-8%	259,488	431,314	595,813	
-6%	301,418	429,788	553,551	
-4%	342,815	428,261	511,162	
-2%	384,212	426,734	468,187	
0%	425,207	425,207	425,207	
2%	465,955	423,680	381,839	
4%	506,704	422,154	338,069	
6%	547,330	420,627	294,124	
8%	587,517	419,100	249,511	
10%	627,705	417,573	204,849	

Source: Adjusted Uitkomst Model and BDO analysis

			Discount Rate		
Discount rate (%)	10.0%	11.0%	12.0%	13.0%	14.0%
Value of Uitkomst (ZAR '000)	509,598	464,925	425,207	389,850	358,335

Source: Adjusted Uitkomst Model and BDO analysis

In considering the above sensitivities, Shareholders should note the following:

- the variables described above may have compounding or offsetting effects and are unlikely to move in isolation;
- the variables for which we have performed sensitivities are not the only variables which are subject to deviation from the forecast assumptions; and



• the sensitivities performed do not cover the full range of possible variances from the base case assumptions used (i.e. variances could be greater than the percentage increases or decreases set out in this analysis).

We also note that we have presented the above sensitivities to highlight the sensitivity of the value of Uitkomst to changes in pricing and other assumptions.

Based on the above analysis we consider the value of Uitkomst to be in the range of ZAR380 million to ZAR460 million with a preferred value of ZAR420 million. Our assessed low and high values are based on +- 2% movements in the coal price and USD/ZAR exchange rate. These two key economic inputs drive the forecast ZAR denominated coal price on which MC Mining derives its revenue. Over the past five years, the annualised volatility of ZAR denominated thermal coal price was approximately 50%. Therefore, given the sensitivity of the value to movements in the coal price and exchange rate, and the historical volatility of these inputs, we consider it appropriate to adopt a wide range of values around our preferred position.

Utilising the ZAR/USD exchange rate of 0.0682 as at the valuation date of 1 April 2022, the above values are converted to a range between US\$25.92 million and US\$31.37 million, with a midpoint of US\$28.64 million.

MC Mining holds a 70% interest in Uitkomst, and as such, we conclude the value of the Uitkomst held by the Company to be between US\$18.14 million and US\$21.96 million, with a midpoint of US\$20.05 million, as outlined in the table below.

	Low Value US\$m	Midpoint Value US\$m	High Value US\$m
Value of Uitkomst	25.92	28.64	31.37
MC Mining's ownership in Uitkomst	70%	70%	70%
Value held by MC Mining	18.14	20.05	21.96

Source: SRK Valuation, 2022, BDO analysis



10.1.3. Valuation of Makhado

We outline below the material assumptions underpinning the Adjusted Makhado Model.

Mining physicals and production assumptions

Based on the recently completed BFS, Makhado has an expected LOM of approximately 22 years. The charts below show the forecast coal to be mined, and the saleable yield of the mined coal over the production outlook period, for each financial year assuming a 1 April 2022 valuation date.



ROM Coal Production (t)

Source: Adjusted Makhado Model and BDO analysis



Saleable Yield

Source: Adjusted Makhado Model and BDO analysis


Production mix

Two marketable products will be produced at Makhado, being hard coking coal for sale domestically and internationally, and a thermal coal product for sale on the export market. As such, we have depicted below the production mix at Makhado over the LOM.



Source: Adjusted Makhado Model and BDO analysis

Operating costs

The operating costs included in the Adjusted Makhado Model include mining costs, processing costs and overheads. In preparing the Adjusted Makhado Model, we have applied our inflation assumption of 5.0% per annum to the forecast operating costs. SRK has confirmed the reasonableness of the forecast operating cost assumptions having considered the costs incurred historically and by assessing the forecast per tonne operating costs in the context of their experience with mining projects in similar jurisdictions. The forecast operating costs for Makhado are illustrated in the charts below.



Makhado Operating Costs

Source: Adjusted Makhado Model and BDO analysis



Capital expenditure

Makhado is forecast to require development capital expenditure of approximately ZAR1.46 billion in nominal terms over the forecast period. The spike in capital expenditure in 2033 coincides with the shift to phase 2 of operations at Makhado.





Source: Adjusted Makhado Model and BDO analysis

Rehabilitation Costs

SRK has recommended a mine closure cost estimate of ZAR80 million (in real terms). We have reflected SRK's recommended mine closure costs in the Adjusted Makhado Model, after applying inflation. Further details on rehabilitation costs can be found in SRK's Technical Specialist Report in Appendix 5 to our Report.

Assumed financing

We have assessed an initial funding requirement of ZAR703 million on a nominal basis based on the initial capital expenditure and operating costs required before Makhado generates revenue from the sale of coal. We note that Management has advised that Makhado will be funded by a combination of debt and equity.

MC Mining has advised of a number of agreements relating to the funding of Makhado at various stages of completion, which includes a loan facility of up to ZAR245 million with the IDC. MC Mining is currently in the process of securing further funding through a build, own, operate and transfer ('BOOT') arrangement, and further debt financing of up to ZAR193 million. Based on information provided by Management, we consider it to be reasonable that the Company will be able to secure this additional financing to fund operations at Makhado. Based on our review and discussions with Management, we have assumed that MC Mining will be able to secure debt financing of up to ZAR438 million (approximately US\$27 million) at an assumed interest rate of the South African Prime Overdraft Rate (7.75% as at 1 April 2022) +5%, as in its existing agreement with the IDC.

We have assumed the remaining funds will be raised through a notional equity raise, detailed further in Section 10.1.5 below. The cash raised through the notional equity raising is considered in the cash flows of the Adjusted Makhado Model.



Sensitivity analysis

Similar to Uitkomst, our valuation of Makhado is sensitive to changes in forecast commodity prices, operating expenditure, capital expenditure and foreign exchange rates. We have therefore included a sensitivity analysis to consider the value of Makhado under various pricing scenarios and in applying:

- a change of +/- 10% to the coal price;
- a change of +/- 10% to operating costs;
- a change of +/- 10% to capital costs; and
- a discount rate in the range of 10.0% to 14.0%.

Currency: ZAR (000)	Sensitivi	Ly Analysis of the value of i	Makhado
Percentage change	Coal price (US\$/t)	Capital costs	Operating costs
-10%	437,896	1,840,958	2,865,116
-8%	724,906	1,836,140	2,658,417
-6%	1,004,782	1,831,322	2,450,928
-4%	1,279,850	1,826,504	2,242,119
-2%	1,550,723	1,821,686	2,030,729
0%	1,816,868	1,816,868	1,816,868
2%	2,074,381	1,812,050	1,595,963
4%	2,328,639	1,807,232	1,370,630
6%	2,579,226	1,802,414	1,143,277
8%	2,829,481	1,797,596	912,029
10%	3,077,496	1,792,779	678,220
Source: Adjusted Makhado Mode	l and BDO analysis		

Source. Adjusted Makhado Model and DDO analysis

			Discount Rate		
Discount rate (%)	10.0%	11.0%	12.0%	13.0%	14.0%
Value of Makhado (ZAR '000)	2,254,883	2,018,725	1,816,868	1,643,687	1,494,552

Source: Adjusted Makhado Model and BDO analysis

Based on the above analysis we consider the value of Makhado to be in the range of ZAR1,600 million to ZAR2,000 million with a preferred value of ZAR1,800 million. Our assessed low and high values are based on movements in the discount rate, and +-2% movements in the coal price.

Utilising the ZAR/USD exchange rate of 0.0682 as at the valuation date of 1 April 2022, the above values are converted to a range between US\$109.12 million and US\$136.40 million, with a midpoint value of US\$122.76 million.

MC Mining holds a 67.3% interest in Makhado. SRK have undertaken their calculations based on an ownership of 67% and do not consider the difference to be material. For consistency, we have utilised the same ownership interest of 67%, and as such, we conclude the value of the Makhado held by the Company to be between US\$73.11 million and US\$91.39 million, with a preferred midpoint of US\$82.25 million, as outlined in the table below.



	Low Value US\$m	Midpoint Value US\$m	High Value US\$m
Value of Makhado	109.12	122.76	136.4
MC Mining's ownership in Makhado	67%	67%	67%
Value held by MC Mining	73.11	82.25	91.39

Source: SRK Valuation, 2022, BDO analysis

10.1.4. Valuation of MC Mining's other mineral assets

We have instructed SRK to independently value the other mineral assets of MC Mining, being Vele and GSP, as well as MC Mining's Resources that lie outside the Uitkomst and Makhado LOM models. SRK used the comparable transactions approach, a peer group analysis, and a yardstick approach to value the residual coal of MC Mining. The range of values for MC Mining's ownership in Vele and the GSPs, as calculated by SRK are set out below:

Volo	Primary Valuation	Supporting Valuation	Concluded Value
vele	Comparable Transactions	Yardstick Valuation	Concluded Value
Low Valuation (ZAR m)	1,180.24	3,280.2	1,180.24
Preferred Valuation (ZAR m)	1,475.30	5,239.7	1,475.30
High Valuation (ZAR m)	1,770.36	7,199.1	1,770.36
Source: SRK Valuation, 2022			

CCD	Primary Valuation	Supporting Valuation	Concluded Value
GSP	Comparable Transactions	Yardstick Valuation	
Low Valuation (ZAR m)	875.06	17,104.9	875.06
Preferred Valuation (ZAR m)	1,158.54	25,906.0	1,158.54
High Valuation (ZAR m)	1,442.02	34,707.0	1,442.02
Source: SRK Valuation, 2022			

The range of values for the residual coal Resources, being those outside the respective LOM models, are set out below:

Uitkomst (outside of LOM model)	Primary Valuation Comparable Transactions	Supporting Valuation Yardstick Valuation	Concluded Value	% ownership	Attributable Value
Low Valuation (ZAR m)	93.03	137.9	93.03	70%	65.12
Preferred Valuation (ZAR m)	116.29	235.5	116.29	70%	81.40
High Valuation (ZAR m)	139.55	333.1	139.55	70%	97.69
Source: SRK Valuation, 2022					



Primary Valuation Comparable Transactions	Supporting Valuation Yardstick Valuation	Concluded Value	% ownership	Attributable Value
1,613.75	3,062.6	1,613.75	67%	1,081.21
2,017.18	5,122.1	2,017.18	67%	1,351.51
2,420.62	7,181.7	2,420.62	67%	1,621.82
	Primary Valuation Comparable Transactions 1,613.75 2,017.18 2,420.62	Primary ValuationSupporting ValuationComparable TransactionsYardstick Valuation1,613.753,062.62,017.185,122.12,420.627,181.7	Primary Valuation Comparable TransactionsSupporting Valuation Yardstick ValuationConcluded Value1,613.753,062.61,613.752,017.185,122.12,017.182,420.627,181.72,420.62	Primary Valuation Comparable TransactionsSupporting Valuation Yardstick ValueConcluded Value% ownership1,613.753,062.61,613.7567%2,017.185,122.12,017.1867%2,420.627,181.72,420.6267%

Source: SRK Valuation, 2022

The fair market value of the residual Resources of Makhado and Uitkomst, and MC Mining's other mineral assets of Vele and GSP lay within the range of ZAR3,202 million to ZAR4,932 million with a preferred value of ZAR4,067 million. For further information on SRK's approach and conclusions, refer to the Technical Specialist Report, which is included as Appendix 5 of our Report.

Utilising the ZAR/USD exchange rate of 0.0682 as at the valuation date of 1 April 2022, the above values are converted to a range between US\$218.35 million and US\$336.35 million, with a preferred midpoint of US\$277.35 million, as outlined below.

Valuation of Residual Resources	Low Value	Preferred Value	High Value
Uitkomst (ZAR m)	65.12	81.40	97.69
Makhado (ZAR m)	1,081.21	1,351.51	1,621.82
Vele (ZAR m)	1,180.24	1,475.30	1,770.36
GSP (ZAR m)	875.06	1,158.54	1,442.02
Total (ZAR m)	3,201.63	4,066.75	4,931.89
ZAR:USD as at 1 April 2022	0.0682	0.0682	0.0682
Concluded Range (US\$m)	218.35	277.35	336.35

Source: BDO analysis, SRK Valuation, 2022

10.1.5. Cash raised from notional equity raising

In assessing the DCF value of Makhado prior to the Proposed Transaction, we have had to make certain assumptions on the funding that will be available to the Company. In particular, per RG 111.15, the funding requirements for a target that is not in financial distress (i.e. capital that is required to develop a project) should generally be taken into account when determining the fair value of target securities.

From our discussions with management regarding financing options, we consider there to be reasonable grounds to assume that MC Mining's funding requirements could be fulfilled through drawdowns on the Company's ZAR245 million loan facility with IDC, its loan facility with Dendocept, and additional funding, as well as a notional equity raising to fund the remaining funding shortfall.

The total notional equity required to fully fund the development of Makhado is ZAR265 million (US\$18.07 million). This is based on the minimum amount required to ensure that the first year of operations at Makhado is fully funded, prior to the Project generating cash inflows in year two. Funding is required for capital expenditure requirements, the funding of fixed operating costs during the production ramp-up phase and payment of corporate overheads.

We have increased the amount to be raised to reflect our estimate of the gross amount including likely capital raising costs. We have assessed the placement fee to be approximately 5% of the funds raised.



Therefore, the total equity funding requirement of the Project will be approximately \$18.97 million (inclusive of a placement fee).

In order to determine the likely price at which MC Mining would have to place its shares to a third party or to current shareholders under a notional capital raising to raise the funds required, we considered the quoted market prices of MC Mining's shares and the discount at which shares have been issued by ASX listed companies when compared to the respective companies' 30-day VWAP prior to the announcement of the placement.

We considered the discount at which shares have been issued over the last three years, by ASX listed companies to raise capital. A summary of our results is set out in the table below:

	Offer size between \$15m - \$30m	Capital raise to >80% market cap	Market cap <\$100m	All companies
All Mining				
No. companies	43	9	726	889
Mean	14.4%	14.6%	16 .9 %	16.4%
Median	13.6%	14.6%	15.7%	15.3%
All ASX				
No. companies	156	21	1,480	1,995
Mean	14.2%	22.7%	17.3%	16.3%
Median	13.0%	16.4%	15.7%	14.5%

Source: Bloomberg and BDO analysis

From our analysis, the average (mean) discount for ASX listed companies was 16.3%. Given that the placement discounts have ranged significantly we have also considered the median of 14.5% as this represents a better measure of central tendency.

However, given that the size of the notional capital raising required to fund Makhado would be approximately 80% of MC Mining's current market capitalisation, we have analysed placement discounts for capital raisings in which the amount raised was more than 80% of the company's market capitalisation at the time of the raising and found that the median discount for mining companies was 14.6% and the mean discount across all companies on the ASX raising more than 80% of their market capitalisation was 22.7%.

We have also assessed the discounts of capital raisings for companies with market capitalisations less than \$100 million (where MC Mining's market capitalisation currently falls). The mean discount across all ASX listed companies in this band was 17.3%, with the median being 15.7%.

Given the above analysis and the size of the notional capital raising, we consider a placement discount in the range of 15% and 20% will be required to provide a sufficient incentive for investors to participate in any raising that MC Mining would conduct on the open market.

In Section 10.2 of our Report, we consider the QMP of MC Mining shares. From this analysis, we assessed the value of a MC Mining share to be between \$0.080 and \$0.120 on a minority interest basis. Applying a discount in the range of 15% to 20% to the assessed value of a MC Mining share prior to the Proposed Transaction results in an assumed notional capital raising price of between \$0.064 and \$0.102 per share.

As shown in the table below, in order to raise an equivalent of US\$18.97 million to provide funding to develop Makhado and cover capital raising costs, the Company will be required to issue between



246,051,196 and 411,675,344 new shares, with a midpoint of 334,990,721 new shares at between \$0.064 and \$0.085 per share.

	Low	High
Equity funding required (US\$)	18,970,000	18,970,000
Exchange rate (USD/AUD)*	0.72	0.72
Equity funding required (A\$)	26,347,222	26,347,222
Quoted market price (\$) (minority)	\$0.080	\$0.120
Assessed placement discount (%)	20%	15%
Price of capital raising	\$0.064	\$0.102
Number of shares issued under notional capital raise	411,675,344	258,306,098

Source: Bloomberg and BDO analysis.

*We have used an assessed AUD/USD exchange rate of 0.72 based on our consideration of historical and recent prices.

10.1.6. Value of MC Mining's other assets and liabilities

The other assets and liabilities of MC Mining represent the assets and liabilities that have not been specifically addressed elsewhere in our Sum-of-Parts valuation. From our discussions with MC Mining and analysis of these other assets and liabilities, outlined in the table below, we do not consider there to be a material difference between book value and fair value unless an adjustment has been noted below.

The table below represents a summary of the assets and liabilities identified:

Valuation of MC Mining's other assets and liabilities	Ref	Reviewed as at 31-Dec-21 US\$'000	Adjusted value US\$'000
CURRENT ASSETS			
Cash and cash equivalents	a)	1,986	2,954
Trade and other receivables		992	992
Inventories		1,428	1,428
TOTAL CURRENT ASSETS	_	4,406	5,374
NON-CURRENT ASSETS			
Exploration and evaluation assets	b)	84,844	-
Development assets	c)	17,260	-
Property, plant and equipment	d)	24,194	6,590
Right-of-use assets		2,968	2,968
Other financial assets		4,624	4,624
Restricted cash		159	159
TOTAL NON-CURRENT ASSETS		134,049	14,341
TOTAL ASSETS		138,455	19,715
CURRENT LIABILITIES	—		
Deferred consideration	e)	2,560	-
Current borrowings	f)	17,462	47,335
Trade and other payables		7,410	7,410
Bank overdraft	g)	80	1,722
Current provisions		143	143
Other liabilities	g)	1,307	-



Valuation of MC Mining's other assets and liabilities	Ref	Reviewed as at 31-Dec-21 US\$'000	Adjusted value US\$'000
Current tax liabilities		371	371
Current lease liabilities		231	231
TOTAL CURRENT LIABILITIES	-	29,564	57,212
NON-CURRENT LIABILITIES	-		
Provisions	h)	6,459	5,411
Deferred tax liability		3,743	3,743
Lease liabilities		2,534	2,534
TOTAL NON-CURRENT LIABILITIES	-	12,736	11,688
TOTAL LIABILITIES	-	42,300	68,899
NET ASSETS		96,155	(49,184)

Source: MC Mining's reviewed financial statements for the half-year ended 31 December 2021, management accounts as at 31 March 2022 and BDO analysis.

We have not undertaken a review of MC Mining's unaudited accounts in accordance with Australian Auditing and Assurance Standard 2405 'Review of Historical Financial Information' and do not express an opinion on this financial information. However, nothing has come to our attention as a result of our procedures that would suggest the financial information within the management accounts has not been prepared on a reasonable basis.

We have been advised that there has not been any other significant change in the net assets of MC Mining since 31 December 2021 and that the above assets and liabilities represent their fair market values apart from the adjustments detailed below. Where the above balances differ materially from the reviewed position at 31 December 2021 we have obtained supporting documentation to validate the adjusted values used, which provides reasonable grounds for reliance on the unaudited financial information.

We note the following in relation to the above valuation of MC Mining's other assets and liabilities:

Note a) Cash and cash equivalents

We have adjusted the value of cash and cash equivalents to account for the movements over the quarter ended 31 March 2022 as provided in the Company's Appendix 5B, primarily in relation to the receipt of ZAR46,036,691 (US\$3.0 million) as consideration for the issue of 38,363,909 shares in MC Mining as part of Tranche 1 of the Proposed Transaction. Additionally, over the quarter, MC Mining generated receipts from customers of US\$6.77 million, and made payments for production of US\$4.01 million and property plant and equipment of US\$2.64 million.

Note b) Exploration and evaluation assets

We have adjusted exploration and evaluation assets of approximately US\$84.84 million as at 31 December 2021 to nil as this value is reflected in the DCF value of Uitkomst and Makhado, and the values of Vele and GSP as valued by SRK.

Note c) Development assets

We have adjusted development assets of approximately US\$17.26 million as at 31 December 2021 to nil as this value is reflected in the DCF value of Uitkomst and Makhado, and the values of Vele and GSP as valued by SRK.



Note d) Property, plant and equipment

We have adjusted the property, plant, and equipment balance of approximately US\$24.2 million at 31 December 2021 to US\$6.59 million to only reflect the portion of the PP&E that are not used for mining activities. The PP&E used for mining related activities and Uitkomst's mining rights, which are contained within PP&E, are reflected in the value of MC Mining's mineral assets considered elsewhere in our Sum-of-Parts valuation.

Note e) Deferred consideration

Deferred consideration of US\$2.56 million as at 31 December 2021 comprised the consideration for the acquisition of key surface rights at the Makhado Project. The deferred consideration was settled on 1 March 2022, and as such, we have adjusted the value of deferred consideration to nil.

Note f) Borrowings

We have adjusted borrowings as at 31 December 2021 to reflect the debt financing included in the Adjusted Makhado Model of ZAR438 million (US\$27.1 million) in order to fund the first year of operations prior to Makhado generating revenue from the sale of coal. Refer to Section 10.1.3 for further information regarding the assumed financing of Makhado.

Note g) Bank overdraft and other liabilities

We have adjusted the balances of the Company's bank overdraft and other liabilities (being contract liabilities) to reflect the balance in MC Mining's management accounts as at 31 March 2022.

Note h) Provisions

Provisions relate to employee provisions, biodiversity offset provisions and rehabilitation provisions. We have adjusted the balance of approximately US\$6.46 million as at 31 December 2021 to US\$5.41 million, which is the portion that does not relate to mine closure costs at Uitkomst and Makhado. We have removed the rehabilitation provisions from Uitkomst and Makhado, as mine closure costs are included in the Adjusted Models and therefore are reflected elsewhere in our Sum-of-Parts valuation.

10.1.7. Number of shares on issue

As detailed in Section 4 of our Report, the Company had 154,419,555 shares on issue prior to the Proposed Transaction. However, due to Tranche 1 of the Proposed Transaction not requiring Shareholder approval, we have assumed the completion of Tranche 1 in our assessment of the value of an MC Mining share prior to the Proposed Transaction. Additionally, we have adjusted the shares on issue to account for the shares issued pursuant to the Company's performance rights plan, and the notional equity raise outlined in Section 10.1.5. As such, we have outlined the adjusted number of shares on issue for MC Mining below:



Shares on issue	Low	Preferred	High
Shares on issue prior to the announcement of the Proposed Transaction	154,419,555	154,419,555	154,419,555
Issue of Tranche 1 shares	38,363,909	38,363,909	38,363,909
Shares issued pursuant to performance rights plan	4,871,406	4,871,406	4,871,406
Shares issued pursuant to notional equity raising (ref 10.1.5)	411,675,344	334,990,721	258,306,098
Total number of MC Mining shares prior to the Proposed Transaction	609,330,214	532,645,591	455,960,968

Source: BDO analysis

10.2 Quoted Market Prices for MC Mining's Securities

To provide a comparison to the valuation of MC Mining in Section **Error! Reference source not found.**, we have also assessed the quoted market price for a MC Mining share.

The quoted market value of a company's shares is reflective of a minority interest. A minority interest is an interest in a company that is not significant enough for the holder to have an individual influence in the operations and value of that company.

RG 111.43 suggests that when considering the value of a company's shares for the purposes of approval under Item 7 of s611 the expert should consider a premium for control. An acquirer could be expected to pay a premium for control due to the advantages they will receive should they obtain 100% control of another company. These advantages include the following:

- control over decision making and strategic direction;
- access to underlying cash flows;
- control over dividend policies; and
- access to potential tax losses.

Whilst SGIH will not be obtaining 100% of MC Mining, RG 111 states that the expert should calculate the value of a target's shares as if 100% control were being obtained. The expert can then consider an acquirer's practical level of control when considering reasonableness, which we have done in Section 13.

Therefore, our calculation of the quoted market price of a MC Mining share including a premium for control has been prepared in two parts. The first part is to calculate the quoted market price on a minority interest basis. The second part is to add a premium for control to the minority interest value to arrive at a quoted market price value that includes a premium for control.

Minority interest value

Our analysis of the quoted market price of a MC Mining share is based on the pricing prior to the announcement of the Proposed Transaction. This is because the value of a MC Mining share after the announcement may include the effects of any change in value as a result of the Proposed Transaction. However, we have considered the value of a MC Mining share following the announcement when we have considered reasonableness in Section 13.

Information on the Proposed Transaction was announced to the market on 1 February 2022. Therefore, the following chart provides a summary of the share price movement over the 12 months to 31 January 2022 which was the last trading day prior to the announcement.





Source: Bloomberg

The daily price of MC Mining shares from 1 February 2021 to 31 January 2022 has ranged from a low of \$0.078 on 21 January 2022 to a high of \$0.170 on 5 February 2021 and 8 February 2021. The highest single trading day over the assessed period was 10 August 2021, where 856,417 shares were traded.

During this period a number of announcements were made to the market. The key announcements are set out below:

Date	Announcement		Closing Share Price Following Announcement			Closing Share Price Three Days After Announcement	
		\$ (m	lovem	ent)	\$ (m	ovem	ent)
11/01/2022	MCM Makhado Project Update	0.090	•	4.3%	0.091		1.1%
01/11/2021	MCM Annual Report to shareholders	0.120	•	0.0%	0.110	•	8.3%
29/10/2021	MCM Quarterly Cash Flow and Activities Reports	0.120	•	4.0%	0.105	•	12.5%
20/10/2021	Change in substantial holding	0.120	•	4.0%	0.125		4.2%
01/10/2021	MCM FY2021 Financial Results Announcement	0.125	•	4.2%	0.125	•	0.0%
03/09/2021	Change in substantial holding	0.105	•	0.0%	0.125		19.0%
18/08/2021	Change in substantial holding	0.120	•	4.0%	0.125	•	4.2%
13/04/2021	Change in substantial holding	0.115	•	0.0%	0.130		13.0%
23/02/2021	MCM Appointment of Interim CEO - details	0.135	•	0.0%	0.140		3.7%
10/02/2021	MCM IDC Loan Update	0.165	•	0.0%	0.135	•	18.2%
05/02/2021	MCM Mopane Mining Right Granted	0.170	•	13.3%	0.165	•	2.9 %
11/01/2022 01/11/2021 29/10/2021 20/10/2021 01/10/2021 03/09/2021 18/08/2021 13/04/2021 13/04/2021 10/02/2021 05/02/2021	MCM Makhado Project Update MCM Annual Report to shareholders MCM Quarterly Cash Flow and Activities Reports Change in substantial holding MCM FY2021 Financial Results Announcement Change in substantial holding Change in substantial holding Change in substantial holding MCM Appointment of Interim CEO - details MCM IDC Loan Update MCM Mopane Mining Right Granted	0.090 0.120 0.120 0.125 0.105 0.105 0.120 0.135 0.135 0.165	 * *<	4.3% 0.0% 4.0% 4.2% 0.0% 4.2% 0.0% 0.0% 0.0% 0.0% 13.3%	0.091 0.110 0.125 0.125 0.125 0.125 0.125 0.130 0.140 0.135 0.165		1 8 12 4 0 19 4 13 3 18 2

Source: Bloomberg and BDO analysis

On 11 January 2022, MC Mining announced the extension of its existing deferred payment for the acquisition of the Lukin and Salaita properties at Makhado, to 28 February 2022. On the date of the announcement, the share price decreased 4.3% to close at \$0.090, before increasing 1.1% over the subsequent three-day trading period to close at 0.091.



On 1 November 2021, MC Mining released its annual report for the year ended 30 June 2021. On the date of the announcement, the share price closed unchanged at \$0.120, before declining 8.3% over the subsequent three-day trading period to close at \$0.110.

On 29 October 2021, the Company released its quarterly cash flows and activities report for the September 2021 quarter, highlighting funding initiatives for Makhado and recent production at Uitkomst. On the date of the announcement, the share price declined 4.0% to close at \$0.120, before declining a further 12.5% over the subsequent three-day trading period to close at \$0.105.

On 20 October 2021, the Company announced a change in substantial holding relating to the sale of 1,755,000 ordinary shares in MC Mining held by M&G Investment Management Ltd ('M&G'), equating to a 1.14% interest in the Company. On the date of the announcement, the share price declined 4.0% to close at \$0.120, before increasing 4.2% over the subsequent three-day trading period to close at \$0.125.

On 3 September 2021, the Company announced a change in substantial holding relating to the sale of 1,655,000 ordinary shares held by M&G, equating to a 1.07% interest. On the date of the announcement, the share price closed unchanged at \$0.105 before increasing 19.0% over the subsequent three-day trading period to close at \$0.125.

On 18 August 2021, MC Mining announced a change in substantial holding relating to the sale of 1,790,558 ordinary shares in MC Mining held by M&G, equating to a 1.16% interest. On the date of the announcement, the share price decreased by 4.0% to close at \$0.120, before increasing 4.2% over the subsequent three-day trading period to close at \$0.125.

On 13 April 2021, MC Mining announced a change in substantial holding relating to the sale of 1,596,125 ordinary shares in MC Mining held by M&G, equating to a 1.03% interest. On the date of the announcement, the share price closed unchanged at \$0.115, before increasing 13.0% over the subsequent three-day trading period to close at \$0.130.

On 10 February 2021, MC Mining released an update on their loan with IDC, highlighting an extension of the repayment date to 31 July 2021. On the date of the announcement, the share price closed unchanged at \$0.165, before declining 18.2% over the subsequent three-day trading period to close at \$0.135.

On 5 February 2021, the Company released an announcement detailing that the Company had been granted the remaining mining rights for its 74% owned Mopane Project, being one of the GSPs. On the date of the announcement, the share price increased by 13.3% to close at \$0.170, before declining 2.9% over the subsequent three-day trading period to close at \$0.165.

To provide further analysis of the market prices for an MC Mining share, we have also considered the weighted average market price for 10, 30, 60 and 90 day periods to 31 January 2022.

Share Price per unit	31-Jan-22	10 Days	30 Days	60 Days	90 Days
Closing price	\$0.099				
Volume weighted average price (VWAP)		\$0.083	\$0.087	\$0.092	\$0.116
Source: Bloomberg, BDO analysis					

The above weighted average prices are prior to the date of the announcement of the Proposed Transaction, to avoid the influence of any increase in price of MC Mining shares that has occurred since the Proposed Transaction was announced.

An analysis of the volume of trading in MC Mining shares for the six months to 31 January 2022 is set out below:



Trading days	Share price	Share price	Cumulative volume	As a % of
	low	high	traded	Issued capital
1 Day	\$0.099	\$0.099	30,621	0.02%
10 Days	\$0.078	\$0.099	317,211	0.16%
30 Days	\$0.078	\$0.105	543,413	0.28%
60 Days	\$0.078	\$0.110	1,052,524	0.55%
90 Days	\$0.078	\$0.125	4,346,731	2.25%
180 Days	\$0.078	\$0.165	10,605,239	5.50%

Source: Bloomberg, BDO analysis

This table indicates that MC Mining's shares display a low level of liquidity, with 2.25% of the Company's current issued capital being traded in the 90-day period prior to the announcement of the Proposed Transaction. RG 111.86 states that for the quoted market price methodology to be an appropriate methodology there needs to be a 'liquid and active' market in the shares and allowing for the fact that the quoted price may not reflect their value should 100% of the securities not be available for sale. We consider the following characteristics to be representative of a liquid and active market:

- Regular trading in a company's securities;
- Approximately 1% of a company's securities are traded on a weekly basis;
- The spread of a company's shares must not be so great that a single minority trade can significantly affect the market capitalisation of a company; and
- There are no significant but unexplained movements in share price.

A company's shares should meet all of the above criteria to be considered 'liquid and active', however, failure of a company's securities to exhibit all of the above characteristics does not necessarily mean that the value of its shares cannot be considered relevant.

In the case of MC Mining, just 5.50% of the Company's issued capital was traded in the 180 days prior to the announcement of the Proposed Transaction. This indicates that the market for MC Mining's shares is not liquid, nor active, with substantially less than 1% of the Company's issued capital being traded on a weekly basis. We discuss the consequences of this for use in our valuation below in Section 10.3.

Our assessment is that a range of values for MC Mining shares based on market pricing, after disregarding post announcement pricing, is between \$0.080 and \$0.120.

10.2.1. Quoted Market Price including control premium

The quoted market price per share reflects the value to minority interest shareholders. In order to value a MC Mining share on a control basis, we have added a control premium that is based on our analysis set out in Appendix 4.

Applying a control premium to MC Mining's quoted market share price results in the following quoted market price value including a premium for control:

QMP including control premium	Ref	Low	High
Value per share (minority basis)	10.2	0.080	0.120
Control premium	Appendix 4	25%	35%
Value per share (controlling interest)		\$0.100	\$0.162
Source: BDO analysis			



Therefore, our valuation of a MC Mining share based on the quoted market price method and including a premium for control is between \$0.100 and \$0.162, with a midpoint value of \$0.131.

Using our assessed the AUD/USD exchange rate of 0.72, this represents a MC Mining share price range between US\$0.072 and US\$0.117, with a midpoint value of US\$0.094.

10.3 Assessment of MC Mining Value

The results of the valuations performed are summarised in the table below:

	Low US\$	Preferred US\$	High US\$
Sum-of-Parts value (Section 10.1)	0.427	0.620	0.878
QMP (Section 10.2)	0.072	0.094	0.117

Source: BDO analysis

We consider the Sum-of-Parts approach to be the most appropriate methodology to value MC Mining as the core value lies within the Company's mineral assets, which have been independently valued by SRK, an independent technical specialist in accordance with VALMIN, or valued using the DCF methodology.

We note that the value of MC Mining derived under the Sum-of-Parts valuation is higher than that derived under the QMP approach. This may be attributable to the lack of liquidity in trading MC Mining shares. As detailed in Section 10.2 of our Report, we consider there to be a low level of liquidity in trading MC Mining shares, with only 5.50% of the Company's current issued capital being traded in the six months prior to the announcement of the Proposed Transaction. As a result, the quoted market price may not reflect the underlying value of the Company's shares.

Further, we have commissioned SRK to provide a valuation of MC Mining's mineral assets as an independent technical specialist. We have instructed SRK to prepare their Technical Specialist Report in compliance with the VALMIN Code and other industry guidelines, whilst also adhering to guidance provided by ASIC's Regulatory Guides. Market participants are not governed by these industry codes and therefore may be basing their valuations on different technical and economic assumptions.

As such, based on the results above we consider the value of a MC Mining share to be between US\$0.427 and US\$0.878, with a preferred value of US\$0.620.



11. Valuation of MC Mining following the Proposed Transaction

11.1 Sum-of-Parts valuation of MC Mining following the Proposed Transaction

Commencing with our Sum-of-Parts valuation of MC Mining prior the Proposed Transaction, as per section 10.1, we have assessed the impact of the Proposed Transaction on the Company's net assets. This is set out in the table and accompanying notes below.

Sum-of-Parts following the Proposed Transaction	Ref	Low Value US\$	Preferred Value US\$	High Value US\$
MC Mining NAV prior to the Proposed Transaction	10.1	260,415,758	330,465,758	400,515,758
Cash receipts from Tranche 2 of the Proposed Transaction	a)	2,728,000	2,728,000	2,728,000
Value of MC Mining following the Proposed Transaction		263,143,758	333,193,758	403,243,758
Total shares on issue following the Proposed Transaction	b)	642,663,547	565,978,924	489,294,301
Value per share		0.409	0.589	0.824
Minority interest discount (%)	c)	26%	23%	20%
Value per share (\$) - minority basis		0.303	0.454	0.659

Source: BDO analysis

The table above indicates that the net assets value of a MC Mining share on a minority basis is between US\$0.303 and US\$0.659, with a preferred value of US\$0.454. The following adjustments were made to the net assets of MC Mining in arriving at our valuation of the Company following the Proposed Transaction.

Note a) Cash receipts from Tranche 2 of the Proposed Transaction

We have adjusted the value of MC Mining to account for the receipt of ZAR40,000,000 as consideration for the issue of 33,333,333 shares in MC Mining. Using the ZAR/USD exchange rate as at 1 April 2022 of 0.0682, this equates to US\$2,728,000, which we have added to the NAV of MC Mining prior to the Proposed Transaction.

We do not consider that the impact of the Proposed Transaction alters the forecast cash flows or the risks of achieving those cash flows, and as such, the DCF values of Makhado and Uitkomst. Altering the debt to equity ratio as part of the assessed WACC has an immaterial impact on the overall discount rate used as part of our valuations, and as such, we used the same discount rate in valuing Uitkomst and Makhado prior to and following the Proposed Transaction.

The cash receipts as part of the Proposed Transactions do, however, impact the 'other assets and liabilities' set out in Section 10.1.6. As we have assumed that debt funding will reduce by the value of the Tranche 2 consideration, we have added the ZAR40,000,000 (US\$2,728,000) to the value of MC Mining prior to the Proposed Transaction to reduce the value of borrowings by this amount.

Note b) Number of shares on issue following the Proposed Transaction

We have adjusted the number of shares on issue to reflect the issue of 33,333,333 shares to SGIH if the Proposed Transaction is approved, as outlined in the table below.



Shares on issue	Low	Preferred	High
Number of shares on issue prior to the Proposed Transaction	609,330,214	532,645,591	455,960,968
Add: Shares issued under the Proposed Transaction	33,333,333	33,333,333	33,333,333
Number of shares on issue following the Acquisition	642,663,547	565,978,924	489,294,301

Source: MC Mining management and BDO analysis

Note c) Minority interest discount

As outlined in Section 3.3 of our Report, in assessing fairness we have compared the value of an MC Mining share prior to the Proposed Transaction on a control basis to the value of an MC Mining share following the Proposed Transaction on a minority interest basis, as we are required to do by RG 111.

A minority interest discount is the inverse of a premium for control and is calculated using the formula 1- $(1 \div (1 \div \text{control premium}))$. As discussed in section 10.2.1, we consider an appropriate control premium for MC Mining to be in the range of 25% to 35%, giving a minority interest discount in the range of 20% to 26%, with a rounded midpoint of 23%.

12. Is the Proposed Transaction fair?

The value of an MC Mining share prior to the Proposed Transaction and the value of an MC Mining share following the Proposed Transaction is compared below:

	Ref	Low US\$	Preferred US\$	High US\$
Value of a MC Mining share prior to the Proposed Transaction on a control basis	10.1	0.427	0.620	0.878
Value of a MC Mining share following the Proposed Transaction on a minority basis	11.1	0.303	0.454	0.659
Source: BDO analysis				

The above valuation ranges are graphically presented below:



The above pricing indicates that, in the absence of any other relevant information, and an alternative offer, the Proposed Transaction is not fair for Shareholders.

We note that RG 111 states that an offer is fair if the value of the offer price or consideration is equal to or greater than the value of the securities which are the subject of the offer. Despite this, our assessment is that the Proposed Transaction is not fair as our valuation of MC Mining following the Proposed Transaction is less than our valuation of MC Mining prior to the Proposed Transaction at each of the low, preferred, and high points of our valuation ranges.



Further, we note that whilst the valuation ranges overlap, it would be inappropriate to compare different points within the ranges, as our valuation of MC Mining prior to the Proposed Transaction is assessed at different levels of possible dilution. As a result, comparing different points across the range would imply different numbers of shares on issue for the same company. Therefore, the above valuations must be compared on a like for like basis at individual points, rather than across the range.

Accordingly, we consider the Proposed Transaction to be not fair for Shareholders.

BDO

13. Is the Proposed Transaction reasonable?

13.1 Alternative Proposal

Management of MC Mining have advised that a potential alternative to the Proposed Transaction is a rights issue. We consider the Proposed Transaction to be a superior proposal for Shareholders compared to a potential rights issue, which would be undertaken at a discount to MC Mining's market price. As outlined in Section 4 of our Report, the Proposed Transaction is at an 11.1% premium to the closing price on the last practicable date prior to the announcement of the Proposed Transaction (as quoted on the ASX).

However, we note that as MC Mining's share price has recently increased (refer Section 13.3 for postannouncement pricing). This increase may in part be caused by the existence of the Proposed Transaction. A discount to the current market price may, in fact, exceed the Issue Price. If the Proposed Transaction is not approved the market price may reduce back to pre-Announcement levels. As a result, it is unknown whether the undertaking of a rights issue will result in a comparatively more or less favourable position for Shareholders than the Proposed Transaction, in terms of cash generation and dilution.

13.2 Practical Level of Control

If the Proposed Transaction is approved then SGIH will hold an interest of 31.04% in MC Mining.

When shareholders are required to approve an issue that relates to a company there are two types of approval levels. These are general resolutions and special resolutions. A general resolution requires 50% of shares to be voted in favour to approve a matter and a special resolution requires 75% of shares on issue to be voted in favour to approve a matter. If the Proposed Transaction is approved then SGIH will be able to block special resolutions.

Prior to the announcement of the Proposed Transaction, MC Mining's Board comprised seven directors. On 28 April 2022, MC Mining announced the appointment of Mr. Senosi as a director of the Company, which took MC Mining's Board to eight directors. This means that SGIH nominated directors make up approximately 13% of the Board.

Therefore, SGIH's control of MC Mining following the Proposed Transaction will be significant when compared to all other Shareholders.

13.3 Consequences of not Approving the Proposed Transaction

MC Mining will need to source alternative funding to progress the development of the Makhado Project

If the Proposed Transaction is not approved, the Company will forego the ZAR40,000,000 of funds that are to be raised pursuant to Tranche 2 of the Proposed Transaction. As set out in Section 4 of our Report, the Company intends to use these funds to progress the development of the Company's flagship Makhado Project. If the Proposed Transaction is not approved, MC Mining will need to source alternative means of fund raising, and as such, there is no certainty that the Company will be successful in obtaining the additional funding it requires to progress the development of Makhado, and may not be in a position to negotiate further debt funding, as the Company already has a substantial level of borrowings across two facilities. Given the Company's share price, it is possible that any capital raising may be more dilutionary to Shareholders than the Proposed Transaction.



Potential decline in share price

We have analysed movements in MC Mining's share price since the Proposed Transaction was announced. A graph of MC Mining's share price and trading volume leading up to, and following the announcement of the Transaction is set out below.



Source: Bloomberg

Over the post-announcement trading period, the share price of MC Mining has varied from a low of \$0.079 on 15 March 2022 to a high of \$0.175 on 19 April 2022. The highest single day of trading was on 4 March 2022, where 448,816 shares were traded, representing approximately 0.23% of the Company's current issued capital. Additionally, we note that over the post-announcement trading period, the share price of MC Mining has increased in line with the increased prices of coal, largely on the back of the conflict between Russia and Ukraine.

Based on the above analysis, if the Proposed Transaction is not approved by Shareholders, it is possible that the share price of MC Mining may decline to its pre-announcement levels.

Repayment of advanced funds

As outlined in the announcement of the Proposed Transaction on 1 February 2022, the consideration for Tranche 2 is split into four separate payments, with two payments of ZAR10 million scheduled to have already been advanced to MC Mining as at the date of our Report. Should the Proposed Transaction not be approved by Shareholders, the final two instalments of the funding will not be advanced to MC Mining and the loans previously advanced will become repayable to SGIH within 30 business days.

13.4 Advantages of Approving the Proposed Transaction

We have also considered the following advantages when assessing whether the Proposed Transaction is reasonable.

13.4.1. Access to mining expertise and experience of SGIH and Mr. Senosi

Following completion of the Proposed Transaction, SGIH will hold an interest of 31.04% in MC Mining, and will be the Company's most significant shareholder. Mr. Senosi was also appointed to the Board of MC Mining following completion of Tranche 1 of the Proposed Transaction.



Mr. Senosi is a South African mining engineer with over 20 years of experience in the resources sector. As the Chief Executive Officer and controlling shareholder of SGIH, Mr. Senosi controls over 300Mt of coal Resources and Reserves, and oversees the production of over 8Mt of ROM coal per year. Additionally, Mr. Senosi has experience outside of coal mining, with SGIH being a diversified mining investment company, also engaging in contract mining, commodity trading, engineering and property.

Mr. Senosi's experience is likely to supplement the existing MC Mining Board, with the alignment of his interests with MC Mining Shareholders' possibly value accretive. Additionally, given MC Mining is currently in the process of progressing its flagship Makhado Project into development, SGIH and Mr. Senosi may be able to use their commercial and developmental expertise to assist this process. SGIH may also have relationships with a number of external parties that may have the potential to bring future value to MC Mining, as Mr. Senosi is a director at a number of South African mining companies.

13.4.2. Financing support for the development of the Makhado Project

As outlined in the Notice of Meeting, the funds raised through Tranche 2 of the Proposed Transaction will be used to progress the Makhado Project, and to supplement the Company's working capital requirements.

We note that in April 2022, MC Mining announced that it had completed its BFS showing that Makhado had a post-tax net present value of ZAR4.0 billion, equating to US\$268 million, based on the production of approximately 13.7Mt of hard coking coal, and 11.9Mt of thermal coal. Additionally, in the Adjusted Makhado Model, we note that the first year of operations experience negative net cash flows of approximately ZAR703 million (in nominal terms). The funding as part of the Proposed Transaction will provide support for operations, whilst importantly not straining the working capital position of MC Mining.

13.4.3. Raising funds through the issue of equity, rather than debt will not have a negative impact on MC Mining's working capital

Approval of the Proposed Transaction means that the Company will issue 33,333,333 shares in MC Mining, pursuant to Tranche 2. An alternative strategy to raise capital (following the rights issue) may be to enter into a further debt agreement with a third party, or to attempt to increase the balance on the Company's existing loan facilities, which would impact the Company's cash position during the life of the Makhado Project.

13.4.4. Support from a cornerstone investor

SGIH will be the cornerstone investor and given its current commitment, it is likely that it will continue to support MC Mining in at least the short to medium term.

13.5 Disadvantages of Approving the Proposed Transaction

If the Proposed Transaction is approved, in our opinion, the potential disadvantages to Shareholders include those listed below:

13.5.1. Dilution of existing Shareholders' interests

The issue of new MC Mining shares as part of the Proposed Transaction is dilutive to current Shareholders. Existing Shareholders will go from holding 100% of the share capital of MC Mining to only 68.96% following the Proposed Transaction.



13.5.2. Restrictions on special resolutions

Following the Proposed Transaction, SGIH's ownership in the Company will rise to 31.04%, which would leave SGIH as the largest shareholder in the Company. This would allow SGIH to exert significant influence on the Company relative to other Shareholders, including the ability to block any special resolutions.

13.5.3. Presence of a large cornerstone investor may reduce the possibility of a takeover offer being received in the future

Following the Proposed Transaction, SGIH will have a significant shareholding which could deter potential acquirers from making a takeover offer for MC Mining in the future, thereby reducing the opportunity for Shareholders to receive a future premium for control.

14. Conclusion

We have considered the terms of the Proposed Transaction as outlined in the body of this report and have concluded that, in the absence of an alternative offer, the Proposed Transaction is not fair but reasonable to Shareholders.

In our opinion, the Proposed Transaction is not fair because the value of a MC Mining share prior to the Proposed Transaction on a control basis is greater than the value of a MC Mining share following the Proposed Transaction on a minority interest basis. However, we consider the Proposed Transaction to be reasonable because the advantages of the Proposed Transaction to Shareholders are greater than the disadvantages.

In particular, MC Mining will gain support from a cornerstone investor, SGIH and Mr. Senosi, as well as the diversified mining expertise, relationships, experience and synergies that they possess. Additionally, the Proposed Transaction will provide financing support for the development of the Makhado Project, which, based on the recently completed BFS is estimated to have a post-tax net present value of US\$268 million.

Further, we note that if the Proposed Transaction is not approved by Shareholders, MC Mining will be required to repay the ZAR40,000,000 of funds which have already been advanced pursuant to Tranche 2, and may need to raise capital to cover the shortfall required to progress the development of Makhado. This may result in a greater dilutionary effect on Shareholders than under the Proposed Transaction.



15. Sources of information

This report has been based on the following information:

- Draft Notice of Meeting on or about the date of this report;
- Audited financial statements of MC Mining for the years ended 30 June 2020 and 30 June 2021;
- Reviewed financial statements of MC Mining for the period ended 31 December 2021;
- Unaudited management accounts of MC Mining as at 31 March 2022;
- Quarterly cash flow report of MC Mining for the period ended 31 March 2022;
- Independent Technical Assessment and Valuation Report of MC Mining's mineral assets performed by SRK;
- MC Mining's financial models for Uitkomst and Makhado;
- Share registry information of MC Mining;
- BDO Explorer Quarterly Cash Update: December 2021;
- United States Geological Survey 2022;
- Energy and Metals Consensus Forecasts;
- Announcements made by MC Mining available through the ASX;
- Bloomberg;
- S&P Capital IQ;
- Information in the public domain; and
- Discussions with Directors and Management of MC Mining.

16. Independence

BDO Corporate Finance (WA) Pty Ltd is entitled to receive a fee of \$70,000 (excluding GST and reimbursement of out of pocket expenses). The fee is not contingent on the conclusion, content or future use of this Report. Except for this fee, BDO Corporate Finance (WA) Pty Ltd has not received and will not receive any pecuniary or other benefit whether direct or indirect in connection with the preparation of this report.

BDO Corporate Finance (WA) Pty Ltd has been indemnified by MC Mining in respect of any claim arising from BDO Corporate Finance (WA) Pty Ltd's reliance on information provided by the MC Mining, including the non-provision of material information, in relation to the preparation of this report.

Prior to accepting this engagement BDO Corporate Finance (WA) Pty Ltd has considered its independence with respect to MC Mining and SGIH and any of their respective associates with reference to ASIC Regulatory Guide 112 'Independence of Experts'. In BDO Corporate Finance (WA) Pty Ltd's opinion it is independent of MC Mining and SGIH and their respective associates.

A draft of this report was provided to MC Mining and its advisors for confirmation of the factual accuracy of its contents. No significant changes were made to this report as a result of this review.

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17. Qualifications

BDO Corporate Finance (WA) Pty Ltd has extensive experience in the provision of corporate finance advice, particularly in respect of takeovers, mergers and acquisitions.

BDO Corporate Finance (WA) Pty Ltd holds an Australian Financial Services Licence issued by the Australian Securities and Investments Commission for giving expert reports pursuant to the Listing rules of the ASX and the Corporations Act.

The persons specifically involved in preparing and reviewing this report were Sherif Andrawes and Adam Myers of BDO Corporate Finance (WA) Pty Ltd. They have significant experience in the preparation of independent expert reports, valuations and mergers and acquisitions advice across a wide range of industries in Australia and were supported by other BDO staff.

Sherif Andrawes is a Fellow of the Institute of Chartered Accountants in England & Wales and a Fellow of Chartered Accountants Australia & New Zealand. He has over 30 years' experience working in the audit and corporate finance fields with BDO and its predecessor firms in London and Perth. He has been responsible for over 400 public company independent expert's reports under the Corporations Act or ASX Listing Rules and is a CA BV Specialist. These experts' reports cover a wide range of industries in Australia with a focus on companies in the natural resources sector. Sherif Andrawes is the Corporate Finance Practice Group Leader of BDO in Western Australia, the Global Head of Natural Resources for BDO and a former Chairman of BDO in Western Australia.

Adam Myers is a member of Chartered Accountants Australia & New Zealand and the Joint Ore Reserves Committee. Adam's career spans over 20 years in the Audit and Assurance and Corporate Finance areas. Adam is a CA BV Specialist and has considerable experience in the preparation of independent expert reports and valuations in general for companies in a wide number of industry sectors.

18. Disclaimers and consents

This report has been prepared at the request of MC Mining for inclusion in the Notice of Meeting which will be sent to all MC Mining Shareholders. MC Mining engaged BDO Corporate Finance (WA) Pty Ltd to prepare an independent expert's report to consider the proposal to issue up to 71,697,242 new shares in MC Mining to SGIH, increasing the voting interest of SGIH to 31.04%.

BDO Corporate Finance (WA) Pty Ltd hereby consents to this report accompanying the above Notice of Meeting. Apart from such use, neither the whole nor any part of this report, nor any reference thereto may be included in or with, or attached to any document, circular resolution, statement or letter without the prior written consent of BDO Corporate Finance (WA) Pty Ltd.

BDO Corporate Finance (WA) Pty Ltd takes no responsibility for the contents of the Notice of Meeting other than this report.

We have no reason to believe that any of the information or explanations supplied to us are false or that material information has been withheld. It is not the role of BDO Corporate Finance (WA) Pty Ltd acting as an independent expert to perform any due diligence procedures on behalf of the Company. The Directors of the Company are responsible for conducting appropriate due diligence in relation to MC Mining. BDO Corporate Finance (WA) Pty Ltd provides no warranty as to the adequacy, effectiveness or completeness of the due diligence process.



The opinion of BDO Corporate Finance (WA) Pty Ltd is based on the market, economic and other conditions prevailing at the date of this report. Such conditions can change significantly over short periods of time.

The forecasts provided to BDO Corporate Finance (WA) Pty Ltd by MC Mining and its advisers are based upon assumptions about events and circumstances that have not yet occurred. Accordingly, BDO Corporate Finance (WA) Pty Ltd cannot provide any assurance that the forecasts will be representative of results that will actually be achieved. We note that the forecasts provided do not include estimates as to the effect of any future emissions trading scheme should it be introduced as it is unable to estimate the effects of such a scheme at this time.

With respect to taxation implications it is recommended that individual Shareholders obtain their own taxation advice, in respect of the Proposed Transaction, tailored to their own particular circumstances. Furthermore, the advice provided in this report does not constitute legal or taxation advice to the Shareholders of MC Mining, or any other party.

BDO Corporate Finance (WA) Pty Ltd has also considered and relied upon independent valuations for mineral assets held by MC Mining.

The valuer engaged for the mineral asset valuation, SRK, possess the appropriate qualifications and experience in the industry to make such assessments. The approaches adopted and assumptions made in arriving at their valuation is appropriate for this report. We have received consent from the valuer for the use of their valuation report in the preparation of this report and to append a copy of their report to this report.

The statements and opinions included in this report are given in good faith and in the belief that they are not false, misleading or incomplete.

The terms of this engagement are such that BDO Corporate Finance (WA) Pty Ltd is required to provide a supplementary report if we become aware of a significant change affecting the information in this report arising between the date of this report and prior to the date of the meeting or during the offer period.

Yours faithfully

BDO CORPORATE FINANCE (WA) PTY LTD

Sherif Andrawes Director

Adam Myers Director



Appendix 1 - Glossary of Terms

Reference	Definition
A\$, \$ or AUD	Australian dollar
The Act	The Corporations Act 2001 Cth
The Adjusted Model	BDO Adjusted Model
AIM	Alternative Investment Market of the London Stock Exchange
ANC	African National Congress
APES 225	Accounting Professional & Ethical Standards Board professional standard APES 225 'Valuation Services'
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
Baobab	Baobab Mining and Exploration Pty Ltd
BDO	BDO Corporate Finance (WA) Pty Ltd
The Company	MC Mining Limited
Corporations Act	The Corporations Act 2001 Cth
DCF	Discounted Future Cash Flows
Dendocept	Dendocept (Proprietary) Limited
DFS	Definitive Feasibility Study
EBIT	Earnings before interest and tax
EBITDA	Earnings before interest, tax, depreciation and amortisation
Ekusasa	Ekusasa Mining (Pty) Ltd
GSP	Greater Soutpansberg Project
IDC	Industrial Development Corporation of South Africa Ltd
IS 214	Information Sheet 214: Mining and Resources: Forward-looking Statements



Reference	Definition
JORC Code	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition)
JSE	Johannesburg Stock Exchange
Kms	Kilometres
Km ²	Square kilometres
LOM	Life of mine
M&G	M&G Investment Management Ltd
Makhado	Makhado hard coking coal project
MC Mining	MC Mining Limited
The Model	Detailed cash flow model for Uitkomst prepared by the management of MC Mining with the assistance of advisors
MPC	SARB Monetary Policy Committee
Mr. Senosi	Mr. Ontiretse Matthews Senosi
Mt	Million tonnes
Mtpa	Million tonnes per annum
NAV	Net Asset Value
The Proposed Transaction	The proposal to issue up to 71,697,242 new shares in MC Mining to SGIH, increasing the voting interest of SGIH to 31.04%
QMP	Quoted market price
RBA	Reserve Bank of Australia
Regulations	Corporations Act Regulations 2001 (Cth)
Our Report	This Independent Expert's Report prepared by BDO
RG 74	Acquisitions approved by Members (December 2011)
RG 111	Content of expert reports (March 2011)
RG 112	Independence of experts (March 2011)



Reference	Definition
RG 170	Prospective Financial Information (March 2011)
ROM	Run of mine
SBS Mining	SBS Mining (Pty) Ltd
Section 411	Section 411 of the Corporations Act
Section 611	Section 611 of the Corporations Act
Shareholders	Shareholders of MC Mining not associated with SGIH
SRK	SRK Consulting (Australasia) Pty Ltd
Sum-of-Parts	A combination of different methodologies used together to determine an overall value where separate assets and liabilities are valued using different methodologies
Technical Specialist Report	Valuation of the mineral assets of MC Mining issued by SRK
Tranche 1	The issue of 38,363,909 new ordinary shares in MC Mining to SGIH at the Issue Price to raise ZAR46,036,691
Tranche 2	The issue of 33,333,333 ordinary shares in MC Mining at the Issue Price, for the consideration of ZAR40,000,000
Uitkomst	Uitkomst Colliery
USD or US\$	United States dollar
Valmin Code	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (2015 Edition)
Valuation Engagement	An Engagement or Assignment to perform a Valuation and provide a Valuation Report where the Valuer is free to employ the Valuation Approaches, Valuation Methods, and Valuation Procedures that a reasonable and informed third party would perform taking into consideration all the specific facts and circumstances of the Engagement or Assignment available to the Valuer at that time.
Vele	Vele Colliery
VWAP	Volume Weighted Average Price
WA	Western Australia
WACC	Weighted Average Cost of Capital



Reference	Definition
ZAR	South African Rand

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Appendix 2 - Valuation Methodologies

Methodologies commonly used for valuing assets and businesses are as follows:

1 Net asset value ('NAV')

Asset based methods estimate the market value of an entity's securities based on the realisable value of its identifiable net assets. Asset based methods include:

- Orderly realisation of assets method
- Liquidation of assets method
- Net assets on a going concern method

The orderly realisation of assets method estimates fair market value by determining the amount that would be distributed to entity holders, after payment of all liabilities including realisation costs and taxation charges that arise, assuming the entity is wound up in an orderly manner.

The liquidation method is similar to the orderly realisation of assets method except the liquidation method assumes the assets are sold in a shorter time frame. Since wind up or liquidation of the entity may not be contemplated, these methods in their strictest form may not be appropriate. The net assets on a going concern method estimates the market values of the net assets of an entity but does not take into account any realisation costs.

Net assets on a going concern basis are usually appropriate where the majority of assets consist of cash, passive investments or projects with a limited life. All assets and liabilities of the entity are valued at market value under this alternative and this combined market value forms the basis for the entity's valuation.

Often the FME and DCF methodologies are used in valuing assets forming part of the overall Net assets on a going concern basis. This is particularly so for exploration and mining companies where investments are in finite life producing assets or prospective exploration areas.

These asset based methods ignore the possibility that the entity's value could exceed the realisable value of its assets as they do not recognise the value of intangible assets such as management, intellectual property and goodwill. Asset based methods are appropriate when an entity is not making an adequate return on its assets, a significant proportion of the entity's assets are liquid or for asset holding companies.

2 Quoted Market Price Basis ('QMP')

A valuation approach that can be used in conjunction with (or as a replacement for) other valuation methods is the quoted market price of listed securities. Where there is a ready market for securities such as the ASX, through which shares are traded, recent prices at which shares are bought and sold can be taken as the market value per share. Such market value includes all factors and influences that impact upon the ASX. The use of ASX pricing is more relevant where a security displays regular high volume trading, creating a liquid and active market in that security.

3 Capitalisation of future maintainable earnings ('FME')

This method places a value on the business by estimating the likely FME, capitalised at an appropriate rate which reflects business outlook, business risk, investor expectations, future growth prospects and other entity specific factors. This approach relies on the availability and analysis of comparable market data.



The FME approach is the most commonly applied valuation technique and is particularly applicable to profitable businesses with relatively steady growth histories and forecasts, regular capital expenditure requirements and non-finite lives.

The FME used in the valuation can be based on net profit after tax or alternatives to this such as earnings before interest and tax ('EBIT') or earnings before interest, tax, depreciation and amortisation ('EBITDA'). The capitalisation rate or 'earnings multiple' is adjusted to reflect which base is being used for FME.

4 Discounted future cash flows ('DCF')

The DCF methodology is based on the generally accepted theory that the value of an asset or business depends on its future net cash flows, discounted to their present value at an appropriate discount rate (often called the weighted average cost of capital). This discount rate represents an opportunity cost of capital reflecting the expected rate of return which investors can obtain from investments having equivalent risks.

Considerable judgement is required to estimate the future cash flows which must be able to be reliably estimated for a sufficiently long period to make this valuation methodology appropriate.

A terminal value for the asset or business is calculated at the end of the future cash flow period and this is also discounted to its present value using the appropriate discount rate.

DCF valuations are particularly applicable to businesses with limited lives, experiencing growth, that are in a start-up phase, or experience irregular cash flows.

5 Market Based Assessment

The market based approach seeks to arrive at a value for a business by reference to comparable transactions involving the sale of similar businesses. This is based on the premise that companies with similar characteristics, such as operating in similar industries, command similar values. In performing this analysis it is important to acknowledge the differences between the comparable companies being analysed and the company that is being valued and then to reflect these differences in the valuation.

The resource multiple is a market based approach which seeks to arrive at a value for a company by reference to its total reported resources and to the enterprise value per tonne/lb of the reported resources of comparable listed companies. The resource multiple represents the value placed on the resources of comparable companies by a liquid market.



Appendix 3 - Discount Rate

Determining the correct discount rate, or cost of capital, for a business requires the identification and consideration of a number of factors that affect the returns and risks of a business, as well as the application of widely accepted methodologies for determining the returns of a business.

The discount rate applied to the forecast cash flows from a business represents the financial return that will be required before an investor would be prepared to acquire (or invest in) the business.

The capital asset pricing model ('**CAPM**') is commonly used in determining the market rates of return for equity type investments and project evaluations. In determining a business' WACC, the CAPM results are combined with the cost of debt funding. WACC represents the return required on the business, whilst CAPM provides the required return on an equity investment.

In our assessment of the appropriate discount rate for MC Mining, we consider the most appropriate discount rate to be the WACC. This is because the Adjusted Models consider cash flows to the firm.

Cost of Equity and Capital Asset Pricing Model

CAPM is based on the theory that a rational investor would price an investment so that the expected return is equal to the risk-free rate of return plus an appropriate premium for risk. CAPM assumes that there is a positive relationship between risk and return, that is, investors are risk averse and demand a higher return for accepting a higher level of risk.

САРМ	
K _e	$= R_f + \beta \times (R_m - R_f)$
Where:	
K _e	= expected equity investment return or cost of equity in nominal terms
R _f	= risk free rate of return
R _m	= expected market return
R _m - R _f	= market risk premium
в	= equity beta

CAPM calculates the cost of equity and is calculated as follows:

The individual components of CAPM are discussed below.

Risk Free Rate (R_f)

The risk free rate is typically approximated by reference to a forecast long term government bond rate with a maturity approximately equivalent to the timeframe over which the returns from the assets are expected to be received.

In determining an appropriate ten-year bond rate to use as a proxy for the risk free rate we have given consideration to the ten-year South African Government Bond rate and projections of the ten-year South African Government Bond rate based on forecasts. Based on this analysis, we have used a risk free rate between 9.0% and 10.0% in our analysis.



Market Risk Premium (R_m - R_f)

The market risk premium represents the additional return that investors expect from an investment in a well-diversified portfolio of assets. It is common to use a historical risk premium, as expectations are not observable in practice. In order to determine an appropriate market risk premium in South Africa, we have analysed historical data. Our sample of data included the daily historical market risk premiums in South Africa over the last ten years.

The market risk premium is derived on the basis of capital weighted average return of all members of the FTSE/JSE Index minus the risk free rate, which is dependent on the 10-year South African Government Bond rate.



Source: Bloomberg and BDO analysis

The graph above illustrates the frequency of observations of the South African market risk premium over the past ten years. The graph indicates that a high proportion of the sample data for South African market risk premiums lie around 4%. For the purpose of our Report, we have adopted a market risk premium of 4%.

Equity Beta

Beta is a measure of the expected correlation of an investment's return over and above the risk free rate, relative to the return over and above the risk free rate of the market; a beta greater than one implies that an investment's return will outperform the market's average return in a bullish market and underperform the market's average return in a bearish market. On the other hand, a beta less than one implies that the business will underperform the market's average return in a bullish market and outperform the market's average return in a bearish market.

Equity betas are normally estimated using either a historical beta or an adjusted beta. The historical beta is obtained from the linear regression of a stock's historical data and is based on the observed relationship between the security's return and the returns on an index. An adjusted beta is calculated based on the assumption that the relative risk of the past will continue into the future, and is hence derived from historical data. It is then modified by the assumption that a stock will move towards the market over time, taking into consideration the industry risk factors, which make the operating risk of the company greater or less risky than comparable listed companies.

It is important to note that it is not possible to compare the equity betas of different companies without having regard to their gearing levels. It is generally accepted that a more valid analysis of betas can be achieved by 'ungearing' the equity beta to derive an asset beta (β_a) by applying the following formula:



= B / (1+(D/E x (1-t))
= ungeared or asset beta
= equity beta
= value of debt
= value of equity
= corporate tax rate

Selected Beta (B)

In order to assess the appropriate equity beta for MC Mining, we have considered the betas of two separate peer groups:

- ASX-listed coal mining companies, with a preference towards coal miners with operations in South Africa; and
- JSE-listed coal or diversified mining companies with operations based in South Africa.

For the ASX and JSE-listed peer groups, we have regressed the returns of the selected companies against the S&P/ASX300 Energy Index and the FTSE/JSE Africa Mining Index, respectively. These indices were selected over a broader market index, as we consider them to better capture the systematic risks associated with investing in energy companies. They also resulted in more meaningful coefficients of determination (R^2 values) compared to a broader market index, when performing the regression analysis. The R^2 value represents the proportion of variance of a company's share price that is explained by the variance of the index it is regressed against. A higher R^2 implies that the index explains a greater proportion of the variance of the share price, and therefore results in a more meaningful beta.

The betas below have been assessed over a two-year period to 1 April 2022, using weekly returns regressed against the respective index's returns. We have used 1 April 2022 as our assessed date as it captures the most recently available data of MC Mining and the peer group up to the end of the March 2022 quarter. We have based our analysis over two years of weekly data as we found this timeframe for analysis to produce the highest R² values over the two data sets considered. The list of comparable companies we selected for each peer group are set out below:

ASX-listed coal companies: Beta calculations based on 2-year weekly returns					
Company	Market Capitalisation 1-Apr-22 (A\$m)	Geared Beta (B)	Gross Debt/Equity (%)	Ungeared Beta (βа)	R²
MC Mining Limited (ASX:MCM)	17.76	0.44	21%	0.38	0.00
New Hope Corp Limited (ASX:NCR)	7.69	0.88	14%	0.80	0.31
Stanmore Resources Limited (ASX:SMR)	1,541.38	0.41	43%	0.31	0.00
Terracom Limited (ASX:TER)	362.21	0.53	0%	0.53	0.01
Walkabout Resources Limited (ASX:WKT)	108.55	0.75	0%	0.75	0.05
White Energy Co Limited (ASX:WEC)	12.39	0.67	0%	0.67	0.02
Mean	406.44	0.65	11%	0.61	0.08
Median	108.55	0.67	0%	0.67	0.02

ASX-listed coal mining companies regressed against the S&P/ASX300 Energy Index

Source: Bloomberg and BDO analysis



JSE-listed coal mining companies: Beta calculations based on 2-year weekly returns					
Company	Market Capitalisation 1-Apr-22 (A\$m)	Geared Beta (B)	Gross Debt/Equity (%)	Ungeared Beta (ßa)	R²
African Rainbow Minerals Ltd (JSE:ARI)	5,197.83	0.79	0%	0.79	0.32
Exxaro Resources LTD (JSE:EXX)	5,058.56	0.75	0%	0.75	0.29
Renergen Limited (JSE:REN)	503.27	0.37	1%	0.37	0.00
Salungano Group Limited (JSE:SLG)	59.78	0.74	117%	0.40	0.11
Thungela Resources Limited (JSE:TGA)	2,376.55	0.32	1%	0.32	0.00
Mean	2,639.20	0.59	24%	0.53	0.14
Median	2,376.55	0.74	1%	0.40	0.11

JSE-listed coal mining companies regressed against the FTSE/JSE Africa Mining Index

Source: Bloomberg and BDO analysis

Descriptions of the comparable companies are provided at the end of this appendix.

Based on the results of the regressions above, we consider the peer group of ASX-listed mining companies to be the most suitable for assessing MC Mining's beta. This is because the ASX-listed peer group contains coal mining companies with South African exposure, which we believe more suitably captures the market risk associated with MC Mining's ASX listing, combined with systematic risk associated with South African operations.

Consequently, whilst we have utilised both data sets in our assessment of an appropriate ungeared beta for MC Mining, we have more specifically focussed on the results from the ASX-listed peer group. Additionally, whilst not included in our peer group, we have also considered the actual ungeared beta of MC Mining in our assessment.

In selecting an appropriate beta for MC Mining, we have considered the similarities and differences between MC Mining and its set of comparable companies as set out above. For the ASX-listed peer group, the comparable similarities and differences noted are:

- Three of the five selected comparable companies have coal operations located in South Africa or the broader African region. As South Africa has experienced high levels of unemployment, changes in government, and civil unrest, we consider its country risk to be an important factor in identifying the peer group;
- Although some of the comparable companies selected mine commodities in addition to coal, we consider there to be sufficient similarities in terms of the risks faced by these miners operating in South Africa. We note however, that coal mining companies in particular, face additional risks in terms of obtaining funding compared to other general mining companies, given their stigma as contributors to global warming; and
- Although not all companies in the list have similar metrics across each of the assessed factors, we still consider them to be comparable as they have sufficient similarities on an overall basis.

In selecting an appropriate ungeared beta for MC Mining, we have considered the ungeared betas of the companies listed above along with the various factors discussed. As set out in the table above, the ungeared betas for the ASX-listed comparable companies range from 0.31 to 0.80 with a mean and median of 0.61 and 0.67, respectively.



From our analysis, we consider an appropriate ungeared beta to be in the range of 0.65 to 0.75 for MC Mining.

Gearing (Pre-Transaction)

Before a discount rate can be determined, the proportion of funding provided by debt and equity (i.e. gearing ratio) over the forecast period must be determined.

We have assessed MC Mining's debt to equity ratio on a pre-transaction basis, considering the assumed financing outlined in Section 10.1 of our Report. In terms of debt, we assume the Company will draw down on its existing debt facility with the IDC for up to ZAR245 million (US\$16.7 million), as well as additional debt funding of ZAR193 million (US\$13.2 million). We also account for the equity raised from the notional capital raise. Our calculations are set out below:

Debt to equity ratio	US\$
Debt	
Borrowings as at 31 March 2022	22,105,000
IDC Debt Facility	16,709,000
Assumed additional funding	13,162,600
Total debt	51,976,600
Equity	
Total shareholder equity as at 31 March 2022	99,698,000
Add: equity raised under notional capital raising	18,070,000
Total equity	117,768,000
Debt to equity ratio	44%

Source: Management accounts as at 31 March 2022, BDO analysis. Assumed ZAR/USD exchange rate of 0.0682.

We have therefore assessed the debt to equity ratio, on a pre-transaction basis to be 44%. We have regeared MC Mining's ungeared beta on a pre-transaction basis to be between 0.86 and 0.99.

Gearing (Post-Transaction)

On a post-transaction basis, we have adjusted MC Mining's debt and equity components as at 31 March 2022 for the funding to be received under Tranche 2 of the Proposed Transaction. In terms of equity, we account for the receipt of ZAR40 million (US\$2.73 million) from SGIH, and have assumed that the additional funding will be reduced by this amount. Other funding as at the valuation date of 1 April 2022 remains the same as its pre-transaction values. Our calculations are set out below:

Debt to equity ratio	US\$
Debt	
Borrowings as at 31 March 2022	22,105,000
IDC Debt Facility	16,709,000
Assumed additional funding	10,434,600
Total debt	49,248,600
Equity	
Total shareholder equity as at 31 March 2022	99,698,000
Add: equity raised under notional capital raising	18,070,000
Add: equity raised under Proposed Transaction	2,728,000
Total equity	120,496,000
Debt to equity ratio	41%



Source: Management accounts as at 31 March 2022, BDO analysis. Assumed ZAR/USD exchange rate of 0.0682.

We have therefore assessed the debt to equity ratio, on a post-transaction basis to be 41%. We have regeared MC Mining's ungeared beta to be between 0.84 and 0.97.

Cost of Equity (Pre-Transaction)

We have assessed the cost of equity of the MC Mining on a pre-transaction basis to be in the range of 12.44% to 13.96%.

Input (Dro Transaction)	Value adopted		
input (Pre-Transaction)	Low	High	
Risk free rate of return	9.00%	10.00%	
Equity market risk premium	4.00%	4.00%	
Beta (regeared)	0.86	0.99	
Cost of Equity	12.44%	13.96%	

Source: Bloomberg and BDO analysis

Cost of Equity (Post-Transaction)

We have assessed the cost of equity of the MC Mining post-transaction to be in the range of 12.38% to 13.90%.

Input (Post Transaction)	Value adopted		
input (Post-Iransaction)	Low	High	
Risk free rate of return	9.00%	10.00%	
Equity market risk premium	4.00%	4.00%	
Beta (regeared)	0.84	0.97	
Cost of Equity	12.38%	13.90%	

Source: Bloomberg and BDO analysis

Tax rate

We have adopted an effective tax rate of 27% based on South Africa's corporate tax rate.

WACC (Post-Tax)

The WACC represents the market return required on the total assets of the undertaking by debt and equity providers. WACC is used to assess the appropriate commercial rate of return on the capital invested in the business, acknowledging that normally funds invested consist of a mixture of debt and equity funds. Accordingly, the discount rate should reflect the proportionate levels of debt and equity relative to the level of security and risk attributable to the investment.

In calculating WACC there are a number of different formulae which are based on the definition of cash flows (i.e. pre-tax or post-tax), the treatment of the tax benefit arising through the deductibility of interest expenses (included in either the cash flow or discount rate), and the manner and extent to which they adjust for the effects of dividend imputation. The commonly used WACC formula is the post-tax WACC, without adjustment for dividend imputation, which is detailed in the below table:

WACC	
WACC	$= \underline{E} \text{Ke} + \underline{D} \text{Kd} (1-t)$ $E+D \qquad D+E$
Where:	


WACC	
Ке	= expected return or discount rate on equity
Kd	= interest rate on debt (pre-tax)
Т	= corporate tax rate
E	= market value of equity
D	= market value of debt
(1- t)	= tax adjustment

Cost of Debt

We have assessed the relevant cost of debt for MC Mining based on the current funding arrangements as provided by Management. For support, we have also considered the cost of debt currently observed in the market for comparable companies to conclude our assessed rate is reasonable. Based on our analysis, we consider an appropriate cost of debt of 12.75%, being the South African prime overdraft rate + 5% as at 1 April 2022, which is payable on future drawdowns on the IDC facility.

WACC (Pre-Transaction)

Using the inputs discussed, results in a pre-transaction, post-tax WACC in the range of 11.48% to 12.54% as set out in the table below.

WACC (Pre-Transaction)	Value Adopted	
	Low	High
Cost of Equity (Ke)	12.44%	13 .96 %
Cost of Debt (Kd) (1-t)	12.75%	12.75%
Proportion of Equity (E/(E+D)	69.44%	69.44%
Proportion of Debt (D/(E+D)	30.56%	30.56%
WACC (rounded)	11.48%	12.54%

Source: Bloomberg, BDO analysis

WACC (Post-Transaction)

Using the inputs discussed, results in a post-transaction, post-tax WACC in the range of 11.49% to 12.56% as set out in the table below.

WACC (Pre-Transaction) Value Adopted		opted
	Low	High
Cost of Equity (Ke)	12.38%	13.90%
Cost of Debt (Kd) (1-t)	12.75%	12.75%
Proportion of Equity (E/(E+D)	70.92%	70.92%
Proportion of Debt (D/(E+D)	29.08%	29.08%
WACC (rounded)	11.49%	12.56%

Source: Bloomberg, BDO analysis

Based on an approximate rounded midpoint of this range, we consider a post-tax WACC of 12.00% to be appropriate for our use both pre and post-transaction.



Set out below are the company descriptions of the companies we considered in our comparable company analysis.

Descriptions for ASX-listed coal mining companies peer group

Company Name	Business Description
New Hope Corporation Limited	New Hope Corporation Limited explores, develops, produces, and processes coal, and oil and gas properties. It operates through three segments: Coal Mining in Queensland, Coal Mining in New South Wales, and Other. The company holds interests in two open-cut coal mines that produce thermal coal, which include the New Acland project located in north Oakey, Queensland; and the Bengalla mine situated in the Hunter Valley region of New South Wales.
Stanmore Resources Limited	Stanmore Resources Limited explores for, produces, and sells metallurgical and thermal coal in Australia. The company holds interests in the Isaac Plains, Isaac Downs, Belview, The Range, Lilyvale, Mackenzie, and Clifford projects in the Bowen and Surat basins of Queensland, as well as the Millennium and Mavis Downs mine located near Moranbah, Queensland.
TerraCom Limited	TerraCom Limited engages in the exploration, extraction, and production of coal in Australia and South Africa. It explores for hard and soft coking, thermal, and PCI coal. It holds interests in the Kangala Colliery property; the New Clydesdale Colliery project; the Berenice project; Ubuntu Colliery; North Block Complex Colliery; Cygnus project; and Eloff project located in South Africa.
Walkabout Resources Limited	Walkabout Resources Limited explores for and develops resource and energy assets in Tanzania, Namibia, Scotland, Malawi, and Northern Ireland. The company explores for graphite, coal, copper, gold, and lithium deposits, as well as base metals. Its flagship project is the Lindi Jumbo graphite project situated in south-eastern Tanzania.
White Energy Company Limited	White Energy Company Limited engages in coal technology, coal mining, and exploration businesses in Australia, Indonesia, China, Singapore, South Africa, Mauritius, the United States, and the United Kingdom. It holds license for the Binderless Coal Briquetting technology, which processes poor quality coal into a higher quality product; and EL6566 tenements near Coober Pedy, South Australia.

Source: S&P Capital IQ and BDO analysis

Descriptions for JSE-listed mining companies peer group

Company name	Company description
African Rainbow Minerals Limited	African Rainbow Minerals Limited, through its subsidiaries, operates as a diversified mining and minerals company in South Africa and Malaysia. It explores for platinum group metals, nickel, copper, coal, iron ore, manganese ore, chrome ore, and ferro manganese, as well as gold. The company was founded in 1933 and is based in Sandton, South Africa.
Exxaro Resources Limited	Exxaro Resources Limited engages in coal, iron ore investment, pigment manufacturing, and renewable energy businesses in South Africa, Europe, Australia, and Asia. It produces thermal coal, metallurgical coal, and semi-soft coking coal products primarily in the Waterberg and Mpumalanga regions; offers gas-atomised ferrosilicon for use in separation plants, as well as iron ore; and operates two wind farms.
Renergen Limited	Renergen Limited, an investment holding company, engages in the alternative and renewable energy businesses in South Africa and sub-Saharan Africa. It explores for, develops, and sells compressed natural gas, as well as liquefied helium and natural gas. The company was incorporated in 2014 and is based in Johannesburg, South Africa.



Company name	Company description		
Salungano Group Limited	Salungano Group Limited, engages in mining, processing, selling, and distributing thermal coal primarily in South Africa. The company is involved in the exploration, beneficiation, and mining of bituminous coal; and buys and sells coal to inland customers. The company was formerly known as Wescoal Holdings Limited and changed its name to Salungano Group Limited in April 2022. Salungano Group Limited is a subsidiary of K2016316243 (SA) Proprietary Limited.		
Thungela Resources Limited	Thungela Resources Limited engages in the mining and production of thermal coal in South Africa. The company owns interests in and produces its thermal coal from seven mining operations in the Mpumalanga province of South Africa.		

Source: S&P Capital IQ and BDO analysis



Appendix 4 - Control Premium

The concept of a premium for control reflects the additional value that is attached to a controlling interest. We have reviewed control premiums on completed transactions, paid by acquirers of coal mining companies, general energy companies and all ASX-listed companies. In assessing the appropriate sample of transactions from which to determine an appropriate control premium, we have excluded transactions where an acquirer obtained a controlling interest (20% and above) at a discount (i.e. less than a 0% premium). We have summarised our findings below.

C I		
Coal	mining	companies
cout		companies

Year	Number of Transactions	Average Deal Value (AU\$m)	Average Control Premium (%)
2022	-	-	-
2021	-	-	-
2020	2	85.36	29.39
2019	2	8.89	14.30
2018	1	226.41	73.41
2017	1	147.78	97.80
2016	2	3.17	79.12
2015	5	34.55	30.39
2014	2	34.52	65.27
2013	6	32.37	28.14
2012	4	666.43	32.92

Source: Bloomberg, BDO Analysis

General energy companies

Year	Number of Transactions	Average Deal Value (AU\$m)	Average Control Premium (%)
2022	1	1033.25	5.80
2021	2	7551.60	17.92
2020	6	279.58	50.68
2019	3	10.36	19.61
2018	5	286.44	33.21
2017	3	53.33	99.28
2016	3	115.35	59.85
2015	9	68.70	23.37
2014	8	371.16	63.39
2013	10	43.52	32.61
2012	7	444.70	33.98

Source: Bloomberg, BDO Analysis



All ASX listed companies

Year	Number of Transactions	Average Deal Value (AU\$m)	Average Control Premium (%)
2022	16	6,761.17	16.22
2021	37	1,281.91	48.22
2020	27	419.16	48.36
2019	46	2,961.72	36.74
2018	47	1,054.73	40.74
2017	30	940.19	42.05
2016	42	718.52	49.58
2015	34	828.15	34.10
2014	46	507.34	39.97
2013	41	128.21	50.99
2012	51	481.33	52.19
Courses Discust	and DDO Analysis		

Source: Bloomberg, BDO Analysis

The mean and median of the entire data sets comprising control transactions since 2012 for coal mining companies, general energy companies and all ASX listed companies, respectively, are set out below.

	Coal	Mining	Genera	l Energy	All ASX liste	ed companies
Entire Data Set Metrics	Deal Value (AU\$m)	Control Premium (%)	Deal Value (AU\$m)	Control Premium (%)	Deal Value (AU\$m)	Control Premium (%)
Mean	146.83	39.99	479.92	40.87	1,157.22	43.28
Median	53.85	33.59	51.10	33.59	115.57	33.41

In arriving at an appropriate control premium to apply we note that observed control premiums can vary due to the:

- Nature and magnitude of non-operating assets;
- Nature and magnitude of discretionary expenses;
- Perceived quality of existing management;
- Nature and magnitude of business opportunities not currently being exploited;
- Ability to integrate the acquiree into the acquirer's business;
- Level of pre-announcement speculation of the transaction; and
- Level of liquidity in the trade of the acquiree's securities.

When performing our control premium analysis, we considered completed transactions where the acquirer held a controlling interest, defined at 20% or above, pre transaction or proceeded to hold a controlling interest post transaction in the target company.

The table above indicates that the long-term average control premium paid by acquires of coal mining companies, general energy companies and all ASX listed companies is approximately 39.99%, 40.87% and 43.28% respectively. However, in assessing the transactions included in the table, we noted transactions that appear to be extreme outliers. These outliers included one coal mining company transaction, three general energy company transactions and 29 ASX listed company transactions, for which the announced premium was in excess of 100%. We consider these transactions as outliers, as it is likely that the acquirer in these transactions would be paying for special value and/or synergies in excess of the standard



premium for control. Whereas, the purpose of this analysis is to assess the premium that is likely to be paid for control, not specific strategic value to the acquirer.

In a population where there are extreme outliers, the median often represents a superior measure of central tendency compared to the mean. We note that the median announced control premium over the assessed period was approximately 33.59% for coal mining companies, 33.59% for general energy companies and 33.41% for all ASX listed companies.

We consider an appropriate control premium for MC Mining to be on the lower end of historical averages, given the market capitalisation of the Company, and the uncertainty around the ability of MC Mining to continue as a going concern as noted by the Company's auditor for the years ended 30 June 2020 and 30 June 2021, and the half-year ended 31 December 2021.

Based on the above analysis, we consider an appropriate premium for control to be between 25% and 35%.

The minority discount is calculated from the control premium identified, using the formula [1 - (1/(1+Control Premium))]. Therefore, the minority discount (rounded to the nearest percentile) is in the range from 20% to 26%.



Appendix 5 - Independent Valuation Report

Final

Independent Specialist Report on the Mineral Assets of MC Mining Limited

Uitkomst Colliery, Kwazulu Natal, South Africa Vele Colliery, Limpopo, South Africa Makhado Project, Limpopo, South Africa Greater Soutpansberg Project, Limpopo, South Africa

Prepared for BDO Corporate Finance (WA) Pty Ltd



SRK Consulting (Australasia) Pty Ltd • BDO019 • June 2022



Final

Independent Specialist Report on the Mineral Assets of MC Mining Limited

Kwazulu Natal and Limpopo Provinces, South Africa

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File Name: BDO019_MC Mining - ITVR_Rev3.docx

Suggested Citation:

SRK Consulting (Australasia) Pty Ltd. 2022. Independent Specialist Report on the Mineral Assets of MC Mining Limited. Final. Prepared for Prepared for BDO Corporate Finance (WA) Pty Ltd: Perth, WA. Project number: BDO019. Issued June 2022.

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SRK Consulting (Australasia) Pty Ltd = BDO019 = June 2022



Acknowledgments

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Disclaimer: The opinions expressed in this Report have been based on the information supplied to SRK Consulting (Australasia) Pty Ltd (SRK) by MC Mining Limited. The opinions in this Report are provided in response to a specific request from MC Mining Limited to do so. SRK has exercised all due care in reviewing the supplied information. While SRK has compared key supplied data with expected values, the accuracy of the results and conclusions from the review are entirely reliant on the accuracy and completeness of the supplied data. SRK does not accept responsibility for any errors or omissions in the supplied information and does not accept any consequential liability arising from commercial decisions or actions resulting from them. Opinions presented in this Report apply to the site conditions and features as they existed at the time of SRK's investigations, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this Report, about which SRK had no prior knowledge nor had the opportunity to evaluate.

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Appendices

Appendix A Comparable Market Transactions

Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

°C	degrees celsius
%	percentage
A\$	Australian dollar/s
A&C	A&C Mining Investments Pty Ltd
AD or ADB	Air dried basis
AIG	Australian Institute of Geoscientists
AMSL	above mean sea level
ash	ash content
ASIC	Australian Securities and Investment Commission
ASX	Australian Securities Exchange
AusIMM	Australasian Institute of Mining and Metallurgy
BCM	bank cubic metres
BDO	BDO Corporate Finance (WA) Pty Ltd
BEE	Black Economic Empowerment
BFS	Bankable Feasibility Study
Blue Falcon	Blue Falcon 232 Trading (Pty) Ltd
Brandywine	Brandywine Valley Investments (Pty) Ltd
BTU/lb	International Steam Table British thermal unit per pound (BTU(IT)/lb)
CoAL	Coal of Africa Ltd
COPs	Codes of Practice
Cove	Cove Mining Pty Ltd
SOPs	Standard Operating Procedures
CPP	coal processing plant
CPR	Competent Persons Report
CV	calorific value
DAF	dry, ash free
DAFF	Department of Agriculture, Forestry and Fisheries
DCF	discounted cashflow
ddpm	Dial divisions per minute measured by the Gieseler plastometer
DFFE	Department of Forestry, Fisheries and the Environment (previously known as DAFF)
DMC	dense medium cyclone
DMR	South African Department of Mineral Resources
DMRE	Department of Mineral Resources and Energy
DMS	dense media separation
dmt	dry metric tonnes

DWS	Department of Water and Sanitation
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
EMC	Environmental Management Committee
EMPR	Environmental Management Programme Report
EMS	Environmental Management System
ESG	Environmental, Social and Governance
Eskom	Eskom Holdings SOC Ltd (the state-owned electricity utility)
Exploration Result	Data and information generated by mineral exploration programs that might be of use to investors but which do not form part of a declaration of Mineral Resources or Ore Reserves.
Exploration Target	A statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource
FC	Fixed Carbon
FEL	front end loaders
FS	A Feasibility Study is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a Pre-feasibility Study.
GAR	Gross as received
gcm ³	grams per cubic centimetre
Gross in-situ	Gross in-situ Coal Resource before geological lose
GSP	Greater Soutpansberg Project
GTIS	Gross Tonnes In Situ
ha	hectare/s
IER	Independent Expert Report
Ikwezi	Ikwezi Mining Ltd
IM	Inherent Moisture
Indicated Resource	that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
Inferred Resource	that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
Iscor	The South African Iron and Steel Industrial Corporation

ISR or Report	Independent Specialist Report
IVSC	International Valuation Standards Committee
IWUL	Integrated Water Use Licence
IWWMP	Integrated Water and Waste Management Plan
JORC	2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
JORC Code	2012 edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves
JSE	Johannesburg Securities Exchange
kcal/kg	kilocalorie per kilogram
kg	kilogram/s
km	kilometre/s
km²	square kilometre/s
koz	thousand ounces
kW	kiloWatt
ktpm	kilotonnes per minute
kWh	kiloWatt hour
I	litre/s
LEDET	Limpopo Department Economic Development Environment and Tourism
Limpopo Coal	Limpopo Coal Company (Pty) Ltd
LOM	life-of-mine
М	Million
m	metre/s
Makhado	Makhado Project
MCM	MC Mining Limited
Mbcm	Million bulk cubic metres
Measured Resource	that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.
MEE	Multiples of Exploration Expenditure
Mineral Resource	a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
MJ	Megajoules
MJ/kg	Megajoules per kilogram
mm	millimetres

MPRDA	Minerals and Petroleum Resources Development Act (Act No. 28 of 2002)
Mt	Million tonnes
MTIS	Mineable Tonnes <i>In Situ</i>
Mtpa	Million tonnes per annum
NAR	Net as received
NEM:WA	National Environmental Management: Waste Act (Act No. 59 of 2008)
NEMA	National Environmental Management Act (Act No. 107 of 1998)
NSR	net smelter return
NST	Northern Star Limited
NWA	National Water Act (Act No. 36 of 1998)
Ore Reserve	the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.
PCI	Pulverised Coal Injection
PFS	A Preliminary Feasibility Study (Pre-feasibility Study) is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Competent Person, acting reasonably, to determine if all or part of the Mineral Resources may be converted to an Ore Reserve at the time of reporting. A Prefeasibility Study is at a lower confidence level than a Feasibility Study.
PM ₁₀	Particulate Matter (PM). PM_{10} describes inhalable particles, with diameters that are generally 10 micrometers and smaller
Probable Reserve	the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.
Proved Reserve	the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.
RBCT	Richards Bay Coal Terminal
RC	Reverse circulation
RG	Regulatory Guide
RICS	Royal Institution of Chartered Surveyors
ROM	run-of-mine
RPEEE	reasonable prospects for eventual economic extraction
SAHRA	South African Heritage Resources Authority
SAMREC Code	South African Code for Reporting of Mineral Resources and Mineral Reserves as prepared by the South African Resource Committee under the auspices of the South African Institute of Mining and Metallurgy
SLP	Social Labour Plan
SOP	Standard Operating Procedure

SRK	SRK Consulting (Australasia) Pty Ltd
TEPs	technical and economic parameters
t	tonnes
Terrecom	Terrecom Resources Ltd
tph	tonnes per hour
TS	Total Sulfur content
Uitkomst	Uitkomst Colliery
UCPL	Uitkomst Colliery (Pty) Ltd
US\$	United States dollar/s
VALMIN	The 2015 edition of the Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (or the VALMIN Code)
Vele	Vele Colliery
VM	volatile matter content
VRM	Valuation & Resource Management
WA	Western Australia, Australia
WML	Waste Management Licence
WUL	Water Use Licence
ZAR	South African Rand/s

Executive Summary

Background

BDO Corporate Finance (WA) Pty Ltd (BDO) has been engaged by MC Mining Limited (MCM or the Company) to prepare an Independent Expert Report (IER) in relation to a potential transaction involving the coal assets of MCM located in Kwazulu Natal and Limpopo Provinces of South Africa.

BDO has subsequently engaged SRK Consulting (Australasia) Pty Ltd (SRK) to prepare an Independent Specialist Report (ISR or Report) in relation to matters on which BDO is not an expert. The scope of the work to be completed by SRK was determined by BDO. SRK's ISR will form part of BDO's IER, which is to be provided to MCM shareholders and comment on the 'fairness and reasonableness' of the proposed transaction. SRK's Report does not comment on the 'fairness and reasonableness' of any transaction between MCM and any other parties.

The key mineral assets to be considered in this Report are collectively known as the Mineral Assets and comprise:

- A 70% interest in the Uitkomst Colliery (metallurgical and thermal coal)
- A 100% interest in the Vele Colliery (semi-soft coking and thermal coal)
- A 67% interest in the Makhado Project (hard coking coal)
- A 74% interest in tenements comprising the Greater Soutpansberg Project (GSP) (coking and thermal coal)
- Royalty interests in three gold projects in Western Australia.

This ISR presents the following key technical information as at the Effective Date (27 May 2022):

- Coal Resource and Reserve statements (Uitkomst Colliery and Makhado Project) reported in accordance with the terms and definitions of the JORC Code (as defined below) and used as the basis for the Economic Analysis
- The associated life-of-mine (LOM) plans and associated technical and economic parameters (TEPs) included in the LOM plans
- A techno-economic assessment of the Uitkomst and Makhado mineral assets as at 27 May 2022.

This Report presents a review of the geological setting and coal seams present in association with the Mineral Assets and comments on MCM's exploration and project growth plans.

Requirement and reporting standard

SRK's ISR has been prepared in accordance with the guidelines outlined in the Australasian Code for the Public Reporting of Technical Assessment and Valuation of Mineral Assets (VALMIN Code, 2015), which incorporates the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012).

As defined in the VALMIN Code (2015), Mineral Assets comprise all property including (but not limited to) tangible property, intellectual property, mining and exploration tenure and other rights held or acquired in relation to the exploration, development of, and production from, those tenures. This may include plant, equipment and infrastructure owned or acquired for the development, extraction and processing of minerals relating to that tenure.

Techno-economic assumptions and valuation

As mandated in its scope of work, SRK has reviewed the project technical assumptions and provided an assessment on the reasonableness of the techno-economic assumptions in the supplied Uitkomst and Makhado cashflow models (the Model/s) which consider the LOM plans as developed by MCM, including the Coal Resource and Coal Reserve Estimates, the mining physicals, the processing assumptions, the operating costs, the capital expenditure and the environmental and permitting provisions. Where SRK considered any assumptions in the Model/s to be unreasonable, it advised BDO and assisted BDO with making the appropriate changes to the Model/s to reflect SRK's opinion (Table 9-2 and Table 9-3).

SRK has excluded commentary related to the marketing, exchange rate, inflation rates and discount rate assumptions adopted in the Model/s, on the understanding that these are to be considered by BDO.

Value of residual Resources

In addition, SRK has provided an opinion regarding the market value of the residual Coal Resources (i.e. those remaining outside of the LOM schedule) and the exploration potential at Uitkomst and Makhado.

SRK has also provided BDO with its independent opinion on the market value of MCM's Coal Resources situated within the exploration portfolio.

In forming its overall opinion regarding the market value for each of the coal assets, SRK has adopted the market valuation approach using comparable market transactions supported by peer analysis and yardstick approach as secondary guides.

Table ES1 summarises SRK's opinion regarding the current market value of the Company's portfolio of the residual Coal Resources. SRK has not attributed any additional value to the exploration potential as, in its view, this value is encapsulated in the value of the residual Coal Resources, given the valuation approach and methodologies adopted.

Value of Western Australia Mineral Assets

Based on SRK's review of the available data pertaining to MCM's Western Australian royalties, SRK considers they are of nominal value only. As such, SRK has elected not to assign any material value to these tenures unless further information can be made available.

	Low (ZAR M)	High (ZAR M)	Preferred (ZAR M)
Uitkomst	65.12	97.68	81.40
Makhado	1,081.21	1,621.81	1,351.51
Vele	1,180.24	1,770.36	1,475.30
GSP – Mopane	515.09	773.50	644.29
GSP – Generaal	28.50	52.93	40.72
GSP – Chapudi	331.47	615.59	473.53
Total	3,201.63	4,931.88	4,066.76

Table ES1: Valuation summary of attributable residual Resources

Source: SRK analysis

Notes: Table figures are subject to rounding.

On this basis, SRK considers the current market is likely to pay between ZAR3,202 M and ZAR4,932 M, with a preferred value of ZAR4,067 M for the attributable residual Coal Resources held by MCM.

1 Introduction

BDO has been engaged by MCM to prepare an IER in relation to a potential transaction involving the coal assets of MCM in South Africa.

BDO has subsequently instructed SRK to prepare an ISR incorporating a technical assessment and valuation of MCM's coal assets. The scope of the work to be completed by SRK was established by BDO. SRK's ISR will form part of the BDO Report and will be provided to MCM shareholders.

SRK's Report does not comment on the 'fairness and reasonableness' of any transaction between MCM and any other parties.

The key mineral assets to be considered in this Report are collectively known as the Mineral Assets and comprise:

- A 70% interest in the Uitkomst Colliery (metallurgical and thermal coal)
- A 100% interest in the Vele Colliery (semi-soft coking and thermal coal), which is currently on care and maintenance
- A 67% interest in the Makhado Project (hard coking coal)
- A 74% interest in the tenements comprising the GSP (coking and thermal coal)
- Royalty interests in three gold projects in Western Australia.

1.1 Terms of reference and purpose of the Report

SRK understands that this Report is to be used in support of a potential transaction involving the coal assets of MCM. It is understood that this Report will be included in BDO's IER.

The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in SRK's services, based on: i) information available at the time of preparation and ii) the assumptions, conditions, and qualifications set forth in this Report. This Report is intended for use by BDO and MCM subject to the terms and conditions of the agreed contract with SRK and relevant securities legislation in Australia.

Except for the purposes legislated under prevailing securities law, any other use of this Report by any third party is at that party's sole risk. The responsibility for this disclosure remains with MCM.

The purpose of the ISR is to compile the results of previous technical studies into a single document and to provide an independent overview and assessment of the technical merits that might reasonably be expected to be applied by the market when considering investment in the Australian mineral assets currently held by MCM. In particular, the ISR covers the pertinent aspects in detail appropriate to the strategic importance of the projects and provides commentary on the exploration and development potential of the Mineral Assets.

1.2 Reporting compliance, reporting standard and reliance

1.2.1 Scope of work

To comply with the JORC Code (2012) and VALMIN Code (2015) requirements, SRK's ISR includes discussion of the following (where relevant):

- 1. Input and advice on the appropriateness of the technical assumptions adopted for the Uitkomst and Makhado financial model/s:
 - a. reserves and resources
 - b. production profile, including mining and processing physicals (including tonnes of coal mined and yield)
 - c. costs (including but not limited to mining, general site costs, transport, corporate office and royalties)
 - d. non-operating and other costs (including but not limited to reclamation, mining, discretionary capital costs and deferred capital costs)
 - e. capital expenditure (including but not limited to sustaining capital expenditure)
 - f. any other relevant technical assumptions not listed above.
- 2. The valuation of:
 - a. provide an opinion on the Market Value of all residual resources and exploration potential (including the Uitkomst, Vele, Makhado and the GSP) not considered in the above listed techno-economic models
 - b. in so doing consider and comment on geology, resources, reserves, mining engineering, geotechnical engineering, environmental, processing and infrastructure
 - c. site visit for SRK's designated representative to the Uitkomst site.
- 3. Prepare a report summarising the findings and valuation opinion of the Market Value of the Exploration Assets for the purpose of supporting BDO's IER.

SRK's services exclude any work in relation to:

- Marketing, commodity price and exchange rate assumptions adopted in the financial models
- Financial and/or corporate taxation analysis.

As part of its investigations, SRK has made enquires but not carried out any independent due diligence, on the status of the associated mineral titles and issues relating to land access and environmental regulations. SRK is not qualified to make legal representations in this regard and therefore specifically disclaims responsibility for these aspects for the purpose of this review.

1.2.2 Reporting standard

The authors of this Report are Members or Fellows of the Australasian Institute of Mining and Metallurgy (AusIMM) and/or the Australian Institute of Geoscientists (AIG) and therefore are bound by both the VALMIN and JORC Codes. SRK's report is prepared in accordance with the *Australasian Code for the Public Reporting of Technical Assessment and Valuation of Mineral Assets* – VALMIN Code (2015), which incorporates the *Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* – JORC Code (2012), in addition to other regulatory guidance (RG) (i.e. Australian Securities and Investment Commission (ASIC) RGs 111 and 112).

As per the VALMIN Code (2015), a draft of the Report was supplied to BDO and MCM to check for material error, factual accuracy and omissions before the final version of the Report was issued.

1.2.3 Work program

This assignment commenced in May 2022. It relies on data and information supplied by MCM, as well as other publicly available data and other information sourced by SRK from literature, as well as subscription databases such as S&P Capital IQ Pro database services. MCM also provided SRK with access to an online data room.

To meet the requirements set out in Section 11.1 of the VALMIN Code (2015), a site inspection to the material Mineral Assets may be required. SRK conducted a site visit to MCM's Uitkomst Colliery and has previously inspected the Makhado Project (for a previous assignment) but did not visit the exploration mineral asset portfolio given their early stage exploration status.

SRK representative Peter Shepherd, Principal Consultant, completed a site inspection of the Uitkomst Colliery from 25 to 26 May 2022.

SRK's designated project manager, Shaun Barry, coordinated the contributions from each team member to ensure consistency of approach and appropriate levels of reporting as befitting of an ISR for public reporting purposes.

SRK has satisfied itself and MCM has warranted that all material information in its possession has been fully disclosed to SRK.

1.2.4 Legal matters

SRK has not been engaged to comment on any legal matters. SRK notes that it is not qualified to make legal representations as to the ownership and legal standing of the mineral tenements that are the subject of this Report. SRK has not attempted to confirm the legal status of the tenements with respect to joint venture agreements, local heritage or potential environmental or land access restrictions.

1.2.5 Effective Date

The Effective Date of this Report is 27 May 2022.

Independent Specialist Report on the Mineral Assets of MC Mining Limited Introduction Final

1.3 Project team

This Report has been prepared by a team of SRK's consultants and associates in South Africa and Australia. Details of the qualifications and experience of the consultants who have carried out the work in this Report, who have extensive experience in the mining industry and are members in good standing of appropriate professional institutions, are set out below in Table 1-1.

Table 1-1: Details of the qualifications and experience of the project team

Specialist Position/ Company		Responsibility	Length and type of experience	Site inspection	Professional designation
Shaun Barry	Principal Consultant/ SRK	Project Manager Report and Valuation	30 years – 12 years in consulting specialising in valuation, financial modelling, sensitivity analyses, due diligence studies, IERs, optimisation studies, risk analysis, business and marketing strategy development; 9 years marketing; 7 years analyst; 2 years in operations.	None	BSc(Hons), MSc Eng, AusIMM (CP) MRICS
Norman McGeorge	Principal Consultant/ SRK	Mineral processing	40 years in Mining 35 in operations with BHP and 5 with SRK	None	BSc, MSc, PrEng, MSAIMM
Lesley Jeffrey	Principal Consultant/ SRK	Geology and Coal Resources	+36 years; 17 years in consulting, 5 years in exploration, 6 years in research, 8 years in corporate	None	MSc, BSc, PrSciNat, FGSSA, FFF
Darryll Kilian	Principal Consultant	ESG, Permitting and Approvals	+27 years	25–26 May 2022	MA, BA(Hons), DipEd, BA, MIAIAsa
Jeames McKibben	Principal Consultant/ SRK	Peer review	+25 years – 16 years in consulting specialising in valuation and corporate advisory; 2 years as an analyst; 8 years in exploration and project management roles.	None	MBA, BSc (Hons) FAusIMM (CP), MAIG, MRICS

1.4 Limitations, reliance on information, declaration and consent

1.4.1 Limitations

SRK's opinion contained herein is based on information provided to SRK by MCM throughout the course of SRK's investigations as described in this Report, which in turn reflects various technical and economic conditions at the time of writing. Such technical information as provided by MCM was taken in good faith by SRK. SRK has not independently verified the stated Exploration Results, Mineral Resources and Ore Reserves by means of recalculation but instead has completed limited verification and review for the purposes of the preparation of this Report.

This Report includes technical information, which requires subsequent calculations to derive subtotals, totals, averages and weighted averages. Such calculations may involve a degree of rounding. Where such rounding occurs, SRK does not consider them to be material.

As far as SRK has been able to ascertain, the information provided by MCM was complete and not incorrect, misleading or irrelevant in any material aspect. MCM has confirmed in writing to SRK that full disclosure has been made of all material information and that to the best of their knowledge and

understanding, the information provided by MCM was complete, accurate and true and not incorrect, misleading or irrelevant in any material aspect. SRK has no reason to believe that any material facts have been withheld.

1.4.2 Statement of SRK independence

Neither SRK, nor any of the authors of this Report, has any material present or contingent interest in the outcome of this Report, nor any pecuniary or other interest that could be reasonably regarded as capable of affecting their independence or that of SRK. SRK has no beneficial interest in the outcome of this Report capable of affecting its independence.

1.4.3 Indemnities

As recommended by the VALMIN Code (2015), MCM has provided SRK with an indemnity under which SRK is to be compensated for any liability and/or any additional work or expenditure resulting from any additional work required:

- that results from SRK's reliance on information provided by MCM or MCM not providing material information, or
- that relates to any consequential extension workload through queries, questions or public hearings arising from this Report.

1.4.4 Consent

SRK consents to this Report being included, in full, in BDO's IER documents in the form and context in which it is provided, and not for any other purpose. SRK provides this consent on the basis that the technical assessment and valuation expressed in the Executive Summary and in the individual sections of this Report is considered with, and not independently of, the information set out in the complete Report.

1.4.5 Practitioner consent

The information in this report that relates to the sampling, data preparation, modelling, geophysical interpretation and geochemical interpretation in support of the Coal Resources for the Greater Soutpansberg Project, Vele Colliery and Makhado Project are based on and fairly reflect information compiled and conclusions derived by Mr John Sparrow, who is a Competent Person and a Member of South African Council for natural Scientific Professions SACNASP. Mr Sparrow is a full-time employee of MCM. Mr Sparrow has sufficient experience that is relevant to the mineral asset under consideration, the style of mineralisation and the types of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr Sparrow consents to the inclusion in the Report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to the sampling, data preparation, modelling, geophysical interpretation and geochemical interpretation in support of the Coal Resources for the Uitkomst Colliery is based on and fairly reflects information compiled and conclusions derived by Ms Nthabiseng Masunyane, who is a Competent Person and a Member of South African Council for natural Scientific Professions SACNASP. Ms Masunyane was a full-time employee of MCM at the

time of the resource determination. Ms Masunyane has sufficient experience that is relevant to the mineral asset under consideration, the style of mineralisation and the types of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Ms Masunyane consents to the inclusion in the Report of the matters based on their information in the form and context in which it appears.

The information in this report that relates to the Coal Reserves for the Uitkomst Colliery is based on information compiled by Mr Craig Archer, who is a Competent Person and Member of the SAIMM. Mr Archer is an independent consultant to Uitkomst Colliery. Mr Archer has sufficient experience that is relevant to the Mineral Asset under consideration, the style of mineralisation and the type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr Archer consents to the inclusion in the Report of the matters based on the information in the form and context in which it appears.

The information in this report that relates to the Coal Reserves for the Vele Colliery is based on information compiled by Mr Ben Bruwer, who is a Competent Person and Member of the SAIMM. Mr Bruwer is an independent consultant to MCM. Mr Bruwer has sufficient experience that is relevant to the mineral asset under consideration, the style of mineralisation and the type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr Archer consents to the inclusion in the Report of the matters based on the information in the form and context in which it appears.

The information in this Report that relates to Technical Assessment and Valuation of the Mineral Assets is based on and fairly reflects information compiled and conclusions derived a team of consultants supervised by Mr Shaun Barry, who is a Member of the AusIMM. Mr Barry is employed by SRK, an independent mining consultancy. Mr Barry has sufficient experience that is relevant to the Technical Assessment and Valuation of the Mineral Assets under consideration, the style of mineralisation and the types of deposit under consideration and to the activity being undertaken to qualify as a Practitioner as defined in the 2015 edition of the *Australasian Code for the Public Reporting of Technical Assessments and Valuations of Mineral Assets*, and as a Competent Person as defined in the 2012 Edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves*. Mr Barry consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

1.4.6 Consulting fees

SRK's estimated fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The fees are agreed based on the complexity of the assignment, SRK's knowledge of the assets and availability of data. The fee payable to SRK for this engagement is estimated at approximately A\$85,000. The payment of this professional fee is not contingent upon the outcome of this Report.

1.4.7 Units of measure and currency

Throughout this report, measurements are in metric units and currency in South African rands (ZAR), United States dollars (US\$) or Australian dollars (A\$) unless otherwise stated.

2 Overview of MCM

2.1 Company background

MCM is a mineral resources company listed on the AIM, ASX and JSE, which is primarily focused on its metallurgical coal assets in South Africa. Formerly known as Coal of Africa Limited (CoAL), the Company received shareholder approval for its name change to MC Mining Limited in November 2017.

Following the purchase of the Uitkomst Colliery in 2017, the Company's focus has shifted from project development to operation. The Company's key projects (Figure 2-1) include the Uitkomst Colliery (metallurgical coal), Makhado Project (hard coking and thermal coal), Vele Colliery (semisoft and thermal coal) and the GSP – MbeuYashu (coking and thermal coal).

MCM is an emerging developer of high-quality coking and thermal coal assets, located primarily in the Limpopo province of South Africa.





Source: MCM

With good access to rail and port infrastructure, MCM can effectively service domestic and international coal markets; providing a much-needed resource for economic growth and development to the country and the provinces in which it operates.

The Company also holds three net smelter return (NSR) royalties over gold projects in Western Australia.

3 Uitkomst Colliery

3.1 Overview

Uitkomst Colliery (Pty) Ltd (UCPL) is a producer of thermal and metallurgical coal from the Uitkomst Colliery (Uitkomst) which is situated 20 km northwest of Utrecht and 23 km northeast of Newcastle in the KwaZulu Natal province (Figure 3-1). The colliery lies approximately 580 km directly northwest of the Richards Bay Coal Terminal (RBCT) and 260 southeast of Johannesburg.

Uitkomst is an underground bord and pillar (conventional drill and blast) colliery that extracts the Gus Coal Seam.

The operation is accessible via a well-maintained largely sealed road network and a rail line that runs to the west of the operations. The Wykom Rail Siding is located 5.7 km north of the town of Newcastle, and provides the main loading point for rail transported coals.

MCM owns a 70% interest in UCPL, which is the registered holder of a consolidated mineral right for coal issued by the South African Department of Mineral Resources (DMR) under reference KZN30/5/1/2/2/94 MR (94 MR).



Figure 3-1: Location of the Uitkomst Colliery

Source: MCM website, accessed 13 May 2022

The colliery is situated at the foothills of the Balele Mountains within an important sheep farming and major cattle and mixed farming region.

The surrounding region to the colliery experiences a temperate climate with mild summers (typically 15°C to 28°C) and cool winters (typically 3°C to 23°C). Rain typically falls during the summer months, mostly from October through to March. As such, mining can take place throughout the year.

3.2 History

Uitkomst Colliery currently consists of the operating section, the South Mine (the 'Uitkomst area') and the planned future expansion, the North Mine (the 'Klipspruit area').

The Klipspruit area represents the previously-mined underground Klipspruit Colliery, originally owned by Newcastle Coal Mines (Pty) Ltd. The colliery commenced production in 1987; before being sold in 1989 to Welgedacht Exploration Company (Pty) Ltd, a Rand Mines Limited subsidiary, and later acquired by Ingwe Coal Corporation. The colliery was then sold to Kangra Holdings in 1993. In 2014, the colliery was owned by Shanduka Resources, although it had ceased operations and rehabilitation was completed (Barker's Coalfield Maps of South Africa, 2014).

Operations were commenced in the adjacent Uitkomst area (the original Uitkomst Colliery) in 2007 by Brandywine Valley Investments (Pty) Ltd (Brandywine). In April 2015, Blue Falcon 232 Trading (Pty) Ltd (Blue Falcon) bought Brandywine and consolidated the Klipspruit and Uitkomst mineral rights through a Section 102 application, which was granted in March 2016. Blue Falcon was acquired by Pan African Resources PLC, effective 1 April 2016, which then ceded the mineral rights to its subsidiary, Uitkomst Colliery (Pty) Ltd. In June 2017, the company was acquired by MCM.

Uitkomst was then mined by an independent mining contractor, Khethekile Mining, until 1 August 2018, when MCM acquired all the contractor's mining equipment and employees. The mine has been owner-operated ever since.

Details of historical exploration are limited. Exploration was conducted from the 1950s through to 2013 by a variety of companies (Table 3-1), resulting in a total of 424 drill holes. However, analytical results are only available for 362 of these holes.

Year	Number of Drill Holes	Company	
1971, 1978–1979	41	Iscor Ltd ¹	
1983	16	St George Mining	
1980–1988	268	Grinaker Desert Spar/Grinaker Mining ²	
1987–1988	19	Newcastle Coal Mines (Pty) Ltd ²	
1988–1989	16	Rand Mines Ltd/Ingwe Ltd	
2001	24	Welgedacht	
2007–2009	27	Brandywine	
2013	13	Uitkomst Colliery	
Total	424		

 Table 3-1:
 Historical exploration for the Uitkomst Colliery

Source: Uitkomst CPR (2017)

Notes:

¹ Previously, the state-owned South African Iron and Steel Industrial Corporation Limited.

² Subsidiary of Anglovaal Ltd.

3.3 Local geology

Uitkomst Colliery is located in the Utrecht Coalfield (Figure 3-2); the coal seams are developed in the Vryheid Formation of the Ecca Group which is of Permian age. Seven main seams and two smaller seams are recorded (Figure 3-3), although not all seams are developed in all areas. Four seams are demonstrated to have economic value – the Coking, Dundas, Gus and Alfred Seams. Dolerite intrusions ranging from thin dykes to very thick sills are extremely common in this coalfield, often causing major displacement of the seams (in the order of 150 m) and affecting the quality and rank of the seams. Anthracite is the main coal product derived from this coalfield, with some thermal coal as a secondary product.

Figure 3-2: Coalfields of South Africa



Source: Hancox & Götz, 2014



Figure 3-3: General stratigraphy of the Coal Zone in the Utrecht Coalfield

Source: Hancox & Götz, 2014

At Uitkomst, only two of seams are intersected; namely, the Alfred and Gus Seams. As the Alfred Seam is poorly developed, only the Gus Seam is currently extracted.

The Gus Seam occurs in a north–south trending zone in the central portion of the mining lease and outcrops to the south in the Dorpspruit and Kweekspruit valleys. To the north, the seam extends beneath the escarpment at a depth from surface of around 300 m; due to the extreme topography of the escarpment, the depths increase rapidly to over 800 m. The seam ranges in thickness from 0.8 m to 1.9 m and consists of banded bright, dull and lustrous coal with the coal quality decreasing towards the top of the seam. This upper portion also contains a number of fine-grained sandstone partings, which may attain thicknesses of 20 cm.

Uitkomst Colliery produces a 12% ash content (ash) PCI product, with a total sulfur content (TS) of less than 1%. Theoretical product yields are around 75%, with the better yielding coal located in the northern parts of the mine.

Independent Specialist Report on the Mineral Assets of MC Mining Limited Uitkomst Colliery
Final

3.4 Exploration potential

Drilling north of the presently defined LOM area suggests there may be potential for additional resources to be defined through ongoing exploration, although this is considered to be limited. Future drilling campaigns will target these areas.

3.5 Coal Resources and Reserves

3.5.1 Coal Resources

The critical variable considered for the Uitkomst coal product is the ash content; the main products are both domestic products, namely a 12% ash product from the -10 mm fraction, usually sold to Arcelor-Mittal South Africa, and a 12–14% ash product from the +10 mm fraction, sold into the local domestic market.

In addition, the following cut-off values were imposed to estimate the mineable Resource:

- Mineral Rights boundaries
- Seam subcrop
- Mined out areas have been excluded
- Raw DAF VM >27% to exclude devolatilised areas
- Minimum depth of 25 m for Mineable Tonnes In Situ (MTIS); any coal less than 25 m below surface is difficult to access from underground and due to the abrupt topography, does not have open cast potential
- Maximum seam depth of 300 m
- A minimum seam thickness of 0.5 m for Gross Tonnes In Situ (GTIS) and 1.2 m for MTIS.

The Coal Resource estimates were also discounted for unknown geological structures, based on the confidence in the Coal Resource classification; namely:

- Measured 10%
- Indicated 15%
- Inferred 20%.

The Coal Resources were estimated from the geological model, constructed by Ms Nthabiseng Masunyane (MCM) using the Minex[™] software. SRK has reviewed the geological model and considers it provides a true reflection of the data and that the Coal Resources have been estimated in an appropriate manner.

SRK has reviewed the geological model and is satisfied that the data are represented sufficiently accurately in the grids, that the modelling principles employed and the estimation methods used are fit-for-purpose and that the geological model and the resource estimates can be relied upon.

The Coal Resources were estimated by Ms Masunyane in accordance with the 2004 Edition of the South African National Standard 10320 (SANS10320). The Coal Resources have been reviewed by Mr C Archer (EMPR Mining and Consulting [Pty] Ltd); both Ms Masunyane and Mr Archer are Competent Persons as defined by the *South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves* (SAMREC Code).

All Coal Resources and coal qualities have been estimated on an air-dry basis and are inclusive of the Coal Reserves.

The Coal Resources as reported in the 2021 Annual Report are shown in Table 3-2.

МСМ мсм GTIS MTIS **Resource Category** Attributable Attributable (Mt) (Mt) Interest (%) Resource (Mt) 70 Measured 15.710 14.139 9.897 Indicated 4.885 4.153 2.907 Subtotal Measured & Indicated 20.595 12.804 Inferred 6.696 5.357 3.750 Total 27.291 23.649 70 16.554

 Table 3-2:
 Uitkomst Coal Resources (as declared at 30 June 2021)

Source: MCM 2021 Annual Report

3.5.2 Coal Reserves

The stated Coal Reserves are quoted from the 2021 Annual Report (Table 3-3). SRK has adjusted this estimate to account for recent production (in 2021), which is estimated at approximately 0.5 Mt ROM which can be used for depletion. In the Company's recent LOM plan, additional sales from reprocessing of the coarse discard material are included, but these cannot be classed as Coal Reserves until more analysis has been completed.

 Table 3-3:
 Uitkomst Coal Reserves as at Jun 2020 (in 100% terms)

	ROM Mt (AD)	Rom CV Mj/Kg (AD)	Sales Mt (AD)	Sales CV Mj/Kg (AD)	Sulfur (%)
Proven	6.227	23.88	3.919	28.90	0.94
Probable	1.364	23.72	0.892	28.93	0.92
Total	7.591	23.86	4.811	28.91	0.93

Source: 06.03.04.28.02 20200602_Samrec Report Ending 30 April_2020_2-Issued.xls

Notes:

- Includes all contamination and roof brushing.

- There are 0.762 Mt of ROM that are unclassified that are included in the LOM.

The stated Coal Reserve is in line with previous estimates completed by independent consultants in 2019 and 2017, when the mine was under different ownership.

3.6 Mining

The mine defined Coal Resources predominantly target the Gus Seam and outcrop in the valley portions in the southern and northern parts of the mining right. This seam ranges between 0.8 and 1.9 m in thickness.

The key constraint to the mine layout is the escarpment topography, which rises to over 800 m and with cover which impacts on potential coal recovery. The outcrop areas are accessed from a boxcut to approximately 30 m depth to allow an adit type access into the coal seam.

The coal seam is considered to be horizontal (i.e., a zero dip) but does have some floor rolls that affect the potential mining height. The mining panels have been laid out from the development drive in Adit 1 to the extent of the mining thickness, as defined by a minimum seam thickness of 1.2 m and a minimum overburden cover of 30 m. The maximum panel cover is set at 150 m thickness where the coal recovery beyond this becomes uneconomic (refer Figure 3-4). The original old Klipspruit workings in the vicinity of Adit 2 were mined on a similar basis before they were stopped.

The plan in Figure 3-5 shows the mined-out areas and the remaining panels to be mined in the current LOM plan. The mine basically splits into a South mine exploited from Adit 1 and a North mine, which will be accessed from Adit 2 which is adjacent to the old Klipspruit workings to reduce travel time and aid in ventilation. The two blocks are planned to be joined by a main development, but the panels between the two areas are of thinner seam and hence will need to have the main road's roof brushed to provide sufficient mining height. The area is intersected by several dykes, but the panels are able to mine through and exploit the coal beyond these intrusive bodies. This is evident in the mined-out area of the South mine in Figure 3-5.



Figure 3-4: Uitkomst Colliery overburden depth to the Gus Seam

Source: Minxcom, Uitkomst Technical Review 2017


Figure 3-5: Uitkomst Colliery mining panel layout

Source: MCM

The mining method is bord and pillar, drill and blast mining in the thin seam using coal cutters for the undercut with electric hand drills for the blast holes. The mine panels are designed as 13 road panels at a bord width of 6.0 m and the pillars designed in a squat pillar design to a safety factor of 1.6. In the main development panels, this is increased to 2.0. This means that there is no potential pillar recovery planned.

The clearance of the coal is achieved using battery powered scoops prior to loading onto a lowprofile feeder breaker and conveyor to exit the mine.

The mine is ventilated by two main surface fans supplying 115 m³/second of fresh air into the workings. The roof support is done using low profile roof bolters. The mine has sufficient equipment to operate 3 sections and sometimes doubles the sections into a single panel for faster advance. Within the panels the travelling ways are roof brushed to 2.2 m and the conveyor transfer points are brushed to 2.6 m. The mine attempts to extract the full coal horizon. There is some dilution from the roof and floor that is included as a modifying factor into the defined Coal Reserves. The geological discounts for Measured and Indicated Coal Resources are also included in the estimate.

All the information is loaded into an XPAC software database for scheduling along with the coal qualities and sales product information. The schedule then generates the Coal Reserve statement for the mine. The last plan was completed by Mr C. Archer in July 2020 and this estimate remains the basis for the existing LOM plan.

The sections are scheduled at approximately 19,000 t to 20,000 t/month on a 2-shift basis, with slight variation for the mining height. This is supported from the historical tonnes mined. In developing a schedule rate for thin seam mines, the schedule is highly dependent upon roof conditions and the floor tramming conditions, which can be disruptive to production. Similarly, the use of coal cutters is an older technology and is dependent upon refurbished machinery that is no longer manufactured. SRK does not expected that the future panels will be anything different from the historical panels, so the schedule rates are not expected to vary in the LOM plan.

3.7 Processing

The Uitkomst washplant (Figure 3-6) is located adjacent to the South Mine Adit 1. The plant was constructed in 2007 and primarily treats run-of-mine (ROM) coal from the South Mine. The washing plant is owner operated and employs conventional well-tested coal washing technology with a total design capacity of 70 ktpm.

Figure 3-6: Uitkomst washplant



Source: MCM

The plant consists of a dual stage roller crushing circuit followed by coarse (10 to 40 mm), coal (1 to 10 mm) dense medium cyclone (DMC) washing circuits with the fines (-1 mm) material upgraded in a fines spirals circuit (Figure 3-7). Equipment is generally in good condition with the plant being structurally sound. The plant is operated using mainly grid power, with make-up water sourced from nearby farm dams and potable water from boreholes.

The plant is currently underutilised treating only 40 ktpm of coal on average.

Uitkomst produces and sells 'Export' (0 to 40 mm) and 'Peas' (10 to 25 mm) sized coal products. The plant produces a 28 MJ/kg (6,690 kcal/kg) coal with an ash and sulfur content of 12% and 1% respectively. The plant achieved average yields of 64% on the South mine ROM. It is expected that practical plant yields on Uitkomst material will be maintained at current levels for the LOM.

Plant coarse and slimes discards are disposed of on a co-disposal facility (Figure 3-8). The slimes are pumped to the centre and stored in three paddocks (as shown below) which operate in sequence. Once dry and depending on qualities, the slimes are removed and sold separately from normal Uitkomst products. The costs in producing these additional sales tonnes still form part of the overall plant costs used in the supplied financial model, as they are not accounted for separately.

Dry slimes are blended with a thermal middlings product produced from the recently installed 3product DMS cyclone module to produce a NAR 4700kcal/kg product sold to Glencore. The 3product DMS cyclone allows for a production of a thermal middlings product in addition to the 12 to 14% ash peas product.

Uitkomst proposes to expand the existing capacity of the processing plant and to extend its life to 17 years.

Figure 3-7: Process plant flow sheet



Source: Minxcom, Uitkomst Technical Review 2017





Source: MCM

The main product from Uitkomst is used by ArcelorMittal as a metallurgical coal for Pulverised Coal Injection (PCI) processing, with the balance being a typical thermal export grade coal. This thermal product is marketed through agents who facilitate the RBCT capacity. Other users include domestic power stations and users of A grade domestic coal.

3.8 Infrastructure and services

The mine power is provided by Eskom for the plant and a series of generators provide a backup to the main supply. The colliery has 6 generator sets in use. Water is provided from surrounding farm dams and underground bore holes and is sufficient for the plant and mine use.

Other surface administration and workshops are temporary structures located at the Mine Adit. Some of these structures will need to be duplicated when the Adit 2 is developed.

The mine is serviced by a rail siding (Wycom siding), which is a spur line from the main line with connections to RBCT. Coal is loaded into trains using contractor front end loaders (FEL). Some sales are distributed by truck via a weighbridge located near the processing plant.

3.9 Permitting and environment

Mining rights

Uitkomst Colliery holds a consolidated mining right issued on 20 May 2016 by the DMRE, which is recorded as KZN 30/5/1/2/2/94MR (94MR). The consolidated mining right, 94MR, incorporates various properties that previously formed part of mining right references KZN30/5/1/2/2/1 (21MR), as well as the properties held under the original mining right 94MR (Minxcon 2017). The total mining right area provided in the 94MR is 9,241.6990 ha and consists of the following farms and farm portions:

- Kweekspruit No.22 (Portion 3 [of 2] and Portion 8 [of 1])
- Uitkomst No.95 (Remainder of Portion 1 and Portion 5 [of 2])
- Vaalbank No.103 (Remainder of Portion 1, Portion 4 [of 1] and Portion 5 [of 1])
- Rustverwacht No.151 (Remainder of portion 1, Remainder of portion 2, Remainder of portion 3 [of 1] Portion 4 [of 1], Portion 5 [of 1], Remainder of portion 6 [of 1], Portion 7 [of 1], Portion 8 [of 2], Portion 9 [of 2], Portion 11 [of 6], Portion 12 [of 9], Portion 13 [of 2], Portion 14 [of 2], Portion 15 [of 2], Portion 16 [of 3] and Portion 17 [of 2])
- Waterval No.157 (Portion 18[of 3])
- Klipspruit No.158 (Remainder of portion 1, Remainder of portion 4, Remainder of portion 5, Portion 6, Portion 7 [of 1], Portion 8 [of 1], Portion 9, Remainder of portion 10 [of 5], Portion 11 [of 5], Portion 13 [of 4] and Remainder of portion 14]
- Klipspruit No.178 (Portion 16 [of 14], Portion 18 and Portion 23)
- Jackhalsdraai No.299 (Remainder of portion 1)
- Jericho No.400 (Remainder, Portion 1, Portion 2, Portion 3, Remainder of portion 1 and Remainder of portion 2 [of 1])
- Jericho A No.414 (Portion 3 [of 1], Portion 4 [of 1], Portion 5 [of 2] and Portion 6 [of 1])
- The farm Margin No.420.

The mining right is valid from 3 October 2013 to 2 October 2023 (DMRE 2016). An application for extension of the Uitkomst Colliery mining right, for the LOM was lodged on 6 December 2019 with the application (REF KZN M30/5/1/2/2/10093 MR) allocated (MCM 2021a). SRK notes that the DMRE is processing the application (note dated April 2020).

Environmental authorisations

A consolidated Environmental Management Program Report (EMPR) in support of the consolidated mining right was developed and approved by the DMRE on 20 May 2016 for Blue Falcon. The EMPRs associated with Uitkomst Colliery and the immediately adjacent Klipspruit Colliery were consolidated under the one mining right of KZN 30/5/1/2/2/94 MR (SLR, 2015).

Water Use Licences

The Department of Water and Sanitation (DWS) granted Uitkomst (PTY) LTD the following Water Use Licences:

- Uitkomst Colliery Licence number 11/V32B/ACGIJ/11507 issued on 08 April 2022 for Section 21 (a), (c), (i), (g) and (j) water uses. The WUL is valid for 20 years from the date of issue (DWS, 2022a).
- Wykom Siding Licence number 11/V31D/CGI/11517 issued on 1 April 2022 for Section 21 (a), (c) and (g) water uses. The WUL is valid for 20 years from the date of issue(DWS, 2022b).

Waste disposal

Waste management licences (WMLs) or waste registrations were not available for SRK's review. In the absence of the EMPRs which informed the consolidated process, the timing and requirements for permitting or registration of the following key activities listed in the consolidated EMPR could not be determined:

- Temporary waste rock dumps: stockpiled
- Storage area for hazardous and non-hazardous input materials and waste
- Handling, storage and disposal of general waste on site
- Handling, storage and disposal of hazardous waste on site
- Storage of Waste Rock (SLR, 2015).

Other environmental permits and approvals

Other permits and approvals were not provided for SRK's review. The EMPRs which were consolidated into the 2016 EMPR were not provided and therefore other permits and approvals associated with those EMPRs could not be identified.

Social and Labour Plan

It is SRK's understanding that the new Social and Labour Plan for the period 2021–2025 was approved on 24 March 2022.

3.9.2 Environmental aspects

Environmental management at Uitkomst Colliery

It is reported that the Environmental Management Strategy and System (EMS) adopted at the Vele and Uitkomst Collieries has been developed as the formal tool for environmental management. These systems are independently audited every quarter, and reports are submitted to the regulatory authorities. Continuous monitoring is implemented at the mining sites to assess the effectiveness of controls with regular analysis and reporting, and action management on failures.

It is noted that while not ISO14001:2015 accredited, MCM state that their Uitkomst EMS is aligned to ISO 14001 (MCM, 2021a).

Environmental monitoring

The water quality report for the period from September 2021 to November 2021 was provided for Uitkomst Colliery (Elemental Sustainability, 2021a) and Wykom Siding (Elemental Sustainability, 2021b) and indicated the following key impacts to take note of:

Uitkomst Colliery:

The process water contained in the process water network is highly polluted and can have a significant impact on the receiving environment if the water is discharged into the receiving environment.

Wykom Siding:

- The water within the PCD is polluted and the management measures to ensure that the PCD does not spill into the receiving environment should be maintained.
- When considering the upstream surface points of MP01, MP03 and MP05 (and then compared to downstream point MP04), it is clear that there are other system contributors that change EC, TDS, pH and Sulphate levels (Elemental Sustainability, 2021b).

Environmental performance

Other than two internal WUL audits, other documentation relating to environmental performance and external WUL compliance was not provided as part of this review. It is understood that an external audit will be undertaken on the new IWUL in July 2022. Therefore, environmental compliance and external WUL performance could not be reviewed.

Annual internal WUL audits for Uitkomst Colliery and Wykom Siding dated February 2022, prior to issuing of the new WULs, were provided for review. The key non-compliances for Uitkomst Colliery related to:

- Calibration of flow meters
- Exceeding disposal quantities into the Pollution Control Dam, Slurry Dam, Settling Pond, Return Water Dam
- Exceeding disposal quantities onto the Discard Dum
- Exceeding dust suppression limits
- Exceeding quality limits for disposal of stormwater/dirty water (Wykom Siding, 2022).

The key non-compliances for Uitkomst Colliery related to:

- Exceeding quality limits for disposal of stormwater/dirty water
- Impact on the activities of the mine on the groundwater resources (Uitkomst Colliery, 2022).

In September 2021 the DMRE conducted a monitoring and compliance inspection in respect of the Uitkomst Colliery mining right renewal application. The findings of the inspection resulted in the issuing of a notice of intent to issue a compliance notice in terms of Section 31 L of the *National Environmental Management Act* (Act 107 of 1998) (NEMA) due to transgressions relating to waste management, poor housekeeping and non-implementation of a general environmental awareness or job specific environmental awareness plan on site (DMRE 2022).

3.10 Risks and opportunities

Geological risks relate to devolatilisation of the coal due to the presence of unmapped, and hence unexpected, dolerite intrusions.

A significant risk are activities associated with thin seam mining in particular, variations in floor and roof rolls, which affect the mining height. This is adequately managed by the existing drilling, but also supported by limited horizontal drilling completed at the mine.

Equipment obsolescence in particular the Joy coal cutters present further risk, as well as the scoop trams, which are not common in the local mining thin seam coal industry. This is managed through having surplus equipment that is in constant repair mode.

In August 2018, the owner took over the equipment, as well as the staff, from the contract miner. This retains the necessary skills and equipment availability at the colliery, which was previously considered a risk.

External environmental and water performance against the colliery's consolidated EMPR and IWUL were not made available, therefore the level of compliance to the regulatory requirements could not be determined. The materiality of these aspects can therefore not be assessed as SRK does not have the information to give an informed opinion on whether or not the operation is compiling to the requirements of their environmental licences and permits. This is therefore a material risk. However, it is understood that an external IWUL audit is planned for July 2022 which will assist in understanding the colliery's level of compliance.

There is no recent water quality data, with the most up to date data being from 2019. This lack of recent data may imply that statutory monitoring is not being undertaken. Should this be the case, potential water-related impacts may not be identified and actively managed. This is regarded as a material risk as the operation may be polluting the surrounding resources which may in turn impact on water uses. This will result in reputational damage and intervention from the environmental and water authorities. The operation can be issued with a directive to cease operations. Based on current media attention pertaining to pollution from coal mines, the likelihood of this risk being realised is high.

4 Makhado Project

4.1 Overview

The Makhado Project is situated in the Soutpansberg Coalfield, approximately 36 km north of the town of Makhado on the National Route N1 highway or 65 km southwest of Musina (Figure 4-1). Polokwane lies some 130 km due southwest of the project area, while RBCT is 680 km due southeast.

MCM holds a 67% interest in the Makhado Project through a wholly owned subsidiary, Baobab Mining & Exploration (Pty) Ltd. A new order mineral right No. 30/05/1/2/2/204 MR (204 MR) was granted and is valid until 25 January 2046.

The Project lies 80 km southeast of the Company's Vele Colliery, where it is proposes to transport crushed and screened ROM coal and process through a washplant into saleable product.

The Makhado Project remains in development and is a proposed opencast operation with a forecast mine life of over 21 years, with the potential for further expansion into underground.



Figure 4-1: Location of Makhado Project

Source: MCM website, accessed 13 May 2022

The Project is directly accessed from the bitumen sealed N1 highway, which runs north-south along the western boundary of the Mining Right area. The N1 links the Project to the towns of Musina, Louis Trichard and Polokwane. Several gravel roads and tracks provide further access across the various sites of the Project.

A railway line lies west of the Project, which runs in a northeast–southwest direction and offers connections to RBCT. The Huntleigh Rail Siding is located 15 km due northwest of the Project area.

As at Vele, the climate at the Project is semi-arid and characterised by a hot to extremely hot summers and warm to cool winters, with minimal precipitation. Mining activity can be conducted all year-round, as no appreciable mining down time is expected due to unfavourable climate or weather conditions.

The east–west orientated Soutpansberg Mountains run along the southern boundary of the Project. The topography of the Project area is characterised in the north by a relatively flat plain at an average elevation of 750 m above sea level, rising steeply in the south to an elevation of 1,750 m forming the Soutpansberg Ridge. Immediately beyond the southern boundary of the Project tenure, the land falls rapidly to around 800 m.

4.2 History

Iscor explored the Soutpansberg Coalfield during the 1970s and 1980s, drilling approximately 1,250 holes and opening a bulk sample pit on the farm, Fripp 645 MS, in 1979. No historical mining occurred.

MCM acquired the full Iscor data set for the Makhado Project area, including for the adjacent farms, Telema 190 MT and Gray 188 MT, situated east of Makhado and forming part of the GSP. The data set included 316 diamond core drill holes within the current Makhado tenure. MCM, then known as CoAL, began its own exploration in 2007, with exploration drilling on Fripp 645 MS.

By 2011, 214 drill holes had been drilled within Makhado, as well as aerial magnetic and radiometric geophysical surveys conducted. A boxcut was excavated on the farm Tanga 648 MS in 2010–2011, from which a bulk sample of 45,849 t of material was extracted. The coal produced from this material (21,800 t) was used to confirm the coal and coking properties and to test a number of coal processing options.

In May 2015, a 30-year Mining Right was granted and received by the then Department of Mineral Resources, now termed the Department of Mineral Resources and Energy (DMRE). A WUL, valid for 20 years, was granted by the DWS. The EA for the duration of the LOM was granted by the Limpopo Department Economic Development Environment and Tourism (LEDET) and has since been amended.

4.3 Local geology

Makhado is situated in the Tshipise Basin of the Soutpansberg Coalfield (Figure 3-2). The strata of this coalfield are preserved in a northward-dipping half-graben located on the northeastern edge of the Kaapvaal Craton, and terminating against east–west striking faults associated with the Limpopo Mobile Belt in the north and subcropping in the south (Figure 4-3). The entire Soutpansberg Coalfield is faulted, with extensive east-northeast normal faults, parallel to the regional strike, controlling the preservation of the coal-bearing Karoo strata. This fault system resulted in the horsts and grabens characteristic of the coalfield, with throws to either to the north or south with displacement of around 500 m. A secondary fault system trends west-northwest to northwest, with throws generally to the southwest.



Figure 4-2: Makhado – diagrammatic cross-section

Source: Venmyn Deloitte (2012)

Sedimentation within the coalfield was fault-controlled. The Karoo strata overlies the Soutpansberg Formation and within the Tshipise Basin, the coal-bearing sediments are found in the 30–40 m thick carbonaceous portion of the Madzaringwe Formation. This formation comprises coal, shale, mudstone and siltstone, with the coal seams consisting of alternating bands of coal and mudstone. The coal is generally bright and high in vitrinite, with the vitrinite content decreasing with depth.

The Madzaringwe Formation is overlain by the mudstones, shales and sandstones of the Mikambeni Formation, followed by the coarse sandstone of the Fripp Formation.

This is followed by the siltstones and mudstones of the Solitude Formation of the Beaufort Group; the sandstone of the Klopperfontein Formation; the red mudstones and sandstone of the Bosbokpoort Formation; the sandstone of the Clarene Formation (all of the Stormberg Group) and finally, the basaltic lavas of the Lebombo Group (Figure 4-3).

The surface geology, aeromagnetic geophysical data and stratigraphy of the Makhado area is shown in Figure 4-3.



Figure 4-3: Makhado – surface geology, aeromagnetic data and stratigraphy

Source: Venmyn Deloitte (2012)

Within the project area, the strata display an average dip of 12° to the north, varying from 4–18° to the north.

The northwest–southeast-striking Siloam Fault, identified on the farm Lukin 643 MS, offsets the subcrop (Figure 4-3). This has been taken into consideration when designing the infrastructure and the mine layout. Faulting also restricts the distribution of the coal along strike, on the western and eastern edges of the project, while the position of some smaller faults needs to be confirmed by targeted drilling.

Drilling has identified a 50 m thick dolerite intrusive sill that transgresses the coal seams in two places in the centre of the project area, situated above the coal horizons on the farms Lukin 643 MS and Tanga 648 MS, but below the coal on the farm Fripp 645 MS (situated between the other two farms). The coal has been devolatilised close to this sill and burnt where the sill transgresses the seams, which has destroyed the coking properties of the coal in this area. Interpretation of the aeromagnetic geophysical data by GAP Geophysics suggests that few magnetic intrusive dykes traverse the area and that those that have been identified are vertical, in the order of 2 to 5 m thick and are steeply dipping. A bulk sample pit on Fripp 645 MS, excavated by the then Iscor, revealed a thin, discontinuous dyke in the highwall.

MCM has identified six major mining horizons (referred to as 'seams') within the Madzaringwe Formation; namely, the Upper, Middle Upper, Middle Lower, Bottom Upper, Bottom Middle and Bottom Lower Seams (Figure 4-3). The Bottom Middle Seam is usually excluded from the Coal Resource estimate, as it is mostly mudstone. MCM has modelled the other five seams to estimate the Coal Resources. Average modelled seam thicknesses range from 1.80 m to 4.32 m (Table 4-1).

Saam	Sea	m Thickness	; (m)
Seam	Minimum	Maximum	Mean
Upper	0.1	6.48	2.48
Middle	0.1	18.54	4.32
Middle Lower	0.1	6.03	1.80
Bottom Upper	0.1	7.58	3.78
Bottom Lower	0.1	11.07	3.85

Table 4-1: Makhado – modelled seam thicknesses

Source: Makhado BFS (2022)

Notes: Minimum thickness is a cut-off limit imposed during modelling; note that this cut-off is greater (1.5 m) for resource estimation.

The coal is suitable for producing a primary hard coking coal with a 10% ash, TS between 1.0 and 1.1% and an average theoretical yield for all size fraction of 17.3%, as well as a secondary thermal coal, with an ash content of less than 25.9%, a CV of 5,500 kcal/kg, TS between 0.7 and 0.9% and a theoretical yield of approximately 16%.

4.4 Exploration potential

No areas remain to be drilled for additional resources. However, some consideration has been given to extending the extractable resources below a depth of 200 m on the Middle Lower and Bottom Upper Seams. This would require transitioning to underground extraction and has not yet progressed beyond concept stage.

The northern limits of the pit edge infrastructure will be determined using limit of oxidation drilling; this may result in the definition of some additional resources.

MCM is trying to better understand the fines component of the coal (i.e., the fraction <0.5 mm). Future exploration will target this fraction using large diameter (>150 mm) core to provide representative samples; the analysis of these samples will be used to inform a revised processing methodology and plant design.

These items will be covered by a capital expenditure item of ZAR15 M.

4.5 Coal Resources and Coal Reserves

4.5.1 Coal Resources

The critical variable considered for both the primary coking coal product and the secondary thermal product is ash (<10% and <25.9%, respectively). In addition, the following cut-off values were imposed:

- Mineral Rights boundaries
- 50 m limit around known geological structures
- The limit of oxidation

- Minimum seam thickness of 0.5 m for GTIS
- Minimum seam depth of 17 m for MTIS
- Maximum seam depth of 200 m for MTIS.

The Coal Resource estimates were also discounted for unknown geological structures, based on the confidence in the Coal Resource classification; namely:

- Measured 5%
- Indicated 8%
- Inferred 10%.

The Coal Resources were estimated from the geological model, constructed by Mr John Sparrow using the Minex[™] software. SRK has reviewed the geological model and considers it provides an accurate reflection of the data and that the Coal Resources have been estimated in an appropriate manner.

SRK has reviewed the geological model and is satisfied that the data are represented sufficiently accurately in the grids, that the modelling principles employed and the estimation methods used are fit-for-purpose and that the geological model and the resource estimates can be relied upon.

The Coal Resources have been declared per planned mining pit (open pit only, no underground mining considered) between depths of 17 m and 200 m. Note that no Coal Resources are declared for the farm Fripp 645 MS, as this is occupied by the Mudimeli village.

The Coal Resources have been estimated by Mr John Sparrow (MCM) in accordance with the 2012 JORC Code. The Coal Resources have been reviewed by Mr Uwe Engelmann (Minxcon); both Mr Sparrow and Mr Engelmann are Competent Persons as defined by the JORC Code.

All Coal Resources and coal qualities have been estimated on an air-dry basis and are inclusive of the Coal Reserves.

The Coal Resources as reported in the 2022 Bankable Feasibility Study (BFS) are shown in Table 4-2 and Table 4-3 for coking coal and thermal coal on an MTIS basis respectively.

		Raw	Coal				C	oking Coal	Product				
Pit	Resource Category	MTIS	Density	Theo	retical Yield	(%)	MTIS	Ash	MV	MI	СV	TS	FC
		(Mt)	(gcm³)	≥0.5 mm	<0.5 mm	Total	(Mt)	(%)	(%)	(%)	(MJ/kg)	(%)	(%)
	Measured	85.0	1.8	11.0	5.5	17.2	14.6	10.0	29.6	0.0	31.4	1.1	59.5
	Indicated	22.4	1.8	9.9	5.8	15.8	3.5	10.0	27.9	0.0	31.4	1.1	61.2
West	Subtotal Measured & Indicated	107.4	1.8	10.7	5.6	16.9	18.1	10.0	29.3	0.9	31.4	1.1	59.8
	Inferred	1.0	1.9	7.6	6.1	14.7	0.1	10.0	26.7	0.7	31.4	1.1	62.7
	Total	108.4				16.8	18.2						
	Measured	142.4	1.9	10.8	6.0	17.8	25.4	10.0	29.4	0.5	31.4	1.0	60.0
	Indicated	46.2	1.9	11.6	5.9	16.2	7.5	10.0	29.9	0.5	31.4	1.1	59.6
Central & East	Subtotal Measured & Indicated	188.6	1.9	11.6	6.0	17.4	32.9	10.0	29.6	0.5	31.4	1.0	59.9
	Inferred	6.6	2.0	8.7	6.1	13.4	0.9	10.0	30.2	0.4	31.4	1.1	59.5
	Total	195.2			17.3		33.8						

Table 4-2: Makhado Coking Coal Resources (as at 4 February 2022)

Source: Minxcon (2022)

		Raw	Coal				Thermal C	Soal			
Pit	Resource Category	MTIS (Mt)	Density (gcm³)	Theoretical Yield (%)	MTIS (Mt)	Ash (%)	(%)	(%)	CV (MJ/kg)	TS (%)	FC (%)
	Measured	85.0	1.8	18.5	15.7	25.9	25.3	0.8	24.9	0.8	47.8
	Indicated	22.4	1.8	18.1	4.1	25.9	23.9	0.9	24.9	0.9	49.3
West	Subtotal Measured & Indicated	107.3	1.8	18.4	19.8	25.9	25.0	0.8	24.9	0.8	48.1
	Inferred	1.0	1.9	15.0	0.1	25.9	22.9	0.7	24.9	0.9	50.5
	Total	108.3		18.4	19.9						
	Measured	142.4	1.9	14.7	21.0	25.7	25.1	0.6	24.8	0.7	48.1
	Indicated	46.2	1.9	12.1	5.6	25.8	25.7	0.6	24.8	0.8	47.5
Central & East	Subtotal Measured & Indicated	188.6	1.9	14.1	26.6	25.8	25.2	0.6	24.8	0.7	47.9
	Inferred	6.2	2.0	10.3	0.6	25.7	26.1	0.5	24.7	0.8	47.0
	Total	194.8		14.0	27.2						

Makhado Thermal Coal Resources (as at 4 February 2022) Table 4-3:

Source: Minxcon (2022)

4.5.2 Coal Reserves

The Makahdo Project was evaluated under a feasibility study (FS) conducted in 2017. The 2017 FS considered the project was phased in such a manner as to initially use the beneficiation plant at Vele and then build a plant at Makhado for the longer term. This plan has subsequently been modified into a new FS in 2021 that exploits the Makhado coal to create an offtake for ArcelorMittal for all the pits using the beneficiation plant at Vele, which will be modified to allow fine coal beneficiation. The logistics at the Vele operations will distribute the products and the ROM coal from Makahdo will be trucked across to the Vele plant.

This revised study now fully accounts for the costs including the trucking costs in establishing the appropriate pit shells from which the Coal Reserves are derived (Table 4-4 and Table 4-5). The modified coal will also generate a secondary thermal export product, which is also part of the plan as off take agreements have been identified for this product.

	Delivered			F	lard cok	ing coal			
category	coal tonnes (Mt)	Yield (%)	Tonnes (Mt)	Ash (%)	VM (%)	IM (%)	CV (MJ/kg)	TS (%)	FC (%)
Proved	62.8	20.7	12.4	10.0	29.9	0.8	31.4	1.1	59.2
Probable	6.5	20.3	1.3	10.0	29.0	0.8	31.5	1.1	60.1
Total	69.3	20.7	13.7	10.0	29.8	0.8	31.4	1.1	59.3

Table 4-4: Makhado Hard Coking Coal Reserves December 2021 in 100% terms

Source: Minxcon Projects (2022), Makhado Colliery BFS

Notes:

¹ GTIS based on a 1.4 washability

² MTIS excludes Fripp Farm and is limited to the 200 m depth cut-off

³ MTIS includes geological losses of 5% on Measured. 8% on Indicated and 10% on Inferred Coal Resources

⁴ Quality parameters applied to GTIS to obtain MTIS:

a. Mining depth limit of 200 m applied

b. Minimum coal seam thickness of 0.5 m applied

c. HCC ash content <10% and TC ash content < 25.9%

d. Volatile material >20%

⁵ The Coal Reserve estimation includes diluted Measured and Indicated Coal Resources only

⁶ No Inferred Coal Resources have been included in the Coal Reserve estimation

⁷ The Coal Reserve estimate was completed using a nett received coal price of US\$126/t for HCC and US\$56/t for TC after offtake agreement deductions

⁸ The Coal Reserve estimate is at 100% attributable.

	Delivered				Therma	al coal			
category	coal tonnes (Mt)	Yield (%)	Tonnes (Mt)	Ash (%)	VM (%)	IM (%)	CV (MJ/kg)	TS (%)	FC (%)
Proved	62.8	18.2	10.9	25.8	25.4	0.8	24.9	0.8	47.7
Probable	6.5	15.6	1.0	25.9	24.8	0.9	25.0	1.2	48.5
Total	69.3	18.0	11.9	25.8	25.4	0.8	24.9	0.8	47.8

Table 4-5: Makhado Thermal Coal Reserves December 2021 in 100% terms

Source: Minxcon Projects (2022), Makhado Colliery BFS

Notes

GTIS based on a 1.4 washability

MTIS excludes Fripp Farm and is limited to the 200 m depth cut-off

MTIS includes geological losses of 5% on Measured. 8% on Indicated and 10% on Inferred Coal Resources 4 Quality parameters applied to GTIS to obtain MTIS:

a. Mining depth limit of 200 m applied

b. Minimum coal seam thickness of 0.5 m applied

c. HCC ash content <10% and TC ash content < 25.9%

d. Volatile material >20%

⁵ The Coal Reserve estimation includes diluted Measured and Indicated Coal Resources only

⁶ No Inferred Coal Resources have been included in the Coal Reserve estimation ⁷ The Coal Reserve estimate was completed using a nett received coal price of US\$126/t for HCC and US\$56/t for TC after

offtake agreement deductions

⁸ The Coal Reserve estimate is at 100% attributable.

Mining 4.6

Future development of the Makhado Project envisages 3 open pits namely east, central and west pits as shown in Figure 4-4.

Makhado proposed open pits Figure 4-4:



Source: Minxcon Projects (2022), Makhado Colliery BFS

The sequence of the development is to exploit the west pit first followed by the central and then the east pit. The farm between the pits, namely the Fripp Farm, is not included in current development plans as there is a community that has to be relocated before the area can be developed. Resettlement is not included in the current LOM plan. All the main development trial mining has been completed on the west pit and provides the logical starting point for any future mining.

The defined coal seams consist of several seams (5 seams) separated by a parting. These seams have a dip of approximately 10° from the outcrop position and as the seam dip toward the hilly overburden, this becomes the limiting factor for future pit development (Figure 4-5).



Figure 4-5: Cross-section of coal seams

Source: Minxcon Projects (2022), Makhado Colliery BFS

The shape of the west pit means that as the pit is extracted from the low wall, it will expose significant tonnages of coal for limited waste movement. As the highwall moves to the limits of the strip ratio, there will be limited ability to push the highwall back, if economic conditions allow. It will be easier to expose coal in the other pits.

To balance this strip ratio, the pits will be exploited in two phases to allow waste to be dumped inpit behind the mining operation, as far as possible. The other constraint is the dip, which will limit the coal mining. For easiest mining, the pit is exploited at an apparent dip to the final highwall position. The seams are then mined individually from the partings to maximise coal recovery.

The mining is expected to be completed using excavators and 120 t trucks. The bench heights are designed at 10 m and a flitch height of 3 m is used. There is sufficient space for in pit ramps to move the material from the blocks to either the ex-pit dumps or in-pit that no permanent ramp is needed. Figure 4-6 shows the mining plan for the west pit and how the seams will be exposed relative to the overburden.

Figure 4-6: West pit mine plan



Source: Minxcon Projects (2022), Makhado Colliery BFS

The overburden material will require drilling and blasting, as well as the parting, but the coal can be free dug.

In the Coal Reserve estimate, the geological losses have been applied mostly accounting for modelling issues and are based around the experience gained in mining of the trial pit. Contamination is also included from the parting operations at a level of 8%.

The mine pits have been scheduled to produce 270 ktpm and the appropriate waste moved to balance the overall volumes moved (Figure 4-7).



Figure 4-7: Makhado mine schedule

Source: Minxcon Projects (2022), Makhado Colliery BFS

This yields a mine life of around 21 years with an average strip ratio of 2.3 bulk cubic metres (BCM)/t coal.

4.7 Processing

MCM currently plan to mine, crush and screen 3.2 Mtpa of ROM coal at the Makhado mine to a top size of approximately 225 mm before scalping at 31.5 mm. The +31.5 mm (approximately 34% to 38% of the ROM) will be discarded and placed on the carbonaceous dump or backfilled into the Makhado open pits as high ash waste, while the -31.5 mm coal, which accounts for approximately 62% to 66% of the ROM, will be hauled with side tipper trucks to the Vele coal processing plant (CPP) for washing. Vele is at a distance of approximately 134 km from Makhado mine.

The combined process flow (Figure 4-8) is with the elements added to the existing plant at Vele (Figure 4-9) to allow recovery from the fine coal via a reflux classifier and froth flotation.

Figure 4-8: Combined process flow sheet



Source: Minxcon Projects (2022), Makhado Colliery BFS

The plant was designed by DRA in South Africa, which used the information gained from the trial pit, drill holes and experience gained on developing coking coal plant of a similar nature in Mozambique. The design was developed to a detailed drawing level and hence the capital estimate for this is at a high level of accuracy.

Figure 4-9: Vele washplant



Source: Minxcon Projects (2022), Makhado Colliery BFS

The current Vele plant has provision for water, power and the necessary pollution controls already implemented.

4.8 Infrastructure and services

There is existing water infrastructure at the Vele Colliery and the supply required for future processing operations is approved in terms of an existing integrated water use licence (IWUL). SRK notes that when previously operational, Vele used less than 10% of its annual water allocation of 2,452,800 m³. The Vele Colliery operates a closed water system, with zero water discharged into the natural environment. The supply is adequate and will be abstracted from boreholes in the Limpopo River to supply the processing plant via an existing raw water dam. The pumping and piping infrastructure will be re-commissioned as part of the operational readiness of existing infrastructure to be aligned with the project execution. Water is recycled to reduce the demand on supply, thereby conserving the resource.

Prior to going on care and maintenance in October 2013, Vele's maximum demand for the plant and surface reticulation was 2.0 MVA and an on-site 2500 kVA diesel generator was used as the source of electricity. The colliery has secured a 4.0 MVA supply from Eskom and the necessary overhead lines and infrastructure will be installed as part of the plant modification process. The generator will be used as the back-up power supply. Eskom will supply power from its Pontdrift distribution substation via a 22 kV overhead line to the mine substation. The construction of the overhead line has been initiated and approximately 8 km has been completed, with the remaining 7 km to the Pontdrift substation remaining. The reticulation will include the supply to the borehole pumps on the Limpopo River, holding tank pumps as well as other mine requirements.

The Vele processing plant is situated on the farm, Bergen Op Zoom. Coal produced by the plant is transported by road to the R572 linking Musina to Alldays, which traverses Erfrust. This 55 km road is tarred, facilitating the passage of coal to the Musina railway siding and the trucks returning from Vele to Makhado will transport the saleable coal.

The Musina railway siding provides good access to under-utilised existing rail infrastructure allowing for the supply of coal to domestic and international markets. Limpopo Coal Company (Pty) Ltd (Limpopo Coal) previously constructed a bypass road on the western side of Musina to ensures that the trucks transporting coal from the Vele Colliery do not have to enter the commercial centre at Musina. This bypass road allows the trucks to enter and exit the town without disturbing normal traffic and reduced the effect of the colliery on Musina's infrastructure. The bypass road also improved efficiency by reducing the time required to offload the coal at the railway siding.

The Makhado infrastructure has an estimated power demand of 750 kVA. This is based on the load list for the crushing and screening plant and the power demand supplied by the preferred mining contractor for the mining and owner's infrastructure. A 22 kV line runs through the project area on the western boundary and provision has been made for tying into this line to provide the project with power. A design and cost estimation has been done for the construction of a 2.2 kW line that will feed the project as well as the project intake and distribution substation. This has been conducted by EHL Engineering Services. A diesel generator sourced from the Vele operation will be put in place to provide emergency backup power.

The IWUL as approved for Makhado Project allows for the abstraction of water from existing boreholes based near the Makhado Project infrastructure. Two boreholes will be utilised to supply the project with raw water for processing (crushing and screening) and mining as well as potable water. One borehole is already equipped with a pump and rural supply whereas the piping for both boreholes and equipping is required for the second borehole from the Tanga area.

4.9 Permitting and environment

The Makhado Project was issued with a new order Mining Right (no. 30/05/1/2/2/204 MR) on 26 January 2016. The Mining Right covers an area of approximately 7,651 ha and is in force for a period of 30 years ending on 25 January 2046, comprising the following farms:

- Windhoek 847MS
- Mutamba 668MS
- Tanga 849MS
- Daru 848MS
- Fripp 645MS
- Lukin 643MS
- Salaita 188MT.

Environmental authorisations

The EA has been granted for the Makhado Project. The initial EIA/EMPR (DMR Reference: LP 30/5/1/2/3/2/1(204) EM and LEDET reference 12/1/9/2-V3)) was granted on 30 August 2013. Subsequent amendments were granted in 2016 (7 July 2016) and 2018 (7 September 2018) to account for a delay in the commencement of the project (2016 EA) as well as to include transport of coal via road (2018 EA).

In June 2021, MCM notified the DMRE of the commencement of certain activities approved in the EA (MCM, 2021b).

Water use licences

Minxcon (2022b) indicated that an IWUL no. 01/A80D/ABCEGJ/4138 in terms of Chapter 4 of NWA was issued to Baobab on 24 December 2015. The IWUL was however appealed on 14 February 2016 and automatically suspended under section 148(2)(b) of NWA. The suspension of the IWUL was lifted on 25 May 2019. The appeal process is underway with the DWS Water Tribunal. This process does not affect the validity or current usage of the IWUL, however, there may be operational implications based on the findings or outcomes from the Tribunal.

Baobab Mining and Exploration (Pty) Ltd: Makhado Colliery Project was subsequently issued with a new WUL (No. 01/A80D/ABCEGIJ/4138) on 16 January 2019 which is valid for 17 years till 2036. This licence includes the water allocations from the irrigation farmers in addition to the water uses authorised in the 2015 WUL. The appeal was set to be heard by the Tribunal in January 2022 (MCM. 2021a). The hearing has been postponed indefinitely and there is no outcome yet.

All required water use activities are authorised, however, this should still be confirmed during construction activities once the mine is operational. The volume of water approved for potable and mine use in the WUL exceeds current mine plan water use requirement. Amendment of the WUL to reflect the new mine plan will provide additional water to other users in the water scarce catchment. The 2021 external WUL audit confirms compliance to the WUL.

Waste disposal

Waste disposal in terms of the residue stockpile and residue deposits was initially approved under the *Minerals and Petroleum Resources Development Act 2002* (MPRDA). These associated activities now fall under the NWA as well as the *National Environmental Management Act* (Act 107 of 1998) (NEMA) and is deemed to be approved under NEMA and NWA Section 21 water uses approval.

Other environmental permits and approvals

The Makhado Project has applied for, and received, various permits pertaining to protected tree and plant removal as well as grave relocation. These permits have a short validity (between one and 12 months) so it is advised that the project revisit the need to apply for these permits if they are required in the future (i.e. if further grave relocations or removals of protected flora species are required).

Social and labour plan

MCM has an approved SLP for 2015 to 2019, which was submitted to the DMRE in 2015 and only approved in May 2019 following approval to amend the 2015–2019 SLP in April 2019. SLP Annual Reports for 2014, 2015 (close out report for previous 2010-2015 SLP), 2016, 2017 and 2019, were submitted to the DMRE, with the exception of 2018. A new SLP is in the process of being developed for the 2020 to 2024 period and the associated annual implementation plans and reports must be submitted for 2020 and 2021. It is unclear what the SLP update status is as well as the status of the submission of the 2020 and 2021 annual implementation plans.

4.9.2 Environmental aspects

Environmental management

MCM has an Environmental Policy which is used to guide their environmental management activities (MCM, 2021a).

An Environmental Management System (EMS) is not yet in place for the Makhado Project. However, according to the Makhado Project Information Memorandum (MCM, 2019), the intention is to consolidate the existing Vele safety, health and EMS systems and procedures into an integrated SHE Management System that will be adopted for implementation at the Makhado site. Contractors are required to manage their impacts to the environment in accordance with the Contractor Management Pack (MCM, 2018). This EMS should be in place for construction phase of the project which has commenced with the clearing of land and construction of an access road (MCM, 2021b).

There are several management plans currently in place for the Project, however, these plans will require revision to align to the most up-to-date project description and mine plan.

According to the Company organogram, the Project also has an environmental manager who is supported by an environmental officer. The environmental manager ultimately reports to the general manager.

Environmental monitoring

The only monitoring undertaken at present is dust fallout monitoring (which is not ongoing at this stage).

According to the August 2021 monthly monitoring report (Skyside, 2021), there are currently three sampling locations which are all operational. It is anticipated that the monitoring programme will ramp up with the commencement of construction extending into the operational phase. The following monitoring will be undertaken monthly (Minxcon, 2022 and MCM, 2021a):

- Surface water
- Groundwater
- Heritage
- Air quality (dust)
- Biodiversity
- Waste management.

Commitment to monitoring needs to be aligned with the recommendations from both the specialist studies undertaken in support of the EA as well as what has been included in the EMPR. It is recommended that the EMPR is reviewed to ensure that all the management and mitigation measures are still relevant and aligned with the most up-to-date project description.

A suitably experienced Environmental Control Officer needs to be appointed for the construction phase of the project (2013 EA). Based on the company organogram, it is assumed that an Environmental Control Officer has been appointed.

Environmental performance

Although audits of environmental authorisations (EA) were not available for review, it is assumed that these audits will take place once construction commences. In terms of Regulation 34 of the EIA Regulations, an EA, the EMPR and closure plan (where applicable) must be audited by an independent party with the relevant environmental auditing expertise. The environmental audit report must be submitted the Limpopo Department of Economic Development Environment and Tourism (LEDET).

The frequency of auditing is indicated in the EA. Should no intervals of auditing be indicated, the frequency of the audits may not exceed 5 years.

The latest EMPR performance review was conducted in November 2021 (Elemental Sustainability, 2021c) for activities which have commenced. The colliery received full compliance on the relevant associated EMPR activities assessed. In addition to this the latest external WUL audit was undertaken in October 2021 (Elemental Sustainability, 2021d). The colliery received full compliance on the relevant associated conditions assessed.

4.10 Risks and opportunities

No geological risks were identified during the risk assessment conducted as part of the Makhado BFS.

The environmental permits and licences in place for the Makhado Project are based on an outdated project description and mine plan and need to be aligned to the current status quo.

It needs to be confirmed if a WML has been applied for in terms of the anticipated coal discard stockpiles in line with the requirements of the *National Environmental Management: Waste Act* (Act 59 of 2008) (NEM:WA). Residue/discard stockpiles require a WML in terms of NEM:WA. Currently, since no active mining is taking place and no discard is being generated, the materiality of this risk is low.

All environmental monitoring requirements as specified in the EA and EMPR needs to commence as soon as possible as it is understood that some activities have commenced on site, notably the clearance of vegetation and construction of an access road. It is understood that dust and water monitoring have commenced but monitoring results were not made available to review. The suite of required environmental monitoring will ensure that MCM has a reliable baseline to refer to going forward and to ensure that impacts resulting from the activities are managed and mitigated in a timely manner. If this is undertaken, the operation will be in compliance with its EA and a reliable baseline can be developed which can be used to manage risks going forward. The EMS needs to be implemented as construction phase activities have commenced (MCM, 2021b) to ensure that the company records and manages all aspects related to its impacts on the environment.

Due to the locality of the project in a water scarce area, robust water management such as maximising reuse and water conservation and demand initiatives can assist with reducing water assurance risks for the mine and surrounding users especially in drought situations. Amendment to the current WUL groundwater and Nzhelele Dam water abstraction volumes, in line with the new mine plan, will make water allocations available to other catchment users.

It is important that the mine comply with its WUL as failure to do so can lead to directives from government. This compliance could not be verified. Non-compliance to the WUL is material risk because it is in contravention to the requirements of the NWA and the operation can be issued with a directive to cease operations. The materiality of these aspects can therefore not be assessed as SRK does not have the information to give an informed opinion on whether or not the operation is complying to the requirements of its environmental licences and permits. This is therefore a material risk.

5 Vele Colliery

5.1 Overview

The Vele Colliery is located 40 km west of the town of Musina and 100 km north of the town Alldays in the Limpopo Province, South Africa. Musina is the last major town before the Beitbridge border crossing between South Africa and Zimbabwe and lies 520 km north of Pretoria (Figure 5-1).

MCM holds a 100% interest in the Vele Colliery through a its wholly owned subsidiary, Limpopo Coal. The Project is held under a new order Mineral Right No. LP 103 MR which is granted and remains valid until 18 March 2040. MCM also holds a Prospecting Right LP 1136 PR over the farm Alyth 837MS.

The Colliery started thermal coal production in January 2012. It is currently on care and maintenance having been placed on that status in October 2013.

The Limpopo River, which represents the international border between South Africa and Zimbabwe, bound the Vele operations to the north. The Mapungubwe National Park's eastern border is located 5 km west of the western boundary of the Vele Colliery. The Mapungubwe Hills within the park is a World Heritage site.

The Vele Colliery is well situated with respect to existing infrastructure, such as rail and road. The main road linking South Africa to Zimbabwe and associated rail routes pass through Musina, in proximity to the project. The R572 sealed bitumen road from Pontdrift to Musina is located adjacent to the Vele Colliery on the southern boundary.



Figure 5-1: Location of Vele Colliery

Source: MCM website, accessed 13 May 2022

The climate at Vele is semi-arid and characterised by hot to extremely hot summers and warm to cool winters, with minimal precipitation. Mining activity is able to be conducted all year-round.

5.2 History

Southern Sphere Mining and Development Company Limited undertook exploration activity between 1973 and 1983. This involved drilling 61 drill holes using air flush coring, resulting in a core size of approximately 16.8 mm. Thirty-six large diameter drill holes were also completed for washability and coking testing purposes. All exploration activity then ceased for the next 22 years, after which the Limpopo Coal acquired the prospecting rights to various properties within the current colliery area. In 2006, CoAL's predecessor company, GVM, acquired a 78% stake in Limpopo Coal and in 2008, Silkwood Trading 14 (Pty) Ltd obtained additional prospecting rights on the Vele area but was bought by CoAL later that year, CoAL received shareholder approval for its name change to MCM in November 2017.

A high-resolution airborne magnetic and radiometric geophysical survey was flown over the area in 2008. After detailed processing, the final products were a digital terrain model and a geological map, as well as other geophysical data maps.

In March 2010, an appeal was lodged against the Mining Right, and in April 2010 an appeal was lodged against the EMP. In June 2010, the DEA issued a pre-compliance notice followed by a compliance notice in August 2010. In the same month, the Department of Water Affairs (DWA) (now DWS) issued a directive to cease all unlawful water activities. In March 2011, a coalition of non-government organisations opposed to Vele submitted an appeal to the country's Water Tribunal. Consequently, the IWUL was automatically suspended, however. this suspension was lifted in October 2011.

Vele was awarded a Mining Right over most of the Vele area in 2010.

Open pit coal production started in the East Pit in January 2012, producing a single product with a 12% clean coal ash value for metallurgical use. Production ceased in October 2013 after logistical difficulties on the Matola railway line in Mozambique (as the coal was exported through the Matola Coal Terminal at Maputo) and the inability to produce the predicted yields with the existing configuration of the beneficiation plant.

The plant produced a 10% ash semi-soft coking coal for bulk coking tests at ArcelorMittal and produced an 18% ash export thermal coal until it was put on care and maintenance. After additional drilling and analysis, a redesign has been planned to produce a 10% ash semi-soft coking product and a 5,500 kcal (NAR) thermal coal product.

5.3 Local geology

The Vele Colliery is located in the Permian Tuli Basin of the Limpopo Coalfield. The Limpopo Coalfield is a small intracratonic east-west striking fault-bounded coalfield, where the sedimentation was fault-controlled from initial deposition; the preserved basin length is around 120 km and the width is approximately 80 km; the coalfield extends north into Botswana and northeast into Zimbabwe (Malaza, 2014). The coalfield is bounded by east-northeast trending normal faults.

The basin sediments belong to the Dwyka and Ecca Groups of the Karoo Supergroup and consist of basal diamictites and sandstone of the basal Tshidzi Formation, followed by the sandstone-siltstone-shale-coal assemblage of the Madzaringwe Formation (Figure 5-2). This is overlain by alternating black shale, sandstone and coal of the Mikambeni Formation and sandstones and conglomerates of the Fripp Formation.

The overlying Beaufort Formation is represented by the siltstone, and fine-grained sandstones and mudstones of the Solitude Formation. In the central part of the basin, the Solitude Formation is overlain by the coarse sandstones and conglomerates of the Stormberg Group's Klopperfontein Formation. The red and purple mudstones and subordinate siltstones of the Bosbokpoort Formation are encountered above the Klopperfontein Formation. In turn, these are overlain by the fine-grained sandstones of the Red Rocks and Tshipise Members of the Clarene Formation.

A. M.	ain Karoo Basin Johnson, 1994)	1:250000 Geo	ological Map Alldays, 2001
	Clarene Formation	Clarene Formation	Tehipise Sandstone Member
"Stormberg	Ellist Exemption		Red Rocks Member
Group"	Enlot Pormation	Bosbokpoort F	Formation
	Molteno Formation	Klopperfonteir	Formation
Beaufort Group)	Solitude Forma	ation
		Fripp Formatio	on
Ecca Group		Mikambeni For	rmation
		Madzaringwe F	Formation
Dwyka Group		Tshidzi Forma	tion

Figure 5-2: Vele and Makhado – general stratigraphy

Source: Sparrow (2012)

Figure 5-3 depicts the surface geology of the Vele area.



Figure 5-3: Surface geology of the Vele area

Source: VBKOM (2017)

The strata are interpreted to dip northwards at approximately 2° in the Vele area, although the dip increases locally close to faults; the strata subcrop to the east and south. Near-vertical dolerite dykes are encountered, devolatilizing the coal, but not displacing it. Faults not only controlled deposition, but also subdivided the coalfield into a number of blocks, resulting in varying seam depths between the blocks; thus, parts of the deposit can be exploited from surface, while other blocks need to be mined from underground. The differing block depths are in Figure 5-4.



Figure 5-4: Top Lower Seam depth illustrating different blocks due to faulting

Source: VBKOM (2017)

At Vele, the coals were extracted from the Main Coal Zone of the Madzaringwe Formation within the Ecca Group. The Main Coal Zone is approximately 15 m thick and consists of three coalbearing horizons: the Top, Middle and Bottom Coal Horizons/Seams, comprising interlaminated carbonaceous shale, mudstones and coal. The Top Seam is further subdivided into the Top Upper, Top Middle and Top Lower Seams, while the Bottom Seam is subdivided into the Bottom Upper and Bottom Lower Seams (Table 5-1). However, the Top Middle and Top Upper Seams are not considered economic.

Seam or Zone	Average (m)	Maximum (m)	Minimum (m)	Proportion of Coal (%)
Main Coal Zone	16.42	31.95	0.25	
Top Lower	1.52	7.66	0	55–65
Middle	1.05	2.19	0	25–45
Bottom Upper	1.98	5.48	0	65–80
Bottom Lower	3.68	7.87	0	65–80

Table 5-1: Vo	ele Seam	thicknesses
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Source: VBKOM (2017)

The coal has been petrographically classified as medium rank, high vitrinite C-grade bituminous coal. The coking coal fraction is classified as a semi-soft coking coal and can produce a 10% ash coking coal (primary product) and a secondary 5,500 kcal (NAR) product.

5.4 Exploration potential

Future exploration in areas located between areas covered by the LOM plan and the Prospecting Right boundary are limited, but better fault delineation will assist with defining any potential resources. To date, four inclined drill holes were successful in delineating faults.

MCM has an existing Prospecting Right to the farm Alyth 837 MS. The area covered by this right requires significant drilling in order to upgrade the presently defined seams JORC Code-compliant Coal Resources.

5.5 Coal Resources and Reserves

5.5.1 Coal Resources

With regard to the defined Coal Resources at Vele, the critical variable to exclude devolatilised coal is the volatile matter (VM) content. The following cut-off values were applied when estimating the mineable resources at Vele:

- Mineral Rights boundaries (the Mining Right and Prospecting Right are reported separately)
- The 100-year floodline for the Limpopo River (the international border between South Africa and Botswana or Zimbabwe
- The limit of oxidation
- A 50 m-wide exclusion zone around dykes and other geological structures
- Minimum raw VM of 18% dry ash free
- A minimum seam thickness of 0.5 m for gross tonnes in situ
- Thickness cut-off criteria for underground resources (Bottom Lower Seam) minimum of 1.4 m and maximum of 4.5 m
- Note that MTIS has been estimated by applying the theoretical mining heights and an estimated mining layout loss of 2% for open cast areas and 10% for underground areas. This translates to an average mining layout loss of 5% for the Mining Right area and 8% for the Prospecting Right area.

The Coal Resource estimates were also discounted for unknown geological structures, based on the confidence in the Coal Resource classification, namely:

- Measured 10%
- Indicated 15%
- Inferred 20%.

The Coal Resources were estimated from the geological model, constructed by Mr John Sparrow using the Minex[™] software. SRK has reviewed the geological model and considers it provides an accurate reflection of the data and that the Coal Resources have been estimated in an appropriate manner.

SRK has reviewed the geological model and is satisfied that the data are represented sufficiently accurately in the grids, that the modelling principles employed and the estimation methods used are fit-for-purpose and that the geological model and the resource estimates can be relied upon.

The Coal Resources have been estimated by Mr John Sparrow (MCM) in accordance with the JORC Code. The Coal Resources were reviewed by Mr B. Botha (VBKOM, 2017) and Ms Catherine Telfer of Venmyn Deloitte (2012). Mr Sparrow, Mr Botha and Ms Telfer are Competent Persons as defined by the JORC Code.

All Coal Resources and coal qualities have been estimated on an air-dry basis and are inclusive of the Coal Reserves. Note that the in situ Coal Resource estimates include significant amounts of intercalated non-coal material that will be removed during beneficiation.

The Coal Resources as reported in the Company's 2021 Annual Report are shown in Table 5-2; the Coal Resources, subdivided into those attributable to the Mining Right area and the Prospecting Right area are shown in Table 5-3 and Table 5-4, respectively.

Resource Category	GTIS (Mt)	MTIS (Mt)	MCM Attributable Interest (%)	MCM Attributable Resource (Mt)
Measured	148.166	86.112		86.112
Indicated	426.854	200.303	100	200.303
Subtotal Measured & Indicated	575.02	286.415	100	286.415
Inferred	218.932	75.154		75.154
Total	793.952	361.569	100	361.569

Table 5-2: Vele Coal Resources (as declared at 30 June 2021)

Source: MCM (2021)

			MCM	MCM		Ra	w MTIS Co	oal Qualiti	es	
Resource Category	GTIS (Mt)	MTIS (Mt)	Attributable Interest (%)	Attributable Resource (Mt)	CV (MJ/kg)	Ash (%)	(%) MV	FC (%)	TS (%)	(%)
Measured	96.719	83.271		83.271	16.23	46.5	22.1	29.86	1.78	1.6
Indicated	203.456	163.724	00	163.724	15.66	48.0	21.6	28.82	1.79	1.5
Subtotal Measured & Indicated	300.175	246.995	20	246.995						
Inferred	76.160	58.671		58.671	15.14	49.4	21.3	27.64	1.96	1.6
Total	376.335	305.666	100	305.666	15.70	47.92	21.67	28.85	1.82	1.57

Vele Coal Resources (Mining Right only) Table 5-3:

Source: VBKOM (2017)

Vele Coal Resources (Prospecting Right only) Table 5-4:

	SIT C	NTIS	MCM	MCM		Ra	w MTIS Co	oal Qualiti	es	
Resource Category	(Mt)	(Mt)	Attributable Interest (%)	Attributable Resource (Mt)	CV (MJ/kg)	Ash (%)	IM (%)	FC (%)	TS (%)	(%)
Measured	3.507	2.841		2.841	16.72	44.33	23.20	30.95	1.20	1.52
Indicated	46.964	36.579	001	36.579	15.60	47.82	21.66	28.95	1.64	1.57
Subtotal Measured & Indicated	50.417	39.420	001	39.420						
Inferred	22.071	16.483		16.483	14.60	50.14	21.00	27.29	2.05	1.57
Total	72.542	55.903	100	55.903	15.35	48.36	21.53	28.54	1.75	1.57

Source: VBKOM (2017)

5.5.2 Coal Reserves

Vele originally declared a Coal Reserve in 2017 (VBKOM 2017) based upon parameters adopted at an adjacent open pit operation, that was supplemented by some underground mining (Table 5-5). Since the cessation of active operations and placement into care and maintenance due to the environmental issues, these parameters are no longer valid and hence Coal Reserves are no longer able to be declared.

Operation	Reserve Category	MTIS Reserve (Mt)	ROMt (Mt)	Saleable primary Prodt (Mt)	Saleable secondary Prodt (Mt)
Open pit	Proven	23.81	25.28	2.70	8.34
Opencast and Underground	Probable	301.37	266.11	28.47	87.82
Total Reserves		325.18	291.39	31.18	96.16

Table 5-5: Vele Coal Re	serves (100%	attributable	basis)
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Source: VBKOM (2017)

It is clear there is a substantial Coal Resource within the Mining Right. The existing plant is currently being used to support the beneficiation of coals derived from the Makhado Project and is unlikely to be able to process coals from both Makhado and Vele simultaneously. Hence, until a clear development profile is established, any assessment of this Mining Right should be completed on an implied resource multiples basis.

5.6 Mining

The mine is currently under care and maintenance, with no current plans to re-start coal production any time soon.

5.7 Processing

The processing plant is described in the Makhado Project, refer to Section 4.7.

5.8 Infrastructure and services

The nearest town to the Vele Colliery is Musina, which is the seat of the local Municipality, with a history of mining activity and several active mines in the region. Services available at Musina include schools, rail linkages, a hospital, wide tar roads and electricity from the national grid.

No accommodation is provided on site at Vele, with accommodation for employees currently provided at the MCM-owned Dongola Lodge, which also serves as the administrative centre for the Vele Colliery. Any future development beyond that currently implemented is likely to require employees to have their own accommodation in Musina.

Vele Colliery has an existing opencast mine void, a laboratory, contractors' yard, workshops, change houses, processing plant and ROM stockpile, transportation infrastructure, a wash bay, tyres storage yard, various stores and pollution control dams, with fencing and security in place.
The contractors' yard includes a tyre, oil and general servicing yards, is bunded, and with dirty water drains.

Coal is transported from the mine to an existing and upgraded rail siding in Musina approximately 50 km from the colliery by tar road. A bypass road has been upgraded to the rail siding whereby the route does not pass through Musina township. A concrete base has also been casted at the siding with pollution control drains.

5.9 Permitting and environment

Mining rights

The Vele Colliery was issued with a new order mining right (No. 30/5/1/2/2/103) on 19 March 2010. The mining mining right covers an area of approximately 8,662 ha and comprises the following farms:

- Bergen Op Zoom 124 MS
- Semple 155 MS (Consolidation of Almond 120 and Semple 119 MS)
- Portion 3, 4, 5, 6, 13, 14 and Remaining Extent of the farm Over Vlakte 125 MS
- Voorspoed 836 MS (Consolidation on Remaining Extent of the farm Newmark 121 MS and Portion 1 of Bergen Op Zoom 124 MS).

The Mining Right is in force for a period of 30 years ending on 18 March 2040.

Environmental authorisations

Vele Colliery is supported by an approved EMPR issued on 19 March 2010 in terms of section 39 the MPRDA. The EMPR is valid for the LOM (Mixcom, 2022b). In addition to the EMPR, the colliery also has three EAs, one for a river diversion that was approved on 19 January 2019 and two Section 24G EAs authorised in July and October 2011.

In 2014, the Company applied for an amendment to the EA, which was granted on 16 January 2015, and subsequently appealed. On 19 November 2015, the Minister dismissed the appeal lodged against the Vele Colliery's amended EA.

Water use licences

The consolidated Vele IWUL (No. 01/A71L/ABCEGIJ/420) is valid for 17 years until 10 December 2035 and is inclusive of the necessary water uses, especially the provision of sufficient water capacity for the recommencement of the plant (Minxcon, 2022b). An IWUL, however, does not guarantee that adequate water volumes are always present in the water resource from which the IWUL authorises abstraction. It could not be determined if alternative water resources have been identified.

To convert and restart the Vele Coal Processing Plant (CPP) for the treatment of coals from the Makhado Project, new construction will be required (Minxcon, 2022b). These changes need to be assessed against the NWA to ensure that new activities such as re-routed conveyors, volumes and refurbishment of existing infrastructure do not trigger additional Section 21 water uses or require Regulation 704 exemption. The MCM (2020) Integrated Water and Waste Management Plan indicates that the Water Quality Limits as prescribed in the WUL, do not reflect the true status of water quality in the catchment within which Vele Colliery is situated. Geo Pollution Technologies (2019), indicate various parameter concentrations are elevated across the entire monitoring area and or fluctuate seasonally potentially due to low recharge trends leading to an accumulation of dissolved solutes. A WUL amendment application may be submitted to the Department of Water and Sanitation to address impractical water quality limits, when the mine becomes operations should exceedance be due to non-mining related activities within the area. New authorisation applications to the DWS are considered high risk due to capacity constraints within this Department which may delay or result in the rejection of applications.

An Integrated Water and Waste Management Plan (IWWMP) was compiled in 2020, but must be updated annually in accordance with the IWUL. Documents, such as the stormwater plan (2018), will need to be updated should an additional IWUL Application be required or when operations commence and must be in line with the latest mine plan. No follow up audits post 2019 were available to determine how partial and non-compliances have been addressed in 2021/2022. Audits must be undertaken annually in accordance with the IWUL.

Waste disposal

The Vele Colliery is currently on care and maintenance, therefore no mineral waste/hazardous waste disposal is currently taking place. Based on the Annual Report (MCM, 2021a), the colliery operates on a closed water system with zero discharge to the natural environment. The colliery does not have a WML in terms of NEM:WA, and as in the case of the other operations assessed, the need for/relevance on a WML will have to be reviewed once the colliery becomes operational again.

Other environmental permits and approvals

Various permits were issued by the Department of Agriculture, Forestry and Fisheries (DAFF) to relocate protected trees in terms of Section 15(1) of the National Forests Act, 1998 (Act 84 of 1998). The DAFF permits have been executed within the period of validity and subsequently expired.

Social and Labour Plan

Vele Colliery has a SLP which was valid for the period 2015–2020 (CoAL, 2015). There is no evidence of the intent to provide an updated SLP (for the period 2021–2026) to the DMRE.

5.9.2 Environmental aspects

Environmental management

An EMS consisting of various elements has been adopted at Vele Colliery and was developed as the formal tool for environmental management. These systems are independently audited every quarter, and reports are submitted to the regulatory authorities (MCM, 2021a). Core system procedures have been developed for each of the EMS elements, supported by legislated Codes of Practice (COPs) and operational Standard Operating Procedures (SOPs).

All environmental monitoring, auditing and actions implemented to ensure legal compliance as well as continual improvement in environmental performance are included in the EMS. It is noted that while not ISO14001:2015 accredited, MCM states that the Vele EMS is aligned to ISO 14001 (MCM website, accessed on 19 May 2022).

Vele Colliery has also implemented an Environmental Management Committee (EMC) in accordance with the EA, which comprises various stakeholders from regulatory authorities, relevant organs of state, municipal representatives, civic society and stakeholders identified during the initial public process. The EMC has various sub-committees including the heritage and water sub-committees established to monitor compliance to the heritage management plan and IWUL respectively.

According to the company organogram, the colliery also has an environmental manager who is supported by an environmental officer. The environmental manager ultimately reports to the general manager.

Environmental monitoring

Continuous monitoring is implemented at the mining sites to assess the effectiveness of controls with regular analysis and reporting, and action management on failures. Monitoring data is reviewed by the EMC on a quarterly basis, and the monitoring programme and/or protocols revised where necessary (MCM, 2021a). According to the Annual Report (MCM, 2021a), the following monitoring is undertaken at the colliery:

- Groundwater quarterly
- Surface water monthly
- Biomonitoring biannual
- Heritage monthly
- Air quality (dust and PM₁₀) Monthly (dust) and continuous (PM₁₀).

Limited monitoring reports were provided to SRK for review. Based on the 2020 IWWMP (VELE/EMS/E10-IWWMP/2009 – MCM, 2020), surface water quality monitoring results are generally within IWUL limits, however, the groundwater quality results exceed the limits stipulated by the IWUL. It was recommended that the water quality limits within the IWUL are reviewed and revised to reflect the local context (high natural background levels of certain parameters) of the catchment.

Environmental performance

At Vele Colliery, environmental performance is measured against prescribed criteria in line with its Environmental Management Procedure: Audits and Evaluation of Compliance (VELE/EMS/E14/2014). According to the 2021 Annual Report (MCM, 2021a), both internal and external audits are undertaken and varying intervals for the EMS, EA, IWUL and Environmental Performance Reporting. The DWS, DMRE and the South African Heritage Resources Agency (SAHRA) undertake annual audits of the colliery. Although recent environmental audits (2020/2021) have not been made available for review, previous audit reports of the colliery indicate a high level of compliance to the conditions of the approved environmental permits and licences.

5.10 Risks and opportunities

Geological risks include unknown dolerite dykes and faults that may reduce the blocks available for mining.

The water supply is adequate and will be abstracted from boreholes in the Limpopo River to supply the processing plant infrastructure via an existing raw water dam.

There is no evidence of a valid SLP, which exposes the mine to government directive on noncompliance. The mine requires a valid SLP to be in compliance with South African law. It is not clear whether a new SLP has been prepared for implementation. A valid SLP is a requirement in terms of its Mining Right and should be publicly available. The Mining Right can be revoked and the operation can be shut down if it is operating without a valid SLP. The likelihood of this risk being realised is low if the operation engages with the DMRE and provide an action plan to ensure that a valid SLP is compiled and implemented.

6 Greater Soutpansberg Project

6.1 Overview

The GSP, is contiguous to the Makhado Project, and situated to the north of the Soutpansberg Mountains in the Limpopo province, comprises of three sub-projects: Mopanie, (Jutland and Voorburg), Generaal (Generaal and Mount Stuart) and Chapudi (Chapudi, Wildebeesthoek, Chapudi West) (Figure 6-1).

The Mopane Project comprises Jutland and Voorburg sections. The nearest town is Musina, situated approximately 30 km to the north of the project area. Pretoria lies approximately 380 km to the south.

The project is accessed via a network of unsealed dirt roads that branch from the R525 unsealed dirt road and connect to the sealed national N1 highway.

A railway line runs along the southeastern boundary of the Jutland section and connects the GSP with the main rail network. Eskom grid power lines are located parallel to the N1.

The towns of Louis Trichardt and Musina are regional centres and provide modern facilities including accommodation and services to the Project.

Figure 6-1: Location of GSP



Source: MCM website, accessed 13 May 2022

These are owned by MbeuYashu (Pty) Ltd, a company jointly owned by MCM (74%) and its Black Economic Empowerment partner, Rothe Investments (Pty) Ltd (26%) (Figure 6-2).

New order mineral rights have been granted for Chapudi in December 2018, Generaal in November 2019, and Mopane in February 2021.





Source: Venmyn Deloitte, CoAL CPR, 2017

6.2 History

No mining has taken place on any areas of the GSP. This section discusses the known exploration in the various sections.

6.2.1 Mopane Project

Voorburg Section

Exploration on Cavan 508 MS was first conducted by Rapburn Exploration (Pty) Ltd in the early 1970s. This consisted of reconnaissance drilling with seven holes drilled, of which six were sampled. None have been used in MCM's geological models or resource estimates. In 1976, Iscor drilled 43 diamond holes on Banff 502 MS and Voorburg 503 MS. These were widely spaced for reconnaissance purposes. Iscor recognised the high coking properties of the coals and produced two reports on the mining potential of the properties. CoAL acquired Iscor's Soutpansberg database, covering all the GSP, in 2007.

Rio Tinto drilled one drill hole on each of Banff 502 MS (diamond), Delft 499 MS (reverse circulation (RC)), Vera 815 MS (diamond) and Krige 495 MS (RC) as part of its regional exploration program. No data from any of these drill holes have been incorporated into the MCM modelling or resource estimation, as either MCM has their own drill hole data or the holes are outside MCM's immediate area of interest.

In 2006, CoAL drilled 12 diamond drill holes on the farm, Voorberg 503 MS. Five large diameter drill holes were sunk at each of three sites.

Downhole geophysical surveys have been conducted on all the drill holes, using a tool suite suitable for dual density, natural gamma and calliper measurements. These measurements are used to identify, correlate and sample the coal.

A photographic/LIDAR survey was conducted in 2008 to produce orthophotos and ground elevation data.

Historical mining took place on the farm Cavan 508 MS between 1911 and 1918 to supply the smelter at Messina Copper Mine. The mine was located a few hundred metres west of the Liliput rail siding, into the side of a small hill. Reportedly, 14,488t was mined, but the quality is unknown.

New order Prospecting Rights to the Voorburg Section were acquired by CoAL in 2006.

Jutland Section

Trans Natal Coal Mining Corporation undertook the earliest exploration between 1968 and 1975 for reconnaissance purposes; altogether, 53 holes were drilled, although no information about them still exists.

Between 1975 and 1982, Iscor performed extensive exploration, totalling 106 drill holes and including bulk sampling on the farms Jutland 536 MS, Stubbs 558 MS, Mons 557 MS and Cohen 591 MS. However, the location of the drill holes and the bulk samples could not be ascertained by MCM. A pre-feasibility study (PFS) was conducted by Iscor in 1982 for these farms, concluding that about 50 Mt of coal could be mined from underground. No further work appears to have been done.

During 2006 and 2007, Rio Tinto drilled three reconnaissance vertical holes on the farms Hermanus 553 MS, Verdun 535 MS and Ursa Minor 551 MS. Downhole geophysics were conducted on the drill holes; no remote sensing was undertaken.

CoAL drilled five PQ3 drill holes in 2012 for confirmatory purposes, as well as 10 RC holes to assist with the structural interpretation; these have not been incorporated into the geological model. No remote sensing or geophysical exploration has taken place.

6.2.2 Generaal Project

Mount Stuart Section

Iscor drilled 417 holes between 1975 and 1978, plus a number of deflections and possibly some large diameter holes. Uncertainty regarding the drilling and sampling protocols employed are not known, nor whether the drill hole collars were professionally surveyed. Analysis was conducted by Iscor's in-house laboratory and was usually undertaken on a float fraction of RD1.40; analyses comprised proximate analysis, CV, Roga and Swell Index.

Rio Tinto conducted some limited exploration and CoAL acquired data for nine holes, seven of which were diamond drill holes (farms Nakab 184 MT, Schuitdrift 179 MT, Mount Stuart 153 MT and Ter Blanche 155 MT) and a further two on Nakab 184 MT were percussion holes.

CoAL started drilling in 2009 on the farm Riet 182 MT; nine holes have been drilled to date. Ground magnetic geophysical data for the farm Nakab 184 MT and aeromagnetic data for the farm Schuitdrift 179 MT were acquired from Rio Tinto.

Downhole geophysics was conducted on all Rio Tinto and CoAL drill holes to identify, correlate and sample the coal horizons. Sondes deployed included those for dual density, natural gamma and calliper measurements.

Generaal Section

Most of the exploration has been conducted by Iscor; between 1975 and 1978, 64 holes were drilled. Downhole logging data and partial coal quality data for 13 of these holes was acquired by CoAL in 2007.

Rio Tinto drilled a total of 11 holes on the farms Generaal 587 MS, Fanie 578 MS and Van Deventer 641 MS.

CoAL drilled 26 holes, consisting of diamond and RC holes, as well as four water boreholes, in 2013, which were used to update the geological model. However, there is no quality data for these drill holes and the historical quality data is not believed to be reliable; thus, no Coal Resources have been declared for this section. No downhole geophysical logging or remote sensing has been conducted.

6.2.3 Chapudi Project

Little information seems to exist regarding historical exploration at Chapudi. CoAL obtained an historical database from the then Council for Geological Sciences in 2013; this included 162 holes drilled by Iscor.

Chapudi Section

Rio Tinto conducted extensive exploration, including drilling and various forms of remote sensing. Rio Tinto was targeting thermal power station coal, with or without an export coking coal fraction. As MCM is targeting coking coal, the information from all this previous work will be reassessed and future exploration planned accordingly.

Rio Tinto started drilling in 2003 on the farm Chapudi 752 MS, drilling 125 holes along strike and focusing on areas near the subcrop and for short distances downdip. The holes consisted of both diamond core holes and open holes. Three deep holes were drilled to verify the downdip continuity.

Aeromagnetic and radiometric geophysical surveys were flown in 2005, used to identify intrusions and lineaments over the central area of the section. Three resistivity and four vertical electrical traverses were performed in 2006 and in 2007 two north-south seismic traverses were conducted. These were used to determine the depth of weathering. Aerial photograph interpretation resulted in data for a digital terrane model.

Downhole geophysical logging was conducted on most of the Rio Tinto drill holes. This included three-arm calliper, density, natural gamma, full-wave sonic, resistivity, neutron-neutron, magnetic susceptibility and an acoustic televiewer.

CoAL acquired Rio Tinto's full drillhole database in 2011, as well as detailed data reports and the complete geological model. MCM has not yet drilled any confirmatory holes, although three RC holes were drilled in 2012 for structural purposes and to update the physical geological model.

Chapudi West Section

Trans Natal Coal Mining Corporation drilled holes and Iscor a further 11 drill holes during 1973 and 1974. Although the data from these holes has been used in the geological model, no resources have been declared.

Rio Tinto conducted some reconnaissance drilling between 2003 and 2005. This involved three drill holes on the farms Grootvlei 684 MS and Grootboomen 476 MS. Only petrographic analysis was conducted on these holes.

Wildebeesthoek section

Iscor drilled 94 holes between 1975 and 1978. Although CoAL acquired this data, quality data only exists for two of the drill holes.

Rio Tinto drilled four holes on the farms Wildebeesthoek 661 MS and Mapani Ridge 660 MS, sampling Seam 6 on a ply-by-ply basis.

CoAL drilled 20 holes (10 diamond core and 10 RC) in 2013 to assist with the structural interpretation; none of the holes were sampled and were only used to update the geological model, to estimate resources.

6.3 Local geology

The GSP consists of a number of separate sub-projects:

- The Mopane Project, comprising the Voorburg and Jutland Sections
- The Generaal Project, comprising the Mount Stuart and Generaal Sections
- The Chapudi Project, comprising the Chapudi, Chapudi West and Wildebeesthoek Sections
- The Makhado Extension Project, comprising the Telema and Gray Section. Note that the Prospecting Rights for this area have expired and although a renewal application has been lodged, no notification has been received from government in this regard. This area is consequently excluded from this report.

Figure 6-3 depicts the location of these projects with respect to one another.

The Soutpansberg Coalfield has been subdivided by faulting into a number of separate basins, also sometimes referred to in the literature as coalfields. The GSP falls within these separate basins and divided into three projects (Figure 6-3). Figure 4-2 illustrates the general dip of the strata across these basins of the western part of the Soutpansberg Coalfield.



Figure 6-3: Projects comprising the GSP

Source: modified after Venmyn Deloitte (2017) - Not to scale

6.3.1 Mopane Project

The Mopane Project has been subdivided into the Voorburg and Jutland Sections; Coal Resources have only been declared by MCM for the Voorburg Section. The coal has the potential to produce a semi-hard coking coal. Coal Resources have been declared for the Voorburg Section only.

Voorburg Section

The Voorburg Section is the most advanced exploration part of Mopane Project and located in the Sand River Basin, an isolated, upfaulted block of Karoo sediments, about 10 km north of the main part of the Soutpansberg Coalfield (Figure 6-1 and Figure 6-3). It is a half graben with an unconformable southern contact due to the upsloping edge of the depositional palaeobasin. It is fault-bounded to the north by a southwest–east-northeast striking normal fault. This fault is 25 km long with an upthrow of approximately 1,000 m to south. Semi-parallel smaller faults form offshoots to main fault, with throws between 5 and 10 m. Figure 6-4 depicts the surface geology of the area and the typical stratigraphy encountered in this basin. Minor faulting and dolerite intrusions have been identified in historic drill holes and by mapping; only one 0.4 m thick dolerite sill has been intersected in recent drilling.

The coal seams are thickest in the north, thinning southwards; dips are in the order of 5° north (Figure 4-2). The sediments of the Lower Ecca Group are absent and the coal is found in the sediments of the Mikambeni Formation as alternating coal bands and mudstone laminae. Six potentially economic seams have been identified – the Upper, Middle Upper, Middle Lower, Bottom Upper, Bottom Middle and Bottom Lower Seams. The coal measures are overlain by the red shales and mudstones of the Beaufort Group, followed by the coarse sandstones of the Fripp Formation (Figure 6-4).

Coal was previously mined at Liliput, in the east on the farm Cavan 508 MS, on main rail line from South Africa to Zimbabwe.

A LIDAR survey conducted in 2008 produced ground elevation data and orthophotos. CoAL (now MCM) conducted a drilling program of mainly 83 mm core size vertical drill holes. Triple tube diamond drilling was employed to confirm the drill hole results from historic Iscor drilling and to increase the drill hole density such that resources could be declared. Large diameter drill holes with a 122.8 mm core size were sunk for bulk sampling purposes. All drill holes were geophysically logged to identify, correlate and sample the coal horizons. Standard coal analyses were undertaken (proximate analysis, CV and washability from RD1.35 – 1.70 in 0.05 gcc⁻³ intervals and from RD1.70 – 2.00 in 0.10 gcc⁻³ intervals). The Free Swell Index was also determined to indicate the coking potential.



Figure 6-4: Voorburg Section – surface geology and typical stratigraphy

Source: Venmyn Deloitte (2017)

The seams vary in thickness from 0.5 m to a maximum of 6.0 m (Upper and Middle Upper Seams); the Middle Lower and Bottom Upper Seams are thinner than the other seams (Figure 6-5).



Figure 6-5: Voorburg Section – seam thicknesses (m)

Source: Venmyn Deloitte (2017)

The seam depths vary from <20 m in the west to a maximum of 240 m (Bottom Seam) in the north (Figure 6-6). The coal is mainly shallow (i.e. at depths able to be extracted using opencast methods) from the subcrop in the south but specific seams will need to be mined via underground to the north. The majority of the project area has stripping ratios less than 4 BCM/t of coal.

Figure 6-6: Voorburg Section – seam depths (m)



Source: Venmyn Deloitte (2017)

Washed coal is forecast to produce a theoretical product at RD1.40 with an ash content between 8 and 12%, depending on the seam; VM varies between 10 and 38% (increasing to the south for the Upper, Upper Middle and Middle Lower Seams, while increasing to the southeast for the Bottom Upper and Bottom Lower Seams. The Free Swelling Index ranges from 5.0 to 7.0 and theoretical yields up to 55%, depending on the seam; lower yields are found in seams with a greater amount of intercalated mudstone – the lowest yields occur in the Upper Seam and the highest average yield on the farm Banff 502 MS (Figure 6-7).



Figure 6-7: Voorburg Section – theoretical product yield at RD 1.40

Source: Venmyn Deloitte (2017)

Jutland Section

No Coal Resources have been declared for the Jutland Section, although the presence of coal is known.

The Jutland Section is located in the Mopane Basin of the Soutpansberg Coalfield and is classed as an early-stage exploration project; it is the least developed section of the Mopane Project.

The coal is preserved in a half-graben, with an unconformable southern contact; the lower Karoo sediments are not developed but the coal-bearing Mikambeni Formation is present (Figure 6-8). The seams dip northwards approximately 10–12° (Figure 4-2). The coal-bearing sediments are found as alternating coal bands and mudstone laminae with the coal horizons divided into five economic horizons, named the Upper, Middle Upper, Middle Lower, Bottom Upper and Bottom Lower Seams. The Mikambeni Formation is overlain by the red shales and mudstones of the Beaufort Group, followed by the coarse sandstone of the Fripp Formation.



Figure 6-8: Jutland Section – surface geology and typical stratigraphy

Source: Venmyn Deloitte (2017)

6.3.2 Generaal Project

The Generaal Project is subdivided into the Mount Stuart and Generaal Sections; Coal Resources have only been declared for the Mount Stuart Section (Inferred Coal Resources). Both sections are located in the Tshipise North Basin, northeast of the Makhado Project (Figure 6-3).

Mount Stuart Section

The Mount Stuart Section is the most advanced of these two exploration sections. The Tshipise North Basin is an isolated, upfaulted block of Karoo strata (Figure 6-9). The lowermost strata comprise 10 m of conglomerate-diamictite belonging to the Tshidzi Formation; these are followed by 190 m of alternating black shales, sandstones, siltstones and interbedded coal seams of the Madzaringwe Formation. Overlying this formation is the 140 m thick Mikambeni Formation (consisting of mudstone and shale and lesser amounts of sandstone) with the 60 m thick Fripp Formation of coarse-grained sandstones forming east–west trending ranges of low hills. The Fripp Formation is overlain by Solitude Formation (110 m of shale with minor sandstone and grit), the Klopperfontein Formation (similar to the Fripp Formation) and finally, the Bosbokpoort Formation (300 m of fine sandstone and mudstone, Figure 6-9).



Figure 6-9: Mount Stuart Section – surface geology and typical stratigraphy

Source: Venmyn Deloitte (2017)

Four seams of commercial interest have been identified; namely, the Upper, Middle Upper, Bottom Upper and Lower Seams. The seam thicknesses range from <0.5 m to over 9.0 m and the Upper Seam is usually the thinnest (Figure 6-10).

The coal seams dip to the north with the shallowest part of the basin in the south (Figure 6-11). Depths vary from less than 50 m in the south to a maximum of almost 900 m for the (Bottom Lower Seam in the north. A large northeast-southwest striking fault has been identified in the west of the farm Mount Stuart 153 MT, which continues west across the farms Schuitdrift 179 MT and Nakab 184 MT and beyond. The coal would need to be extracted from surface in the south and then specific seams could be extracted from underground as mining progresses northwards.



Figure 6-10: Mount Stuart Section – seam thickness (m)

Source: Venmyn Deloitte (2017)



Figure 6-11: Mount Stuart Section – seam depths (m)

Source: Venmyn Deloitte (2017)

The section is interpreted to have the potential to produce a hard coking coal. The theoretical product at RD 1.40 equates to approximately a 12% ash product, although the ash varies between 5–20% depending on the seam; the VM is in the order of 10–30% and theoretical yields as high as 50%, depending on seam. The lowest average yields are obtained from the Upper and Bottom Lower Seams.

Generaal Section

The Generaal Section is located immediately north of the Makhado Project. It is classed as an early-stage exploration project; although the presence of coal is known, no Coal Resources have been declared

The section is located within the northern part of the Waterpoort Basin of the Soutpansberg Coalfield. It is a 20 km long east-west striking upfaulted block with the coal found in the northern part of the project area in the Mikambeni Formation. Here the formation consists of a 20–30 m thick package of banded coal-bearing sediments with large proportions of non-coal material. Three horizons with relatively lesser proportions of non-coal material have been identified, with average thicknesses between 2.9 and 3.0 m (Figure 6-12). Dips are in the order of $4-5^{\circ}$ (Figure 4-2), but are steeper in the central part of the project area.





Source: Venmyn Deloitte (2017)

6.3.3 Chapudi Project

The Chapudi Project lies west of the Makhado Project (Figure 6-3) in an extension of the Tshipise Basin of the Soutpansberg Coalfield, named the Waterpoort Basin. In terms of area, the Chapudi Project is the largest of the GSP, covering 21 farms. It has been subdivided into three sections, all of which offer the potential to produce a primary coking coal product and a middlings thermal coal product.

Chapudi Section (the central section)

The Chapudi Section is central section in the project and is the most advanced of the three, hosting Inferred Coal Resources (Table 6-1).

Early exploration by Rio Tinto led to the identification of seven coal zones, three in Lower Ecca and four in Upper Ecca, named, from the base upwards, Seam 1 through to Seam 7 (Figure 6-13). The zones consisted of finely interbanded carbonaceous mudstones and coal and are overlain by the Fripp Formation, which attains a maximum thickness of 40 m. The strata dip northwards at approximately 12° (Figure 4-2).



Figure 6-13: Chapudi Section – surface geology and typical stratigraphy

Source: Venmyn Deloitte (2017)

The best developed zone is Seam 6, with total seam thickness ranging between 5 and 15 m; the coal-only thickness generally averages 25 m (Figure 6-14). Seam floor depths range from surface to at least 800 m below surface (Figure 6-15). The coal is frequently bright with a high vitrinite content. MCM has divided Seam 6 into six mining horizons: Upper Seam, Middle Upper Seam, Middle Lower Seam, Bottom Upper Seam, Bottom Middle Seam and Bottom Lower Seam; however, as the Bottom Lower Seam consist mainly of mudstone, it has been excluded from the resource estimates. The seam is amenable to opencast extraction with average strip ratios estimated around 2 BCM/t coal, which increase to the north.

Figure 6-14: Chapudi Section – Seam 6: Top – total thickness (m); Bottom – coal only thickness (m)



Source: Venmyn Deloitte (2017)



Figure 6-15: Chapudi Section – Seam 6: Top – floor elevation (m AMSL); Bottom – floor depth (m)

Seam 7 is also well-developed (12–15 m thick) but has high ash content and low yields; thus, only Seam 6 is deemed to have economic potential by MCM and exclusively makes up the declared resources.

The resource area is constrained by major faulting; the frequency of smaller-scale faulting in the area is not well understood. Dolerite intrusions mainly strike east–west and were identified through an aeromagnetic geophysical survey (Figure 6-13). In the west and central parts of the Chapudi Section, the intrusions are limited to a single 0.5–1 m thick dyke, but are more common in the eastern part, where they can reach thicknesses of up to 80 m. However, these do not impact Seam 6 above depths of 150 m and so are unlikely to have significant impact on opencast mining.

The potential to produce a 10% ash coking product is believed by MCM to be good, with this potential increasing with increasing coal seam depth, although this is based on limited test work. The coal is 90% vitrinite with qualities on a dry, mineral matter free basis being 35.5 MJ/kg average CV, VM between 37 and 44% and highly variable ash.

Source: Venmyn Deloitte (2017)

Chapudi West Section

The Chapudi West Section is an early-stage exploration project, similar to the Chapudi Section in terms of the stratigraphy and seams intersected. The area is believed to have the potential to produce coking coal and a middlings thermal product.

No Coal Resources have been declared as insufficient exploration has been done to do so.

Wildebeesthoek Section

The Wildebeesthoek Section, immediately north of the eastern extremity of the Chapudi Section (Figure 6-3) and northwest of the Makhado Project, is the least developed of the Chapudi Project sections. It is an isolated, upfaulted block of Karoo strata; interpreted to represent an upfaulted extension of the coal seams from downdip of the main Chapudi Section (Figure 6-16).

Although the presence of coal over the area is known, no Coal Resources have been declared.



Figure 6-16: Wildebeesthoek Section – surface geology and typical stratigraphy

Source: Venmyn Deloitte (2017)

6.4 Exploration potential

Much of the GSP remains to be explored in greater detail, particularly those areas where Coal Resources remain to be declared; that is, the Jutland Section (Mopane project), the Generaal Section of the Generaal Project, the Chapudi West and Wildebeestfontein Sections of the Chapudi Project. The Coal Resources of the Mount Stuart Section (Generaal Project) and the Chapudi Section of the Chapudi Project will require additional exploration, particularly drilling, to increase the confidence and upgrade the resources from the Inferred category.

6.5 Coal Resources

6.5.1 Coal Resources

The critical variable considered for both the primary coking coal product and the secondary thermal product is ash (<10% and <25.9%, respectively). In addition, the following cut-off values were imposed:

- Prospecting Rights boundaries
- Subcrop in the south
- Minimum VM content of 18% for MTIS
- Minimum seam thickness of 0.5 m for GTIS
- A mining layout loss of 2% for MTIS.

The Coal Resource estimates were also discounted for unknown geological structures, based on the confidence in the Coal Resource classification; all Coal Resources have been classified as Inferred.

The Coal Resources were estimated from the geological model, constructed by Mr John Sparrow using the Minex[™] software. SRK has reviewed the geological model and considers it is an accurate reflection of the data and that the Coal Resources have been estimated in an appropriate manner.

SRK has reviewed the geological model and is satisfied that the data are represented sufficiently accurately in the grids, that the modelling principles employed and the estimation methods used are fit-for-purpose and that the geological model and the Resource estimates can be relied upon.

All Coal Resources and coal qualities have been estimated on an air-dry basis and are inclusive of the Coal Reserves. Note that the in situ Coal Resource estimates include significant amounts of intercalated non-coal material that will be removed during beneficiation.

The Coal Resources as reported in the Annual Report (MCN, 2021) are shown in Table 6-1. Note that Coal Resources have only been declared for the Voorburg Section of the Mopane Project, for the Mount Stuart Section of the Generaal Project and for the Chapudi Section of the Chapudi Project.

Project	Resource Category	GTIS (Mt)	MTIS (Mt)	MCM Attributable Interest (%)	MCM Attributable Resource (Mt)
	Measured	109.435	94.916	97	92.012
	Indicated	125.034	100.507	96	96.444
Mopane (Voorburg Section only)	Measured & Indicated	234.469	195.423		188.456
	Inferred	36.239	24.001	88	21.130
	Total	270.708	219.424		209.586
Generaal (Mount Stuart Section only)	Inferred	407.163	55.511	100	55.511
Chapudi (Chapudi Section only)	Inferred	6,399.023	1,318.481	74	975.676
All	Total	7,016.894	1,593.416	±65	1,031.187

Source: MCM (2021)

6.6 Permitting and environment

Mining rights

According to the MCM Annual Report (MCM, 2021), Mining Rights for all three areas comprising the Greater Soutpansberg Project have been secured. It is understood however the Mining Rights have not yet been executed.

Environmental authorisations

Individual EIA/EMPRs have been obtained for the Generaal project¹ (Jacana Environmentals cc, 2014), Chapudi Project² (Jacana Environmentals cc, 2013a) and the Mopane Project³(Jacana Environmentals cc, 2013b) as part of the initial mining right submissions. The company will need to review the existing EIA/EMPRs in line with an updated mining plan and strategy and apply for any relevant outstanding water and environmental regulatory approvals.

Water use licences

WULs are not currently in place for the GSP as the project is currently in the exploration phase (MCM, 2021a). Should the project proceed beyond the exploration phase, MCM should investigate alternative options for water supply and submit a WUL Application to DWS.

¹ DMR Reference numbers: LP 30/5/1/2/2/10044 MR, LP 30/5/1/2/2/10045 MR, LP 30/5/1/2/2/10047 MR, LP 30/5/1/2/2/10050 MR, LP 30/5/1/2/2/10053 MR, LP 30/5/1/2/2/10054 MR, LP 30/5/1/2/2/10058 MR and LP 30/5/1/2/2/10069 MR

² DMR Reference numbers: LP 30/5/1/2/2/10043 MR, LP 30/5/1/2/2/10046 MR, LP 30/5/1/2/2/10048 MR, LP 30/5/1/2/2/10049 MR, LP 30/5/1/2/2/10052 MR, LP 30/5/1/2/2/10055 MR, LP 30/5/1/2/2/10056 MR, and LP 30/5/1/2/2/10059 MR

³ DMR Reference numbers: LP 30/5/1/2/2/10029 MR, LP 30/5/1/2/2/10030 MR, LP 30/5/1/2/2/10031 MR, LP 30/5/1/2/2/10032 MR, LP 30/5/1/2/2/10033 MR, LP 30/5/1/2/2/10034 MR, LP 30/5/1/2/2/10035 MR, and LP 30/5/1/2/2/10036 MR

Waste management licences

Waste permits are not currently relevant as the project is in the exploration phase. The probability of requiring a WML will be based on the anticipated mining activities. This will need to be verified once more technical information is available for the project.

Social and Labour plan

It is understood that the s SLPs associated with the Mining Rights have not been approved yet. The approved SLPs will need to be implemented upon execution of the Mining Right.

6.6.2 Environmental aspects

Environmental management

MCM has an Environmental Policy which is used to guide its environmental management activities (MCM, 2021a). It is assumed that drilling contractors are required to adhere to the Contractor Management Pack (MCM, 2018) and that exploration is being undertaken in line with the exploration Environmental Management Plan. No environmental monitoring is currently taking place as there is no current exploration active.

Environmental monitoring and auditing

There is unclear what level of monitoring and auditing is being undertaken for the exploration sites.

6.7 Risks and opportunities

Geological risks pertain to the continuity of the coal seams and their quality in the lesser explored parts of the GSP. Although the presence of coal is known in all the projects, this has not been proved sufficiently by exploration to declare Coal Resources for all areas, nor is the ability of the coal to be beneficiated to coking coal product confirmed in all areas. Further exploration through drilling and analysing the coal will reduce this risk.

Water is a critical issue in the area due to the low rainfall and high evaporation rates and competing water demands from farmers. It is essential that the potential water sources are carefully studied to determine the sustainability of water supply and identify potential alternatives for future mining activities (Venmyn Deloitte, 2016). Competition for water between mining and local communities/operations can result in negative publicity if this risk is not managed at the onset. Due to the locality of the project in a water scarce area, this risk is material and the likelihood of this risk being realised in the future is high if the eventual operation impacts on water availability of surrounding water users.

The area is extremely rich in cultural heritage and therefore mining is likely to impact on some aspects of cultural heritage. This could result in reputational damage if an updated and extensive heritage impact assessment is not undertaken adequately. This risk is material if the eventual operation impacts cultural heritage resources. The likelihood of this risk could be mitigated to low if adequate and extensive heritage study is undertaken and the resultant mitigation measures are adhered to ahead of the construction phase.

Independent Specialist Report on the Mineral Assets of MC Mining Limited Australian gold royalties
Final

7 Australian gold royalties

In addition to its South African coal assets, MCM holds royalty interests in three gold projects in Western Australia. These gold royalties are discussed below:

7.1 Kanowna West and Kalbara royalty

Through its subsidiary company, Cove Mining Pty Ltd (Cove), MCM holds a 0.5% NSR royalty in several Mining Leases and Prospecting Licences located immediately west of the Northern Star Limited (NST) current Kanowna Belle open pit and underground gold mining and processing operation approximately 20 km east of Kalgoorlie in Western Australia. The Kanowna Belle deposit is categorised as a refractory, Arcehan-lode gold type deposit with several shoots. It has been mined continuously via open pit and underground methods since 2005.

The royalty arose as under the Kanowna West Joint venture dated 18 December 2013, Cove's equity interest in the project tenures fell below mandated thresholds and was converted to a royalty interest via a Deed of Withdrawal and Assignment dated 15 November 2021. SRK understands that as yet, Cove (and for that matter MCM) have not received any royalty payments pertaining to these tenements.

The key tenements over which the royalty pertains are shown in Table 7-1.

Tenure	Status	Area (ha)	Comment
M27/41		28.795	
M27/47		81.425	
M27/59	Dead	22.025	No Value
M27/72		31.665	
M27/73		35.225	
M27/114		5.333	
M27/196		6.3945	
M27/181		207.3	
M27/414	Dead	7.6305	No Value
M27/415		9.6395	
P27/1826		9.36	
P27/1827		7.8	
P27/1828	Dead	6.538	No Value
P27/1829		7.00	
P27/1830	Dead	25.0	No Value
P27/1831	Dead	105.0	No Value
P27/1832	Dead	120.7	No Value
P27/1833	Dead	121.1	No Value
P27/1834	Dead	120.0	No Value
P27/1835	Dead	68.25	No Value

Table 7-1: Western Australia tenements

Tenure	Status	Area (ha)	Comment
P27/1836	Dead	120.70	No Value
P27/1837	Dead	112.0	No Value
P27/1838	Dead	17.849	No Value
P27/1839	Dead	120.0	No Value
P27/1840	Dead	120.0	No Value
P27/1841	Dead	68.733	No Value
P27/1842	Dead	157.0	No Value
P27/1887		194.00	

Source: Tengraph, accessed 23 May 2022

Based on the information supplied by MCM and available within the public domain (largely derived from NST), SRK has been unable to determine if there are any underground or open pit workings likely to support future mining under lands covered by these tenures. Based on disclosures within the supplied documents, SRK understands that the key target within the package at the time of Cove's withdrawal was the Red Eye Prospect, a shear hosted gold deposit located at the contact between an ultramafic and mafic units for which an unquantified Inferred Resource had been estimated. Unless further details are able to be provided, SRK considers there is insufficient information available on which to form a view as to likely value.

7.2 Abbotshall royalty

SRK understands that the Abbotshall royalty pertains to M63/409 and M63/410 in the Norseman district of Western Australia. Upon review of the Western Australian Government's Tengraph portal, both tenements are recorded as Dead. On this basis, no value has been assigned by SRK.

7.3 Kookynie royalty

SRK understands that the Kookynie 0.5% NSR royalty pertains to M40/061, M40/135 and M40/136 in the Kookynie district, 60 km southeast of Leonora in the Eastern Goldfields of Western Australia. Upon review of the Western Australian Government's Tengraph portal, M40/135 is recorded as Dead. On this basis, no value has been assigned by SRK.

M40/61 is reported to cover an area of 832.70 ha and is held by NEX Metals Exploration Limited, which is exploring the tenure in joint venture with Metalicity Limited. It surrounds the former Cosmopolitan and Englishman gold deposits, which were the foundation of the historical Kookynie township. No prospects or Mineral Resources are presently defined within M40/61. The exploration potential associated with this tenure was valued as part of the broader Kookynie Project in an ISR prepared by Valuation & Resource Management (VRM) dated 4 May 2022. Based on this report, SRK does not consider the royalty holds any material value.

M40/136 is held by a private company, A&C Mining Investments Pty Ltd (A&C) and covers 231.25 ha. Little detail is available regarding these tenures.

7.4 Summary

Based on SRK's review of the available data pertaining to MCM's Western Australian royalties, SRK considers they are of nominal value only. While several of the tenures are well located in proximity to known gold mining operations (both active and historical), the tenures are generally located off-strike and peripheral to the main lodes. In many cases, there is insufficient information available to determine the location of active underground workings and hence the likelihood of near-term production from the tenures. As such, SRK has elected not to assign any material value to these tenures unless further information can be made available.

8 Other considerations

8.1 Coal market

SRK has reviewed the coal market prices and note the South African Richards Bay benchmark price is currently at an all-time high (Figure 8-1).



Figure 8-1: Richards Bay thermal coal price

Source: Index Mindi

Notes: Coal (South Africa), thermal NAR netback assessment f.o.b. Richards Bay 6,000 kcal/kg from February 13, 2017; during 2006-February 10, 2017 thermal NAR; during 2002-2005 6,200 kcal/kg (11,200 btu/lb), less than 1.0%, sulfur 16% ash; years 1990-2001 6,390 kcal/kg (11,500 BTU/lb).

In determining a Market Value for MCM's coal assets, SRK has considered the following:

- In reviewing the financial results for the Uitkomst Colliery, the only producing colliery in the MCM portfolio of coal assets, the achieved sales price for 2020 was equivalent to the Richards Bay export thermal coal price (Figure 8-1), while in 2021 the achieved price was at a 9% discount.
- Vele Colliery, currently on care and maintenance, is a potential semi-soft coking and thermal coal producer that could be sold into the export market and shipped through the coal terminal in Mozambique.
- The Makhado Project will potentially produce 50% coking coal and 50% thermal coal with a total yield of approximately 40%. SRK is not aware of any offer price for the thermal coal fraction potentially produced at Makhado.
- South Africa is traditionally an exporter of only thermal coal and as such has no market quoted benchmark coking coal price.

9 Valuation

9.1 Valuation methodology

The objective of this section is to provide BDO with:

- SRK's opinion regarding the reasonableness of the technical inputs to the Uitkomst Colliery and Makhado Project models
- A market value for MCM's residual Coal Resources (i.e. those outside the current LOM schedule)
- SRK's opinion regarding the market value of MCM's Coal Resources with associated exploration tenure.

SRK has not valued the MCM corporate entities that are the beneficial owners of the Mineral Assets.

In determining the appropriate parameters for valuation purposes, SRK has considered the assessments that might be made by a willing, knowledgeable and prudent buyer in assessing the value of MCM's projects. SRK has relied on information provided by MCM, as well as information sourced from the public domain, SRK's internal databases and SRK's subscription databases.

The VALMIN Code (2015) outlines three generally accepted valuation approaches:

- 1. Market Approach
- 2. Income Approach
- 3. Cost Approach.

The Market Approach is based primarily on the principle of substitution and is also called the Sales Comparison Approach. The Mineral Assets being valued are compared with the transaction value of similar Mineral Assets under similar time and circumstances on an open market (VALMIN Code 2015). Methods include comparable transactions and option or farm-in agreement terms analysis.

The Income Approach is based on the principle of anticipation of economic benefits and includes all methods that are based on the anticipated benefits of the potential income or cashflow generation of the mineral asset (VALMIN Code 2015). Valuation methods that follow this approach include discounted cashflow (DCF) modelling, capitalised margin, option pricing and probabilistic methods.

The Cost Approach is based on the principle of cost contribution to value, with the costs incurred providing the basis of analysis (VALMIN Code 2015). Methods include the appraised value method and multiples of exploration expenditure (MEE), where expenditures are analysed for their contribution to the exploration potential of the mineral asset.

The applicability of the various valuation approaches and methods varies depending on the stage of exploration or development of the mineral asset and hence the amount and quality of the information available on the mineral potential of the assets.

Most mineral assets can be classified as either:

- Exploration Project: properties where mineralisation may or may not have been identified, but where a Coal Resource has not been identified.
- Advanced Exploration Project: properties where considerable exploration has been undertaken and specific targets have been identified that warrant further detailed evaluation, usually by drill testing, trenching or some other form of detailed geological sampling. A Coal Resource Estimate may or may not have been made, but sufficient work will have been undertaken on at least one prospect to provide both a good understanding of the type of mineralisation present and encouragement that further work will elevate one or more of the prospects to the resource category.
- Pre-Development Project: properties where Coal Resources have been identified and their extent estimated (possibly incompletely) but where a decision to proceed with development has not been made. Properties at the early assessment stage, properties for which a decision has been made not to proceed with development, properties on C&M and properties held on retention titles are included in this category if Coal Resources have been identified, even if no further Valuation, Technical Assessment, delineation or advanced exploration is being undertaken.
- Development Project: properties for which a decision has been made to proceed with construction and/or production, but which are not yet commissioned or are not yet operating at design levels.
- **Operating Mines**: mineral properties, particularly mines and processing plants that have been commissioned and are in production.

Table 9-1 presents the various valuation approaches for the valuation of mineral assets at the various stages of exploration and development.

Valuation Approach	Exploration Projects	Pre-development Projects	Development Projects	Production Projects
Market	Yes	Yes	Yes	Yes
Income	No	In some cases	Yes	Yes
Cost	Yes	In some cases	No	No

Table 9-1:	Suggested valuation	approaches	according to	development status
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Source: VALMIN Code (2015)

In general, these methods are accepted analytical valuation approaches that are in common use for determining Market Value (defined below) of mineral assets, using market-derived data.

The Market Value is defined in the VALMIN Code (2015) as, *in respect of a mineral asset, the amount of money (or the cash equivalent of some other consideration) for which the Mineral Asset should change hands on the Valuation Date between a willing buyer and a willing seller in an armslength transaction after appropriate marketing wherein the parties each acted knowledgeably, prudently and without compulsion. The term Market Value has the same intended meaning and context as the International Valuation Standards Committee's (IVSC) term of the same name. This has the same meaning as Fair Value in RG 111. In the 2005 edition of the VALMIN Code this was known as Fair Market Value.* The Technical Value is defined in the VALMIN Code (2015) as an assessment of a Mineral Asset's future net economic benefit at the Valuation Date under a set of assumptions deemed most appropriate by a Practitioner, excluding any premium or discount to account for market considerations. The term Technical Value has an intended meaning that is similar to the IVSC term Investment Value.

In summary, the various recognised valuation methods are designed to provide an estimate of the mineral asset or project value in each of the various categories of development. In some instances, a particular mineral asset or project may comprise assets, which logically fall under more than one of the previously discussed development categories.

In estimating the value of MCM's Projects as at the Valuation Date, SRK has considered various valuation methods within the context of the VALMIN Code (2015). SRK's has used comparable market transactions as the primary valuation method. To support the comparable market transaction valuation of the residual resources, SRK has used the yardstick method as a guide.

9.2 Previous valuations

The VALMIN Code (2015) requires that an Independent Valuation Report should refer to other recent valuations or IERs undertaken on the mineral properties being assessed.

SRK is not aware of any previous valuation recently completed on the MCM Mineral Assets.

9.3 Reasonableness of technical inputs to Uitkomst and Makhado cashflow models

9.3.1 SRK recommendations to the Uitkomst cashflow model

MCM has developed a cashflow model (the Model) for its Uitkomst Mine and has provided this to BDO and SRK. SRK has reviewed the Model and assessed technical production and technical cost projections in order to advise BDO of its findings.

Table 9-2 presents a summary of SRK's findings and recommendations as made to BDO in relation to the Uitkomst Colliery.

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Table 9-2: Uitkomst model assumptions and SRK recommendations

Input	Model Assumptions	SRK Recommended Base Case input	SRK Recommended Upside Case input	Basis of recommendation
Coal Resource				No Changes
Coal Reserves	6.208 Mt	6.208 Mt	6.208 Mt	As received – Total Moisture
Dilution				Roof brushing etc included in reserves
Loss				Geological loss in reserves
Coal mined	6.208 Mt	6.208 Mt	6.208 Mt	Based on 3 sections with limited equipment – 14 year mine life
Total process throughput	6.208 Mt	6.208 Mt	6.208 Mt	
Tailings				Current space adequate
Sales Yield	75%	71%	75%	Coarse sales not proven
Operating Costs (real terms)				
Mining costs	ZAR415.90/t	ZAR420.00/t	ZAR415.90/t	Increased fuel and electricity cost beyond inflation
Geology costs				
Royalties	ZAR1.8 M pa	ZAR1.8 M pa	ZAR1.8 M pa	Product mix not changing
Processing cost	ZAR41.16/t	ZAR41.16/t	ZAR41.16/t	Based on contract rates, excluding discard washing
Administration	ZAR19.4 M pa	ZAR22.3 M pa	ZAR19.4 M pa	Other revenue not proven
Capital Expenditure (real ter	ms)			
Total Capex	ZAR204.6 M	ZAR174.6 M	ZAR204.6 M	Discards conveyor not in recommended case
Sustaining				Included in Capex, adequate for equipment
Closure costs	0	20 m	20 m	Not currently in model
Source: Uitkomst Financial Model, SRK	analysis			

The Model has simulated a product of coarse discard that creates a product sold at ZAR250/t. In the recommended SRK base case, these tonnes should be excluded and included in a potential upside case. The motivation for this is that the product is currently a trial project that does not have any firm offtake. The current pricing for thermal coal sales is too low and needs revision. The ratio of sales price to API4 is correct and should be used in revenue forecast.

9.3.2 SRK recommendations to the Makhado cashflow model

MCM has developed a cashflow model (the Model) for its Makhado Project and has provided this to BDO and SRK. SRK has reviewed the Model and assessed technical production and technical cost projections to advise BDO of its findings.

Table 9-3 presents a summary of SRK's findings and recommendations as made to BDO in relation to the Makhado Project.

Input	Model Assumptions	SRK Recommended Base Case input	SRK Recommended Upside Case input	Basis of recommendation
Coal Resource				As defined, Balance of resource to be valued as is recoverable at increased prices
Coal Reserves	69.3 Mt	69.3 Mt	69.3 Mt	Based upon current pit shell. Could be higher dependent on pricing
Dilution – Losses				Accounted in Reserves
Coal mined At Makhado	69.3 Mt	69.3 Mt	69.3 Mt	Phase 1 and 2 three pits. Upside captured through valuing resources
Total process throughput at Vele	42.0 Mt	42.0 Mt	42.0 Mt	Coarse discards at Makhado low grade – no value
Tailings				Currently at Vele reduced by fine coal processing
Coking Coal Sales	13.7 Mt	13.7 Mt	13.7 Mt	Already includes froth flotation
Thermal Coal Sales	11.9 Mt	11.9 Mt	11.9 Mt	Assumes rail capacity of 0.36 Mtpa – 6 trains per month
Operating Costs	s (real terms)			
Mining costs (Fuel)	ZAR12/litre	ZAR15/litre	ZAR15/litre	Increase costs expected to remain on contractor mining cost
Processing cost	As is	As is	As is	Current costs comprehensive
Administration				
Capital Expendi	ture (real terms	6)		
Vele	ZAR698 M	ZAR698 M	ZAR698 M	EPCM contingency ZAR104 M – no basis for change
Makhado	ZAR192 M	ZAR192 M	ZAR192 M	EPCM contingency of ZAR5 M
Closure costs	0	ZAR80 M	ZAR80 M	Not included in model

 Table 9-3:
 Makhado Model assumptions and SRK recommendations

Source: Makhado Financial Model, SRK analysis 28.04.03 Makhado FinInput_vFinal.xls

The existing Makhado Model sales price for the 5,500 Kcal product is US\$61/t against an API4 price input of US\$112/t (i.e. a discount of 45% for the lower grade coal). SRK considers this to be excessive and even more so in the current high coal price regime. Unless this price is based on a contractual offtake, SRK suggests that it be revaluated. In similar thermal coal deals executed at Richards Bay, the lower grade coal is priced from API4 by subtracting between US\$8–12/t for ash differences then adjusting for the CV differences. i.e. 112-10*5,500/6,000 = 93.5 based at the port. If the same is done at the mine, then the starting point would be API4 price less port and rail costs as the starting point, i.e. 112-20-10*5,500/6,000 = 75 based at the mine. As yet, the offtake agreement for thermal coal could not be found in data provided.

9.4 Valuation of the residual Resource

9.4.1 Residual Coal Resource estimate

MCM's Coal Resources that lie outside the LOM plan and are classified as residual coal in this valuation exercise total 8,241.9 Mt, which accounts for around 95% of the total gross in situ Coal Resource of 8,655.7 Mt. The gross in situ residual resource estimates are presented in Table 9-4.

Coal Asset	Status		Measured (Mt)	Indicated (Mt)	Inferred (Mt)	Total (Mt)	Interest	Total Attributable (Mt)
		GTIS	15.7	4.9	6.7	27.3		19.1
Uitkomst Operation	LOMP ¹	3.1	3.1		6.2	70%	4.3	
		Residual	12.6	1.8	6.7	21.1		14.8
		GTIS	387.3	254.0	116.2	757.5		507.6
Total Makhado Development	Fripp Farm ²	92.0	75.4	42.3	209.7	. 67%	140.5	
	LOMP	62.8	6.5	-	69.3		46.4	
	Residual	232.6	172.1	73.9	478.5		320.6	
		GTIS	148.2	426.9	218.9	794.0		794.0
Vele Care & Maintenance	LP1136 PR ³	7.6	69.9	51.0	128.5	100%	128.5	
		Residual	140.6	356.9	167.9	665.4		665.4
Manana	Advanced	GTIS	109.4	125.0	36.2	270.7	050/	258.1
exploration	Residual	109.4	125.0	36.2	270.7	95%	258.1	
Generaal Advanced exploration	GTIS			407.2	407.2	4000/	407.2	
	exploration	Residual			407.2	407.2	100%	407.2
Chanudi	Advanced	GTIS			6,399.0	6,399.0	740/	4,735.3
Chapudi	exploration	Residual			6,399.0	6,399.0	74%	4,735.3
Gross in-situ I	Resources		660.7	810.8	7,184.3	8,655.7		6,721.1
Total Residual	Resources		495.2	655.8	7,091.0	8,241.9		6,401.3

 Table 9-4:
 Gross in situ residual Coal Resources (100% basis)

Source: MCM 2021 Annual Report, Minxcon Projects (2022) Makhado Colliery BFS

Notes:

¹ Proportion of Measured and Indicated are estimated

² A village is situated on this farm over the defined Coal Resource and as such has been excluded

³ Vele prospecting right LP1136 PR has expired

9.4.2 Comparable transactions

As the primary valuation method to establish a market value for MCM's residual resources, SRK carried out a search for publicly available information on market transactions involving similar coal projects in Southern Africa. Based on its analysis, SRK has considered 34 transactions involving assets within South Africa that occurred since 2007 leading up to the Effective Date of this valuation (Appendix A). The transaction values (ZAR/t gross in situ resource) were then normalised using the Richards Bay export coal price as a proxy index to reflect the values in the current South African coal market at the Effective Date of this valuation. The coal price was indexed to the April 2022 average of ZAR4,543/t.

Each transaction was then indexed according to increasing confidence of coal mineralisation and stage of development. This is graphically illustrated in Figure 9-1.



Figure 9-1: South African coal transactions classified

Source: SRK analysis

Notes: A total of 34 transactions sorted according to the level of Coal Resource confidence based on stage of development.

The statistics of the population of market transactions are summarised in Table 9-5.

	Low	Medium	High
Count	8.00	7.00	19.00
Min (ZAR/t)	0.11	1.05	2.98
Max (ZAR/t)	7.46	8.78	57.23
Average (ZAR/t)	2.97	3.42	11.83
Median (ZAR/t)	2.26	1.36	8.52

 Table 9-5:
 Comparable market transaction statistics

Source: SRK Analysis

Importantly, while transaction multiples are widely used in valuation, they rely on the assumption that the reported Coal Resources or Coal Reserves have been appropriately reported and can be taken at face value. As such, the method assumes that differences in reporting regimes, between different Competent Persons, resource classification, coal recovery and adopted cut-off grades (which may change between assets and/or companies) do not materially influence the implied multiple. The method implicitly assumes total recoverability of all coal tonnes, as reliable and accurate data is generally not disclosed or available around the time of most transactions or for all companies. Importantly, SRK's implied value calculations are for the purposes of our valuation and do not attempt to estimate or reflect the coal likely to be recovered as required under the JORC Code (2012).

SRK's analysis of the implied resource value multiples is based on the reported Coal Resources involving mainly South African thermal products but also includes a few transactions of metallurgical coal assets. SRK also recognises that the reasonable prospects for eventual economic extraction (RPEEE, with the meaning as defined in the JORC Code) based on depth of coal seams, likely stripping ratios, and structural complexity impact the implied transaction multiples. Therefore, informing our opinion of the residual Coal Resource of MCM's assets, SRK has considered coal confidence, coal resource estimation differences, coal type and reasonable prospect of eventual economic extraction. SRK also notes that several of the transactions considered included Coal Reserves (supported by a LOM schedule).

Based on its comparable transaction analysis (Table 9-6), SRK considers the implied value of the residual Coal Resource (i.e. that Coal Resource material outside of the presently defined LOM schedule) and the project Coal Resource resides between ZAR3,234 M and ZAR4,980 M, on an attributable basis.
Coal Asset	% Owned	Total Remnant Resource	Range	Implied Value Inferred (ZAR/t)	Implied Value Indicated (ZAR/t)	Implied Value Measured (ZAR/t)	Total Value (ZAR M)	Attributable Value (ZAR M)
			Low	0.80	1.08	6.80	93.03	65.12
Uitkomst	70	21.1	High	1.20	1.62	10.20	139.55	97.68
			Mid	1.00	1.35	8.50	116.29	81.40
			Low	0.72	0.96	6.00	1,613.75	1,081.21
Makhado	67	478.5	High	1.08	1.44	9.00	2,420.62	1,621.81
			Mid	0.90	1.20	7.50	2,017.18	1,351.51
			Low	0.64	0.80	5.60	1,180.24	1,180.24
Vele	100	665.4	High	0.96	1.20	8.40	1,770.36	1,770.36
			Mid	0.80	1.00	7.00	1,475.30	1,475.30
			Low	0.07	0.80	4.00	540.30	515.09
GSP – Mopane	95	270.7	High	0.13	1.20	6.00	811.36	773.50
			Mid	0.10	1.00	5.00	675.83	644.29
			Low	0.07	0.80	4.00	28.50	28.50
GSP – Generaal	100	407.2	High	0.13	1.20	6.00	52.93	52.93
			Mid	0.10	1.00	5.00	40.72	40.72
			Low	0.07	0.80	4.00	447.93	331.47
GSP - Chapudi	74	6,399.0	High	0.13	1.20	6.00	831.87	615.59
			Mid	0.10	1.00	5.00	639.90	473.53
- - - -			Low				3,903.76	3,201.63
iotai (ZAR M)			High				6,026.70	4,931.88
			Mid				4,965.23	4,066.76

 Table 9-6:
 Comparable market transaction valuation

Source: SRK analysis

9.4.3 Peer Group analysis

As a cross check of the Market Value derived from the comparable market transaction method, SRK has considered the enterprise values per defined Coal Resource of similar listed companies with defined Coal Resources in South Africa.

There are two companies broadly comparable to MCM listed on the ASX – Terrecom Resources Ltd (Terrecom) and Ikwezi Mining Ltd (Ikwezi) (Table 9-7).

In 2020, Terrecom purchased Universal Coal Plc comprising of a portfolio of coal assets in South Africa. Terrecom now has a 3,180 Mt of attributable Coal Resources in both South Africa and Australia. The company sold approximately 6.3 Mt in 2021 FY on an attributable basis.

Ikwezi is listed on the ASX and owns a coal operation in KwaZulu Natal, South Africa. It operated the Kliprand Colliery that producers a thermal coal. The colliery has a Coal Resource of 169.4 Mt and produce 160,800 t of washed coal in 2021.

As at the 23 May 2022, Terrecom and Ikwezi traded at multiples of ZAR2.84/t and ZAR4.69/t, respectively.

	Market cap (ZAR M)	Enterprise Value (ZAR M)	Attributable Coal R&R (Mt)	EV ZAR/t
Terrecom	5,894.30	9,035.90	3,180.36	2.84
Ikwezi	816.50	794.90	169.40	4.69

Table 9-7: Peer Group analysis

Source: S&P Global Capital IQ Pro, Ikwezi Annual Report 2021, Terrecom Annual Report 2021

Note: Market capitalisation and Enterprise Value as at 23 May 2022.

Bases on this analysis, SRK has adopted the only two peers as the lower and upper range for the value of MCM. Applying these multiples to MCM's residual Coal Resources implies a value of between ZAR18,244 M and ZAR30,086 M on an attributable basis as outlined in Table 9-8.

	Attributable Residual Resource (Mt)	Adopted metric (ZAR/t)	Value (ZAR M)
Low	6,401.32	2.85	18,243.8
High	6,401.32	4.70	30,086.2
Preferred	6,401.32	3.78	24,165.0

Table 9-8: Peer Group valuation

9.4.4 Yardstick

To support the comparable market transaction valuation of the residual resources, SRK has used the yardstick method as a guide. Using the yardstick method of valuation, specified percentages of the coal price are applied to the defined Coal Resources (Table 9-9).

- Measured Resources 0.2% to 0.5% of the spot price
- Indicated Resources 0.1% to 0.2% of the spot price
- Inferred Resources 0.05% to 0.1% of the spot price.

SRK has adopted the Richards Bay thermal benchmark coal price average for April 2022 at ZAR4,543/t.

Table 9-9: Yardstick multiples	S
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		Value	Range
Resource	% of the spot price	A\$/t Low	A\$/t High
Measured	0.2% to 0.5%	9.09	22.72
Indicated	0.1% to 0.2%	4.54	9.09
Inferred	0.05% to 0.1%	2.27	4.54

Source: SRK analysis

Notes: Used average Coal price for April 2022 at ZAR4,543/t.

Application of these multiples to MCM's residual Coal Resources implies the value of these resources lies between ZAR18,678 M and ZAR39,216 M.

SRK notes that this value is approximately twice that of the values implied by its Comparative Transactions analysis. SRK considers the values implied by the yardstick approach are generic and do not adequately account for the technical attributes outlined previously. As such, SRK has elected to place less weight on the values implied by the Yardstick and use it only as a guide towards the likely upper end of the likely valuation range (Table 9-10).

Coal Asset	% Owned	Total Remnant Resource	Range	Implied Value Inferred (ZAR/t)	Implied Value Indicated (ZAR/t)	Implied Value Measured (ZAR/t)	Total Value (ZAR M)	Attributable Value (ZAR M)
			Low	2.27	4.54	9.09	137.89	96.53
Uitkomst	70	21.1	High	4.54	9.09	22.72	333.07	233.15
			Mid	3.41	6.81	15.90	235.48	164.84
			Low	2.27	4.54	9.09	3,062.57	2,051.92
Makhado	67	478.5	High	4.54	9.09	22.72	7,181.67	4,811.72
			Mid	3.41	6.81	15.90	5,122.12	3,431.82
			Low	2.27	4.54	9.09	3,280.24	3,280.24
Vele	100	665.4	High	4.54	9.09	22.72	7,199.12	7,199.12
			Mid	3.41	6.81	15.90	5,239.68	5,239.68
			Low	2.27	4.54	9.09	1,644.67	1,567.92
GSP – Mopane	95	270.7	High	4.54	9.09	22.72	3,786.51	3,609.80
			Mid	3.41	6.81	15.90	2,715.59	2,588.86
			Low	2.27	4.54	9.09	924.87	924.87
GSP – Generaal	100	407.2	High	4.54	9.09	22.72	1,849.74	1,849.74
			Mid	3.41	6.81	15.90	1,387.31	1,387.31
			Low	2.27	4.54	9.09	14,535.38	10,756.18
GSP - Chapudi	74	6,399.0	High	4.54	9.09	22.72	29,070.76	21,512.36
			Mid	3.41	6.81	15.90	21,803.07	16,134.27
T-4-1			Low				23,585.63	18,677.66
iotai (ZAR M)			High				49,420.87	39,215.90
			Mid				36,503.25	28,946.78

Table 9-10: Yardstick valuation of residual Resources

Source: SRK Analysis

9.5 Exploration potential value

Given the valuation methods adopted and the multiples assumed for valuation purposes, SRK has elected in this instance not to assign any additional value to the exploration potential associated with MCM's mineral tenures in South Africa.

In all MCM's Mining Rights, the geology and the extent of the coal mineralisation is well understood. In SRK's opinion, it is limited potential for the discovery of new coal deposits at economically extractable depths within the current mining rights. However, additional exploration will be required, particularly drilling, to increase the confidence and upgrade the resources from the Inferred category. This should add value to the current coal assets as the projects advance to increasing stages of development.

10 Valuation summary

In forming its overall opinion regarding the market value for each of the coal assets, SRK has considered the market based methods, such as comparable transaction analysis as its primary valuation method while using peer group analysis and the yardstick approach as secondary guides. Table 10-1 summarises SRK's opinion regarding the current market value of MCM's mineral assets.

On the above basis, SRK considers the market is likely to pay between ZAR3,202 M and ZAR4,932 M, with a preferred value of ZAR4,067 M for the attributable residual Coal Resources held by MCM (Table 10-1).

SRK's average implied value for the remnant Coal Resource is ZAR0.64/t. This implied value is below the low end (ZAR2.84/t) of the peer group range. Despite the historical high coal price (Section 8), SRK considers this appropriate given the low coal product yields for Makhado and the GSP, infrastructure for coal to get to market and the climate change movement.

In adopting its overall values, SRK considers that any value associated with any exploration potential of the surrounding tenures has been captured in the value attributed to the residual Resources, which were valued using comparable market transactions involving coal projects with both defined resources and exploration upside.

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endent Spe ion summa	endent Specialist Report on the Mineral Asse	ion summary Final

resources
of residual
summary
Valuation
Table 10-1:

Coal Asset	% Owned	Total Attributable Remnant Resource (Mt)	Range	Total Low (ZAR M)	Total High (ZAR M)	Total Preferred (ZAR M)	Attributable Low (ZAR M)	Attributable High (ZAR M)	Attributable Preferred (ZAR M)
			Market	93.03	139.55	116.29	65.12	97.68	81.40
Uitkomst	70	14.76	Yardstick	137.89	333.07	235.48	96.53	233.15	164.84
			Adopted	93.03	139.55	116.29	65.12	97.68	81.40
			Market	1,613.75	2,420.62	2,017.18	1,081.21	1,621.81	1,351.51
Makhado	67	320.61	Yardstick	3,062.57	7,181.67	5,122.12	2,051.92	4,811.72	3,431.82
			Adopted	1,613.75	2,420.62	2,017.18	1,081.21	1,621.81	1,351.51
			Market	1,180.24	1,770.36	1,475.30	1,180.24	1,770.36	1,475.30
Vele	100	665.43	Yardstick	3,280.24	7,199.12	5,239.68	3,280.24	7,199.12	5,239.68
			Adopted	1,180.24	1,770.36	1,475.30	1,180.24	1,770.36	1,475.30
			Market	540.30	811.36	675.83	515.09	773.50	644.29
GSP – Monane	95	258.07	Yardstick	1,644.67	3,786.51	2,715.59	1,567.92	3,609.80	2,588.86
			Adopted	540.30	811.36	675.83	515.09	773.50	644.29
			Market	28.50	52.93	40.72	28.50	52.93	40.72
GSP – Generaal	100	407.16	Yardstick	924.87	1,849.74	1,387.31	924.87	1,849.74	1,387.31
QCICI dai			Adopted	28.50	52.93	40.72	28.50	52.93	40.72
			Market	447.93	831.87	639.90	331.47	615.59	473.53
GSP - Chanudi	74	4,735.28	Yardstick	14,535.38	29,070.76	21,803.07	10,756.18	21,512.36	16,134.27
5			Adopted	447.93	831.87	639.90	331.47	615.59	473.53
			Market	3,903.76	6,026.70	4,965.23	3,201.63	4,931.88	4,066.76
Totol		C 101 3	Peer group				18,243.76	30,086.20	24,164.98
014		0,401.34	Yardstick	23,585.63	49,420.87	36,503.25	18,677.66	39,215.90	28,946.78
			Adopted	3,903.76	6,026.70	4,965.23	3,201.63	4,931.88	4,066.76
Total Adopte	d (ZAR M)						3,201.63	4,931.88	4,066.76
Total Adopte	d (ZAR/t)						0.50	0.77	0.64

10.1 Discussion on valuation ranges

In assigning its valuation range and preferred value, SRK is mindful that the valuation range is also indicative of the uncertainty associated with exploration assets.

The wide range in value is driven by the confidence limits placed around the size and quality of the mineral occurrences assumed to occur within each project area. Typically, this means that as exploration progresses and a prospect moves from an early to advanced stage prospect, through Inferred, Indicated or Measured Resource categories to Reserve status, there is greater confidence around the likely size and quality of the contained mineral and its potential to be extracted profitably.

Estimated confidence of plus or minus 60% to 100% or more are not uncommon for exploration areas and are within acceptable bounds given the level of uncertainty associated with early to advanced stage exploration assets. By applying narrower confidence ranges, one is actually implying a greater degree of certainty regarding these assets than may be the case in reality.

The GSP tenements are exploration assets in the early to advance stages of assessment. Therefore, there are significant uncertainties around their attributes. This results in a wide valuation range. Where possible, SRK has endeavoured to narrow its valuation range. In recognising this wide range, SRK has also indicated a preferred value for each project.

The preferred value can be the midpoint of the range unless there is a specific reason to choose a bias to either side of the midpoint, within the range.

Closure

This report, Independent Specialist Report on the Mineral Assets of MC Mining Limited, was prepared by

Shaun Barry Principal Consultant

and reviewed by



This signature has been scanned. The author has given perpension to its use for this document. The original signature is held on file

Jeames McKibben Principal Consultant

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

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Appendix A Comparable Market Transactions

ets of MC Mining Limited	
Specialist Report on the Mineral Asse	Final
Independent	Appendix A

Transaction
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South Africa C

Date	Target	Buyer	Seller
7/11/2007	Isicebi Carbon Mining Pty Ltd	Comdek Limited	Lukale Mining Company (Pty) Ltd and Umnotho
7/05/2008	Holfontein coal project	Lachlan Star Ltd	Coal of Africa Ltd
6/08/2008	Vlakplaats Coal Project	Universal Coal PLC	Universal Pulse Trading 132 Pty Ltd
14/07/2009	Vele Project	Coal of Africa Ltd	Limpopo Coal Co Proprietary Ltd
11/09/2009	Waterberg Coal Projects	Firestone Energy Ltd	Sekoko Resources Pty Ltd
1/04/2010	Rietkuil	Sable Mining Africa Ltd	Unknown Company or Entity - 30.0%
23/04/2010	Rietkuil	Sable Mining Africa Ltd	London Mining plc - 27.5%
29/11/2010	Vlakplaats Coal Project	Korea Resources Corp	Continental Coal Ltd
29/11/2010	Chapudi Coal Project	Coal of Africa Ltd	Rio Tinto PLC, Kwezi Mining Pty Ltd
27/01/2011	Cgynus property	Universal Coal PLC	Private
27/03/2012	Grootegeluk West Coal Project	Resource Generation Limited	Exxaro Resources Limited
11/07/2012	Moabsvelden Coal Project	Thebe Investment Corporation	Xceed Resources Ltd
12/12/2012	Firestone Energy Ltd	Ariona Co SA	Sekoko Resources Pty Ltd
3/02/2014	New Clydesdale	Universal Coal PLC	Exxaro Resources Limited
27/06/2014	Leeuw Mining and Exploration Proprietary Limited	Keaton Energy Holdings Limited	JPI Leeuw and Associates Pty Ltd
28/07/2014	Total Coal South Africa Ltd.	Exxaro Resources Limited	Total S.A.
9/01/2015	Continental Coal Limited (South Africa)	Investors group	Continental Coal Limited
8/06/2015	Penumbra Coal Mine	ICHOR Coal NV	Continental Coal Limited
20/10/2015	South Arnot project	Universal Coal PLC	Exxaro Resources Limited
15/02/2016	Leeuw Mining & Exploration Pty Ltd/Amalahle Exploration Pty Ltd.	Bayete Energy Resources (Pty) Ltd	Keaton Energy Holdings Limited
12/09/2016	South African Coal Mining Holdings Ltd	JSW Energy Limited	Shareholders of South African Coal Mining Holdings Ltd.
2/02/2017	Keaton Energy Holdings Ltd	Wescoal Holdings Limited	Keaton Energy Holdings Limited
30/06/2017	Eloff Mining Company (Pty) Ltd.	Universal Coal PLC	Canyon Springs Investments 80 (Pty) Ltd
27/11/2017	Eloff Mining Company (Pty) Ltd.	Universal Coal PLC	Manyeka Coal Mines (Pty) Ltd
1/08/2018	New Largo project	Seriti Resources Proprietary Limited	Anglo American
30/08/2018	Mooiplaats colliery		MC Mining
1/09/2018	Eloff Mining Company (Pty) Ltd.	Universal Coal PLC	South32 Limited

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Date	Target	Buyer	Seller
12/11/2018	North Block Complex	Universal Coal PLC	Exxaro Resources Limited
12/12/2018	Tegeta Exploration and Resources (Pty) Ltd	Project Halo	Oakbay Investments Proprietary Limited
22/08/2019	South32 SA Coal Holdings (Pty) Ltd	Seriti Resources Proprietary Limited	South32 Limited
2/10/2019	Mbuyelo Coal operations	Investors group	ICHOR Coal NV
25/03/2020	Universal coal Plc	Terrecom Resources Limited	Universal coal Plc
16/02/2021	Wescoal Holdings Limited	RBFT Investments (Pty) Ltd	Wescoal Holdings Limited
9/04/2021	Exxaro Coal Central Proprietary Ltd	Overlooked Colliery (Pty) Ltd	Exxaro Resources Limited
Course: C8 D Clo	hal CDK analyteic		

Source: S&P Global, SRK analysis