

P.no.	Sec/ Sub Sec	Conditions	DMR	DEA	DWS	NEMPAA	Compliance Status
6	3.2	Holder must commence with the mining operations within a year from the date on which the mining right becomes effective in terms of Section 23(5) of the Act or any later date as may upon a written request by the Holder, be authorized in writing by the Minister in terms of the Act failing which this right may be cancelled or suspended. Activity: Before 28th June 2017 (within one year of effective date)	✓				Pending. Application for extension of commencement for 1 year to be submitted to DMR by 26th
16	3.29	Notification to authorities: A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity.		✓			Pending
4	1.1	A written notification of commencement must be given to the National Department of Environmental Affairs prior to the commencement of activity.			✓		Pending
31	4.1	The Provincial Head must be notified in writing one week prior to commencement of the licensed activity (s) and again upon completion of the activity (s).			✓		Pending
14	3.15	Management & Monitoring: The EMPr must be amended for best environmental option and submitted to Department for written approval prior to commencement of activities. Once approved, the EMPr must be implemented and adhered to.		✓			EMPr yet to be submitted for approval
14	3.15	Management & Monitoring: The EMPr must be amended for best environmental option and submitted to Department for written approval prior to commencement of activities. Once approved, the EMPr must be implemented and adhered to.			✓		EMPr yet to be submitted for approval
20	1.13.1	Work Method Statements, site plan(s) and detailed design drawings for construction of all infrastructure must be submitted to Provincial Department for written approval before construction			✓		Pending
31	4.4	An Environmental Control Officer must be appointed and he/she will be responsible for monitoring of the affected areas.		✓	✓		Appointed and approved
14	3.16	The ECO shall be responsible for establishment and management of environmental committee (EMC) that shall be established for construction and Operation phase of the project.		✓			EMC not yet appointed
15	3.16.2	The Member of EMC must be approved by Department in writing prior to commencement of activity.		✓			Under process
15	3.16.3	The Purpose, Outcomes, Role and Functions of the EMC must be submitted to the department for approval prior to the commencement of the activity.		✓			Pending
18	3.57	A permit must be obtained from the Mpumalanga Tourism and Parks Agency for the removal or destruction of indigenous protected and endangered plant and animal species.		✓			Application submitted
18	3.6	Liaison with land owners/farm managers is to be done prior to construction in order to provide sufficient time for them to plan their agricultural activities.		✓			Done
18	3.56	A "Plant Rescue and Protection" plan with specific focus on conserving important species from areas to be transformed must be compiled by an ecological specialist and be submitted together with the Maintenance Management Plan for approval prior to the commencement of any construction activities		✓		✓	Done
21	1.17	A Storm Water Management Plan must be compiled and submitted to the Provincial Head for written approval before construction may commence.			✓		Approved
17	3.38	The wetland specialist must carry out quarterly audits of the wetlands and the report must be submitted to the department and also be tabled for discussion at the EMC meetings.		✓			Pending

DMR 37



DEPARTMENT: MINERAL RESOURCES
REPUBLIC OF SOUTH AFRICA

MINING RIGHT

Granted in terms of section 23(1) of the Mineral and Petroleum Resources Development Act, 2002
(Act No. 28 of 2002)

RECEIVED

2006-07-18

DEPARTMENT OF MINERAL RESOURCES

[Handwritten signatures and initials]

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REGISTERED IN THE MINERAL & PETROLEUM TITLES
REGISTRATION OFFICE: PALLORIA

In the register of Mining Right

On the 8th day of SEPTEMBER 2016

Under MPT No. 43/2016

pp DIRECTOR-GENERAL: MINERAL RESOURCES

Protocol No: 5012 /2016

File Ref No

Application No 10069MR

LET IT HEREBY BE MADE KNOWN:

THAT on this **28** day of **June** in the year **2016**, before me, **Matsiepane Titus Mphela** a Notary Public, duly sworn and admitted, residing and practising at **Witbank**, in the **Mpumalanga** Province of South Africa, and in the presence of the subscribing competent witnesses, personally came and appeared:

Sylvia Seapei Sekgetho, Acting, Regional Manager, **Mpumalanga** Region of the Department of Mineral Resources, and as such in his / her capacity as the duly authorised representative of:

THE MINISTER OF MINERAL RESOURCES

The said Regional Manager, being duly authorised thereto under and by virtue of a Power of Attorney granted by the **DIRECTOR-GENERAL** of the Department of Mineral Resources on the **08** day of **June** in the year **2015** in terms of the powers delegated by the Minister on the **12th** day of **May 2004** in terms of section 103 (1) of the Act,

AND

Praveer Tripathi as the company's representative, the duly authorised representative of Atha Africa Ventures(Pty) Ltd, Identification/ Registration number:

2	0	0	4	/	0	2	0	7	4	6	/	0	7	
---	---	---	---	---	---	---	---	---	---	---	---	---	---	--

(Hereinafter together with his/her/its successors in title and assigns referred to as "the Holder", he/she, the said representative, being duly authorised thereto under and by virtue of a power of attorney/resolution of directors/members of the Holder, signed or passed at Johannesburg on the 20 day of April in the year 2015 which power of attorney or a certified copy of a resolution has this day been exhibited to me, the notary, and remain filed of record in my protocol with the minutes hereof.)

AND THE MINISTER AND HOLDER DECLARED THAT:

WHEREAS The State is the custodian of the Nation's mineral and petroleum resources in terms of section 3 of the Act.

AND WHEREAS The Holder has applied for a mining right in terms of section 22 of the Act,

AND WHEREAS The **DIRECTOR-GENERAL** of the Department of Mineral Resources has by virtue of powers delegated to him, granted to the Holder, a mining right in terms of section 23(1) of the Act.

NOW THEREFORE THE MINISTER GRANTS A MINING RIGHT SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

[Handwritten signatures and initials]

Definitions

In this mining right, the following words and expressions shall have the meanings assigned to them:

'**Act**' means the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and includes the Regulations, guidelines, circulars, directives and orders made in terms of that Act;

'**Effective date**' means 28 day of June in the year 2016 (being the date on which the environmental management programme is approved in terms of section 39(4) of the Act);

'**Environmental Management Programme**' is as defined in the Act and includes any other Environmental Management Programme approved in terms of the previous mining legislation;

'**Financial year**' means a complete financial year of the Holder which, at the time of the granting of this mining right, commences on 01 day of March in the year 2016; and ends on 28 day of February in the year 2017;

'**Holder**' is as defined in the Act, and specifically in relation to this right, it means **Atha Africa Ventures(Pty) Ltd**, Registration No/Identification No **200402074607**;

'**Mineral**' is as defined in the Act, and specifically in relation to this right means **Coal**;

'**Mining Area**' is as defined in the Act and includes any additional area of environmental liability as may be reflected on the Environmental Management Programme relating to this right;

'**Mining right**' is as defined in the Act and includes all the Annexures to it, agreements and inclusions by reference;

'**Mining Work Programme**' is as defined in the Act and as reflected in the attached **Annexure C** to this mining right;

'**Minister**' means the Minister of Mineral Resources and includes the successors in title, the assignee or any person duly authorised to act in the Minister's place and stead;

'**Regional Manager**' is as defined in the Act and specifically in relation to this right means the Regional Manager for the **Mpumalanga** Region of the Department of Mineral Resources; and

'**Social and Labour Plan**', is as contemplated in regulation 46 of the Regulations to the Act and is as reflected in the attached **Annexure D** to this mining right.

1. Description of the Mining Area

The Mining Area shall comprise the following:

Certain: **the farms Bloemhof 92 HT, Goedgevonden 95 HT, Kromhoek 93 HT, Portion 1 of the farm Nauwgevonden 110 HT, Paardekop 109 HT, Uitzicht 108 HT, Portion 2 and the Remaining extent of the farm Van Der Waltspoort 81 HT, Virginia 91 HT, Portion 1 and the Remaining Extent of the farm Yzermyn 96 HT and Zoetfontein 94 HT**

Situated: **Mpumalanga Magisterial/Administrative District of Wakkerstroom**

Measuring: **8 352, 6158 hectares in extent.**

(In the case of various farms being involved, a list can be attached and referred to as Annexure A);

Which Mining Area is described in detail on the attached Diagram/plan marked Annexure B.

2. Granting of Mining Right

Without detracting from the provisions of sections 5 and 25 of the Act, the Minister grants to the Holder the sole and exclusive right to mine, and recover the mineral/s in, on and under the mining area for the Holder's own benefit and account, and to deal with, remove and sell or otherwise dispose of the mineral/s, subject to the terms and conditions of this mining right, the provisions of the Act and any other relevant law in force for the duration of this right.

3. Commencement, Duration and Renewal

- 3.1. This mining right shall commence on **08 June 2015** and, unless cancelled or suspended in terms of this clause 13 of this right and or section 47 of the Act, will continue to be in force for a period of **15 years ending on 07 June 2030**.
- 3.2. The Holder must commence with the mining operations within a year from the date on which the mining right becomes effective in terms of section 23 (5) of the Act, or any later date as may, upon a written request by the Holder, be authorised in writing by the Minister in terms of the Act, failing which this right may be cancelled or suspended.
- 3.3. Any application for renewal must be submitted to the Regional Manger not later than 60 working days prior to the date of expiry of this right.

4. Amendments, Variation and Abandonment

- 4.1. The terms of this right (including by extension of the area covered by it or by the addition of minerals or a share or shares or seams, mineralized bodies, or strata, which are not at the time the subject thereof) may not be amended or varied without the written consent of the Minister.

4.2. The Holder shall be entitled to abandon or relinquish the right or the area covered by the right entirely or in part. Upon abandonment or relinquishment of the mining area or any portion thereof, the Holder must:

4.2.1. Furnish the Regional Manager with all prospecting and /or mining results and/or information, as well as the general evaluation of the geological, geophysical and borehole data in respect of such abandoned area in so far as it applies to the mineral or any other mineral/s obtained in respect of this right and,

4.2.2. Apply for a closure certificate in terms of section 43 (3) of the Act.

4.3 With effect from the date the Holder has abandoned or relinquished a portion or portions of the mining area, and subject to section 43 of the Act, the Minister is entitled to grant any right, permit, or permission referred to in the Act in, on, or under the portion/s, so abandoned or relinquished, to any person/s.

5. Payment of Royalties

5.1. The Holder shall as contemplated in section 25 (2) (g) pay to the State throughout the duration of this mining right, royalties payable in terms of any Act or Amendment to an Act of Parliament implemented.

6. Payment of Interest

If mining fees, any fees, any levy, royalties or consideration referred to in clause 5 are not paid punctually, the Holder shall be in mora and shall pay interest thereon at the rate prescribed in terms of section 80 of the Public Finance Management Act, 1999(Act 1 of 1999) reckoned from the date on which payment is due and payable, to the date of actual payment.

7. Restrictions and Obligations Imposed on the Holder

7.1 The Holder is entitled to the rights referred to in section 5(2), (3) and section 25 of the Act, and such other rights as may be contained in this mining right or such other right as may be granted to, acquired by or conferred upon the Holder by any other applicable law.

7.2 Mining operations in the mining area must be conducted in accordance with the Mining Work Programme and any amendment to such Mining Work Programme and an approved Environmental Management Plan.

7.3 The Holder shall not trespass or enter into any homestead, house or its curtilage nor interfere with or prejudice the interests of the occupiers and/or owners of the surface of the Mining Area

except to the extent to which such interference or prejudice is necessary for the purposes of enabling the Holder to properly exercise the Holder's rights under this mining right.



8. Conditions on disposal of Minerals and/ or Products Derived from Mining

It is a condition of the granting of this mining right that the Holder shall dispose of all minerals and/ or products derived from the exploitation of the mineral at competitive market prices which shall mean in all cases, non-discriminatory prices or non-export parity prices. If the minerals are sold to any entity, which is an affiliate or non-affiliated agent or subsidiary of the Holder, or is directly or indirectly controlled by the Holder, such purchaser must unconditionally undertake in writing to dispose of the minerals and any products produced from the minerals, at competitive market prices.

9. Mortgage, Cession, Transfer, Alienation

9.1 This mining right, a shareholding, an equity, an interest or participation in the right or joint venture, or a controlling interest in a company, close corporation or joint venture, may not be encumbered, ceded, transferred, mortgaged, let, sublet, assigned, alienated or otherwise disposed of without the written consent of the Minister, except in the case of a change of controlling interest in listed companies.

9.2 Any transfer, encumbrance, cession, letting, sub-letting, assignment, alienation or disposal of this right or any interest therein or any share or any interest in the Holder, without the consent of the Minister referred to in section 11(1) is of no force, no effect and is invalid.

10. Protection of Boreholes, Shafts, Edits and Openings.

All boreholes, shafts, edits, excavations, and openings sunk or made, by the Holder during the currency of this mining right shall be sealed, closed, fenced, made safe by the Holder in accordance with the approved Environmental Management Programme, the Mine Health and Safety Act, 1996 or any other applicable laws and Regulations.

11. Holder's liability for payment of Compensation for Loss or Damage

11.1 Subject to section 43 of the Act, the Holder shall, during the tenure of this right while carrying out the mining operations under this right, take all such necessary and reasonable steps to adequately safeguard and protect the environment, the mining area and any person's using or entitled to use the surface of the mining area from any possible damage or injury associated with any activities on the mining area.

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- 11.2. Should the holder fail to take reasonable steps referred to above, and to the extent that there is legal liability, the holder shall compensate such person or persons for any damage or losses, including but not limited to damage to the surface, to any crops or improvements, which such person or persons may suffer as a result of, arising from or in connection with the exercise of his/her rights under this mining right or of any act or omission in connection therewith.

12. Inspection of Mining Area

The Minister and/or any person duly authorised thereto in writing by the Minister shall be entitled to inspect the mining area, the Holder's mining operations and the execution of the approved Environmental Management Programme on the Mining Area as provided for in the Act, and any instruction conveyed in writing by the Minister to the Holder requiring the proper performance by the Holder of the Holder's obligations under this mining right shall be put into effect by the Holder in terms of the Act.

13. Cancellation or Suspension

- 13.1 Subject to section 47 of the Act, this mining right may be cancelled or suspended if the Holder:
- 13.1.1 Submits inaccurate, incorrect and or misleading information in connection with any matter required to be submitted under the Act;
- 13.1.2 Fails to honour or carry out any agreement, arrangement, or undertaking, including the undertaking made by the Holder in terms of the Broad Based Socio Economic Empowerment Charter and Social and Labour plan, on which the Minister relied for the granting of this right;
- 13.1.3 Breaches any material term and condition of this mining right;
- 13.1.4 Conducts mining operations in contravention of the provisions of the Act;
- 13.1.5 Contravenes the requirement of the approved Environmental Management Programme; or
- 13.1.6 Contravenes any provisions of this Act in any other manner.
- 13.2 Before the Minister cancels or suspends this right, the Minister shall:
- 13.2.1 Give written notice to the Holder indicating the intention to suspend or cancel this right;
- 13.2.2 Give reason/s why the Minister is considering the suspension or cancellation of this right;
- 13.2.3 Give the Holder 30 days to show reasons why the right should not be suspended or cancelled;
- 13.2.4 Notify, the mortgagee [if any], of the intention to suspend or cancel this right; and
- 13.2.5 Direct the Holder, where it is possible to remedy any contravention, breach or failure, to comply or to take such specified measures to remedy any contravention, breach or failure to comply.
- 13.3 If the Holder does not take the measures as specified by the Minister to remedy a contravention, breach or failure, the Minister may cancel or suspend this right after considering representations made by the Holder in terms of clause 13.2.3.

14. Records and Returns

- 14.1. The Holder shall maintain all such books, plans and records in regard to mining on the Mining Area as may be required by the Act and shall furnish to the office of the Regional Manager such reports and documents as may be relevant under this right.
- 14.2. The Holder shall furnish to the Regional Manager all such monthly returns contemplated in section 28 (2) A of the Act not later than the 15th day of the month following the month in respect of which it was reported.
- 14.3. The Holder shall furthermore at the end of each year following commencement of this mining right, inform the Regional Manager in writing of any new developments and of the future mining activities planned in connection with the exploitation/mining of the minerals on the Mining Area.

15. Minister's liability for Compensation

The Minister shall not at any time be liable or responsible for the payment of compensation of whatever nature to the Holder, the Holder's successors-in-title or assignee, or any person whomsoever as a result of the granting of this right.

16. Compliance with the Laws of the Republic

The granting of this Right, does not exempt the Holder and its successors in title and/or assigns from complying with the relevant provisions of the Mine Health and Safety Act, (Act No.29 of 1996) and any other law in force in the Republic of South Africa.

17. Provisions relating to section 2(d) and (f) of the Act

In the furthering of the objects of this Act, the Holder is bound by the provisions of an agreement or arrangement dated NIA NIA N/A entered into between the Holder/ empowering partner and NIA (the empowerment partner) which agreement or arrangement was taken into consideration for purposes of compliance with the requirements of the Act and or Broad Based Economic Empowerment Charter developed in terms of the Act and such agreement shall form part of this right.

18. Social and Labour Plan

- 18.1 The holder must annually, not later than three months before the end of its financial year, submit detailed implementation plan to give effect to Regulation 46(e)(i),(ii)and (li) in line with the Social and Labour Plan.

- 18.2 The holder must annually, not later than three months after finalisation of its audited annual report, submit a detailed report on the implementation of the previous year's social and labour plan.

19. Severability

Notwithstanding anything to the contrary, any provision of this mining right which is contrary to any provision of the Act or which is otherwise ultra vires, null and void, voidable, or unenforceable, shall be severable from the rest of this right, such rest thus being and remaining of full force, effect and enforceable.

20. Domicilia citandi et executandi

- 20.1. The parties hereto choose the following addresses as their *domicilia citandi et executandi* and for all purposes arising from this mining right, in particular for the purposes of serving of any notice in terms of this mining right, and any notice properly addressed to the under mentioned postal addresses of the parties shall be deemed to have been received by the addressee within 14 days if given in writing and posted by prepaid registered post addressed to the addressee at the relevant postal address:

20.1.1. In the case of the Minister:

Physical Address	Postal Address
Province House Cnr Botha and Paul Kruger Street WITBANK Code 1035 Tel 013 656 1448 Fax 013 656 0932	Private Bag X7279 WITBANK 1035 013 656 1448 013 656 0932

20.1.2. In the case of the Holder:

Physical Address	Postal Address
8th Floor, Sinosteel Plaza 159 Rivonia Road Morningside Sandton Code 2144	P.O Box 1569 Sunninghill 2157

Tel 011 784 1885	011 784 1885
Fax 011 784 7467	011 784 7467

20.2. Notwithstanding anything to the contrary herein contained, a written notice or communication actually received by a party at any place other than the chosen *domicilia citandi et executandi* shall constitute adequate notice or communication to the party notwithstanding that it was not sent to or delivered at such party's chosen *domicilium citandi et executandi*.

20.3 Either party shall be entitled from time to time to change the *domicilia citandi et executandi* or postal address furnished above after giving at least 14 days prior written notice of such change to the other party, failing which the above mentioned addresses will remain in force.

20.4 Any written notice or communication contemplated in this clause which is forwarded by one party to the other by registered post will be presumed to have been received by the addressee on the fourteenth day following the date of posting from an address within the Republic of South Africa to the addressee at the postal address of the addressee for the time being as determined in accordance with the provisions of this clause.

21. Costs

The Holder shall pay all costs and charges incurred in connection with the execution and registration of this prospecting right.

Thus done and signed at Witbank on the 28 day of June in the year 2016 in the presence of the undersigned witnesses:

AS WITNESS:

T. S. G. R.

[Signature]

For and on behalf of the **Minister**

AS WITNESS:

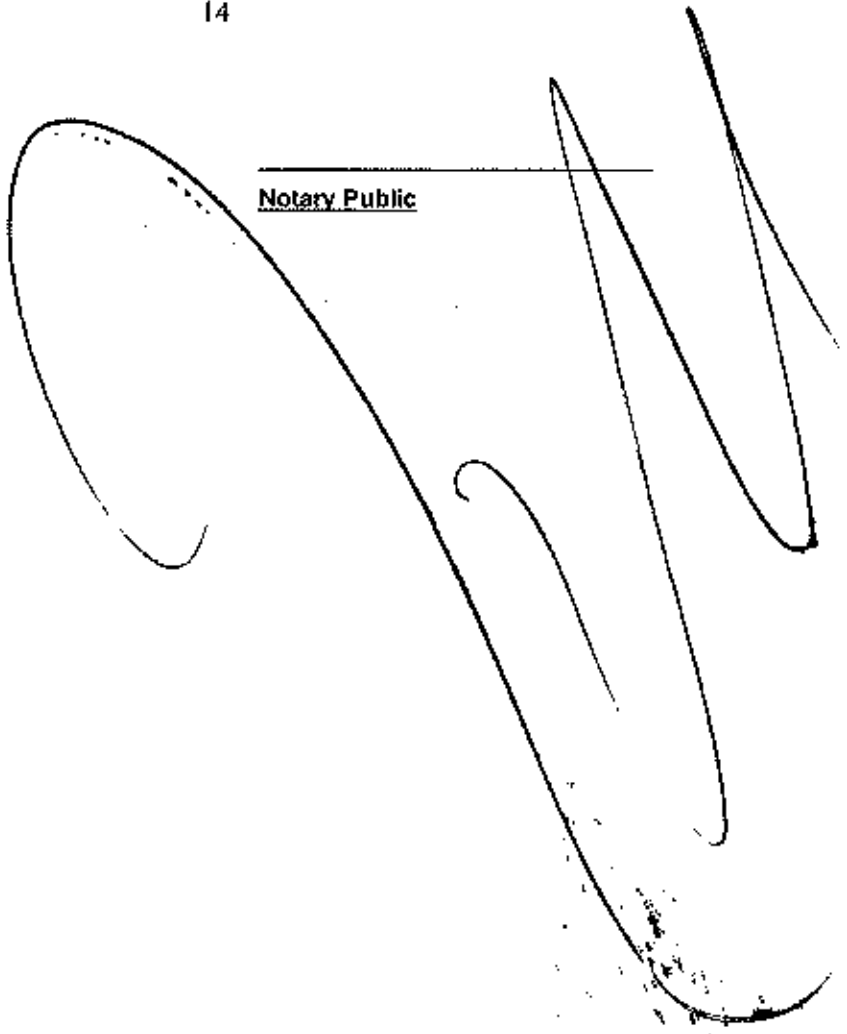
[Signature]

[Signature]

For and on behalf of the **Holder**

[Signature] [Signature]

Notary Public

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SS

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8th Floor, Sinosteel Plaza, 159 Rivonia Road,
Morningside, Sandton, 2144
Tel: +27-11 784-1885.
Fax: +27 11 784- 7467
Email: info.rsa@athgroup.in

Date: 22 June 2017

Your Ref: MP 30/5/1/2/2/10069MR

To,
The Honourable Minister of Mineral Resources
Mr. Mosebenzi Joseph Zwane
70 McIntje Street
Trevenna Campus
Sunnyside
0007

CC: The Regional Manager
Department of Mineral Resources
Saveways Crescent Centre
Mandela Drive
Emalahleni, 1035
BY HAND DELIVERY

RECEIVED BY THE DIRECTORATE
GENERAL SERVICES
DEPARTMENT OF MINERAL RESOURCES
DATE: 22/06/2017 TIME: 14:00
SIGNATURE: *[Signature]*

Sir,

**RE: REQUEST IN TERMS OF SECTION 25(2)(B) OF MINERAL AND
PETROLEUM RESOURCES DEVELOPMENT ACT, 2008 TO EXTEND PERIOD
FOR COMMENCEMENT OF MINING OPERATIONS**

Herewith request for Ministerial permission required in terms of Section 25(2)(b) of the MPRDA.

Attached hereto:

1. Section 25(2)(b) application request
2. Annexure – A (Resolution)

Yours faithfully,

[Signature of Praveer Tripathi]

PRAVEER TRIPATHI
SR. VICE PRESIDENT
Cell: 072 804 8250
Email: praveer.tripathi@athgroup.in

Dept. of Mineral Resources
- Phase 1/1/1/2/2/10069
2017-06-22
Witsiek 1035
Dept. of Mineral Resources

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**ATHA AFRICA
VENTURES**
(Pty) Limited

Registration No: 2004/020746/07

8th Floor, Sinosteel Plaza, 159 Rivonia Road,
Morningside, Sandton, 2144
Tel: +27 11 784-1885
Fax: +27 11 784-7467
Email: info.rsa@athagroup.in

Date: 22 June 2017

Your Ref: MP 30/5/1/2/2/10069MR

Our Ref: AAV/DMR/2017/1

To,
The Honourable Minister of Mineral Resources
Mr. Mosebenzi Joseph Zwane
70 Meintje Street
Trevenna Campus
Sunnyside
0007

CC: The Regional Manager
Department of Mineral Resources
Saveways Crescent Centre
Mandela Drive
Emalahleni, 1035

BY HAND DELIVERY

Sir,

**RE: REQUEST IN TERMS OF SECTION 25(2)(B) OF MINERAL AND
PETROLEUM RESOURCES DEVELOPMENT ACT, 2008 FOR AUTHORISATION
BY MINISTER OF MINERAL RESOURCES FOR AN EXTENDED PERIOD FOR
COMMENCEMENT OF MINING OPERATIONS; ATHA-AFRICA VENTURES
(PROPRIETARY) LIMITED: MINING RIGHT MP 30/5/1/2/2/10069MR**

1. **ATHA-AFRICA VENTURES (PTY) LIMITED** (Company registration No. 2004/020746/07), hereinafter referred to as "**Company**", represented by Mr. **Praveer Tripathi** in his capacity as the **Senior Vice President**, he being duly authorised hereto by a Resolution of the Directors of the Company passed on 19 June 2017 (A copy as Annexure A annexed hereto), herewith request the Honourable Minister of Mineral Resources to grant, in terms of section 25(2)(b) of the Mineral and Petroleum Resources Development Act, 2008 (MPRDA), an extension to the Company of one (1) year before commencement of mine production, in terms of the Company's Mining Right (**MP 30/5/1/2/2/10069MR**).



**ATHA AFRICA
VENTURES**
(Pty) Limited

Registration No. 2004/020746/07

8th Floor, Shosheel Plaza, 159 Rivonia Road,
Morningside, Sandton, 2144
Tel: +27 11 784-1885
Fax: +27 11 784-7467
Email: info.rs@athagroup.in

2. MOTIVATION SUPPORTING THE COMPANY'S REQUEST

2.1. The Company was issued the relevant Mining Right on 14 April 2015, and the Mining Right was dually executed on 28 June 2016. The Mining Right became effective on the date the EMPR was approved which was on 28 June 2016 and per definition 'mining operations' needs to commence by 27 June 2017. Due to external factors outside the control of the Company, the Company respectfully submits that it will not be in a position to commence with mining operations on the 27th of June 2017, for the following reasons:

2.1.1. The Environmental Authorisation (EA) for the Yzerbyn Underground Coal Mine granted to Atha-Africa was issued on 07th June, 2016 by the Mpumalanga Department of Agriculture, Rural Development Land and Environmental Affairs (M:DARDLEA). An Appeal against the grant of the EA was lodged by the Centre for Environmental Rights (CER) and 8 others on 19 August 2016. The Appeal against the grant of EA, was, however, lodged under the 2010 NEMA Appeal Regulations and therefore an Appeal does not automatically suspend the EA.

2.1.2. The Water Use License was granted to AAV on 17 August 2016. The same was Appealed by CER acting on behalf of its clients on 14 December 2016. This had the immediate effect of suspending the Water Use License from that day.

2.1.3. AAV also needed a permission under s48(1)(b) of NEM:PAA from the Cabinet Ministers responsible for Environment and for Mineral Resources to proceed with mining activities within a Protected Environment, and this approval was obtained on 21 November 2016.

2.1.4. AAV submitted a motivation to the Honorable Minister of Water and Sanitation on 09 January, 2017 to uplift the automatic suspension. The Minister using her statutory mandated powers uplifted the automatic suspension of the Water Use License on 24 March 2017.

2.1.5. The above Appeal processes, automatic suspension of licenses, and delays in obtaining approvals in terms of the EA, WUL and section 48(1)(b) permission, wreaked havoc with the planning of commencement activities and consequently delayed the commencement of mining operations.

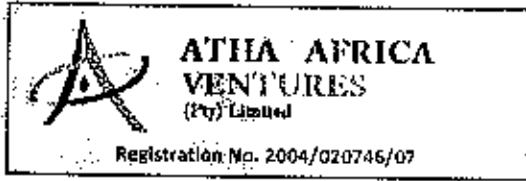


**ATHA AFRICA
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8th Floor, Sinosteel Plaza, 159 Rivonia Road,
Morrisonside, Sandton, 2144
Tel: +27 11 784-1885
Fax: +27 11 784-7467
Email: info.rsa@athagroup.in

- 2.2. In addition to the abovementioned delays, AAV is under statutory obligation to adhere to compliance related to the conditions of the relevant authorisations, prior to commencement with any mining operations.
- 2.3. Condition 3.15 of the EA states under the heading "*Management & Monitoring: The EMPr must be amended for best environmental option and submitted to Department for written approval prior to commencement of activities. Once approved, the EMPr must be implemented and adhered to.*" The preparation of the EMPr commenced only after the revocation of the automatic suspension of WUL by the Minister for Water and Sanitation on 24 March 2017. The EMPr is still work in progress and is expected to be submitted to the relevant department for approval before the end of June 2017.
- 2.4. Condition 3.16 of the EA states that an Independent Environmental Control Officer (ECO) be appointed and "*The ECO shall be responsible for establishment and management of Environmental Committee (EMC) which shall be established for the Construction and Operation phases of the project.*" The ECO has since then been appointed and has already sent out letters to various departments and stakeholders to nominate their members for the EMC.
- 2.5. Condition 3.16.2 of the EA states "*The Member of EMC must be approved by Department in writing prior to commencement of activity.*" This pre-commencement condition is still under process.
- 2.6. Condition 3.57 of the EA states "*A permit must be obtained from the Mpumalanga Tourism and Parks Agency for the removal or destruction of indigenous protected and endangered plant and animal species.*" The application for the permit has been made but AAV is still awaiting approval.
- 2.7. Condition 11 of the s48 approval states "*A written notification of commencement must be given to the National Department of Environmental Affairs prior to the commencement of activity.*" AAV is yet to provide written notification due to EMC not being formed yet and the EMPr referred to in 2.1 above has not yet been submitted and approved.
- 2.8. Condition 3.29 of the EA states under the heading "*Notification to Authorities: A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity.*" AAV is yet to give written notification due to the EMC not being formed yet and the EMPr referred to in 2.1 above has not yet been submitted and approved.



8th Floor, Sinosteel Plaza, 159 Rivonia Road,
Morningside, Sandton, 2144
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3. Conclusion

3.1. In light of the abovementioned, it is respectfully submitted that it is reasonable to conclude that due to uncertainties outside the control of AAV related to the various statutory approval processes which were only finalised by the end of November 2016, and then due to the automatic suspension of the WUL which was only uplifted in late March 2017, and also due to the inherent conditions of the various approvals which the AAV is striving hard to comply with, the Company will not be in a position to commence with its mining operations on the 27th of June 2017. Consequentially AAV respectfully requests the Minister to consider the request for an extension of one year before AAV has to commence with its mining operations in terms of its Mining Right Terms and Conditions.

We trust that you will find the above in order.

Yours faithfully,

PRAVEER TRIPATHI
SR. VICE PRESIDENT
Cell: 072 804 0250
Email: praveer.tripathi@athagroup.in

Attachment: Annexure A

ANNEXURE - A



**ATHA AFRICA
VENTURES**
(Pty) Limited

Registration No. 2004/020746/07

8th Floor, Sinosteel Plaza, 159 Rivonia Road,
Morningside, Sandton, 2144
Tel: +27 11 784-1885
Fax: +27 11 784- 7467
Email: info@athaafrica.co.za

**RESOLUTION OF THE BOARD OF DIRECTORS OF ATHA-AFRICA VENTURES (PTY) LIMITED
REGISTRATION NUMBER 2004/020746/07 ("THE COMPANY") TAKEN AT JOHANNESBURG
ON 19TH OF JUNE 2017**

IT WAS RESOLVED THAT

1. The Company lodges an application with the Department of Mineral Resources (Mpumalanga Region situated at Emalahleni) for Ministerial Authorisation in terms of Section 25(2)(b) of the Mineral and Petroleum Resources Development Act (Act 28 of 2002) to extend the commencement of mine production in respect of the effective date of MP 30/5/1/2/2/10069MR executed on 28 June 2016.
2. The Company hereby authorises Mr. Praveer Tripathi, Senior Vice President of the Company, to sign all documentation as may be required to give effect to the abovementioned application and to represent the Company throughout the processing of the above application.

GAURAV ATHA
MANAGING DIRECTOR

DATE: 19/06/2017

MORGAM MUNSAMY
DIRECTOR

DATE: 19 JUNE 2017



agriculture, rural development,
land & environmental affairs
MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA

Building No. 6, No. 7 Government Boulevard, Riverside Park, 1200, Mpumalanga Province
Private Bag X 11219, 1200
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Liliko Lelokulima, Kufutukiswa
Kwotindzawo Tsoomkhaya, Fomhlaba
Netesimondzawo

Departement van Landbou,
Landelike Ontwikkeling,
Grond en Omgewing Sake

umNyango weZembo
LikuThuthukiswa kweNdawo zamaKhaya,
INarha neeNdaba zeBhoduluko

Enquiries : Marebana Surgeon
Telephone : (017) 811 4830 / 3981
Reference : 17/23 09-131

Morgam Munsamy
Atha Africa Ventures (Pty) Ltd
8th Floor, Sinosteel Plaza
Sandton
2144

Fax : (011) 784 7467
Email : Morgam.Munsamy@athagroup.in

Dear Sir,

APPLICATION FOR ENVIRONMENTAL AUTHORISATION FOR THE PROPOSED MULTIPLE LISTED ACTIVITIES ASSOCIATED WITH THE YZERMYN UNDERGROUND COAL MINE LOCATED ON VARIOUS FARMS AT MABOLA UNDER THE JURISDICTION OF PIXLEY KA SEME LOCAL MUNICIPALITY, MPUMALANGA PROVINCE.

With reference to the abovementioned application, please be advised that the Department has decided to grant authorisation. The environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010, you are instructed to notify all registered interested and affected parties, in writing and within 12 days of the date of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations, which regulates appeal procedures. Should you wish to appeal any aspect of the decision, you must, *inter alia*, lodge a notice of intention to appeal with the MEC, within 20 days of receiving this letter, by means of one of the following methods:

By facsimile: (013) 766 6067/8
By post: Private Bag x 11219
Nelspruit
1200

By hand: Building 6, No 7 Government Boulevard,
Riverside Park
Nelspruit
1200

8

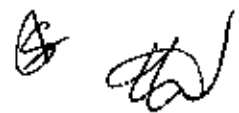
[Handwritten signature]

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours sincerely


Mr. S.S. Makuleka
Chief Director: Environmental Affairs
Date: 07.06.2010

cc: EAP : EcoPartners
Fax : (086) 538 6127
Email : chalaine@ecopartners.co.za





agriculture, rural development,
land & environmental affairs

MPUMALANGA PROVINCE
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ILiko LeHkullima, Kutfutukwawa
Kwetindzawo Tasemakhaya, Tomhisba
Neesimondzawo

Departement van Landbou,
Landelike Ontwikkeling,
Grond en Omgewing Sake

umNyango weZalimo
UkuThuthukiswa kweNdawo zamaKhaya,
INtsha neNcaba zeBhoduluko

Environmental Authorisation

Authorisation register number : 17/2/3/GS – 131

Holder of Authorisation : Atha Africa Ventures (Pty) Ltd

Location of activity : Portions 1 of the farm Yzermyn
96 HT, within the jurisdiction of
Pixley Ka Seme Local
Municipality, Mpumalanga
Province

1. Decision

The Department is satisfied on the basis of the information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity as specified below. Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

2. Activity authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2010, the Department hereby authorises:

Atha Africa Ventures (Pty) Ltd
8th floor, Sinosteel Plaza
Sandton
2144

Contact person : Morgam Munsamy
Fax No. : (011) 784 7467
Email : Morgam.munsamy@athagroup.in

to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notices 1,2 and 3 (GN R.544, 545 and 546):

Listed activities	Activity/Project description
<p><u>GN R. 544 Item 11:</u> The construction of: (ii) channels; (iv) dams; (vi) bulk storm water outlet structures; (x) buildings exceeding 50 square metres in size; or (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p>	<p>Portions of the mine surface infrastructure, such as the adit platform, administration buildings, internal access roads, workshops, vehicle wash bay, sewage treatment facility, water treatment plant, storm water control infrastructure such as the clean and dirty water berms and channels and Pollution Control Dam (PCD), will be located within a wetland or within 32m of a wetland, as per the layout plan shown in Annexure 2.</p>
<p><u>GN R. 544 Item 13:</u> The construction of facilities or infrastructure for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in</p>	<p>Dangerous goods such as diesel will be stored on site. Aboveground storage tanks (not exceeding 500 cubic metres) will be installed on</p>

Listed activities	Activity/Project description
containers with a combined capacity of 80 but not exceeding 500 cubic metres.	<p>site.</p> <p>An explosives magazine storage facility will be constructed. Not more than 1 000 kg of explosive is anticipated to be stored within the explosives magazines.</p>
<p><u>GN R. 544 Item 18:</u></p> <p>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from:</p> <p>(i) a watercourse;</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving;</p> <p>(a) is for maintenance purposes undertaken in accordance with a management plan agreed to by the relevant environmental authority; or</p> <p>(b) occurs behind the development setback line.</p>	<p>Portions of the mine surface infrastructure, such as the adit platform, administration buildings, internal access roads, workshops, vehicle wash bay, sewage treatment facility, water treatment plant, storm water control infrastructure such as clean and dirty water berms and channels and PCD may be located within a wetland, as per the layout plan shown in Annexure 2. 12.10ha of wetland areas will be directly impacted on by the surface infrastructure. During the construction phase, the site for surface infrastructure will be cleared of all vegetation and topsoil will be stripped to a depth of 700 mm or more, in areas where construction will be taking place.</p>
<p><u>GN R. 544 Item 22:</u></p> <p>The construction of a road, outside urban areas,</p> <p>(i) with a reserve wider than 13,5 meters or,</p> <p>(ii) where no reserve exists where the road is wider than 8 metres.</p>	<p>The construction of internal access roads wider than 8m within the surface infrastructure layout.</p>
<p><u>GN R. 544 Item 26:</u></p> <p>Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)</p>	<p>The proposed mining project may trigger Section 53(1) of the NEM:BA as the target area falls within an ecosystem according to classification</p>

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Listed activities	Activity/Project description
(NEM:BA).	in terms of section 52(1)(a) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).i.e. Wakkerstroom Montane Grassland (Gm 14) (Endangered).
<p><u>GN R. 544 Item 47:</u> The widening of a road by more than 8 metres, or the lengthening of a road by more than 1 kilometre -</p> <p>(i) where the existing reserve is wider than 13,5 meters; or</p> <p>(ii) where no reserve exists, where the existing road is wider than 8 metres –</p> <p>excluding widening or lengthening occurring inside urban areas.</p>	The widening of existing internal track roads within the surface infrastructure layout by more than 6m.
<p><u>GN R. 545 Item 5:</u> The construction of facilities or infrastructure for any process or activity which requires a permit or license in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent and which is not identified in Notice No. 544 of 2010 or included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case that Act will apply.</p>	The mining activities have the potential to generate or release emissions, pollution or effluent, particularly with regards to the storm water control infrastructure and PCD, for which permits and licenses are required (i.e. Water Use Licence in terms of the National Water Act 1998 (Act 36 of 1998)(NWA).
<p><u>GN R. 545 Item 6:</u> The construction of facilities or infrastructure for the bulk transportation of dangerous goods -</p> <p>(iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons day.</p>	An enclosed conveyor system will be installed within the surface infrastructure layout of the mine as indicated in Annexure 2, in order to transport the coal from the underground operations to the ROM 'raw coal' stockpile.
<p><u>GN R. 545 Item 15:</u> Physical alteration of undeveloped, vacant or derelict</p>	The total footprint of the mine surface infrastructure will be

Listed activities	Activity/Project description
<p>land for residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more;</p> <p>except where such physical alteration takes place for:</p> <p>(i) linear development activities; or</p> <p>(ii) agriculture or afforestation where activity 16 in this Schedule will apply.</p>	<p>approximately 22.4ha. During the construction phase, the site for surface infrastructure will be cleared of all vegetation.</p>
<p><u>GNR 548 Item 4:</u></p> <p>The construction of a road wider than 4 metres with a reserve less than 13,5metres.</p> <p>(a) In Mpumalanga:</p> <p>i. Outside urban areas, in:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve.</p>	<p>The unpaved road stretching from the proposed mine access to the R543 will need to be upgraded to accommodate mine vehicles.</p> <p>The construction of internal access roads wider than 8m within the surface infrastructure layout.</p> <p>According to the Pixley KaSeme Local Municipality EMF (2011), the prospecting right falls within a critical biodiversity area (CBA). Portions of the mine area are also recognized in the Mpumalanga Biodiversity Sector Plan (MBSP) as Irreplaceable and Optimal Critical Biodiversity Areas (CBAs).</p> <p>The mine lies within an Endangered ecosystem; the Wakkerstroom Montane Grassland (Gm 14). The site borders the KwaMandlangampisi Protected Environment and surface infrastructure will be constructed just outside of the Mabola Protected Environment. The area falls within the South Eastern Escarpment National Spatial Biodiversity</p>

Listed activities	Activity/Project description
	<p>Assessment (NSBA) Priority Area. The area comprises habitat that has been zoned by the national Mining and Biodiversity Guideline as having the Highest Importance for Biodiversity. The site is regarded as important and necessary in terms of Mpumalanga Biodiversity Conservation Plan.</p>
<p>GN R. 546 item 12: The clearance of an area of 300 square metres or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation.</p> <p>(a) Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;</p> <p>(b) Within critical biodiversity areas identified in bioregional plans;</p>	<p>The site for surface infrastructure will be cleared of all vegetation during the construction phase. The area to be cleared has been calculated at approximately 224 028 m².</p> <p>According to the Pixley ka Seme Local Municipality EMF (2011), the prospecting right falls within a critical biodiversity area (CBA). Portions of the mine area are also recognized in the Mpumalanga Biodiversity Sector Plan (MBSP) as Irreplaceable and Optimal Critical Biodiversity Areas (CBAs). The mine lies within an Endangered ecosystem; the Wakkerstroom Montane Grassland (Gm 14).</p>
<p>GN R. 546 item 13: The clearance of an area of 1 hectare or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation,</p> <p>(a) Critical biodiversity areas and ecological support areas as identified in systematic biodiversity plans adopted by the competent authority.</p> <p>(c) In Mpumalanga:</p> <p>II. Outside urban areas, the following:</p>	<p>The site for surface infrastructure will be cleared of all vegetation during the construction phase. The area to be cleared has been calculated at approximately 224 028 m².</p>



Listed activities	Activity/Project description
<p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ff) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve.</p>	
<p><u>GN R. 546 item 14:</u></p> <p>The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation</p> <p>(a) In Mpumalanga:</p> <p>i. All areas outside urban areas.</p>	<p>The site for surface infrastructure will be cleared of all vegetation during the construction phase. The area to be cleared has been calculated at approximately 224 028 m².</p>
<p><u>GN R. 546 Item 16:</u></p> <p>The construction of:</p> <p>(iii) buildings with a footprint exceeding 10 square metres in size; or</p> <p>(iv) infrastructure covering 10 square metres or more where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p> <p>(a) In Mpumalanga:</p> <p>ii. Outside urban areas, in:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p>	<p>Portions of the mine surface infrastructure, such as the adit platform, administration buildings, internal access roads, workshops, vehicle wash bay, sewage treatment facility, water treatment plant, storm water control infrastructure such as the clean and dirty water berms and channels and Pollution Control Dam (PCD), will be located within a wetland or within 32m of a wetland, as per the layout plan shown in Annexure 2.</p>

Listed activities	Activity/Project description
(hh) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;	
<p><u>GN R. 546 Item 19:</u></p> <p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>(a) In Mpumalanga:</p> <p>II. Outside urban areas, in:</p> <p>(aa) A protected area identified in terms of NEMPAA, excluding conservancies;</p> <p>(cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;</p> <p>(ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p> <p>(gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve;</p>	The widening of existing internal track roads within the surface infrastructure layout by more than 4m.

as described in the Amended Final Environmental Impact Assessment Report dated 27 January 2015 at the following co-ordinates:

Alternative Environmental coordinates	S1 (Best Option)	Latitude	Longitude
Bend-points of the surface boundary area			
1		27°12'53.43"S	30°18'32.43"E
2		27°12'55.14"S	30°18'53.12"E
3		27°12'55.53"S	30°18'54.12"E
4		27°13'4.74"S	30°18'57.51"E






5	27°13'7.17"S	30°18'55.64"E
6	27°13'8.84"S	30°18'51.07"E
7	27°13'11.13"S	30°18'46.29"E
8	27°13'10.55"S	30°18'39.43"E
9	27°13'2.61"S	30°18'41.85"E
10	27°12'57.80"S	30°18'33.48"E
Adit location		
A1	27° 13' 2.91"S	30° 18' 47.20"E
A2	27° 13' 4.62"S	30° 18' 50.08"E
A3	27° 13' 9.06"S	30° 18' 47.60"E
A4	27° 13' 6.02"S	30° 18' 43.58"E

for the Yzermyn underground coal mine near Wakkerstroom with new surface infrastructure located on portion 1 of the farm Yzermyn 96 HT, within the Pixley Ka Seme Local Municipality in the Mpumalanga Province, hereafter referred to as "the property".

The infrastructure associated with this facility includes:

- a) Security fence and access controlled gate around the layout area;
- b) Site office, including administration offices, internal access roads within the surface infrastructure layout, parking, change houses and ablution facilities;
- c) Boxcut adit, decline shafts, high-wall and adit platform;
- d) Installation of conveyor systems to transport coal from the underground working face to the ROM 'raw coal' stockpile. The conveyor system will be enclosed to minimise noise and air quality impacts;
- e) A Crushing and Screening Station with ROM stockpile;
- f) Stormwater management infrastructure including clean and dirty water berms and channels and a Pollution Control Dam (PCD) approximately 2.8 ha in extent and less than 50000 m³;
- g) Workshops and vehicle wash bays;
- h) Sewage treatment facility with design capacity to store and treat enough sewage waste for 300 people;
- i) Water treatment plant;
- j) Waste management infrastructure;
- k) Installation of generator sets and connection of power via a network of 22kV overhead cables;
- l) Aboveground storage tanks (not exceeding 500 cubic meters) will be installed according to SANS 10089. Dangerous goods such as hydrocarbons will be stored on site. The tanks will be constructed within non-permeable bunds and all water collecting in the bund will be

required to pass through an oil separation system before being pumped to the PCD. All dangerous goods utilised onsite will be stored within the hazardous substance storage facility. The facility will have all necessary fire fighting equipment as well as adequate ventilation; and

- m) An explosives magazine will be constructed to the requirements of the Occupational Health and Safety Act 1993 (Act No. 85 of 1993). Not more than 1 000 kg of explosive is anticipated to be stored within the explosives magazine. The explosives magazine will also comply with the requirements of the Fire Brigade Services Act (No. 99 of 1987).

The total footprint of the mine surface infrastructure will be approximately 22.4ha as indicated in Annexure 2.

Coal from the underground mine will not require further beneficiation. The coal will be stockpiled on a temporary stockpile within the infrastructure footprint area, from where it will be loaded on coal transport vehicles for transportation via road to an existing coal siding (operated by Jindal) at the Piet Retief Siding near Piet Retief for dispatch to Richards Bay Coal Terminal on the east coast or to other destinations for supply of coal (i.e. coal fired power stations within the country) as appropriate. The haul route will take the existing unpaved road through the village of Dirkiesdorp, which is situated about 13 km from the proposed mine site, and onto the tarred R543 to the Piet Retief Siding, located approximately 60 km away. The unpaved route will be graded and surfaced with dust-aside or similar dust suppression chemicals prior to construction activities and watered regularly to reduce dust. After three years of operation, the road will be tarred and upgraded to the satisfaction of a registered civil engineer.

Initial water requirements will be sourced from available groundwater supply and from surface water harvesting. Once mining commences, the recharge from the underground workings will be sufficient to supply all the water requirements for the operation. PCDs will provide water in the case of a lack of supply for various reasons or in the case of an emergency on the mine.

3. Conditions of authorisation


Scope of Authorisation

- 3.1 The Best Environmental Option for the surface layout of the mine infrastructure is approved as indicated in Annexure 2. This option does not include a wash plant or discard dump (residue stockpile) on site, as the extracted coal from the underground mine will not require further beneficiation. The coal will be stockpiled on a temporary stockpile within the

- Infrastructure footprint area, from where it will be loaded on coal transport vehicles for transportation and sale directly to market.
- 3.2 The preferred coal haul route alternative, comprising the existing unpaved road adjacent to the target area, that continues through the town of Dirkiesdorp and onto the tarred R543 to the Piet Retief Siding located approximately 60 km away, is approved.
- 3.3 Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
- 3.4 The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
- 3.5 The activities authorised may only be carried out at the property as described above.
- 3.6 Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
- 3.7 This activity must commence within a period of 5 (five years) from the date of issue of this authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
- 3.8 Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
- 3.9 The holder of an environmental authorisation must apply for an amendment of environmental authorisation with the applicable competent authority for any alienation, transfer or change of ownership rights in the property on which the activity is to take place.

Appeal of authorisation

- 3.10 The holder of the authorisation must notify every registered interested and affected party in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
- 3.11 The notification referred to must –
- 3.11.1 Specify the date on which the authorisation was issued;



- 3.11.2 Inform the interested and affected party of the appeal procedure provided for in Chapter 2 of the Environmental Impact Assessment Regulations, 2014;
- 3.12 Advise the interested and affected party that a copy of the authorisation will be furnished on request; and
- 3.13 Give the reasons of the competent authority for the decision.
- 3.14 The holder of the authorisation must publish a notice –
- 3.14.1 informing interested and affected parties of the decision;
 - 3.14.2 informing interested and affected parties where the decision can be accessed; and
 - 3.14.3 draw the attention of interested and affected parties to the fact that an appeal may be lodged against this decision.

Management and monitoring of the activities

- 3.15 The Environmental Management Programme (EMPr) for the Best Environmental Option submitted as part of the Application for EA (as attached in the Amended EIR dated January 2015) must be amended and submitted to the Department for written approval prior to commencement of the activity. Once approved, the EMPr must be implemented and adhered to. The EMPr must be amended to include:
- 3.15.1 a copy of the surface infrastructure layout plan for the mine, as per Annexure 2;
 - 3.15.2 Maintenance Management plan for the maintenance of biodiversity sensitive areas including wetlands located within the surface boundary area indicated in Annexure 2 must:
 - a) be drawn up with the input of a suitably qualified and experienced wetland and biodiversity specialist;
 - b) Contain mitigation measures to ensure the integrity of those biodiversity sensitive features located within the surface infrastructure boundary area which will not be directly impacted on by the placement of the mining surface infrastructure;
 - c) Define all the wetlands that will not be directly affected by the development and which are to be included as part of the no-go area; and
 - d) A map indicating all no-go areas that have been identified for the development.
- 3.16 The Environmental Control Officer as appointed shall be responsible for the establishment and management of the Environmental Management Committee (EMC), that shall be established for the construction and operational phase of the project.
- 3.16.1 The EMC shall consist of, inter alia, representatives from the Department of Mineral Resources, Department of Water and Sanitation, Department of Environmental Affairs (Legal and Authorisations), Mpumalanga Tourism and Parks Agency, Department of Agriculture, Rural Development and Environmental Affairs

(Compliance Monitoring and Enforcement), Mabola Protected Environment Management Authority and Pixley Ka Seme Local Municipality;

- 3.16.2 The Members of the EMC must be approved by the Department in writing prior to the commencement of the activity;
- 3.16.3 The purpose, outcomes, role and functions of the EMC must be submitted to the department for approval prior to the commencement of the activity;
- 3.16.4 The EMC shall be responsible for:
 - a) The ongoing and continuous development of the EMPr,
 - b) Monitoring adherence and compliance to the approved EMPr,
 - c) Making necessary amendments to the EMPr as and when required.

Monitoring

- 3.17 The applicant must appoint a suitably experienced independent Environmental Control Officer (ECO) for the construction phase of the development, that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- 3.18 The ECO shall be appointed before commencement of any authorised activities.
- 3.19 Once appointed, the name and contact details of the ECO must be submitted to the *Directorate: Compliance Monitoring and Enforcement* of the Department.
- 3.20 The ECO shall keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
- 3.21 The ECO shall remain employed until all rehabilitation measures, as required for implementation are completed and the site is ready for operation.

Recording and reporting to the Department

- 3.22 All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the *Directorate: Compliance Monitoring and Enforcement* of the Department.
- 3.23 The holder of the authorisation must submit an environmental audit report to the Department within 30 days of completion of any authorised listed activity and within 30 days of completion of rehabilitation of such activities.
- 3.24 Quarterly audit reports must also be provided to the Department during the operational phase of the activity.

- 3.25 The environmental audit reports must indicate the date of the audit, the name of the auditor and the outcome of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the EMPr.
- 3.26 Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Commencement of the activity

- 3.27 The authorised activity shall not commence within **twenty (20) days** of the date of signature of the authorisation.
- 3.28 In terms of Section 43(7), an appeal under Section 43 of the National Environmental Management Act, 1998 does not suspend the environmental authorisation or any provision or condition attached thereto unless the Minister or an MEC directs otherwise.

Notification to authorities

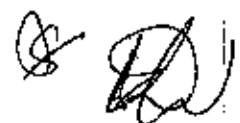
- 3.29 A written notification of commencement must be given to the Department no later than **fourteen (14) days** prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

Site closure and decommissioning

- 3.30 Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

- 3.31 Prior to construction commencing, written permission must be obtained from the Minister of National Department of Environmental Affairs and Cabinet member responsible for mineral resources to undertake mining activities within the Mabola Protected Environment in terms of Section 48 of the National Environmental Management: Protected Areas Act, 57 of 2003.
- 3.32 No activities, which require a water use authorisation, shall commence without a water use license granted by the Department of Water and Sanitation (DWS).
- 3.33 A minimum no-go 100m buffer must be retained around the Mkuzase and Mawandlane Rivers and associated channelled valley bottom wetlands, as per the no-go map in the approved EMPr.



- 3.34 A minimum no-go 500m buffer must be maintained around the two large, old adits located outside the prospecting area, where at least four Conservation Important bat species are roosting.
- 3.35 The mine surface infrastructure must not be constructed within a 1 km radius of any National Freshwater Ecosystem Priority Area (FEPA) wetlands.
- 3.36 The no-go areas must be clearly demarcated before construction commences. No development must be allowed within channelled valley bottom wetlands and no-go areas.
- 3.37 The discard dump and associated wash plant do not form part of this environmental authorisation.
- 3.38 The wetland specialist must carry out quarterly audits of the wetlands and the report must be submitted to the department and also be tabled for discussion at the EMC meetings.
- 3.39 The Integrity (PES score) of any category A and B wetlands must not drop below 20% from the baseline. Should that happen a biodiversity offset agreement must be negotiated with the relevant competent authority within the timeframe stipulated by the competent authority.
- 3.40 No surface water generated as a result of the development may be channelled directly into any wetland or watercourse. All surface runoff generated during both construction and operation phases must be managed (and cleaned where applicable) prior to entering any natural drainage system or wetland so as not to impact on the natural hydrology and morphology of the watercourses.
- 3.41 Stormwater must be managed in accordance with the Stormwater Management Plan referred to in the EMPr and in line with DWS requirements.
- 3.42 Scouring, erosion or sedimentation of all watercourses and wetlands must be prevented to avoid destabilisation of the watercourses.
- 3.43 Construction of the coal stockpile areas and the pollution control dam (PCD) must be carried out to the satisfaction of a Registered Professional Engineer.
- 3.44 The stockpile areas and PCD must be lined according to the requirements of the Department of Water and Sanitation (DWS), in order to prevent contamination of groundwater resources.
- 3.45 A groundwater monitoring system must be designed and implemented according to the requirements of DWS.
- 3.46 The dangerous goods storage facility must be constructed within non-permeable bunds. The bunded area must be designed to contain, at a minimum, 110% volume of the largest container stored.
- 3.47 Any spillage of dangerous goods such as stored fuels and chemicals must immediately be contained and the impacted area remediated as per the approved EMPr.
- 3.48 Re-fuelling must take place on a sealed surface area at the designated fuelling depots in order to prevent the ingress of hydrocarbons into topsoil and ground and surface water resources.

- 3.49 All trucks hauling coal must be covered by a tarp or equivalent cover to prevent the spillage of coal on roads.
- 3.50 A dust fallout monitoring network must be installed in and around the main area of operation in order to determine dust fallout trends. Ambient air quality monitoring must also include the sampling of PM₁₀, PM_{2.5}, NO₂, SO₂ and VOC concentrations, as per the approved EMPr.
- 3.51 Fallout dust outside the surface infrastructure fence of the mine through the gravel road up to the intersection of road R543 must comply with the permitted fallout dust levels for residential areas (800mg/m²/day).
- 3.52 Stringent measures must be applied to suppress dust emanating from the construction site, as per the approved EMPr.
- 3.53 Exhaust emissions testing must be undertaken on all mobile and stationary diesel combustion sources as part of equipment maintenance schedules, as per the approved EMPr.
- 3.54 Road safety management measures such as pedestrian crossings, speed humps and warning signs to warn motorists of pedestrians (as per the South African Road Traffic Signs Manual) must be placed at strategic points near the two schools located along the haul route and near homesteads located in the vicinity of the mine site.
- 3.55 The surface infrastructure area and construction lay down areas must be clearly demarcated. Clearing of vegetation must be limited to these demarcated areas. The clearing of vegetation must be undertaken in accordance with the approved EMPr.
- 3.56 A "Plant Rescue and Protection" plan with specific focus on conserving important species from areas to be transformed must be compiled by an ecological specialist and be submitted together with the Maintenance Management Plan for approval prior to the commencement of any construction activities.
- 3.57 A permit must be obtained from the Mpumalanga Tourism and Parks Agency for the removal or destruction of indigenous protected and endangered plant and animal species.
- 3.58 An alien plant control program must be developed and implemented from the inception of the site clearing phase in accordance with the relevant legislation and as per the approved EMPr.
- 3.59 No exotic plants may be used for rehabilitation purposes. Only locally indigenous plants must be utilised.
- 3.60 Liaison with land owners/farm managers is to be done prior to construction in order to provide sufficient time for them to plan their agricultural activities.
- 3.61 If any relocations of affected homesteads are required, these must be addressed in accordance with the Resettlement Plan that is to be compiled as per the approved EMPr and in line with relevant legislation, and also in accordance with the Social and Labour Plan

to be regulated by Department of Mineral Resources. The Resettlement Plan must be informed by the recommendations of the Socio-Economic Impact Assessment study as attached in the Amended EIR dated January 2015.

- 3.62 Should any material of cultural or archaeological significance be encountered during construction, the South African Heritage Resources Agency (SAHRA) must be alerted immediately, and a professional archaeologist or palaeontologist must be contacted to inspect the findings.
- 3.63 An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste, which will not be recycled, must be disposed of at a licensed landfill site in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).

General

- 3.64 A copy of this authorisation and the approved EMPr must be kept at the property where the activity will be undertaken. The authorisation and approved EMPr must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who undertakes work at the property.
- 3.65 The holder of the authorisation must notify both the Director: Integrated Environmental Authorisations and the Directorate: Compliance Monitoring and Enforcement at the Department, in writing and within 48 (fourty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
- 3.66 National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

ENVIRONMENTAL AUTHORISATION APPROVED BY:


Mr. S.S. Maluleka
Chief Director: Environmental Affairs
Date 07.06.2016





ANNEXURE 1: REASONS FOR THE DECISION

1. Background

The applicant Alpha Africa Ventures (Pty) Ltd applied for Environmental Authorisation for the infrastructure associated with Yzermyn underground coal mine. The proposed project includes the construction of:

- a) Security fence and access controlled gate around the layout area;
- b) Site office, including administration offices, internal access roads within the surface infrastructure layout, parking, change houses and ablution facilities;
- c) Boxcut adit, decline shafts, high-wall and adit platform;
- d) Installation of conveyor systems to transport coal from the underground working face to the ROM 'raw coal' stockpile. The conveyor system will be enclosed to minimise noise and air quality impacts;
- e) A Crushing and Screening Station with ROM stockpile;
- f) Stormwater management infrastructure including clean and dirty water berms and channels and a Pollution Control Dam (PCD) approximately 2.8 ha in extent and less than 50000 m³;
- g) Workshops and vehicle wash bays;
- h) Sewage treatment facility with design capacity to store and treat enough sewage waste for 300 people;
- i) Water treatment plant;
- j) Waste management infrastructure;
- k) Installation of generator sets and connection of power via a network of 22kV overhead cables;
- l) Aboveground storage tanks (not exceeding 500 cubic meters).
- m) An explosives magazine area.

The total footprint of the mine surface infrastructure will be approximately 22.4ha as indicated in Annexure 2.

2. The applicant appointed the following Environmental Assessment Practitioner to undertake the Environmental Assessment process:

Consultant Name: EcoPartners

Address: P O Box 73513
Fairland
2030

Contact Person: Charlene Baartjies
Telephone: (011) 431 2251
Fax: (086) 664 2908

3. Information considered in making a decision.

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the Amended EIR dated January 2015;
- b) The comments received from the Mpumalanga Tourism and Parks Agency, the Department of Environmental Affairs: Branch: Biodiversity and Conservation, the Department of Water and Sanitation, the South African Heritage Resources Agency and Interested and Affected Parties as included in the Amended EIR dated January 2015;
- c) Mitigation measures as proposed in the EIR dated January 2015 and the EMPr;
- d) The information contained in the specialist studies contained within Appendix C-F and H-O of the Amended EIR dated January 2015;
- e) Socio-economic consideration
- f) Findings of the last site visit conducted on 19 May 2016; and
- g) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act107 of 1998).

4 Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The findings of all the specialist studies conducted and their recommended mitigation measures.
- b) The project need and desirability was sufficiently addressed. South Africa is heavily reliant on thermal coal for power generation. Both local and international markets are highly dependent on South Africa being a main provider of coal. The identification and exploitation of new coal reserves in South Africa is therefore a prerequisite in meeting this demand. The proposed Yzermyr Underground Coal Mine has a gross in situ resource of 80.32 Mt (before losses)





within the Target Area that will be exported via Richards Bay Coal Terminal, or transported to supply power stations in the country.

- c) The Amended EIR Identified all relevant environmental legislation and guidelines that have been considered in the preparation of the Amended EIR dated January 2015.
- d) The methodology used in assessing the potential impacts identified in the Amended EIR dated January 2015 and the specialist studies have been adequately indicated.
- e) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2010 for public involvement.

5 Findings

After consideration of the information and factors listed above, the Department made the following findings -

- a) Underground mining will occur within the Mabola Protected Environment, although the new surface infrastructure required for the mine will be located just outside of the protected environment. The Yzermyn Underground Coal Mine also borders the KwaMandlangampisi Protected Environment, which falls within the greater ENKangala Grassland Biodiversity Stewardship Initiative as well as the Grassland Important Bird Area (IBA). The area comprises habitat that has been zoned by the national Mining and Biodiversity Guideline (DEA et al. 2013) as having the Highest Importance for Biodiversity. The site is regarded as important and necessary in terms of Mpumalanga Biodiversity Conservation Plan.
- b) According to the Pixley Ka Seme Local Municipality EMF (2011), the prospecting right falls within a critical biodiversity area (CBA). Portions of the mine area are also recognized in the Mpumalanga Biodiversity Sector Plan (MBSP) as Irreplaceable and optimal Critical Biodiversity Areas (CBAs). The mine lies within an Endangered ecosystem; the Wakkerstroom Montane Grassland. A number of protected species (both fauna and flora) have been identified on site.
- c) The Yzermyn Underground Coal Mine Project is situated in a sensitive and conservation important area in terms of biodiversity. Construction of the proposed surface infrastructure will result in complete removal of vegetation. The surface infrastructure was relocated to the northern most area of the prospecting right. The historical transformation of the environment in this area indicates that disturbance to the biodiversity will be limited. The areas identified for the preferred surface infrastructure layout have been mostly disturbed previously, by agricultural and old mining practices. The ecosystem is fragmented in the proposed areas of the surface



infrastructure and the development of the area can be mitigated to ensure ecologically sustainable development.

- d) The mine lease area is situated in a National Freshwater Ecosystem Priority Area (FEPA) river catchment, and includes several Category 1 Wetland FEPAs. Mining in any form should not be permitted in wetland FEPAs, or within 1km of a wetland/riverine FEPA buffer. The surface infrastructure required for the mine falls outside the 1km FEPA buffer areas.
- e) 12.1 ha of the total wetland area will be disturbed by the surface infrastructure, however 7.62 ha of the wetland has already been transformed through agricultural development. With the Best Environmental Option the discard dump (residue stockpile) and associated wash plant will not be constructed, thereby reducing the impact on the sensitive biodiversity and wetland areas. Mitigation measures have been stipulated in the EMP and environmental authorisation to further reduce potential risk to the wetland areas.
- f) In an attempt to furthermore optimise the layout of the surface infrastructure off of wetland areas an additional wetland delineation investigation was conducted to determine the wetland edge within the surface infrastructure footprint. The surface infrastructure layout was revised to minimise the impact on the wetlands. Due to the degraded nature of the wetlands, the very limited Ecological Importance and Sensitivity of the area and the low level of ecosystem service provision of the wetlands which will be directly affected, the significance of this impact is considered very low and will not significantly affect local, regional, provincial or national conservation initiatives for wetlands, floral species conservation, faunal species conservation and aquatic resource conservation.
- g) Two large adits from previous mining in the area have Very High conservation importance. This is because these adits provide roosting habitat for at least four C1 bat species. The surface infrastructure footprint of the mine is however outside of the 500 m buffer for caves that is prescribed.
- h) During the assessment of water uses downstream it was determined that no water use is registered for the properties located adjacent to the Assegai and Mawandlane rivers up to the Heyshope dam. It has been determined that the downstream river usage of the proposed Yzemyn underground coal mine area is used for agricultural purposes. It is anticipated that the proposed underground coal mine development will reduce the Mean Annual Runoff of the quaternary catchment only by 46,030 m³ or by 0.05%.

- i) The geochemical assessment of six coal and two discard samples classified the majority of tested coal samples as potentially acid generating with the remainder inconclusive. Following the precautionary principle, all stockpiled coal will therefore be treated as potentially acid generating. The anticipated cone of dewatering due to mine inflows will capture groundwater, which would have otherwise contributed to spring discharges, leakages along hill slopes, wetlands, river baseflow or to deeper regional groundwater flow. Post-closure the mine voids are likely to be flooded within 45 years with potential decant (hereafter). The PCD will be lined to limit groundwater contamination. With the Best Environmental Option, no discard will be generated and no discard dump (residue stockpile) will be constructed. This will reduce the risk of groundwater contamination.
- j) PM_{10} emissions were found to result in the most notable air quality impacts. Both unmitigated and mitigated simulated PM_{10} concentrations exceed National Ambient Air Quality Standards (NAAQS) off-site and at several Air Quality Sensitive Receptors (AQSR), primarily those along the unpaved road between the Coal Handling and Processing Plant and Dirkiesdorp. Although ground level concentrations reduce notably when considering mitigated emissions (achieved with watering), the assumed reduction (75%) is not sufficient to decrease levels to within NAAQS at AQSRs located in close proximity to the unpaved road. The use of the unpaved haul route between the Coal Handling and Processing Plant (CHPP) and Dirkiesdorp results in exceedances of NAAQSs at most of the AQSRs. With the paving of this road, as is planned after year 3 of operation, PM_{10} impacts along the road will reduce significantly by an estimated 90%. With the Best Environmental Option, no discard dump (residue stockpile) will be constructed and this will significantly reduce the PM_{10} concentrations expected.
- k) The existing Plet Retief Siding will be utilised for the transport of export quality coal to Richards Bay. The Siding is operated and managed by JINDAL, who has indicated that sufficient space is available and that an upgrade to the Siding is not required.
- l) During the construction phase the highest noise levels are associated with general construction activities, which include land clearing, earthworks, grading, bulldozing and unloading of material. Since blasting events at the box cut/ high-wall are not continuous and will only occur once per day, impacts from this source are low.
- m) Surface infrastructure for the mine will impact on only three cultural heritage sites which were determined to be of medium to low significance. From an archaeological and heritage point of view the development can be allowed once the mitigation measures have been implemented.



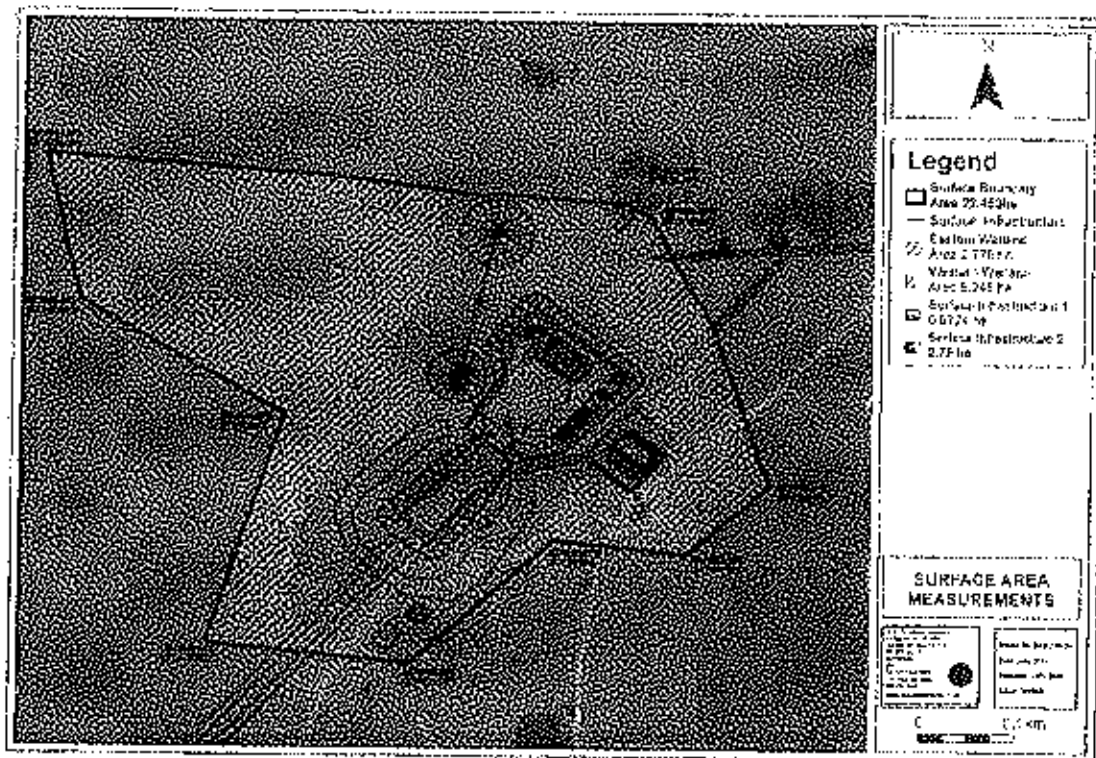
- n) The visual impact of the mine will be significantly reduced with the implementation of the Best Environmental Option, since no discard dump (residue deposit) will be constructed which would otherwise have remained as a permanent structure in the landscape.
- o) The impact of the proposed Yzerwyn Underground Coal Mine on the peak hour traffic operating conditions of the surrounding road network will not necessitate any mitigation measures such as intersection upgrades. The heavy vehicle loading impact of the proposed mine on the existing road network will require the replacement of surfacing at the problem areas identified. At the very least a surface treatment is required.
- p) There is one homestead located approximately 500 m from the proposed adit entrance, and approximately 100m from the main access road to the target area. The mining activities are likely to have direct negative impact on this homestead in terms of vibrations (cracking of houses), dust, noise, safety and visual impacts. If any relocations are required, these will be addressed in accordance with a Resettlement Plan that is to be compiled as per the approved EMPr and in line with relevant legislature, and also in accordance with the Social and Labour plan to be regulated by Department of Mineral Resources.
- q) The mine is anticipated to have a considerable positive socio-economic impact through the provision of employment and the stimulation of the local economy.
- r) The identification and assessment of impacts are detailed in the Amended EIR dated January 2015 and sufficient assessment of the key identified issues and impacts have been completed.
- s) The procedure followed for impact assessment is adequate for the decision-making process.
- t) According to the independent EAP, the information contained in the Amended EIR is accurate and credible.
- u) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts. EMPr measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activity will not conflict with the general objectives of integrated environmental management as laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental



impacts resulting from the authorised activity can be mitigated for to acceptable levels.
Authorisation is accordingly granted.

Annexure 2: Layout Plan





water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag x 313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria
Tel: (012) 336 7500, Fax: (012) 326 4472 / (012) 326 2715

LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998)

I, *Nofwazi Gasa*, in my capacity as acting Director-General (Acting) in the Department of Water and Sanitation and acting under authority of the powers delegated to me by the Minister of Water and Sanitation, hereby authorise the following water uses in respect of this licence

SIGNED: *N. Gasa*

DATE: 7/7/2016

LICENCE NO: 05/W51A/ACFGIJ/4726
FILE NUMBER: 16/27/W51/Yzermyn

1. Licensee: ATHA-AFRICA VENTURES (PTY) LTD

Postal Address: 8th Floor
Sinosteel Plaza
159 Rivonia Road
Morningside
Sandton
2144

2. Water Uses:

- 2.1. Section 21(a) of the Act: Taking water from a water resource, subject to the conditions set out in Annexures I and II.
- 2.2. Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse, subject to the conditions set out in Annexures I and III.
- 2.3. Section 21(f) of the Act: Discharging waste or water containing waste into a water resource through a pipe, canal, sewer or other conduit, subject to the conditions set out in Annexures I and IV.

B 07320

ABSAL
Approved
[Signature]

[Signature]

- 2.4. Section 21(g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions set out in Annexures I and V
- 2.5. Section 21(i) of the Act: Altering the bed, banks course or characteristics of a watercourse, subject to the conditions set out in Annexures I and III.
- 2.6. Section 21(j) of the Act: Removing, discharging or disposing of water found underground, subject to the conditions set out in Annexures I and VI.

3. Owners and Properties in respect to which this licence is issued.

Table 1: Properties in respect of which this licence is issue

Item	Property	Owner
3.1	Kromhoek 93 HT	Mr Pierre William Bruwer Uys
3.2	Goedgevonden 95 HT	Mr Pierre William Bruwer Uys
3.3	Yzermyn 96 HT Portion 1	Mr Pierre William Bruwer Uys
3.4	Zoetfontein 94 HT (Portion of)	Imfuyo (Pty) Ltd
3.5	Vaalbank 74 HT	Mr Petrus Nkanyezi Lukhele

4. Licence and Review Period



- 4.1 This licence is valid for a period of fifteen (15) years from the date of issuance and it may be reviewed every two (2) years.

5. Definitions

"Any word or term defined under the Act shall have the same meaning as defined in the Act, unless otherwise specifically stated."

"The Regional Head" means the Provincial Chief Director: KwaZulu Natal Regional Office, Department of Water and Sanitation, P.O BOX 1018 Durban, 4000.

"The Report" means the consolidated submission of the Yzermyn Underground Coal Mine Integrated Water Use Licence Application in terms of the National Water Act (Act No. 36 of

  Approved

1998) as well as other related documentation and communication (email, letters, verbal, etc.) thereto.

"Extent of the watercourse" means the outer edge of the 1:100 year floodline or the delineated riparian habitat, whichever is the greatest.

"Regulated area of a wetland" is the use of water for section 21 c and i water uses within 500m radius from the boundary of any wetland.

A "wetland" means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil.

The "characteristics of a watercourse/s" mean the flow regime, water quality, habitat (including the physical structure of the watercourse/s and associated vegetation) and biota found within the extent of the watercourse/s. The Resource Quality characteristics as defined in the National Water Act, 1998 (Act 36 of 1998).

6. Description of activity

The licence authorises the mining of thermal coal at Yzermyn Underground Coal Mine, including the establishment of services such as access roads, power and water supply. The infrastructure will also include pollution control dams, water separation systems, a sewage treatment plant, and a water treatment plant. There are also drainage lines and wetlands within the proposed site. Hence a water use licence for Section 21 activities (a), (c), (f), (g), (i) and (j) will be required.

Exemption has been granted from GN 704 for the following items:

Section 4: Restrictions on locality: No person in control of a mine or activity may - locate or place any residue deposit, dam, reservoir, together with any associated structure, or any other facility within the 1:100 year flood-line or within a horizontal distance of 100 metres from any watercourse or estuary, borehole or well, excluding boreholes or wells drilled specifically to monitor the pollution of groundwater, or on water-logged ground, or on ground likely to become water-logged, undermined, unstable or cracked.

  AB Singh
Approach

Section 4: Restrictions on locality: No person in control of a mine or activity may- (b) except in relation to a matter contemplated in regulation 10, carry on any underground or opencast mining, prospecting or any other operation or activity under or within the 1:50 year flood-line or within a horizontal distance of 100 metres from any watercourse or estuary, whichever is the greatest.

7. Appeal

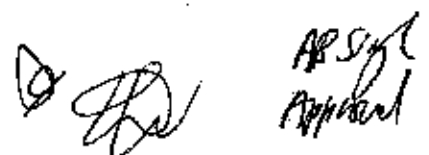
Any person who has timeously lodged a written objection against the application for a licence or has an objection against the refusal of such licence, may appeal to a Water Tribunal (within 30 days of the licence date) and the Tribunal may confirm, amend or withdraw the licence, or make any other order as the Tribunal deems fit.

APPENDIX I


GENERAL CONDITIONS FOR THE LICENCE

1. This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
3. The Licensee shall immediately inform the Provincial Head of any change of name, address, premises and/or legal status.
4. If the property/ies in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the Regional Head within 60 days of the said change taking place.
5. If a Water User Association is established in the area to manage the resource, membership of the Licensee to the Association is compulsory. Rules, regulations and water management stipulation of such association must be adhered to.
6. The Licensee shall be responsible for any water use charges and/or levies imposed by a Regional Head.
7. While effect must be given to the Reserve as determined in terms of the Act, where a lower confidence determination of the Reserve has been used in issuance of this licence, the licence conditions may be amended should a higher confidence reserve be conducted.
8. When compulsory licensing is implemented for the water resource in respect of which this licence was issued, the water use authorized in this licence may be subject to appropriate conditions on quantity and quality.
9. The licence must not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.
10. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other provisions of the Act, as amended from time to time.
11. The Licensee must conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the Regional Head within one month of the finalization of the audit.
12. The Licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within the first three (3) months of the date of this licence is issued and the



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- report on the audit shall be submitted to the regional Head within one month of finalization of the report.
13. Any incident that causes or may cause water pollution must be reported to the Responsible Authority or a designated representative within 24 hours.
 14. The issuance of this licence does not imply a guarantee relating to:-
 - 14.1. the statistical probability of supply
 - 14.2. the availability of the water , or
 - 14.3. the quality of water.
 15. If the water use described in this licence is not exercised within 3 years of the date of the licence, the authorisation will be withdrawn. Upon commencement of the water use, the Licensee must inform the relevant authority in writing.
 16. The water may not be used for another purpose than the purpose in this licence.
 17. The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply techniques for the re-use of water containing waste, in an endeavor to conserve water at all times.
 18. The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders for the need for Water Conservation/Water Demand Management.
 19. The Licensee shall ensure that all measuring devices are easily accessible.
 20. Where applicable flow metering devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than once in two years. Calibration certificates shall be available for inspection by the Responsible Authority or his representative upon request.
 21. Notices prohibiting unauthorized persons from entering water use premises must be displayed.
 22. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of / amongst other things.
 - 22.1. Shortage of water;
 - 22.2. Inundation of flood;
 - 22.3. Any *force majeure* event;
 - 22.4. Siltation of the river or dam basin; and
 - 22.5. Required Reserve releases.

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APPENDIX II

Section 21 (a) of the Act: Taking water from a water resource

1. This licence authorises the taking of a maximum quantity of 28277 cubic meter (m³) of water per annum from supply well CBH2D located on the farm Kromhoek 93 HT Re, and 28277 cubic meter (m³) of water per annum from supply well CBH3S located on the farm Goedgevonden 95 HT based on the monthly schedule for mining and domestic use purposes on Yzermyn 96 HT.

Table 1: Summary of Water Uses Applied for

Water Use	Activity and Purpose	Volume (m ³ /a) / Area / WXLJH	Watercourse/Resource affected	Property Description	Approximate Centre Coordinates
21(a)	Abstraction of water from supply wells CBH2D	28 277 m ³ /a	CBH2D groundwater	Kromhoek 93 HT Re	27°13'43.61"S 30°16'49.91"E
21(a)	Abstraction of water from supply wells CBH3S	28 277 m ³ /a	CBH3S groundwater	Goedgevonden 95 HT	27°14'00.96"S 30°16'04.61"E

2. The quantity of water authorised to be taken in terms of this licence may not be exceeded without prior authorisation by the Minister.
3. This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.
4. The abovementioned volume may be reduced when the licence is reviewed.
5. The licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the efficient use of water containing waste, in an endeavour to conserve water at all times.
6. The licensee shall be responsible for any water use charges or levies, which may be imposed from time to time by the Department or responsible authority in terms of the Department's Raw Water Pricing Strategy.
7. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of:
 - 7.1 shortage of water
 - 7.2 inundations or flood
 - 7.3 siltation of the resource; and
 - 7.4 required reserve releases.

8. The licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders for the need to for WC/WDM.



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ANNEXURE III

Section 21(c) of the Act: Impeding or diverting the flow of water in a watercourse
Section 21(i) of the Act: Altering the bed, banks, course or characteristic of a watercourse

1. GENERAL

1.1 This licence authorises Atha-Africa Ventures (Pty) Ltd the construction and operation of Yzemyn Underground Coal Mine and associated infrastructure on the properties as set out in Table 1 below for Sections 21(c) and (i) water uses.

Table 1: Summary of Water Uses Applied for

Water Use	Activity and Purpose	Volume (m ³ /a) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(c) & (i)	Circular Sectional Steel Tanks associated with the PCD system for the purpose of water conservation reducing evaporation.	45m (w) X 82m (l) X 8.735m (h)	Partial destruction of wetland system 1; Seep wetland (S1)	Yzemyn 96 HT Ptn 1	27°12'54.74"S 30°18'33.84"E
21(c) & (i)	PCD, silt trap and drying slab for waste water pollution control	107m (w) X 182.8m (l) X 5m (h)	Partial destruction of wetland system 1; Seep wetland (S1)	Yzemyn 96 HT Ptn 1	27°12'56.1"S 30°18'44.1"E
21(c) & (i)	Construction and operation of the adit for access to underground	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzemyn 96 HT Ptn 1	27°13'06.1"S 30°18'46.5"E

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Water Use	Activity and Purpose	Volume (m³/a) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
	mine workings				
21(c) & (i)	Construction and operation of the main workshop platform	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'00.8"S 30°18'51.0"E
21(c) & (i)	RoM Stockpile slab A (Raw Coal)	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'01.4"S 30°18'47.5"E
21(c) & (i)	RoM Stockpile slab B (Processed product)	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'56.5"S 30°18'48.5"E
21(c) & (i)	Office Block and parking area	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'04.0"S 30°18'53.5"E
21(c) & (i)	Pipeline: 200ND HDPE Main Pump from steel tanks to Water Treatment Plant	NA	Runs through wetland system 1; seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'58.7"S 30°18'36.2"E
21(c) & (i)	Pipeline: 300ND HDPE outlet pipe from PCD to Steel Tanks	NA	Runs through wetland system 1; seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'57.0"S 30°18'36.1"E
21(c) & (i)	Pipeline: from dirty water sump with float pump	NA	Runs through wetland system 1; seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'54.6"S 30°18'36.1"E

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Water Use	Activity and Purpose	Volume (m³/g) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
	back to PC Dam				
21(c) & (i)	Dirty water cut-off Flo-Drain Y	NA	Runs through wetland system 1; seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'54.1"S 30°18'36.2"E
21(c) & (i)	Dirty water cut-off Flo-Drain X	NA	Runs through wetland system 1 & 2; seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'54.4"S 30°18'41.1"E
21(c) & (i)	Clean Water Cut-Off Flo-Drain A	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2) – discharging into seep wetland S2	Yzermyn 96 HT Ptn 1	27°13'11.1"S 30°18'50.8"E
21(c) & (i)	Clean Water Cut-Off Flo-Drain B	NA	Runs through wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°13'07.2"S 30°18'38.4"E
21(c) & (i)	Clean Water Cut-Off Flo-Drain C	NA	Runs through wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'59.6"S 30°18'39.6"E
21(c) & (i)	Clean water diversion Berm A	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'11.1"S 30°18'49.3"E
21(c) & (i)	Clean water diversion Berm B	NA	Runs through wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°13'05.1"S 30°18'36.4"E

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Water Use	Activity and Purpose	Volume (m³/s) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(c) & (i)	Canal A1, A2, Chute B, Canal E, C & F for process water to report to the PCD for re-use/recycling.	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	Canal A1- 27°13'00.1"S 30°18'51.6"E Canal A2- 27°13'01.5"S 30°18'49.1"E Chute B- 27°12'58.7"S 30°18'50.2"E Canal E- 27°12'59.2"S 30°18'49.2"E Canal F- 27°12'55.2"S 30°18'48.4"E Canal C- 27°12'58.1"S 30°18'50.8"E
21(c) & (i)	Canal D for process water to report to the PCD for re-use/recycling	NA	Runs through wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'55.5"S 30°18'45.9"E

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Water Use	Activity and Purpose	Volume (m³/a) / Area / WXLKH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(c) & (i)	8m access road for heavy vehicles for collection of product coal.	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2) – Also runs through seep wetland S2	Yzermyn 96 HT Ptn 1	27°12'57.1"S 30°18'54.3"E
21(c) & (i)	7m access road for light vehicles	NA	Within 500m of wetland system 2; Seep wetland (S2) – Also runs through seep wetland S2	Yzermyn 96 HT Ptn 1	27°12'58.6"S 30°18'56.9"E
21(c) & (i)	RoM stockpile conveyor 3A and coal product 3B.	NA	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	Conveyor 3A – 27°13'02.5"S 30°18'48.0"E Conveyor 3B – 27°12'58.5"S 30°18'48.1"E
21(c) & (i)	Perimeter fence	NA	Runs through wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'59.5"S 30°18'58.2"E
21(c) & (i)	Electricity supply route to pumps	NA	Runs through wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'54.6"S 30°18'33.5"E
21(c) & (i)	Sewerage pipeline and treated sewer water pipeline – Treated	NA	Within 500m of wetland system 2; Seep wetland (S2)	Yzermyn 96 HT Ptn 1	27°13'01.7"S 30°18'53.7"E

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Water Use	Activity and Purpose	Volume (m³) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
	sewerage will be discharge back to the PCD for recycling and process use.				
21(c) & (l)	Pipeline: Treated wastewater from PCD to be discharged into seep wetland S2	NA	Within 500m of wetland system 2; Seep wetland (S2) (SAS, May 2015) - treated excess waste water to be discharge into seep wetland S2	Yzermyn 96 HT Ptn 1	27°13'05.29"S 30°18'36.37"E
21(c) & (l)	Clean water Cut-off Flo-Drain A discharge point to underground filter drains	NA	Wetland system 2; Seep wetland (S2)	Yzermyn 96 HT Ptn 1	27°13'11.1"S 30°18'50.8"E
21(c) & (l)	Clean water Cut-off Flo-Drain B discharge point to underground filter drains	NA	Wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°13'07.2"S 30°18'38.4"E
21(c) & (l)	Clean water Cut-off Flo-Drain C discharge point to underground filter drains	NA	Wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'59.6"S 30°18'39.6"E

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Water Use	Activity and Purpose	Volume (m³/a) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(c) & (i)	Treated excess waste water discharge point to underground filter drains	NA	Wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°13'05.29"S 30°18'36.37"E
21(c) & (i)	Rehabilitation of disturbed seep wetlands S1 & S2	NA	Wetland system 1 & 2; Seep wetlands S1 & S2 during and post operation within the infrastructure footprint	Yzermyn 96 HT Ptn 1	S1 27°12'58.53"S 30°18'42.97"E S2 27°13'1.5"S 30°18'54.98"E
21(c) & (i)	Underground mining activities and voids	NA	Wetland system 1 & 2; Seep wetlands S1, S2, & S4; channel valley bottom CVB1 & CVB2	Yzermyn 96 HT Ptn 1	S1 27°13'13.33"S 30°18'35.95"E S2 27°13'26.44"S 30°18'54.78"E S4 27°13'35.08"S 30°19'07.35"E CVB1 27°12'56.15"S 30°18'22.41"E CVB2 27°13'28.22"S 30°19'0.16"E

Water Use	Activity and Purpose	Volume (m³/a) / Area / WXLXH	Watercourse/Resources affected	Property Description	Approximate Centre Coordinates
21(e) & (i)	Underground mining activities and voids	2040m (w) X 3890m (l) X 2.5m (h)	Wetland system 1 & 2; Seep wetlands S1, S2, S3, S5, S6, S12 & S13; channel valley bottom CVB1 & CVB2	Goedgevonden 95 HT	S1 27°13'10.01"S 30°18'24.69"E S2 27°13'42.31"S 30°18'41.64"E S3 27°13'31.23"S 30°18'30.64"E S5 27°14'11.63"S 30°18'28.09"E S6 27°13'57.12"S 30°18'25.40"E S12 27°14'31.60"S 30°18'54.00"E S13 27°14'35.08"S 30°19'7.40"E CVB1 27°13'16.55"S 30°18'18.81"E CVB2 27°14'1.98"S 30°18'51.14"E

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Water Use	Activity and Purpose	Volume (m ³ /a) / Area / W/L/KH	Watercourse/Resource affected	Property Description	Approximate Centre Coordinates
21(c) & (i)	Underground mining activities and voids	1023m (w) X 1040m (l) X 2.5m (h)	Wetland system 1 & 4; Seep wetlands S10; channel valley bottom CVB1 & CVB4	Kromhoek 93 HT Ptn 1	S10 27°13'10.99"S 30°17'43.05"E CVB1 27°13'17.94"S 30°18'1.60"E CVB4 27°13'14.76"S 30°17'33.47"E
21(c) & (i)	Underground mining activities and voids	2200m (w) X 2045m (l) X 2.5m (h)	Wetland system 3 & 4; Seep wetlands S9, S14; channel valley bottom CVB 1, CVB3 & CVB4	Kromhoek 93 HT RE	S9 27°13'35.06"S 30°16'51.36"E S14 27°13'27.90"S 30°17'24.02"E CVB 1 27°13'36.91"S 30°17'49.30"E CVB3 27°13'55.66"S 30°17'9.99"E CVB4 27°13'23.92"S 30°17'38.11"E

Water Use	Activity and Purpose	Volume (m³/a) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(c) & (i)	Underground mining activities and voids	2155m (w) X 465m(l) X 2.5m (h)	Wetland system 2 & 3; Seep wetlands S7 & S8; channel valley bottom CVB 2 & CVB3	Zoetfontein 94 HT	S7 27°14'14.67"S 30°16'47.08"E S8 27°14'13.90"S 30°16'33.93"E CVB2 27°14'42.45"S 30°17'19.56"E CVB3 27°14'16.47"S 30°17'6.44"E
21(c) & (i)	Borehole pipeline for CBH2D	6570m	Wetland system 1, 2, 3 & 4; Seep wetlands S2 & S9; channel valley bottom CVB 1, CVB 3 & CVB4	Kromhoek 93 HT; Vaalbank 74 HT; Yzemyn 96 HT ptn 1; Yzemyn 96 HT; Goedgevonden 95HT	27°13'43.6"S 30°16'49.9"E
21(c) & (i)	Borehole pipeline for CBH3S	2800m	Wetland system 2 & 3; Seep wetlands S7 & S8; channel valley bottom CVB 2 & CVB3	Kromhoek 93 HT; Vaalbank 74 HT; Yzemyn 96 HT ptn 1; Yzemyn 96 HT; Goedgevonden 95HT	Wetland System 2 – 27°13'40.8"S 30° 18'37.0"E S7 & S8 – 27°13'07.6"S 30°17'09.6"E

1.2 The Licensee must carry out and complete all the activities listed under condition 1.1 according to the following:



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- 1.2.1. Reports submitted to the Department or the Provincial head, specifically:
 - 1.2.1.1. Updated Stormwater Management Plan for the Proposed Yzermyn Underground Coal Mine, Highlands Hydrology (Pty) Ltd, March 2015.
 - 1.2.1.2. Wetland Ecological Assessment as Part of the Environmental Assessment and Authorisation Process for the Proposed Yzermyn Coal Mining Project near Dirkiesdorp, Mpumlanga Province, EcoPartners, June 2014.
 - 1.2.1.3. Atha Yzermyn Coal Project Biodiversity Baseline & Impact Assessment Report, Natural Scientific Services, August 2013 and SAS Biodiversity Report reference: SAS EP Flora_Fauna_Wetland Yzermyn Disc Fac and SAS Yzermyn Wetland Assessment Revised_June'15.
 - 1.2.1.4. Water Use Research: Atha-Africa Venture (Pty) Ltd Downstream Water Usage for a Proposed Underground Coal Mine, EcoPartners, August 2014.
 - 1.2.1.5. Yzermyn Water Balance Simulation Model (ver. 0.8d) Technical Report, SimX Consulting, February 2015.
 - 1.2.1.6. Yzermyn Underground Coal Mine – Numerical Groundwater Model Report, EcoPartners, August 2014.
 - 1.2.1.7. Stakeholder Consultation Report Yzermyn Underground Coal Mine, WSP, January 2014.
 - 1.2.1.8. Amended Environmental and Social Impact Assessment Report and Environmental and Social Management Programme: Yzermyn underground Coal Mine, EcoPartners, January 2015.
 - 1.2.1.8. Geotechnical Report: Yzermyn Coal Project, Mindset Mining Consultants, June 2015.
 - 1.2.1.10. Integrated Water and Waste Management Plan for Yzermyn Underground Coal Mine, August 2015.
- 1.3 The conditions of the authorisation must be brought to the attention of all persons (employees, sub-consultants, contractors etc.) associated with the undertaking of these activities and the Licensee must take such measures that are necessary to bind such persons to the conditions of this licence.
- 1.4 A copy of the water use licence and reports set out under condition 1.2 must be on site at all times during construction and operation.
- 1.5 A suitably qualified person(s), appointed by the Licensee, and approved in writing by the Regional Head must be responsible for ensuring that the activities are undertaken in compliance with the specifications as set out in reports submitted to the Department or the Responsible Authority and the conditions of this licence.



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- 1.6 If the Licensee is not the end user/beneficiary of the water use related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee must provide a programme for hand over to the successor-in-title including a brief management /maintenance plan and the agreement for infrastructure along with allocation of responsibilities, within three (3) months of the date of issuance of this licence.
- 1.7 No activity must take place within the 1:100 year flood line or the delineated riparian habitat, whichever is the greatest, or within 500 m radius from the boundary of any wetland unless authorised by this Licence.
- 1.8 No site activities must occur beyond the proposed site location of the erosion and sedimentation controls and marked limits of disturbance.
- 1.9 Waste generated on site must be disposed of at licenced landfill.
- 1.10 Wetland specialist must supervise the rehabilitation of all disturbed areas. Rehabilitation and re-vegetation programme must be specified.
- 1.11 The construction methods to be deployed when crossing wetlands must be acceptable and the use of gablons and Reno mattresses is commendable as it will expedite the reformation of the disturbed natural habitats.
- 1.12 The risks associated with possible spillages during construction must be adequately mitigated.
- 1.13 For water use activities in Table 1:
 - 1.13.1. Work method statements, site plan(s) and detailed design drawings for the construction of all infrastructure impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the properties must be submitted to the Provincial Head for written approval before construction and implemented as directed. The foregoing must indicate the regulated activities, marking the limits of disturbance in relation to the impacted watercourse(s); morphology of the watercourse(s); site specific impacts; and environmental management, particularly erosion and sediment, controls and measures;
 - 1.13.2. No fundamental alterations of the work method statements, site plan(s) and drawings are allowed, unless a modification is requested and granted by the Provincial Head in writing; and
 - 1.13.3. No site activities must occur beyond the proposed site location of the erosion and sedimentation controls and marked limits of disturbance.
- 1.14 If the Licensee is not the end user/beneficiary of the water use related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee must provide a programme for hand over to the successor-in-title including a brief management/maintenance plan and the agreement

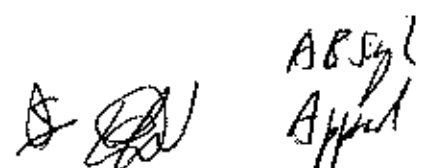
for infrastructure along with allocation of responsibilities, within three (3) months of the date of issuing of this license.

- 1.15 An EMP and rehabilitation plan for the decommissioning of any of the water use activities listed in Table 1 must be submitted five (5) years before commencing with closure to the Provincial Operations for written approval.
- 1.16 For all the activities listed under condition 1.1, Table 1, "as-built" plan(s) and engineering drawing(s) prepared by a registered professional engineer, must be submitted to the Regional Head within six (6) months of completion of new activities and for existing water uses within six (6) months of the date of issuing of this Licence. These plan(s) and drawing(s) must indicate the watercourse(s) including wetland boundaries and layout and structure location(s) of all infrastructure impeding and/or diverting flow of watercourses as well as alterations to watercourse(s) on the properties.
- 1.17 A Storm Water Management Plan must be compiled and submitted to the Provincial Head for written approval before construction may commence.
- 1.18 The Licensee will not be authorised to commence underground mining at Zoetfontein 94 HT until the Licensee provides to this Department a signed copy of the DW 902 form by the surface rights owner of that property.

2. PROTECTIVE MEASURES

2.1 Storm water management and erosion control

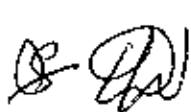

- 2.1.1. Storm water management practices must be constructed, operated and maintained in a sustainable manner throughout the project and for the water use activities set out in condition 1.1 and must include but are not limited to the following:
 - 2.1.1.1 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the watercourse(s);
 - 2.1.1.2 Storm water must be diverted from construction works, mining areas, stockpiles, pollution control dams, infrastructure areas and roads and must be managed in such a manner as to disperse runoff and to prevent the concentration of storm water flow;
 - 2.1.1.3 The velocity of storm water discharges must be attenuated and the banks of the watercourses protected, notably in this environment of high rainfall;
 - 2.1.1.4 Storm water leaving the Licensee's premises must in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a

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- combination thereof which is produced, used, stored, dumped or spilled on the premises;
- 2.1.1.5 Drainage next to the activities listed in Table 1 must be diverted away from the watercourse(s) to ensure that any contaminated runoff does not flow directly into the watercourse(s) as a storm water discharge;
- 2.1.1.6 Sheet runoff from paved, compacted, hardened surfaces and access roads need to be curtailed;
- 2.1.1.7 Erosion control measures must be implemented to avoid erosion in areas that are prone to erosion, such as the steep slopes and drainage lines.
- 2.1.1.8 All erosion control mechanisms need to be regularly inspected and maintained;
- 2.1.1.9 Development platforms constructed above wetlands and buffer zones must be sloped away from water resources to divert runoff away from fill embankments and downstream users.
- 2.1.1.10 Reduce runoff from hardened surfaces by strategically placing structures such as grassed swales, Hyson Cells or grass blocks to enhance infiltration.
- 2.1.1.11 Stilling basins must be installed below all outlets and suitable armouring of the downstream buffer zones area (e.g. reno-mattresses with vetiver bands) must be installed below all stormwater outlets prior to flows entering downstream wetlands / watercourses.
- 2.1.1.12 On-site attenuation of stormwater flows must take place prior to discharge to the receiving watercourses, such that the post development flood peaks within the northern and southern watercourses draining the development site do not exceed pre-development flood peaks.
- 2.1.1.13 Post development flow volumes discharged by the stormwater reticulation infrastructure must be split between the north and south watercourses in similar proportions to the pre-development catchment state.

2.2 Structures, construction site and materials

- 2.2.1 The necessary erosion prevention measures must be employed to ensure the sustainability of all structures.
- 2.2.2 The height, width and length of structures must be limited to the minimum dimension necessary to accomplish the intended function.
- 2.2.3 Structures must not be damaged by floods exceeding the magnitude of floods occurring on average once in every 100 years.
- 2.2.4 Structures must be non-erosive, structurally stable and must not induce any flooding or safety hazard.

- 2.2.5 Structures must be inspected regularly for accumulation of debris, blockage, erosion of abutments and overflow areas - debris must be removed and damages must be repaired and reinforced immediately.
- 2.2.6 The construction camp, equipment and material stockpiles must be located outside the extent of the watercourse/s and must be recovered and removed within a period of one (1) month after completion of activity.
- 2.2.7 Erosion berms shall be installed for the entire life-of-construction to prevent gully formation, according to the slope (Table 2). The designs and placement of the berms must be done by a registered, professional, independent Civil Engineer and approved in writing by the Provincial Head before construction commences. Berms must be vegetated with indigenous vegetation.

Table 2: Erosion protection berm placement

Track slope	Berm placement
<2%	Every 50 m
2% - 10%	Every 25 m
10% - 15%	Every 20 m
>15%	Every 10 m

- 2.2.8 All areas affected by construction should be rehabilitated upon completion of the construction phase of the development. Areas should be reseeded with indigenous vegetation species as required, and the use of seed nets is recommended to prevent erosion.
- 2.2.9 No vehicles shall be allowed to indiscriminately drive through any wetland areas.
- 2.2.10 Any access roads, haul roads or crossings should be:
 - 2.2.10.1 Non-erosive, structurally stable and should not induce any flooding or safety hazard;
 - 2.2.10.2 Any damage is to be repaired immediately to prevent further damage;
 - 2.2.10.3 Non-polluting with respect to silt and litter that can be deposited into a watercourse;
 - 2.2.10.4 Not consist of any coal, carbonaceous and/or other polluting material;
 - 2.2.10.5 Watercourse crossings to facilitate the movement of aquatic and non-aquatic organisms and fauna; and
 - 2.2.10.6 Crossing surfaces and roads must be tarred or concreted along the extent of the watercourse and the regulated area of a wetland and extent at least 100m

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beyond the extent of the watercourse to minimise impacts on the characteristics of the watercourse.

- 2.2.11 Where possible, construction activities should be scheduled for dry winter months to decrease the risk of erosion during heavy thunderstorms.
- 2.2.12 Natural drainage lines and wetlands outside of the structure footprint must be treated as sensitive areas, with highly restricted use. Permissible activities inside these areas must be clearly stipulated and treated as unique situations and exceptions.
- 2.2.13 The Licensee must protect all areas susceptible to erosion and ensures that there is no un-due soil erosion resultant from activities within and adjacent to construction camp and work areas.
- 2.2.14 The Licensee must not permit vehicular or pedestrian access into the wetland areas.
- 2.2.15 Retain natural indigenous trees, shrubbery and grass species wherever possible.
- 2.2.16 The Licensee must not drain, fill or alter in any way, any wetland or drainage line, including the riverbanks unless this forms part of the construction works authorised in this license.
- 2.2.17 The Licensee must not allow erosion to develop on a large scale before effecting repairs. When in doubt, seek advice from the Environmental Officer/Environmental Control Officer.
- 2.2.18 Crossings must be constructed to lie perpendicular across a wetland and not diagonally as this will create preferential flow paths which will ultimately desiccate the wetland.
- 2.2.19 The method used for crossing must prevent the concentration of flow and thus the risk of soil erosion.
- 2.2.20 Stock piles must be re-vegetated to stabilise the soil, reduce run-off and minimise erosion.
- 2.2.21 A low temporary berm between the wetlands and stockpiles must be constructed to intercept flows with transported sediment and allow them to settle out.
- 2.2.22 The volume of storm water run-off should be minimised by limiting the area of impermeable surfaces and compacting soils.
- 2.2.23 Gabion structures must be used to reduce the velocity and volume which would dissipate the energy of storm water movement and disperse the flows over a wider area.
- 2.2.24 Culvert discharges must include a rock packed mattress to prevent gully erosion.
- 2.2.25 Upslope of the authorised culverts drop down weirs should be incorporated in the construction of the culverts to prevent the formation of head cuts.
- 2.2.26 Hazardous material must be stored outside the extent of the watercourse and dispose of at a registered landfill site.

 
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2.2.27 Designs are to be safe for people and animals.

2.3 Water Quality

2.3.1 The Licensee shall sample the water quality weekly (during construction) and monthly (operation) for the mentioned variables (Table 3) at monitoring points both upstream and downstream of the activities, and report to the Responsible Authority within thirty (30) days after the results of each sampling event is received:

Table 3: Water quality parameters relevant for sampling

Variable	Limit
Temperature (°C)	<10% variation
pH	6.0 – 8.5
Electrical conductivity (EC) (mS/m)	<50
Suspended solids (SS) (mg/l)	<20
Dissolved oxygen (mg/l)	4-7
Turbidity (NTU)	20
Ammonia (ug/l)	15

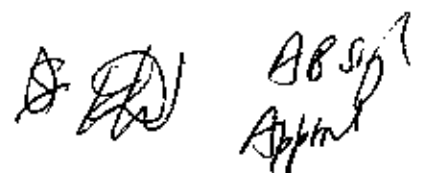
The variables may be amended on discretion of the Responsible Authority. Only an accredited (SANS 17025) laboratory can be used for analysis.

- 2.3.2 Monitoring must be undertaken as set out in condition 4 of Annexure III.
- 2.3.3 Monitoring must continue for three (3) years after the cessation of the activities listed in condition 1.1 of Annexure III.
- 2.3.4 Turbidity, sedimentation and chemical changes to the composition of water must be limited and monitored both upstream and downstream of the development.
- 2.3.5 Activities that lead to elevated levels of turbidity of any watercourse must be prevented, reduced, or otherwise remediate.
- 2.3.6 Construction, operation and maintenance activities must be scheduled to take place during dry seasons when flows are lowest where reasonably possible. If this is not possible and if management measures have not been provided for in the reports submitted to the Provincial Head, the Licensee must submit such to the Provincial Head for a written approval before these activities commence. Natural in stream hydrology is to be used to determine which months constitute the low flow months.

- 2.3.7 Pollution of and disposal/spillage of any material into the watercourse must be prevented, reduced, or otherwise remediate through proper operation, maintenance and effective protective measures.
- 2.3.8 Vehicles and other machinery must be serviced well above the 1:100 year flood-line or outer edge of the riparian habitat whichever is the greatest. Oils and other potential pollutants must be disposed of at an appropriate licenced site, with the necessary agreement from the owner of such a site.
- 2.3.9 Any hazardous substances must be handled according to the relevant legislation relating to transport, storage and use of the substance.
- 2.3.10 All reagent storage tanks and reaction units must be supplied with a banded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system must be maintained in a state of good repair and standby pumps must be provided.
- 2.3.11 Where water quality parameters (Table 3) are not met, the Licensee must indicate to the Responsible Authority what the reason(s) for non-compliance is/are and actions taken to meet compliance. This component is part of the reporting condition as stipulated under condition.

2.4 Flow regime

- 2.4.1 The Licensee must determine flood lines (1:50 and 1:100 year) prior to construction to ensure risks are adequately managed. Flood lines must be clearly indicated on the site plan(s) and drawings along with all wetland boundaries.
- 2.4.2 The activities must be conducted in a manner that does not negatively affect catchment yield, hydrology and hydraulics. The Licensee must ensure that the overall magnitude and frequency of flow in the watercourse(s) does not decrease, other than for natural evaporative losses and authorised attenuation volumes.
- 2.4.3 Appropriate design and mitigation measures must be developed to minimise impacts on the natural flow regime of the watercourse i.e. through placement of structures/supports and to minimise turbulent flow in the watercourse.
- 2.4.4 Structures to be designed in a way to prevent the damming of wetland water and not impact on the flow of the water, during the construction and operational phases of all developments.
- 2.4.5 The Licensee must ensure that development does not impede natural drainage lines.
- 2.4.6 The Licensee must appoint a professional, independent, qualified and registered ecologist and hydrologist to determine the ecological flow releases required for all impacted watercourses, which must be approved in writing by the Regional Head



within six (6) months after the issuance of this License, and ensure that these releases are maintained and reported as part of conditions 3.3.1 and to sustain all watercourses.

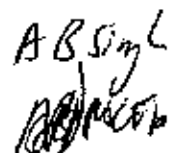
- 2.4.7 The characteristics of the streambed are likely to be altered locally. In particular the rock and rubble created during the construction process is likely to have sharp edges, and not smooth surfaces that are typically associated with river rocks and pebbles. All rock and rubble must be removed from the watercourse once construction has been completed. Any rock placed in the watercourse to enhance the dissolved oxygen content of the water must adhere to the same criteria, namely only smooth rock surfaces to be placed within the watercourse.
- 2.4.8 The Licensee shall measure water levels in all monitoring boreholes in a 1km radius around all the mining operations every three (3) months to establish any dewatering impacts on the watercourses, notably the wetland, and must be evaluated by a professional, registered wetland specialist and geohydrologist when water levels vary more than 10% from the previous monitoring event and be reported to the Regional Head for written comment within thirty (30) days after each monitoring event. The impact of water level reduction, less base flow to the watercourses and impacts on the characteristics of a watercourse must be given attention under condition 5.2

2.5 Riparian and In-stream Habitat (Vegetation and Morphology)

- 2.5.1 Activities (including spill clean-up) must start up-stream and proceed into a down-stream direction, so that the recovery processes can start immediately, without further disturbance from upstream works.
- 2.5.2 Operation and storage of equipment must not take place within the 1:100 year flood line or delineated riparian habitat, whichever is the greatest unless authorised in this license.
- 2.5.3 Indigenous riparian vegetation, including dead trees, outside the limits of disturbance indicated in the site plans must not be removed from the area.
- 2.5.4 Alien Eradication Plan to be implemented and recorded. Alien and invader vegetation must not be allowed to further colonise the area, and all new alien vegetation recruitment must be sustainably eradicated or controlled as per Alien Eradication Plan.
- 2.5.5 Existing vegetation composition must be maintained or improved by maintaining the natural variability in flow fluctuations. Rehabilitated areas shall have at least 8% basal cover within one year and improve to 12% by year 3 after first seeding and improve to 15% by year 5.



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- 2.5.6 Recruitment and maintaining of a range of size classes of dominant riparian species in perennial channels must be stimulated.
- 2.5.7 Encroachment of additional exotic species and terrestrial species within the wetland area and the riparian habitat must be discouraged.
- 2.5.8 All reasonable steps must be taken to minimise noise and mechanical vibrations in the vicinity of the watercourses and especially during night time (22:00 to 06:00) to keep noise below 35dB within the 100m wetland buffer zone and the riparian habitat.
- 2.5.9 The necessary erosion prevention mechanisms must be employed to ensure the sustainability of structures and activities and to prevent sedimentation within the watercourses.
- 2.5.10 Soils that have become compacted through the water use activities must be loosened to an appropriate depth to allow seed germination.
- 2.5.11 Slope/bank stabilisation measures must be implemented with a 1:3 ratio or flatter and vegetated with indigenous vegetation immediately after the shaping.
- 2.5.12 The indiscriminate use of machinery within the watercourse areas (including the riparian habitat) will lead to compaction of soils and vegetation and must therefore be strictly controlled.
- 2.5.13 Operation activities and storage of equipment in the riparian habitat to be prevented as far as possible.
- 2.5.14 Stockpiling of removed soil and sand must be stored outside of the 1:100 flood line or 100m from the delineated riparian habitat, whichever is the greater, to prevent being washed into the river and must be covered to prevent wind and rain erosion.
- 2.5.15 The overall macro-channel structures and mosaic of cobbles and gravels must be maintained by ensuring a balance (equilibrium) between sediment deposition and sediment conveyance maintained. A natural flooding and sedimentation regime must thus be ensured as far as reasonably possible.
- 2.5.16 As much indigenous vegetation growth as possible should be promoted within the proposed development area in order to protect soil and to reduce the percentage of the surface area which is paved.
- 2.5.17 Where applicable, disturbed riparian zone (i.e. for those areas that will not form part of the operational footprint but that were disturbed as part of the construction activities) should be re-vegetated using site-appropriate indigenous vegetation. Alien Invasive vegetation must be eradicated and not allowed to colonize the disturbed riparian and instream areas.
- 2.5.18 Rehabilitation of the disturbed riparian zone must occur during and after completion of construction. An aquatic specialist and ecologist must oversee this process.
- 2.5.19 Construction camps must be at least 100m from the edge of the riparian zone.

- 2.5.20 Toilet facilities must be located at least 100m from the edge of the riparian zone.
- 2.5.21 No harvesting of indigenous plants and animals in and adjacent to the construction area.
- 2.5.22 Slope/bank stabilization measures must be implemented where necessary, to prevent erosion during the construction and operational phases.
- 2.5.23 The use of machinery within the riparian zone may lead to compaction of soils and vegetation. This will lead to decrease of infiltration of rain water, increases in run-off water and will limit re-vegetation from taking place. It is thus recommended that all compacted areas that do not form part of the footprint activity be ploughed, landscaped to approximately the natural slope of the area and aerated followed by re-vegetation.
- 2.5.24 Methods used during construction of infrastructure must limit turbidity, sedimentation and chemical changes to the composition of the water.
- 2.5.25 The possibility of spillages should be catered for in the design of the Infrastructure where for example, attenuation ponds prior to the discharge of storm-water could be employed or the storm water systems themselves could be designed in such a way that it can be easily sealed off after the occurrence of a spill. If a spill occurs during the operational phase of the infrastructure, a suitable qualified team of experts will need to be consulted and rehabilitation plan must be drawn up and implemented.
- 2.5.26 Any disturbance to the riparian zone that can cause undercutting and /or bank slumping must be prevented. Disturbed areas shall be rehabilitated.
- 2.5.27 All reasonable steps must be made to maintain the wilderness qualities of the watercourses. In particular, visual impacts and aesthetic appraisal shall be minimized.
- 2.5.28 Any medicinal plants that are impacted upon must be assessed by the Responsible Authority and a registered, professional specialist and relocated, if necessary, to a suitable site. This activity must take place within thirty (30) days after the issuance of this License and proof must be submitted to the Provincial Head for written approval.
- 2.5.29 Present Ecological State and Recommended Ecological Category of C to be maintained.
- 2.5.30 Plant search and rescue to be implemented and recorded.
- 2.5.31 Final Landscape Maintenance Plan to be submitted to the Provincial Head for approval within three months of the licence being issued.


2.6 Biota

- 2.6.1 The Licensee must take all reasonable steps to allow movement of aquatic species, including migratory species. Any fencing of the property must also allow for drainage and the movement of small animals through the fencing.
- 2.6.2 All reasonable steps must be taken not to disturb the breeding, nesting and/or feeding habitats and natural movement patterns of aquatic biota.
- 2.6.3 The current level of diversity of biotopes and communities of animals, plants and micro-organisms must be maintained.

3 REHABILITATION AND MANAGEMENT

- 3.1 The rehabilitation plan must be submitted to the Provincial Head for approval prior commencement of the rehabilitation.
- 3.2 A habitat assessment study must be undertaken annually for three years to ensure that rehabilitation is stable; failing which remedial action must be taken to rectify impacts.
- 3.3 The rehabilitation of all wetlands on site as well as wetlands that were destroyed during mining must be reinstated as follows: The integrity (PES) score of any Category A and Category B wetland must not drop below 20% from the baseline. Prior to the end of Life of Mine, the condition of those wetlands must be brought back to baseline condition.
- 3.4 The Licensee must embark on a systematic long-term rehabilitation programme to restore the watercourse/s to environmentally acceptable and sustainable conditions after completion of the activities, which must include, but not be limited to the rehabilitation of disturbed and degraded riparian areas to restore and upgrade the riparian habitat integrity to sustain a bio-diverse riparian ecosystem, and to improve resilience to erosion. The Rehabilitation Plan must include the following:
 - 3.4.1 Measures for the control of erosion within the receiving watercourses, riparian zones and adjacent terrestrial areas.
 - 3.4.2 Specific rehabilitation interventions and structures to deactivate erosion headcuts, stabilise channels and/or protect the watercourses from the stormwater discharge.
 - 3.4.3 Active planting, re-vegetation and management of the riparian habitat and buffer zone to improve the integrity and resilience of the watercourses draining the development site.
- 3.5 Rehabilitation must be commence within five (5) working days of mine closure.
- 3.6 Trench is to be open for minimal length of time.
- 3.7 Top soil must be stripped and redistributed.

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- 3.8 The Provincial Head will sign a release from indicating that rehabilitation was done satisfactory.
- 3.9 All disturbed areas must be re-vegetated with indigenous plants in consultation with an indigenous plant expert, ensuring that during rehabilitation only indigenous shrubs, trees and grasses are in restoring the biodiversity.
- 3.10 An active campaign for controlling invasive species must be implemented within disturbed zones to ensure that it does not become a conduit for the propagation and spread of invasive exotic plants.
- 3.11 Rehabilitation structures must be inspected regularly for the accumulation of debris, blockages instabilities and erosion with concomitant remedial and maintenance actions.

4 MONITORING AND REPORTING

- 4.1 The Provincial Head must be notified in writing one week prior to commencement of the licensed activity (ies) and again upon completion of the activity (ies).
- 4.2 A comprehensive and appropriate environmental (including bio-monitoring) assessment, monitoring and auditing plan and programme to determine the impact, change, deterioration and improvement of the aquatic system associated with the activities listed under condition 1.1 of Annexure III as well as compliance to these water use licence conditions must be developed and submitted to the Provincial Head for a written approval within six months of the commencement of the activity and must subsequently be implemented as directed.
- 4.3 The Monitoring Plan referred to in 4.2 above must include the following key components:
 - 4.3.1 Monitoring of biological water quality indicators, physio-chemical and chemical water quality determinants.
 - 4.3.2 Inspections of stormwater and wastewater infrastructure.
 - 4.3.3 Biophysical monitoring, including fixed point photography.
 - 4.3.4 Channel erosion monitoring.
 - 4.3.5 Monitoring and inspection of rehabilitation interventions and outcomes.
 - 4.3.6 Two additional water quality monitoring points are to be included further downstream from the wetland.
- 4.4 An Environmental Control Officer must be appointed and he/she will be responsible for monitoring of the affected areas.
- 4.5 Six (6) month monitoring reports must be submitted to the Provincial Head until otherwise agreed in writing with the Provincial Head.

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- 4.6 A qualified environmental management specialist must be retained by the Licensee who must give effect to various licence conditions and to ensure compliance thereof pertaining to all activities of impeding and/or diverting flow of watercourses as well as alternations to watercourses on the property as set out in condition 1.1 of Annexure III.
- 4.7 The Licensee must conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit must be submitted to the Provincial Head within one month of the finalisation of the audit. A qualified independent auditor must undertake this audit.
- 4.8 The audit reports must include but are not limited to:
 - 4.8.1 Reporting in respect of the monitoring programme referred to in condition 4.2 of Annexure III;
 - 4.8.2 A record of implementation of all mitigation measures and implementation of the watercourse rehabilitation and management plan including a record of corrective actions.
- 4.9 The applicant must apply in writing to the Provincial Head for alternative monitoring and reporting arrangements for which written approval must be provided.

5. POLLUTION PREVENTION, INCIDENTS AND MALFUNCTIONS

- 5.1 Any incident that may cause pollution of any water resource must immediately be reported to the Provincial Head, during the construction, operation and decommissioning phases of the activities.
- 5.2 If surface and/or groundwater pollution has occurred or may possibly occur, the Licensee must conduct, and/or appoint specialists to conduct the necessary investigations and implement additional monitoring, pollution prevention and remediation measures to the satisfaction of the Provincial Head.
- 5.3 The Licensee shall keep all records relating to the compliance or non-compliance with the conditions of this licence in good order. Such records shall be made available to the Provincial Head within 14 (fourteen) days of receipt of a written request by the Department for such records.
- 5.4 The Licensee shall keep an incident report and complaints register, which must be made available to any external auditors and the Department.


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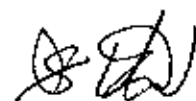

ANNEXURE IV

Section 21 (f) of the Act: Discharging waste or water containing waste into a water resource

Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource

1. CONSTRUCTION AND OPERATION

- 1.1 In the case of new facilities, the Licensee shall submit as-built detailed design drawings of the works together with a concise design report for approval by the Regional Director within 6 months of issuance of the licence.
- 1.2 The Licensee shall carry out and complete all the activities according to the Report in 1.1 above as approved by the Regional Director and the licensee must as well submit a set of as built drawings to the Regional Head after the completion of the new facilities as indicated in the Report.
- 1.3 All construction must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Council of South Africa, as approved by the designer.
- 1.4 Within thirty (30) days after the completion of the activities referred here in accordance with the relevant provisions of this licence, the Licensee shall in writing, inform the Regional Director thereof. This shall be accompanied by a signature of approval from the designer referred to above that the construction was done according to the design plans referred to in the Report.
- 1.5 The construction of the facility shall be designed in such a manner that no pollution due to seepage from the facility shall occur.
- 1.6 The Licensee must ensure that the operation and maintenance of the dirty water holding dams are done according to the provisions in the Report.
- 1.7 The Licensee shall conduct a material classification of the waste rock material to confirm the class 3 classification assumed in the barrier design within 6 months of commencement of the mining operation. Should there be a variance in the material classification between the assumed and the actual, remedial action to ensure compliance to the Regulatory requirements on barrier systems for all pollution risk facilities must be submitted to this Department.
- 1.8 The Licensee must ensure a Type C barrier system for the Pollution Control Dam (PCD) and the stockpile pads. This barrier system must comply with Regulation 636, with 2x 150mm compacted clay layers below the HDPE liner. An under-drainage

 
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system must be provided for the barrier system for the stockpile pad since a 2m separation (as required by regulation) between the stockpile material and the water table will not be possible.

- 1.9 All water containing waste disposal facilities as specified in this licence shall be operated and maintained to have a minimum freeboard of 0.8 metres above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.
- 1.10 The water levels off all dirty water containment facilities, specifically dams used to store water containing waste for re-use or disposal shall be recorded weekly.
- 1.11 The Licensee shall use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample.
- 1.12 Flow metering devices, shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than once in two (2) years. Calibration certificates shall be available for inspection by the Regional Director or his representative upon request.
- 1.13 The Licensee shall ensure at all times that the contaminated water from the dams is pumped to keep the dams as empty as possible as indicated in the Report.
- 1.14 The pollution plume model must be reported upon in the Report referred to in 1.1 above.

1. DISCHARGE OF WASTE OR WATER CONTAINING WASTE

2.1 The Licensee is authorised to discharge water containing waste to the Wetlands System 2 of a maximum quantity of 8861 m³ of treated effluent per annum from Yzermyn 96 HT Ptn 1. The Section 21(f) water uses have been summarised as follows in Table 1:

Table 1: Summary of Water Uses Applied for

Water Use	Activity and Purpose	Volume (m ³ /a) / Area / WKLKH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(f)	Discharging excess water treated to an acceptable quality into the wetland	8 861 m ³ /a	Wetland system 2; Seep wetland (S2)	Yzermyn 96 HT Ptn 1	27°13'05.29"S 30°18'36.37"E

- 2.2 Flow metering devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than once in two years. Calibration certificates shall be available for inspection by the Regional Director or his representative upon request.
- 2.3 The quality of water containing waste discharged into the Wetlands System 2 shall not exceed the following limits as specified in Table 2 below:

Table 2: Quality of water containing waste to be discharged

Constituent	Average Discharge Concentration
Coliforms (Colony Forming Units/ml)	0
Enteric pathogens e.g. E.coli (Colony Forming Units/ml)	0
Alkalinity (mg/l)	20
Aluminium as Al (mg/l)	0.005
Calcium(mg/l)	150
Chloride(mg/l)	50
Potassium	50
Iron as Fe (mg/l)	0.1
Sodium	50
Magnesium as Mg (mg/l)	70
pH at 25 degrees Celsius	6-9
Sulphate as SO ₄ (mg/l)	80
Total dissolved solids (mg/l)	450
Total Suspended Solids	5
Manganese as Mn (mg/l)	0.18

2. DISPOSAL/STORAGE OF WATER CONTAINING WASTE

The Licensee is authorised to store and dispose water containing waste as indicated in Table 3.

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Table 3: Summary of Water Uses Applied for

Water Use	Activity and Purpose	Volume (m ³ /a) / Area / WXLXH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(g)	RoM stockpile slab A	0.5ha	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'01.4"S 30°18'47.5"E
21(g)	RoM Stockpile slab B -Sales coal stockpile	0.5ha	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'56.5"S 30°18'48.5"E
21(g)	Disposal and storage of contaminated water in pollution control dam (PCD)	45 511 m ³ /a	Wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'57.1"S 30°18'40.6"E
21(g)	Tanks associated with the PCD system	0.3ha	Wetland system 1; Seep wetland (S1)	Yzermyn 96 HT Ptn 1	27°12'54.74"S 30°18'33.84"E
21(g)	Bio-Mite Sewerage treatment plant	0.1ha	Wetland system 2; Seep wetland (S2)	Yzermyn 96 HT Ptn 1	27°13'05.5"S 30°18'53.8"E
21(g)	Sewage solids from treatment process to be temporarily stored	0.1ha	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'05.5"S 30°18'53.8"E
21(g)	Wastewater Treatment Plant	8881 m ³ /a	Within 500m of wetland system 1 & 2	Yzermyn 96 HT Ptn 1	27°13'10.5" 30°18'45.2"E

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Water Use	Activity and Purpose	Volume (m ³ /a) / Area / WXLKH	Watercourse/Receptance affected	Property Description	Approximate Centre Coordinates
			2; Seep wetland (S1 & S2) (SAS, May 2015)		
21(g)	Water treatment brine to be crystallised and temporarily stored	0.1ha	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'10.5"S 30°18'45.2"E
21(g)	Hazardous waste form workshops to be temporarily stored	0.1ha	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°13'0.8" S 30°18'51.0"E
21(g)	Pollution Control Dam (PCD)	2ha	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'56.8"S 30°18'37.6"E
21(g)	PCD process water used for dust suppression on roads within the mining footprint	29 367 m ³ /a	Within 500m of wetland system 1 & 2; Seep wetland (S1 & S2)	Yzermyn 96 HT Ptn 1	27°12'59.7"S 30°18'55.8"E

- 3.1 The quantity of wastewater authorised to be disposed in terms of this licence may not be exceeded without prior authorisation by the Minister.
- 3.2 The quality of waste water disposed may not exceed non-exceedance values or range as in Table 5 and any other variables that may be prescribed by the Regional Head from time to time.

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4. QUALITY OF WASTE WATER TO BE DISPOSED

4.1 The water containing waste to be disposed of must be within the following range as indicated in Table 4.

Table 4: Water containing waste that can be disposed

Constituent	Range
Ammonia(mg/l)	0-10
Alkalinity (mg/l)	800-1200
Arsenic(mg/l)	0-10.5
Aluminium as Al (mg/l)	0-1.08
Barium(mg/l)	0-0.28
Boron(mg/l)	0-0.38
Cadmium(mg/l)	0-0.3
Chloride(mg/l)	100-150
Potassium	5-21
Calcium as Ca (mg/l)	100-150
Nickel	0-5
Mercury	0-0.05
Cobalt as Co (mg/l)	0-0.06
Copper as Cu (mg/l)	0-1
Fluorides as F (mg/l)	5-15
Iron as Fe (mg/l)	0.2-10
Lead as Pb (mg/l)	0-1
Sodium	300-400
Tin	0-0.05
Magnesium as Mg (mg/l)	50-70
pH at 25 degrees Celsius	5-9.5
Sulphate as SO ₄ (mg/l)	300-400
Total dissolved solids (mg/l)	1000-1600

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Total Suspended Solids	400-500
Uranium	0-0.05
Vanadium	0-1.5
Manganese as Mn (mg/l)	0-0.07
Zinc as Zn (mg/l)	0-15

4.2 Except for surplus water containing waste from Yzermyn Underground Coal Mine no water containing waste originating from any other source may be disposed of into the dams.

4.3 The water contained in the dams may not be discharged into any natural water course.

4.4 The water containing waste to be disposed for dust suppression must be within the following range as indicated in Table 5.

Table 5: Water containing waste that can be used for Dust Suppression:

Constituent	Range
Ammonia(mg/l)	0-10
Alkalinity (mg/l)	800-1200
Arsenic(mg/l)	0-10.5
Aluminium as Al (mg/l)	0-1.08
Barium(mg/l)	0-0.28
Boron(mg/l)	0-0.38
Cadmium(mg/l)	0-0.3
Chloride(mg/l)	100-150
Potassium	5-21
Calcium as Ca (mg/l)	100-150
Nickel	0-5
Mercury	0-0.05
Cobalt as Co (mg/l)	0-0.08
Copper as Cu (mg/l)	0-1
Fluorides as F (mg/l)	5-15
Iron as Fe (mg/l)	0.2-10
Lead as Pb (mg/l)	0-1

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Sodium	300-400
Tin	0-0.05
Magnesium as Mg (mg/l)	50-70
pH at 25 degrees Celsius	5-9.5
Sulphate as SO4 (mg/l)	300-400
Total dissolved solids (mg/l)	1000-1600
Total Suspended Solids	400-500
Uranium	0-0.05
Vanadium	0-1.5
Manganese as Mn (mg/l)	0-0.07
Zinc as Zn (mg/l)	0-15

5. MONITORING

5.1 The Licensee shall monitor surface water to determine the impact of the facility and other activities by taking samples at the monitoring points as set out in Table 6 below:

Table 6: Surface Water monitoring points

Site Name	GPS co-ordinates
SW1	S27° 13' 33.4" E30° 17' 23.2"
SW2	S27° 13' 11.3" E24° 18' 19.2"
SW3	S27° 13' 36.2" E30° 18' 56.1"
SW4	S27° 13' 47.53" E30° 18' 31.60"
SW5	S27° 13' 03.00" E30° 19' 12.32"
SW6	S27° 12' 44.97" E30° 19' 25.73"

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SW6	S27° 12' 50.81" E30° 18' 18.89"
SW7	S27° 12' 39.48" E30° 17' 38.62"
SW8	S27° 12' 05.53" E30° 18' 10.46"
SW9	S27° 12' 39.48" E30° 17' 38.62"
SW10	S27° 12' 06.87" E30° 18' 26.84"

- 5.2 The date, time and monitoring point in respect of each sample taken shall be recorded together with the analysis results.
- 5.3 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African National Standards.
- 5.4 The methods of analysis shall not be changed without prior notification to and written approval by the Minister.
- 5.5 The quantity of water containing waste must be metered and recorded daily.
- 5.6 The quality of the water containing waste shall be monitored by taking grab samples once a month. Each sample shall be analysed according to condition 4.4 for the following variables:

- o Aluminium as Al (mg/l)
- o Calcium as Ca (mg/l)
- o Total Chromium as Cr (mg/l)
- o Hexavalent Chromium (mg/l)
- o Cobalt as Co (mg/l)
- o Copper as Cu (mg/l)
- o Fluorides as F (mg/l)
- o Iron as Fe (mg/l)
- o Lead as Pb (mg/l)
- o Magnesium as Mg (mg/l)
- o pH at 25 degrees Celsius
- o Sulphate as SO₄ (mg/l)
- o Total Dissolved Solids (mg/l)
- o Total Manganese as Mn (mg/l)

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- o Zinc as Zn (mg/l)
- o Electrical Conductivity (mS/m)

5.7 An Aquatic Scientist approved by the Regional Head must establish a monitoring programme for the following indices: Invertebrate Habitat Assessment System (IHAS) and the latest SASS (South African Scoring System). Sampling must be done once during the summer season and once during the winter season, annually, to reflect the status of the river upstream and downstream of the mining activities.

5.8 Water quality testing to be performed on the all facilities on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Regional Head. If any concentrations levels as specified above are exceeded, the Licensee must institute an investigation to determine the cause of poor water quality.

5.9 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African National Standards.

5.10 The methods of analysis shall not be changed without prior notification to and written approval by the Minister.

5.11 The groundwater model must be updated as more information on the monitoring boreholes becomes available. This will add significant value in terms of groundwater management and understanding of the aquifer behaviour.

5.12 The groundwater levels needs to be monitored to ensure that the groundwater component of the Reserve is not impacted on negatively.

5.13 Measures must be considered to re-use water containing waste or appropriate technological treatment options investigated and implemented.

5.14 Contingency plans must be formulated for accidental breach of storage facilities for waste emanating from the above facilities and submitted to the Department within a year of the licence being issued.

6 Groundwater Monitoring

6.1 The Licensee shall monitor groundwater to determine the impact of the activities on ground water quality by taking samples at the monitoring boreholes described in Table 7:

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Table 7: Groundwater monitoring points

Site Name	GPS co-ordinates
CBH 4 D	030.30956°X 27.22253°Y
CBH 1	030.31597°X 27.23156°Y
CBH 2D	030.28053°X 27.22878°Y
CBH 2S	030.28051°X 27.22868°Y
CBH 4S	030.30956°X 27.22252Y
CBH 5S	030.29597°X 27.22681°Y
CBH 3S	030.30128°X 27.23360°Y
CBH 3D	030.30128°X 27.23360°Y
CBH 7S	030.30634°X 27.22669°Y
CBH 7D	030.30630°X 27.22668°Y
CBH 6	030.30590°X 27.21990°Y
CBH 5D	030.29530°X 27.22608°Y
CBH 8S	030.29018°X 27.22597°Y
CBH 8D	030.29016°X 27.22597°Y

6.2 The ground water monitoring network should extend to the exit boundaries of the site. The updated ground water and surface water monitoring network shall be submitted to the Regional Director for approval within 60 days of commencement of mining.

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- 6.3 Groundwater monitoring shall be done on a quarterly basis and must coincide with seasonal events i.e. dry and wet season.
- 6.4 The Licensee shall compile a groundwater monitoring report and submit it to the Regional Director on a quarterly basis, within one month of the groundwater sampling.
- 6.5 Monitoring points shall not be changed prior to notification to and written approval by the Regional Director.
- 6.6 The Groundwater monitoring programme must include the following: Source monitoring to evaluate the impact thereof on the groundwater chemistry; Plume monitoring to evaluate the migration rates and chemical changes along the pathway; impact monitoring to serve as early warning systems for contamination break-through at areas of concern; and Background monitoring to evaluate the impact of a specific action/pollution source on the groundwater chemistry.
- 6.7 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African National Standards.
- 6.8 The methods of analysis shall not be changed without prior notification to and written approval by the Regional Head.
- 6.9 The Licensee shall monitor the quality of ground water at the monitoring point as set out in Table 7. Each sample must be analysed according to condition 5.6 for the following variables:
- o Aluminium as Al (mg/l)
 - o Calcium as Ca (mg/l)
 - o Total Chromium as Cr (mg/l)
 - o Hexavalent Chromium (mg/l)
 - o Cobalt as Co (mg/l)
 - o Copper as Cu (mg/l)
 - o Flourides as F (mg/l)
 - o Iron as Fe (mg/l)
 - o Lead as Pb (mg/l)
 - o Magnesium as Mg (mg/l)
 - o pH at 25 degrees Celsius
 - o Sulphate as SO₄ (mg/l)
 - o Total Dissolved Solids (mg/l)
 - o Total Manganese as Mn (mg/l)
 - o Zinc as Zn (mg/l)
 - o Electrical Conductivity (mS/m)

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- o Water level (Mbgf)
- o Cadmium as Cd (mg/l)

7. WATER RESOURCE PROTECTION

7.1 The impacts of the industrial activities on the groundwater shall not exceed the following limits as indicated in the Table 8:

Table 8: Groundwater quality limit

Variable	Limit
Sodium (mg/l)	200
Total Alkalinity as CaCO ₃ (mg/l)	400-500
Magnesium (mg/l)	10-15
Nitrate (mg/l)	0-1.0
Calcium (mg/l)	40-60
Electrical Conductivity (mS/m)	<170
Chloride (mg/l)	131
Sulphate (mg/l)	10-20
pH	6.5-9.5
Fluoride (mg/l)	0.5

8. REPORTING

- 8.1 The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resources and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.
- 8.2 The Licensee shall submit the results of analysis for the monitoring requirements to the Regional Director on a quarterly basis.
- 7.3 A qualified Wetland specialist must within each and every six months submit a written report to the Regional Director on the status of the wetlands.
- 8.4 Long term mitigation measures for Acid Mine Drainage (AMD) that will include passive systems must be investigated and reported upon within 12 months of issuance of this licence.

- 8.5 The Licensee must submit to this Department a written motivation within 3 months of issuance of this licence that the ecological risks and impacts posed to the characteristics (surface flow, interflow, groundwater flow, water quality, geomorphology, habitat and biota) of the watercourses involved are minimal and that the watercourses will be returned to baseline conditions once mining is complete.
- 8.6 The Licensee must inform the Department in writing of any changes on the quality of both surface water and groundwater, within 24 hours of such change.

9. ACCESS CONTROL

- 9.1 The Licensee must exercise strict control of access to the property to ensure safety.
- 9.2 Notices prohibiting unauthorised persons from entering the controlled access areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

10. CONTINGENCIES

- 10.1 Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records shall be available for inspection by the Acting Regional Head upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of all the contributory circumstances:
- 9.1.1 operating errors;
 - 9.1.2 mechanical failures (including design; installation or maintenance);
 - 9.1.3 environmental factors (e.g. floods);
 - 9.1.4 loss of supply services (e.g. power failure);
 - 9.1.5 other causes
- 10.2 The Licensee must, within twenty four (24) hours, notify the Regional Director of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.
- 10.3 The Licensee must, within fourteen (14) days, or a shorter period of time, as specified by the Regional Director, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Regional Director of measures taken to:
- 9.3.1 correct the impacts resulting from the incident;
 - 9.3.2 prevent the incident from causing any further impacts; and

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9.3.3 prevent a recurrence of a similar incident.

11. AUDITING

- 11.1 The Licensee shall conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the Regional Director within one month of finalisation of the report, and shall be made available to an external auditor should the need arise.
- 11.2 The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 3 (three) months of the date this licence was issued and a report on the audit shall be submitted to the Regional Director within one month of finalisation of the report.

12. STORM WATER MANAGEMENT

- 12.1 Stormwater leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises
- 12.2 Increase runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the water resource.
- 12.3 Where necessary works must be constructed to attenuate the velocity of any storm water discharge and to protect the banks of the affected watercourses.
- 12.4 Stormwater control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.
- 12.5 All stormwater that would naturally run across the pollution areas shall be diverted via channels and trapezoidal drains into the anti-pollution facility.
- 12.6 The polluted stormwater captured in the storm water control dams shall be pumped to the process water treatment plant for re-use and recycling.
- 12.7 The Licensee must ensure that the wetlands must not be polluted or destroyed because of the activities occurring within the Yzermyn Underground Coal Mine site.
- 12.8 The Licensee must confirm within 6 months of the issuance of this licence, if the ground slope in the area will not result in supercritical flows in the clean water diversion channels and/or berms resulting in the formation of gulleys.

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- 12.9 The Licensee must also provide to this Department, in the report referred to in 12.8 above, the details of erosion protection measures that will be implemented at the clean runoff diversion outlet (including the attenuation facility outlet if applicable).

13. INTEGRATED WATER AND WASTE MANAGEMENT

- 13.1 The Licensee shall update the Integrated Water and Waste Management plan and submit for approval to the Regional Director on an annual basis.
- 13.2 The Licensee shall make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long term water management strategy.

14 BUDGETARY PROVISIONS

- 14.1 The water user must ensure that there is a budget sufficient to complete and maintain the water use and for successful implementation of the rehabilitation programme.
- 14.2 The Department may at any stage of the process request proof of budgetary provisions.

 
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ANNEXURE V

Section 21 (j) of the Act: Removing of water found underground

1. The licensee is authorised to remove a volume not exceeding 9467 cubic metres (m³) per annum of groundwater from underground based on an average quantity of 33 m³ per day.
2. The licensee is authorised to either dispose of the groundwater into the PCD on the farm Yzermyn 96 HT Portion 1.
3. The disposal or discharge of water into the PCD shall take place at the following location:

Table 1: Summary of Water Uses Applied for

Water Use	Activity and Purpose	Volume (m ³ /a) / Area / W/L/KH	Watercourse/Resource affected	Property Description	Approximate Centre Co-ordinates
21(j)	Pumping out of groundwater flowing into the adit and underground workings via rock fissures	9 467m ³ /a	Wetland system 1, 2, 3 & 4	Yzermyn 96 HT Ptn 1; Goedgevond en 95 HT; Kromhoek 93 HT Ptn 1; Kromhoek 93 HT RE; Zoetfontein 94 HT	27°13'57.6" S 30°18'00.2" E

4. The quantity of the water authorised to be removed and disposed of into the PCD in terms of this license may not be exceeded without prior authorisation by the Minister.
5. The quality of the water disposed into the PCD shall not exceed the quality as specified in the Table below:

Parameter	Maximum Concentration
Electrical Conductivity(mS/m)	200
Sodium (mg/l)	200

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Magnesium (mg/l)	20
Calcium(mg/l)	50
Chloride(mg/l)	150
Sulphate(mg/l)	100
Nitrate(mg/l)	15
Fluoride(mg/l)	0.5
pH	5.5-8.5

6. The licensee shall provide any water user whose water supply is impacted by the water use with potable water.
7. The quantity of water removed from underground must be metered and recorded on a daily basis.
8. The groundwater levels shall be monitored every six months (once in the beginning of the dry season and once in the beginning of the wet season).
9. Self registering flow meters must be installed in the delivery lines at easily accessible positions near the dewatering points.
10. The flow metering devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than once in two years. Calibration certificates shall be available for inspection by the Regional Director or his/her representative upon request.
11. Calibration certificates in respect of the pumps must be submitted to the Regional Director after installation thereof and thereafter at intervals of two years.
12. The date and time of monitoring in respect of each sample taken shall be recorded together with the results of the analysis.
13. Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards, in terms of the Standards Act, 1982 (Act 30 of 1982).
14. The methods of analysis shall not be changed without prior notification to the

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licensee and written approval by the Minister or his/her delegated nominee.

15. The Regional Director must be informed of any incident that may lead to groundwater being disposed of contrary to the provisions of this license, by submitting a report containing the following information: -
 - 15.1 nature of the incident (e.g. operating malfunctions, mechanical failures, environmental factors, loss of supply services, etc)
 - 15.2 actions taken to rectify the situation and to prevent pollution or any other damage to the environment and
 - 15.3 measures to be taken to prevent re-occurrence of any similar incident.
16. The licensee shall follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the groundwater removal system.
17. Reasonable measures must be taken to provide for mechanical, electrical or operational failures and malfunctions of the underground water removal system.

END OF LICENCE

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