

mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Private Bag X 9467, Polokwane, 0700, Tel: 015 287 4700, Fax: 086 710 1045 DMR Building, 101 Dorp Street, Polokwane, 0699

Enquiries: Mr N.C Fhedzisani

Ref: LP30/5/1/2/3/2/1 (10107) EM

E-Mail Address: Shadrack.Fhedzisani@dmr.gov.za Sub-Directorate: Mine Environmental Management

BY HAND

The Manager
RAKHOMA MINING RESOURCES (PTY) LTD
P.O. Box 567
EMALAHLENI
1035

Attention: Mrs. Mbavhi Ngobeni

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT
PRIVATE BAG X 9467: POLOKWANE: 0700

TEL: 015 287 4700

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION: GRANTED NEMA, 1998 (ACT 107 OF 1998), AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION

Fax no: (013) 696 6217

INTEGRATED ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 of 1998) AS AMENDED (NEMA) AND NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT 59 OF 2008) AS AMENDED (NEMWA), AND THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 FOR MINING OF VANADIUM BEARING TITANIFEROUS MAGNETITE ON THE FARM GELUK 512, GELUK 513 OOS KS, IRONSTONE 847 KS, SITUATED WITHIN THE MAGISTERIAL DISTRICT OF SEKHUKHUNE: LIMPOPO REGION.

With reference to the abovementioned application, please be advised that the Department has decided to **grant** an integrated environmental authorisation in terms of Section 24 L of National Environmental Management Act (Act 107 of 1998). The integrated environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 4 (2) of the Environmental Impact Assessment Regulations of 2014, you are instructed to notify all registered interested and affected parties, in writing within 14 (Fourteen) calendar days, from the date of the Department's decision in respect of your application and the relevant provisions regarding the lodgement of appeal must be provided for in terms of the National Appeal Regulations of 2014.

Should you wish to appeal any aspect of the decision, you must submit the appeal to the Minister of Environmental Affairs and a copy of such appeal to the Department of Mineral Resources (Limpopo Regional Office), within 20 days from the date of notification, and such appeal must be lodged as prescribed in by Chapter 2 of the National Appeal Regulations of 2014, by means of the methods as per prescribed below:

Appeal to the Department of Environmental Affairs

Attention

: Directorate Appeals and Legal Review

Email By post : appealsdirectorate@environment.gov.za : Private Bag X 447, **PRETORIA**, 0001

By hand

: Environmental House, Corner Steve Biko and Soutpansberg Street, Arcadia, Pretoria,

0083

Copy of the lodged appeal to the Department of Mineral Resources

Attention

: Regional Manager: Limpopo Region

By facsimile

: (015) 297 7230

E-mail

: tebogo.mangaba@dmr.gov.za

By post

: Private Bag X 9467, POLOKWANE, 0700

By hand

: DMR Building, 101 Dorp Street, Polokwane, 0699

Should you decide to appeal, you must comply with the National Appeal Regulation of 2014 in relation to notification of all registered interested and affected, and a copy of the official appeal form can be obtained from the Department of Environmental Affairs.

Kind Regards

Matauro

REGIONAL MANAGER: MINERAL REGULATION

LIMPOPO REGIONAL OFFICE DATE: 09/06/2017

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

0 9 JUN 2017

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mineral resources

Mineral Resources REPUBLIC OF SOUTH AFRICA

Private Bag X 9467, Polokwane, 0700, Tel: 015 287 4700, Fax: 086 710 1045 DMR Building, 101 Dorp Street, Polokwane, 0699

INTERGRATED ENVIRONMENTAL AUTHORISATION

Reference number: LP30/5/1/2/3/2/1 (10107) EM

Last amended: First issue

Holder of authorisation: Rakhoma Mining Resources (Pty) Ltd

Location of activities: The farm Geluk 512 KS, Geluk 513 Oos KS, Ironstone

> 847 KS, Situated in the Magisterial District of Sekhukhune (where the site is located within

> Makhuduthamaga BEPARIDAE Greater INT Bhatses OF RCES
> Municipality)
>
> MINE ENVIRONMENTAL MANAGEMENT
> PRIVATE BAG X 9467: POLOKWANE: 0700
> TEL: 015 287 4700

DECISION

0 9 JUN 2017

ACRONYMS

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

The National Environmental Management Act, 1998 (Act 107 of 1998), as amended NEMA:

DEPARTMENT: Department of Mineral Resources.

EA: Environmental Authorisation.

IEA Integrated Environmental Authorisation. EMPr: Environmental Management Programme

BAR: Basic Assessment Report

S&EIR: Scoping and Environmental Impact Report

I&AP: Interested and Affected Parties ECO: **Environmental Control Officer** LIHRA:

Limpopo Heritage Resource Agency SAHRA: South African Heritage Resources Agency

EIA REGULATIONS: EIA Regulations, 2014

MPRDA: Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002).

as amended

National Environmental Management: Waste Act, 2008 (Act 59 of 2008), NEMA:WA:

as amended

EIA: Environmental Impact Assessment. The Department is satisfied, on the basis of information availed to it and subject to compliance with the conditions of this integrated environmental authorisation, that the applicant should be authorised to undertake **NEMA EIA** and **NEMWA EIA** listed activity (ies) specified below. Details regarding the basis on which the Department reached this granting decision are set out in Annexure "I" of this integrated environmental authorisation.

ACTIVITY APPLIED FOR

By virtue of the powers conferred on it by NEMA and NEMWA, the Department hereby grant an application for IEA by **Rakhoma Mining Resources (Pty) Ltd** with the following contact details –

Mrs. Mbavhi Ngovheni

Van Eck Road, Ferrobank, Emalahleni, South Africa, 1035 P.O. Box 567

EMALAHLENI

1035

Tel no: (013) 696 6004

Fax no: (013) 696 6217

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT
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0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION

to undertake the following activities listed in the NEMA EIA Regulation and NEMWA.

NEMA: LISTED ACTIVITIES:

Listed activities on listing notice 1 of the EIA Regulations R. 983 of 2014 as:-

Activity 12 - The development of-

- (i) Canals exceeding 100 square metres in size;
- (ii) Channels exceeding 100 square metres in size:
- (iii) Bridges exceeding 100 square metres in size;
- (iv) Dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size:
- (v) Weirs, where the weirs, including infrastructure and water surface area, exceeds 100 square metres in size;
- (vi) Bulk storm water outlet structures exceeding 100 square metres in size:
- (vii) Marinas exceeding 100 square metres in size;

Where such development occurs-

- (a) Within a watercourse:
- (b) In front of a development setback; or

(c) If no development setback exist, within 32 metres of a watercourse, measured from the edge of a watercourse;-

Activity 13 - "The development of facilities or infrastructure for the off stream storage of water, including dams, reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such activity falls with the ambit of Activity 16 of Listing Notice 2" of 2014.

Activity 14 - "The development of facilities or infrastructure, for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres".

Activity 19 - The infilling or depositing of any material or more than 5 miles or the dredging excavation, removal of soil, sand, shell, shell grit, pebbles or rocks of more than 51m2 from-INMENTAL MANAGEMENT

(ii) A watercourse:

Activity 24 - "The development of-

" a road with a reserve wider than 13.5m or where the reserve exists where the read is wider (ii) than 6 meters".

PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

Listed in listing notice 2 of the EIA Regulations R. 984 of 2014 as:-

Activity 6 - "The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding-

- Activities which are identified and included in Listing Notice 1 of 2014; (i)
- (ii) Activities which are 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 the National Environmental Management: Waste Act, 2008 applies; or
- The development of facilities or infrastructure for the treatment of effluent, wastewater or sewage (iii) where such facilities have a daily throughput capacity of 2000 cubic metres or less".

Activity 15 - "The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for -

- (i) The undertaking of a linear activity; or
- (ii) Maintenance purposes undertaken in accordance with a maintenance management plan".

Activity 17 - "Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002), including associated infrastructure, structures and earthworks, directly related to the extraction of the mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002) ";

Activity 21 - "Any activity including the operation of that activity associated with primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource in which case activity 6 in this notice applies";

Activity 24 – "the extraction or removal of peat or peat soils, including the disturbances of vegetation or soil in anticipation of the extraction or removal of peat soils, but excluding where such extraction or removal is for rehabilitation of wetlands in accordance with a maintenance management plan".

Listed in listing notice 3 of the EIA Regulations R. 985 of 2014 as:-

Activity 4 - "The development of road wider than 4 metres with a reserve less than 13.5 metres,

- (a) Limpopo Province
 - (ee) Critical biodiversity areas as identified in a systematic biodiversity plans adopted by the competent authority or bioregional plans"

The proposed mining right application entails the following activities:

- Vegetation removal and site preparation
- Drilling
- Blasting
- Loading and hauling
- Screening and Crushing Plant
- Changing in land use
- > Topsoil removal,
- Topsoil stockpiling
- Development of access and haul roads
- Weighbridges
- Offices
- Workshop
- Overburden stockpiles
- Storm water berms
- Chemical toilets
- Fuel storages
- Sewage handling
- Pollution Control Dam
- Offices
- Stores and material
- Maintenance/Workshop
- Rehabilitation of project area

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MINE ENVIRONMENTAL MANAGEMENT
PRIVATE BAG X 9467 : POLOKWANE : 0700
TEL: 015 287 4700

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED REGIONAL MANAGER : LIMPOPO REGION

Listed in the NEMWA Activities R.921 of 29 November 2013 and Notice 130 of 13 February 2015 as

Waste management activity amended in Category B of the following activity on which Rakhoma Mining Resources (Pty) Ltd applied for:

2 (11). "Prospecting, mining, exploration or production operation, resulting in the development of residue stockpiles and residue deposits"

Activity 11 – "prospecting, mining, exploration or production operation, resulting in the development of residue stockpiles and residue deposits. The management and control of these waste must take place in accordance with the regulations for management and control of residue deposits and residue stockpiles or an integrated environmental authorisation as provided for in terms of NEMA".

The project entails shallow surface mine operation consisting of strip mining simultaneous rehabilitation. It will consist of open pit progressively excavated in strips according to mineral resource and mine schedule. The maximum depth of the pit area will be 20m strips of approximately 20m wide will be mined in the strike direction. Initial mining will be focus on the areas where the main seam forms outcrops at the surface. The resource lies in four magnetite layers close to the surface which will be accessed via a shallow mine pit progressively excavated in strips according to the mineral resource. The Geluk Mine project will be generate domestic waste, office waste, organic waste, reclaimable and recycling waste such as tyres, wood, plastic, pipes, cables, conveyor belts, bricks, building rubbles. The hazardous waste to be generated including hydrocarbons, hydrocarbons contaminated material from construction and operational areas, workshops and wash bay are. However, hazardous waste bins will be provided on site and stored on a concrete floors and roofed. A suitable disposal point would need to be identified for hazardous waste emanating from the mines.

Detailed specifications of the activity are as follows:

Proposed areal extent of the following Activities:

Total proposed mining right area is 3165.32 hectors of which 395 hectors will be the focus area for mining and infrastructure;

Total area covered by Run of Mine pad less than 10 hectors;

Weighbridge with an extent of 7881 square metres.

Drilling 3165.32 ha, Blasting also 3165.32 ha Opening box-cut:3165.32ha Extraction Ore: 3165.32 ha

Topsoil stockpile: 1500 square metres

Fencing: 2400 square metres

Access road: 5 ha

Loading bay: 8000 square metres

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION

Coordinates:

-24.8412 **S** 29.98318 **E**-24.8713 **S** 29.97391 **E**-24.8637 **S** 29.96082 **E**-24.8484 **S** 29.92655 **E**-24.8447 **S** 29.92452 **E**-24.8341 **S** 29.91874 **E**

-24.8268 S	29.91943 E	
-24.8267 S	29.92351 E	
-24. 814 S	29.93417 E	
-24.8322 S	29.96695 E	
-24.8412 S	29.98318 E	
-24.7967 S	2999684. E	
-24.8204 S	29.99175 E	
-24.8411 S	29.98342 E	
-24. 832 S	29.96705 E	
-24.7967 S	29.97481 E	
-24.7969 S	29.9878 E	
-24.7967 S	29.99684 E	

The granting of this IEA is subject to the conditions set out below (site specific) and in **Annexure 2** (Departmental standard conditions). The Environmental Management Programme (EMPr) attached as part of reports for the above development submitted as part of the application for an IEA is hereby approved and must be adhered to throughout the life cycle of the operation.

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1993 (ACT 107 OF 1998) , AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION

IEA SITE SPECIFIC CONDITIONS

- Protected plant species must not be removed (disturbed, cut and destroy their products which may not be possessed, collected, removed, transported, exported, donated, purchased or sold) unless the necessary permission is granted by the Department of Agriculture, Forestry and Fisheries (DAFF).
- 2. All development footprint areas and areas affected by the proposed development must remain as small as possible and must not encroach onto the surrounding sensitive areas and the associated buffer zones
- An Integrated Water Use License (IWUL) must be obtained from the Department of Water and Sanitation (DWS) prior commencement of activity.
- 4. Wetland and riverine areas are to be considered as no go zones unless authorisation is obtained. Ensure that construction activities are outside the demarcated wetland area. No activity should be allowed to encroach on to wetland system.
- 5. 200 metres buffer zone must be implemented to Shakwaneng River and 100 metres buffer zone from drainage channels

 | DEPARTMENT OF MINERAL RESOURCES | MINE ENVIRONMENTAL MANAGEMENT|
- 6. Mining activities must remaining below the edge of the mountain range/ridge on the eastern portion of the proposed mining right area
- 7. Rakhoma Mining Resources (Pty) Ltd must contribute meaningfully to conservation in the region. Corridors and conservation areas should be identified by Mula Hierarch Eco-geologist for Biodiversity Action Plan (BAP)
- 8. Site characteristics boreholes should be drilled up and downstream of potential sources of pollution to be used as monitoring boreholes and to sample current baseline water quality conditions
- No activities are to infringe on upon the riparian habitat along Shakwaneng River. All activities should remain within the demarcated mine footprint area
- A chemical suppressants be applied to unpaved haulage roads in proximity to sensitive receptors to reduce impacts from the source by 60-80% control efficiency
- 11. The Geluk Mine project should remain in full compliance with the requirements of the Environmental Management Programme and with all legislative requirements
- 12. Any changes to the scope of the Geluk Mine activities or infrastructure must subject to an EIA process paired with public participation and result in amendment of the Environmental Authorisation
- 13. The Environmental Management Programme should be implemented by the qualified Environmental Practitioner credible to interprets the EIR and EMPR
- Community engagement must be maintained during construction, operational and closure rehabilitation phases of the Geluk Project
- 15. Regular feedback to the community leaders during the operational phase of the project of the baseline noise and ground vibration must take place.
- 16. A system where complains are recorded and investigated must be made.

ANNEXURE 1: REASONS FOR THE DECISION

1. Background

Rakhoma Mining Resources (Pty) Ltd submitted an application for an IEA for activities listed in the EIA Regulations and NEMWA Listed Activities (Category A and B) of National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) as:

Listed activities on listing notice 1 of the EIA Regulations R. 983 of 2014 as:-

Activity 12 - "The development of-

- (viii) Canals exceeding 100 square metres in size;
- (ix) Channels exceeding 100 square metres in size;
- (x) Bridges exceeding 100 square metres in size;
- (xi) Dams, where the dam, including infrastructure and water surface area, exceeds 100 square metres in size;
- (xii) Weirs, where the weirs, including infrastructure and water surface area, exceeds 100 square metres in size:
- (xiii) Bulk storm water outlet structures exceeding 100 square metres in size;
- (xiv) Marinas exceeding 100 square metres in size;

Where such development occurs-

- (d) Within a watercourse;
- (e) In front of a development setback; or
- (f) If no development setback exist, within 32 metres of a watercourse; measured from the edge of a watercourse;

environmental authorisation : Granted NEMA , 1998 (ACT 197 OF 1998) , AS AMENDED

of a watercourse: measured from the edge of a

0 9 JUN 2017

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT
PRIVATE BAG X 9467 : POLOKWANE : 0700
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Activity 13 – "The development of facilities or infrastructure for the off stream storage of water, including dams, reservoirs, with a combined capacity of 50 000 cubic metres or more, unless such activity falls with the ambit of Activity 16 of Listing Notice 2".

Activity 14 – "The development of facilities or infrastructure, for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres".

Activity 19 – The infilling or depositing of any material or more than $5~\text{m}^3$, or the dredging excavation, removal of soil, sand, shell grit, pebbles or rocks of more than $5~\text{m}^3$ from –

(iii) A watercourse;

Activity 24 - "The development of-

(ii) " a road with a reserve wider than 13.5m or where the reserve exists where the road is wider than 6 meters".

Listed in listing notice 2 of the EIA Regulations R. 984 of 2014 as:-

Activity 6 - "The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding-

- (iv) Activities which are identified and included in Listing Notice 1 of 2014;
- (v) Activities which are 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 the National Environmental Management: Waste Act, 2008 applies; or
- (vi) The development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less".

Activity 15 - The clearance of an area of 20 hectares or more of indigenous vegetation where such clearance of indigenous vegetation is required for -

(iii) The undertaking of a linear activity; or

(iv)

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0 9 JUN 2017

Maintenance purposes undertaken in accordance with name internance imanagementaplan" NEMA 1393 (ACT 107 OF 1998), AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION

Activity 17 - "Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002), including associated infrastructure, structures and earthworks, directly related to the extraction of the mineral resource, including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No.28 of 2002) ";

Activity 21 - "Any activity including the operation of that activity associated with primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource in which case activity 6 in this notice applies";

Activity 24 - "the extraction or removal of peat or peat soils, including the disturbances of vegetation or soil in anticipation of the extraction or removal of peat soils, but excluding where such extraction or removal is for rehabilitation of wetlands in accordance with a maintenance management plan".

Listed in listing notice 3 of the EIA Regulations R. 985 of 2014 as:-

Activity 4 – "The development of road wider than 4 metres with a reserve less than 13.5 metres,

- (b) Limpopo Province
 - (ff) Critical biodiversity areas as identified in a systematic biodiversity plans adopted by the competent authority or bioregional plans"

Listed in the NEMWA Activities R.921 of 29 November 2013 and Notice 130 of 13 February 2015 as

Waste management activity amended in Category B of the following activity on which Rakhoma Mining Resources (Pty) Ltd applied for:

2 (11). "Prospecting, mining, exploration or production operation, resulting in the development of residue stockpiles and residue deposits"

Activity 11 - "prospecting, mining, exploration or production operation, resulting in the development of residue stockpiles and residue deposits. The management and control of these waste must take place in accordance with the regulations for management and control of residue deposits and residue stockpiles or an integrated environmental authorisation as provided for in terms of NEMA".

Rakhoma Mining resources (Pty) Ltd appointed Digby Wells Environmental Electric Scoplings and Environmental Impact Assessment process as required by Regulation 24 of the EIA: Regulations VAGEMENT PRIVATE 346 x 9467 : POLOKWANE : 0700

2. Information considered in making the decision

0 9 JUN 2017

FI: 015 287 4700

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

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

a) The information contained in the application form received by the Department on 16th July 2015 GION

- b) The information contained in the EIAR received by the Department on 26th September 2016 and the revised/updated specialist studies submitted to the Department on 06th February 2017 referred as Volume 4 of 4):
- c) The objectives and requirements of the applicable and relevant legislation, policies and guidelines and the EIA Regulations of 2014;
- d) Public Participation Process (PPP) outlined on page 165 of Volume 1 and also attached in (Appendix 7(25) of the EMPR/volume 1 of 4, Volume 4 of 4, and also attendance register on volume 1) and updated public participation which was submitted to this department on 06th February 2017 (which is referred as Volume 4 of 4) and its supporting affidavit:
- e) The Visual Specialist Report attached to the EIAR as Appendix D (Volume 2 of 4);
- f) The Soil, Agricultural potential and Land Capability Assessment attached to the EIAR as Appendix 2A (Volume 2 of 4);
- g) The Geo-hydrological Assessment attached to the EIAR as Appendix G (Volume 2 of 4);
- h) The Geochemistry and Waste Water Classification Assessment attached to the EIAR as Appendix 2F (Volume 2 of 4);
- i) The Air Quality Assessment attached to the EIAR as Appendix J (Volume 2 of 4):
- j) The Ecological Impact Assessment attached to the EIAR as Appendix 2B (Volume 2 of 4);
- k) The 1:100 year Flood-line Assessment attached to the EIAR as Appendix 2D (Volume 2 of 4);
- 1) The Aquatic Ecology Assessment attached to the EIAR as Appendix 2C (Volume 2 of 4);

- m) The Economic Assessment attached to the EIAR as Appendix 2L (Volume 2 of 4);
- n) The Traffic and Transport Assessment attached to the EIAR as Appendix 2J (Volume 3 of 4);
- o) The Noise Assessment attached to the EIAR as Appendix 2H (Volume 3 of 4);
- p) The Blast and Vibration Assessment attached to the EIAR as Appendix 2H (Volume 3 of 4);
- q) The Cultural Heritage Assessment attached to the EIAR as Appendix 2K (Volume 3 of 4);
- r) The Closure Cost Assessment attached to the EIAR outlined on page 290 and its cost breakdowen I
- s) The Rehabilitation Plan to the EIAR on page 290 (Volume 1 of 4);
- DEPARTMENT OF MINERAL RESOURCES
 DAGE 290 and its cost breakdowent
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 1EL: 015 287 4700

 0 9 JUN 2017

 ENVIRONMENTAL AUTHORISATION: GRANTED NEMA, 1998 (ACT 107 OF 1998), AS AMENDED
 REGIONAL MANAGER: LIMPOPO REGION

3. Key factors considered in making the decision

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

- a. A sufficient Public Participation Process (PPP) was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations R 982 of 2014 for public involvement
- b. The environmental impacts associated with the proposed activity will be addressed by the proposed mitigation measures outlined in the EMPr compiled by Marissa Botha of Naledzi Group (Pty0 Ltd;
- c. A sufficient Public Participation Process (PPP) was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA regulations, 2014 for public involvement. Furthermore the updated public participation which was submitted to this department on 06th February 2017 and its supporting affidavit
- d. The geochemistry compiled by Andre Van Coller of Diggby Wells Environmental on May 2016 indicates that the waste material and ore generated as part of the project needs to be sampled and analysed in accordance with NEM:WA and DWS legislative guidelines. 30 samples per material to conclude with accurate results and conclusions should be performed;
- e. The Soils, Land Use and Land Capability Specialist Report dated May 2016; compiled by Rowena Harrison of Afzelia Environmental Consultants indicates the soil samples were taken at strategic locations across the entire site during the separate field assessments revealed that the proposed mine is not expected to have an impact on agricultural production in this area due to the agricultural limitations of the site. Apart from existing small scale subsistence gardens, there is no agricultural production in this area. Several negative environmental impacts pertaining to the soil resources within the site were identified. These impacts associated with soil compaction leading to erosion, soil pollution and the continued spread of alien invasive vegetation due to mining related disturbances. Mitigation measure recommended are keys to lowering the significance of these impacts.
- f. Ecological Impact Assessment Report prepared by Paige Potter of Afzelia Environmental Consultants dated May 2016 indicates four vegetation units were identified on site; vegetation surrounded by Dr. Eiselen Dam, riverine vegetation, mountainous and disturbed bushveld. The proposed mining activities are planned for ecologically pristine site of high sensitivity, which can never fully rehabilitated and ecologically restored to its pre-mining condition. Furthermore, plant diversity on rocky outcrops was high and no alien species were

recorded there. Currently no provincial legislation that protects these rocky outcrops in Limpopo. Then, 200 metres is strongly supported should the proposed Geluk Mine go ahead. This 200 metres buffer zone must include mountain range on the eastern side of the study area. The exclusion zone is essential to maintain biodiversity.

- g. The Aquatic and Wetland Assessment Report prepared by Paige Potter of Afzelia Environmental Consultants dated May 2016 indicates that the overall results of aquatic assessment concluded that the Shakwaneng River in the study are is considered to be moderately modified and was considered to be highly sensitive area. With measure being put in place, the impacts of decreased water quality may range from subtle changes in community composition of less severe cases. The confinement of tailings in a tailings dam will limit this from happening as solids that have the potential to pollute will settle out. Mitigation measures must be used to limit the significance of these impacts on a functionality and hydrology of the Shakwaneng River and the drainage channels associated with the Geluk Mine. Bufferzone of the Shakwaneng River and the drainage channels must be implemented to ensure that the required mitigation measures are effective throughout the life span on the mine
- h. Geo-hydrological Impact assessment Report F.D Munyai of Naledzi Waterworks dated September 2016 indicates that decant is expected to occur but the date at which the decant will start was not determined. Mitigation measure and groundwater monitoring requirements must be implemented respectively. Groundwater monitoring programmes should be implemented as soon as possible so that the pre-mining groundwater level and quality be gathered.
- i. Heritage and Achaeological Impact assessment of November 2015; compiled by Mathoho Ndivhuwo of Millennium Heritage Group (Pty) Ltd indicates that in the event of any unexpected heritage feature being encountered during mining phase. Immediate reporting will be critical to relevant heritage authorities discovered during mining phase. Nevertheless, it is recommended that burial grounds and graves be monitored during operational phase to record and mitigate any indirect impacts on the resources. Should this not be possible the graves should then be exhumed and relocated after detailed social consultation has been undertaken and the necessary permits had been obtained.;
- j. The Air Quality Assessment Report dated September 2016; compiled by R Von Gruenewaldt of Airsheq Planning Professionals indicates that dust fallout monitoring networks be implemented at the proposed project activities. Due to the close proximity of sensitivity receptors to the proposed activities, it therefore recommended that mitigation measures on the main sources of fugitive dust be implemented to receipt imise the impacts as far as possible and those sensitivity receptors be placed a minimum activities on the EMPR from mining activities in order to reduce health impacts IVAIE BAG X 9467: POLOKWANE: 0700

4. Findings

After consideration of the information and factors listed above, the peraltiment made the following indings -

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED

PENARMENT Made the following findings

REGIONAL MANAGER : LIMPOPO REGION

- a) The potential impacts on the proposed site were clearly investigated and mitigation measures outlined.
- b) Public Participation Process (PPP) attached in (Appendix 7-25 of the EMPR and also attendance register attached).of the EIAR complied with Chapter 6 of the EIA Regulations R.982 of 2014. The PPP included, inter-alia, the following:
 - A newspaper advertisement was placed in the local newspaper "Clasfields dated 31st July 2015;
 - Notices were placed at the project site;
 - Notices were sent to all key stakeholders and the registered interested and affected parties;
 - Authorities meetings (attendance register and minutes of the meetings attached):

- Registration on a database for Background Information Documents (BID);
- No objection was received from the consulted interested and affected parties;

Public meetings were held on 04th December 2015, 11th March 2016, 1st September 2016, 12th September 2016; and comments and issues raised by interested and affected parties were adequately addressed. Furthermore the updated public participation which was submitted to this department on 06th February 2017 (as Volume 4 of 4) and its supporting affidavit

Furthermore the issues raised by **Leolo Development Committee** was regarding the termination of mandate to Rakhoma Mining Resources (Pty) Ltd to apply for mining permit or mining right was also responded 13th February 2017 and also forwarded to such committee on the 15th February 2017.

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

0 9 JUN 2017

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION