



Departmental Reference Number: NC30/5/1/3/2/10915MP

Applicant:

Makganyane Resources (Pty) Ltd
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BACKGROUND INFORMATION DOCUMENT

01 July 2021

To whom it may concern

RE: NOTICE OF APPLICATION IN TERMS OF SECTION 27 OF THE MINERALS AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT NO 28 OF 2002) AND THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998 NEMA) AS WELL AS THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED) OVER THE REMAINING EXTENT OF THE FARM MAKGANYENE NO 667 IN THE KURUMAN MAGISTERIAL DISTRICT OF THE NORTHERN CAPE BY MAKGANYANE RESOURCES (PTY) LTD.

BACKGROUND INFORMATION

Makganyane Resources (Pty) Ltd holds a prospecting right (NC 30/5/1/1/2/2292 PR) over Portion 2 (portion of Portion 1), Remainder Extent, Remainder Portion of Portion 1, and Portion 3 of the farm Makganyene No 667. Consequently, the company identified the need to apply for a mining permit over a 4.9 ha area of the proven iron ore resource on the Remaining Extent of the farm Makganyene No 667 (see Figure 1).

SITE DESCRIPTION

The property lays ± 26 km north-west of Postmasburg, and the proposed footprint area is situated on the north-eastern part of the Remaining Extent of the farm Makganyene No 667. The extent of the proposed mining footprint is 4.9 ha, and the GPS coordinates of the area are as listed below.

GPS COORDINATES OF PROPOSED MINING AREA	
DEGREES MINUTES SECONDS	DECIMAL DEGREES
A. 28°08'16.14"S; 22°56'14.69"E	A. -28.137816°S; 22.937413°E
B. 28°08'16.49"S; 22°56'23.82"E	B. -28.137913°S; 22.939950°E
C. 28°08'22.75"S; 22°56'23.82"E	C. -28.139652°S; 22.939951°E
D. 28°08'22.70"S; 22°56'14.65"E	D. -28.139640°S; 22.937403°E

the goal isn't to live forever, it is to protect a planet that will

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BACKGROUND INFORMATION DOCUMENT



Figure 1: Satellite view of the proposed mining permit area of Makganyane Resources (white polygon) in relation to the property boundary (red polygon) and the nearest public road (R385) (image obtained from Google Earth).

LEGAL COMPLIANCE

The proposed project triggers the following listed activities in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2014 (as amended) and therefore requires an environmental impact assessment (EIA) (basic assessment process) that assess project specific environmental impacts and alternatives, consider public input, and propose mitigation measures, to ultimately culminate in an environmental management programme that informs the competent authority (Department of Mineral Resources and Energy) when considering the environmental authorisation:

■ GNR 327 Listing Notice 1 of 2014 (as amended) Activity 21:

Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002), as well as any other applicable activity as contained in this Listing Notice or in Listing Notice 3 of 2014, required to exercise the mining permit.

■ GNR 327 Listing Notice 1 of 2014 (as amended) Activity 27:

The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.



BACKGROUND INFORMATION DOCUMENT

GNR 327 Listing Notice 1 of 2014 (as amended) Activity 28:

Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development:

ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.

OTHER LEGISLATION TRIGGERED BY THE PROPOSED PROJECT:

- An application for a Mining Permit in terms of Section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002) will be submitted to the Department of Mineral Resources and Energy – Northern Cape Province.*

PROJECT DESCRIPTION

As mentioned earlier, Makganyane Resources (Pty) Ltd (“the Applicant”) applied for a permit to mine iron ore from a 4.9 ha area over the Remaining Extent of the farm Makganyane No 667, Kuruman magisterial district, Northern Cape Province. The application received NC 30/5/1/3/2/10915 MP as departmental reference number.

The mining method will represent open-cast mining where blasting will be used to loosen the hard rock, the loosened material will then be transported to a mobile processing plant where it will be screened to various stockpiles. The iron ore will be hauled from the property to the Sishen iron ore export railway line. As mentioned earlier, the processing plant will be of temporary nature. This will also apply to the offices and other infrastructure to be established on site. Presently, no permanent infrastructure is planned for the proposed development.

The proposed project will appoint ±50 employees, that will mainly be sourced from the local community. All employees will daily be transported to the mining area. The Applicant has an existing workshop ±2 km from the proposed mining area where chemicals and fuels will be stored and emergency vehicle/equipment maintenance can be done.

ACCESS ROUTE:

- The proposed mining area will be reached via the existing roads on the property that will be widened and upgraded if needed.*
- The improvement of the roads will remain below the threshold of the NEMA EIA Regulation activities.*



BACKGROUND INFORMATION DOCUMENT

WATER USE:

- The water required at the mine will be abstracted from an abandoned diamond mine on the property, or alternatively bought from the landowner and transported to site.

ELECTRICITY USE:

- The proposed project will not require any electricity connections to the national grid, as fuel operated generators will be used to power the plant.

BRIEF SITE DESCRIPTION

GEOLOGY:

The regional geology of the study area forms part of the Transvaal Super Group. According to the Makganyane Geological and Preliminary Exploration Report (2019), most of the surface outcrop features towards the east of the property comprises diamictites of the Makganyane Formation. Some quartzite splays cover the diamictite in places. The flat laying topography to the west comprises mostly of sand and sporadic outcrops of the Ongeluk lava. Two almost parallel linear features with a south-southwest to north-north-east trend are present on the geological sheet, possibly representing the continuation of thrust faults. The western feature seems to connect with a thrust-fault. Both the Gamagara Formation and the Rooinekke Iron Formation are hosts rocks to iron and manganese mineralization. Clastic ore deposits present on Kameelhoek, Aucampsrust and Makganyane were documented by Nel, T in 1929.

HYDROLOGY:

The proposed mining area falls within a NFEPA (National Freshwater Ecosystem Priority Area) of conservation importance. The FEPA status applies to the actual river reach (Orange River in this case >100 km removed), of the whole sub-quaternary catchment. Ground truthing however confirmed that there are no wetlands or other watercourses within the earmarked footprint that could be affected by the proposed activity.

FLORA:

According to Mucina and Rutherford (2012) two vegetation types extends into the mining footprint i.e. the Kuruman Mountain Bushveld (SVk 10), and the Olifantshoek Plains Thornveld (SVk 13). Both these vegetation types are classified as Least Threatened.

According to the Screening Report for Environmental Authorizations as required by the 2014 EIA Regulations, the plant species sensitivity of the area is deemed to be of low significance. The screening report notes that the terrestrial biodiversity sensitivity is of very high significance as the area forms part of an Ecological Support Area

BACKGROUND INFORMATION DOCUMENT

(ESA). However, according to the Mining and Biodiversity Guideline, the proposed footprint area does not fall within any area of high biodiversity importance (see Figure 2).

Ground truthing confirmed that the vegetation cover of the earmarked area is natural to near natural. However, should the Applicant obtain the correct permits for any protected plant species that may need to be removed prior to bush clearance, it is believed that the proposed mining of 4.9 ha within the larger extent of the farm will not negatively affect the conservation status of the ESA.

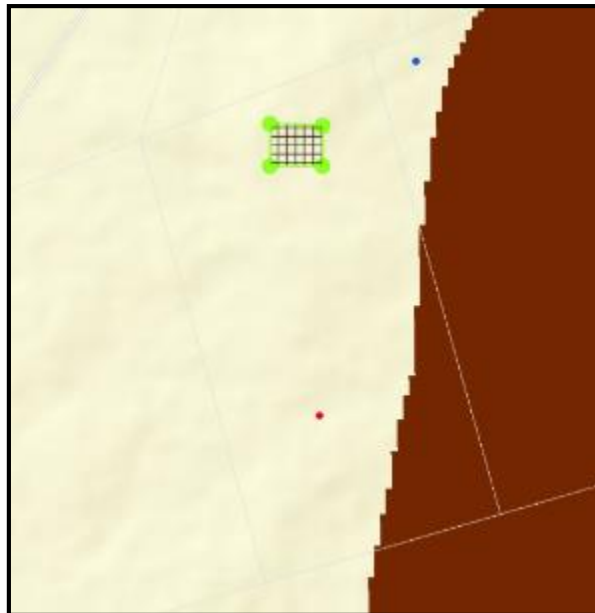


Figure 2: Extract from the BGIS Map Viewer for Mining Guidelines where the proposed mining footprint is shown by the green crossed polygon, and the brown shaded area (east of the mining footprint) represents an area of highest biodiversity sensitivity with a corresponding rating of highest risk for mining.

FAUNA:

The study area is mainly used for stock grazing and game farming. Apart from the domestic animals, the indigenous faunal action of the area is still rich in diversity with the species roaming between the various farm portions. Due to the open cast nature of the proposed operation, fauna would be able to move away from the excavation. The impact on the faunal component of the receiving environment is deemed to be of low significance as the above mentioned screening tool indicated that the animal species significance of the area is Low.

LAND USE:

The study area is located within ward 6 of the Tsantsabane Local Municipality, with Postmasburg being the nearest town. The farm Makganyene No 667 is situated in a rural setting, that was previously mined for diamonds, of which



BACKGROUND INFORMATION DOCUMENT

the open cast pit on Portion 2 (a portion of Portion 1) of Makganyene No 667 serves as landmark. The R385 provincial road crosses through Portions 1 and 2 of Makganyene No 667. The land use of the property mainly comprises of livestock farming. As mentioned earlier, the Applicant also holds a prospecting right over the farm Makganyene No 667.

AIR AND NOISE QUALITY:

Due to the low rainfall, the air quality of the study area is characterised as being dry, arid and dusty. Dust is the most important pollutant given the area's rural character predominantly affected by the agriculture and mining. The noise ambiance of the study area is classified as ambient rural or pastoral with noise levels mainly affected by traffic along the R385, railway traffic, farming equipment and mining related operations.

CULTURAL AND HERITAGE ENVIRONMENT:

The Heritage Impact Assessment compiled by HCAC Heritage Consultants in 2019 for the Makganyene Resources Prospecting Operation notes that the general area consists of two kinds of topographical elements: undulating plains characterised by thick sand cover and a range of hills roughly splitting the area in two. The report confirmed that some mining activities took place between 1967 and 1982. The study noted that the cultural landscape (mining and farming activities) is generally modern without significant cultural landscape elements of concern. No rock art, historical farm steads or colonial-era stone-walling (dwellings or kraals) were recorded by HCAC in 2019, and none of the heritage features identified by HCAC during the 2019 assessment were within the proposed mining permit area.

In terms of the paleontological component, an independent study was conducted by Prof Marion Bamford (2019) that concluded that the proposed site lies on some ancient non-fossiliferous rocks and mostly on windblown sands and sand dunes of the Quaternary Kalahari Group sands. Based on this information Prof Bamford was of the opinion that no palaeontological site visit was required unless fossils were discovered once operations commenced. It was also noted that the Makganyene Formation diamictites do not contain fossils although they are indicated as such by the SAHRIS palaeosensitivity map.

FINAL REHABILITATION

Upon closure of the mining operation the entire footprint area will be rehabilitated so as to allow the affected area to return to agricultural use. At this stage the following baseline rehabilitation actions are proposed from which a detailed closure plan will be developed:



BACKGROUND INFORMATION DOCUMENT

- Rehabilitation of all the disturbed surface areas shall entail landscaping, levelling, sloping, top dressing, land preparation, seeding (if required), and weed / alien clearing.
- All infrastructures, equipment, and other items used during the mining period will be removed from the site in accordance with section 44 of the MPRDA, 2002.
- Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining footprint and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site.
- The rehabilitation area will be cleared of weeds and invader plant species. Priority will be given to species regarded as Category 1a and 1b invasive species in terms of NEM:BA (National Environmental Management: Biodiversity Act 10 of 2004 and regulations applicable thereto).
- Final rehabilitation shall be completed within a period specified by the Regional Manager (DMRE).

APPLICATION FOR CLOSURE

Once the full mining area was rehabilitated the permit holder will submit a closure application to the Department of Mineral Resources and Energy in accordance with section 43(4) of the MPRDA, 2002 that states: *“An application for a closure certificate must be made to the Regional Manager in whose region the land in question is situated within 180 days of the occurrence of the lapsing, abandonment, cancellation, cessation, relinquishment or completion contemplated in subsection (3) and must be accompanied by the prescribed environmental risk report”*. The Closure Application will be submitted in terms of Regulation 62 of the MPRDA, 2002, and Government Notice 940 of NEMA, 1998.

PUBLIC INVOLVEMENT

This document is to inform you about the proposed activity and to determine whether there are any concerns or objections from interested and affected parties (I&AP's) that needs to be considered.

As interested and affected party you are kindly requested to complete the comments form and give any comment/concern or input with regard to the current land use of the area, the environment as well as socio-economic conditions that you feel might be affected by the proposed activity. When submitting response please provide suggestions to mitigate the anticipated impact of each identified activity.

Please contact Christine Fouché at the contact details as presented in the letterhead or at christine.f@greenmined.co.za through any means should you need more information, have additional language requirements, have concerns or comments that need to be considered or if you want to be registered as an interested and/or affected party and would like to receive a copy of the Draft Basic Assessment (DBAR) on or before 02 August



BACKGROUND INFORMATION DOCUMENT

2021. If we do not receive any comments from you on or before 02 August 2021, it will be accepted that you do not have any objections/comments with regard to the project and do not require any further documentation.

A register of interested and affected parties (I&AP's) will be opened and maintained containing the names, contact details and address of all persons who have submitted written comments, attended meetings or have in writing requested to be registered and all organs of state which have jurisdiction in respect of the activity. Please note that only registered I&AP's and stakeholders will be entitled to comment on reports and plans to be submitted to the Department provided that the party provide its name, contact details and address and discloses any direct business, financial, personal or other interest which he/she may have in the approval or refusal of the applications.

The Draft Basic Assessment Report (DBAR) will be submitted to the Department of Mineral Resources and Energy – Northern Cape (DMRE) for review purposes. This report will also be made available to the public for a 30-days review period. An electronic copy of the report will be published on the Greenmined Environmental website (www.greenmined.com). All registered I&AP's and stakeholders will be notified of the commenting period in advance as above.

The DBAR will then be updated to reflect the comments received during the public commenting period. Thereafter, the Final Basic Assessment Report (FBAR) will be submitted to DMRE for its consideration as part of the authorization process in terms of the NEMA, 2014 regulations (as amended 2017). A copy of the final report will be made available on the Greenmined Environmental website. All registered I&AP's and stakeholders will be notified in writing within 14 days of the date of the decision of the outcome of the application, including the reasons for the decision and the right of appeal.

CONTACT DETAILS

By taking part in this process, the undersigned, hereby consent in terms of the Protection of Personal Information Act 4 of 2013 ("POPIA") to the lawful processing of his/her personal information by Greenmined Environmental (Pty) Ltd, which personal information may be used for as part of documentation pertaining to the Environmental Authorisation / Mining Right/ Permit application process as this is a public process and will become public information upon receipt thereof by the competent authority and will no longer be controlled by Greenmined Environmental (Pty) Ltd. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application your information may be made available to a third party, and by accepting the providing your details below and taking part in this process you authorise such information to be shared for these purposes.

Name/Name	
Organisation/Instansie	
Interest/Belange	



BACKGROUND INFORMATION DOCUMENT

Postal Address/Pos Adres	
Tel	
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COMMENTS/ OPMERKINGS

Object / No Objection:	
Request additional information:	
Concerns:	

Signature: _____



BACKGROUND INFORMATION DOCUMENT

Are there any other organisations or individuals that you feel should be invited to comment? If so, please provide their contact details:

Contact name:
Organisation (if applicable):
Address:
Tel:
Fax
E-mail

Your feedback is valued and will be addressed appropriately.

Kind Regards

A handwritten signature in black ink, appearing to read 'Fouché', is written over a horizontal dotted line.

Christine Fouché

Greenmined Environmental (Pty) Ltd