



DEPARTMENTAL REFERENCE NO: To be Confirmed

Applicant:
 Purple Rain Properties No 411 (Pty) Ltd
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BACKGROUND INFORMATION DOCUMENT

1 August 2019

To whom it may concern

RE: NOTICE OF APPLICATION IN TERMS OF SECTION 22 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 2017).

BACKGROUND INFORMATION

Virtigo Properties 33 (Pty) Ltd holds a mining permit for sand and gravel over a 4.9 ha area of Portion 5 of the farm Doornekraal 830 RD, within the Malmesbury magisterial district of the Western Cape Province. The mining permit lapses in 2019 with the option to renew.

Purple Rain Properties No 411 (Pty) Ltd (hereinafter referred to as “the Applicant”) identified the need to apply for a mining right over 42.6115 ha of Portion 5 of the farm Doornekraal 830 RD from where sand and gravel will be mined once the resource, in the abovementioned 4.9 ha permit area, has been depleted. The proposed mining right footprint was contained to the current wheat fields/grazing land of the property, so as to prevent the need for the removal of fynbos or the disturbance of other natural areas.

SITE DESCRIPTION

Portion 5 of the farm Doornekraal 830 RD is situated approximately 11 km south of Malmesbury along the R302. The area earmarked for the proposed mine falls on a section of the farm used for agricultural purposes. The extent of the proposed mining footprint is 42.6115 ha, and the GPS coordinates of the area applied for are as listed below.

GPS COORDINATES OF MINING RIGHT AREA	
BLOCK A	
DEGREES MINUTES SECONDS	DECIMAL DEGREES
A. 33°33'26.58"S; 18°44'04.51"E	A. -33.557384°S; 18.734588°E
B. 33°33'34.28"S; 18°44'04.20"E	B. -33.559499°S; 18.73451°E
C. 33°33'31.61"S; 18°43'46.25"E	C. -33.558761°S; 18.72951°E

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

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GPS COORDINATES OF MINING RIGHT AREA	
BLOCK A	
DEGREES MINUTES SECONDS	DECIMAL DEGREES
D. 33°33'22.02"S; 18°43'47.31"E	D. -33.5561°S; 18.729827°E
E. 33°33'20.85"S; 18°43'49.60"E	E. -33.555795°S; 18.730448°E
BLOCK B	
F. 33°34'04.96"S; 18°43'21.21"E	F. -33.568036°S; 18.722572°E
G. 33°33'43.20"S; 18°43'17.86"E	G. -33.561918°S; 18.721641°E
H. 33°33'52.10"S; 18°43'42.55"E	H. -33.564441°S; 18.728486°E
I. 33°34'03.14"S; 18°43'38.25"E	I. -33.567545°S; 18.727297°E
BLOCK C	
J. 33°33'47.60"S; 18°44'05.10"E	J. -33.563218°S; 18.734746°E
K. 33°33'47.18"S; 18°44'08.44"E	K. -33.5631°S; 18.73569°E
L. 33°33'53.14"S; 18°44'08.51"E	L. -33.564746°S; 18.735695°E
M. 33°33'53.21"S; 18°44'04.06"E	M. -33.56478°S; 18.734461°E

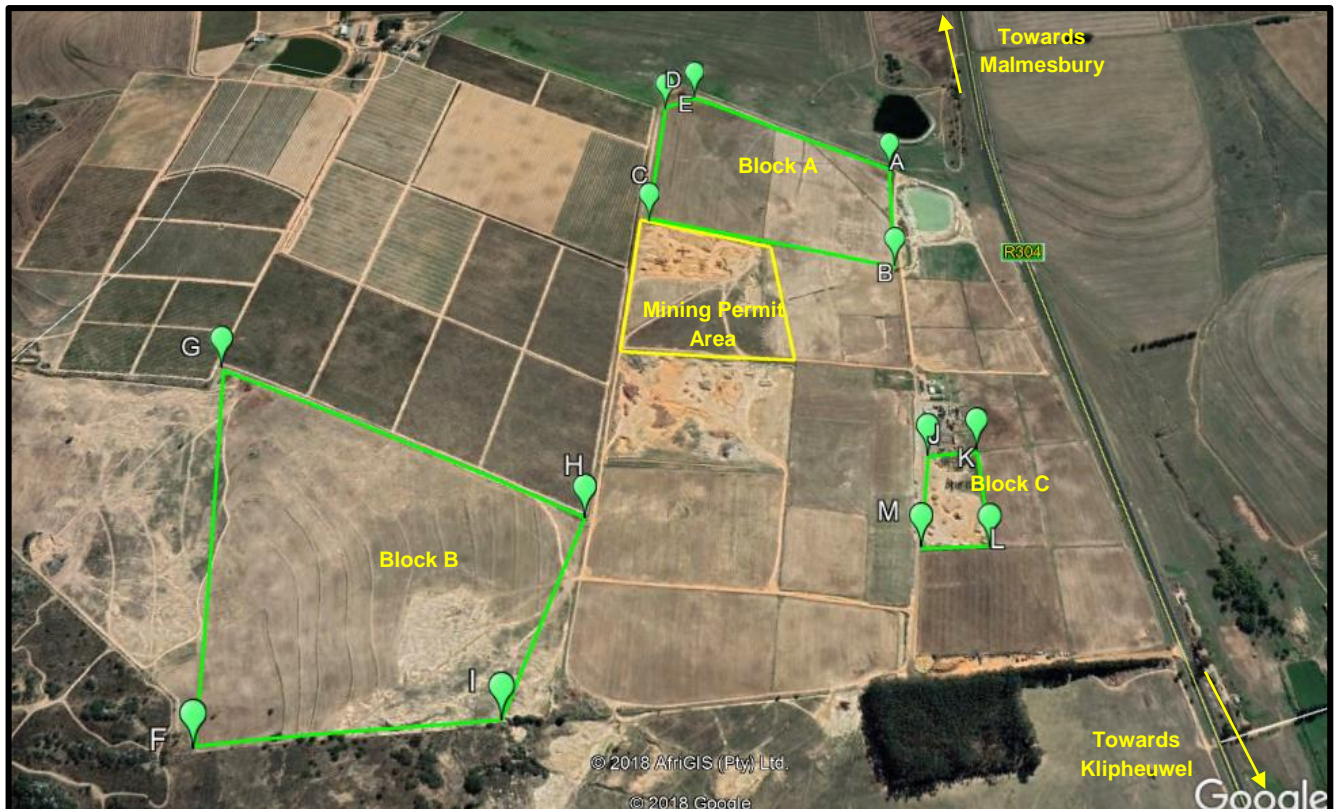


Figure 1: Satellite view of the proposed mining right area of Purple Rain Properties No 411 (Pty) Ltd (green polygons) in relation to the current mining permit area (yellow polygon).

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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 2017) and therefore requires an environmental impact assessment (EIA) (full EIA 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) when considering the environmental authorisation:

■ GNR 324 Listing Notice 3 of 2017 Activity 18:

The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 km.

i. Western Cape

ii. All areas outside urban areas:

(aa) areas containing indigenous vegetation.

■ GNR 325 Listing Notice 2 of 2017 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 -

- a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or*
- b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing.*

■ GNR 327 Listing Notice 1 of 2017 Activity 22:

The decommissioning of any activity requiring –

- c) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (act No. 28 of 2002); or*
- d) a prospecting right, mining right, mining permit, production right or exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure.*

■ GNR 327 Listing Notice 1 of 2017 Activity 27:

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



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GNR 327 Listing Notice 1 of 2017 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 Right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002) will be submitted to the Department of Mineral Resources – Western Cape Province.
- A Notice of Intend to Develop will be submitted to Heritage Western Cape in terms of the National Heritage Resources Act, 1999 (Act No 25 of 1999).
- A land development application will be submitted to the Department of Environmental Affairs and Development Planning in terms of the Land Use Planning Act, 2014 (Act No 13 of 2014).

PROJECT DESCRIPTION

Purple Rain Properties No 411 (Pty) Ltd intends applying for a mining right (MR) over 42.6115 ha of Portion 5 of the farm Doornekraal 830 RD, from where sand and gravel will be mined once the resource, in the abovementioned 4.9 ha permit area, has been depleted. The proposed footprint was identified based on the altered nature of the area and the fact that no fynbos has to be removed to access the minerals. The landowner has used the proposed footprint for agricultural purposes, mainly wheat production and grazing, for the last 13 years. The earmarked area encompasses two larger areas (named "Block A" and "Block B") from where the minerals will be mined, and a smaller area ("Block C") for stockpiling purposes (refer to Figure 1).

The proposed mining method entails the strip mining of the proposed area (Block A / B) and thereafter the processing of the mined material through crushing, screening and washing (if needed) at a designated processing area (Block A / B). The mined material will then be transported from the processing area to the stockpile area (Block C) from where it will be transported to the off-site weighbridge before it is delivered to clients. The Applicant has an operational workshop with storage facilities approximately 1 km from the proposed mining area where all servicing, storage of chemicals and waste will be done. In the circumstance, it is not necessary to establish any of these facilities within the mining area. The crushing, screening and washing infrastructure with the associated



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generator will be the only infrastructure to be established within the proposed mining footprint (processing area). This infrastructure will be leased and of temporary nature.

The Applicant intends to:

- strip and stockpile the topsoil of a 1 ha mining strip;
- excavate the sand and/or gravel;
- crush, screen and wash the mineral (when needed) at the processing area;
- stockpile the product until sold and transported from site;
- landscape and replace the topsoil over the mined strip prior to the opening and mining of the consecutive strip.

It is proposed that the mining site will contain the following:

- two excavators to load the sand and/gravel;
- three front-end loaders;
- one 5 000 litre water cart;
- temporary crushing, screening and washing infrastructure;
- generator on bunded area;
- appropriate waste receptacles;
- two trucks (on-site) and a maximum of ten trucks (sub-contractor) for loading and hauling.

ACCESS ROUTE:

The Applicant will use the existing gravel farm roads to access the mining/processing area and transport material from the mine. These roads connect with the R302 along which material will be transported to clients via truck and trailers. Haul roads will be extended into the mining area as mining progresses, the Applicant will strive to confine these roads to the existing internal farm roads. However, should haul roads be needed where no farm roads exist the footprint of the haul roads will be contained to the approved mining area, specifically to areas where mining still needs to be done. No haul roads will be allowed over rehabilitated areas and upon closure of the site all haul roads will be ripped and rehabilitated.

WATER USE:

The Applicant will only wash material during the wet season and approximately 4 000 litre water will daily be needed at the washing plant when in operation. This water will be extracted from a borehole on the farm. The washing plant will consist of a closed system in which the process water can be reused, to warrant efficient water use. Should the water source not be available the Applicant could continue with the selling of unwashed material.



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Dust generated on the access road, haul roads and at the stockpile area will as far as possible be managed through alternative dust suppression methods in order to restrict water use to the absolute minimum. The crusher plant will be fitted with water sprayers to alleviate dust generation from the conveyor belts. The water requirement for the sprinkler system will be kept to the absolute minimum ($\pm 1\ 000\text{l/day}$) as it is only required to moisten the crushed material with a fine spray. Under very windy/dusty conditions the Applicant might have to substitute the dust suppression methods with the spraying of water, in which case a 5 000l water cart will be used to moisten the roads and other problem areas. A water use application, for the use of borehole water for dust suppression purposes, is pending at the Department of Water and Sanitation. Should this application be issued the Applicant will continue with the water use as stipulated. If additional water is needed the Applicant will purchase wastewater from the neighbouring farmer that discards the water from his dairy to a storage dam. Potable water, for use by employees, will daily be transported to site with the labour force.

ELECTRICITY:

No electricity connection will be needed as the applicant will make use of a generator to power the crushing, screening and washing infrastructure on site

BRIEF SITE DESCRIPTION

GEOLOGY & SOIL:

The main land type occurring on the Doornekraal Farm (land type Fa 859) has an underlying geology of greywacke and phyllite of the Moorreesburg Formation, Malmesbury Group, granite of the Paardeberg Pluton, Cape Granite Suite and Quaternary quartz sand of the Springfontein Formation.

Whilst others may occur, Glenrosa and Mispah soil forms are dominant. The soils generally comprise sandy upper soil horizons overlying a clay horizon of highly weathered bedrock. The depth of the sandy horizons varies from shallow to deep. Gravel occurs between the sand and the underlying clay in places. The sandy colluvium soil of the study area consists mainly of coarse sand with varying sizes between 1-2 mm. The topsoil consists mainly of soil with a loamy sand texture with a clay content of $\pm 10\%$ while the deeper horizons vary between $\pm 12\text{-}20\%$.

HYDROLOGY:

The proposed mining site falls in the Berg Olifants water management area, and the G21D quaternary catchment that forms part of the Diep River system. There are no rivers or wetlands situated in close proximity of the earmarked footprint area. The proposed mining activity is not expected to intersect the groundwater of the study area.



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FAUNA AND FLORA:

As mentioned earlier the proposed mining footprint was chosen over an area of which the groundcover has historically been altered to allow for wheat production and grazing. According to classification of Mucina and Rutherford (2012) the vegetation types of the greater study area is known as Swartland Granite Renosterveld (FRg2) and Swartland Shale Renosterveld (FRs9), both of which are critically endangered vegetation units. Although the proposed project will not necessitate the removal of natural Renosterveld, the removal of some indigenous vegetation may be necessary should the cultivation of the footprint cease and indigenous vegetation establish through succession.

The fauna present within the boundaries of the study area comprise of natural occurring small rodents, reptiles and various bird species. No protected or red data faunal species were identified within the earmarked footprint, and the project is expected to have a negligible impact in this regard.

LAND USE:

The project area is located in the Swartland municipal area, with Malmesbury being the nearest town. The land use of the earmarked property mainly comprises of cattle farming and wheat cultivation, mixed with sand and gravel mining. The land use of the surrounding properties mainly consists of agriculture (wheat cultivation, viticulture, grazing) with small scale sand mining on some. The Applicant will appoint a town and regional planner to assist with land use applications applicable to this project.

AIR AND NOISE QUALITY:

The air and noise ambiance of the study area was historically representative of an agricultural environment in which farming equipment operates with occasional high dust emissions from denuded areas. The surrounding area has since been transformed with the introduction of sand mining and poultry farming to the area. The traffic on the R302 and surrounding roads also contribute to air and noise emissions.

The proposed project will generate dust, however should the Applicant implement the mitigation measures to be proposed in the environmental management programme the impact can be managed and minimized as far as possible. Though the proposed mining operation will contribute some noise to the existing ambiance of the study area it is expected to be of low – medium significance.

HERITAGE:

During a desktop study several archaeological impact assessments were found for the Malmesbury area as the town was identified as a core area for industrial, commercial and residential development. The studies indicated



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that the area is not of pre-colonial archaeological importance. According to one study (ACRM, 2008) this fact is attributed to the region being characterized by intensive agriculture activities for more than 100 years and that the archaeological landscape has already been largely destroyed. The proposed project will not affect any historical structure on the farm and the altered nature of the footprint area makes the presence of artefacts highly unlikely.

FINAL REHABILITATION

The closure objectives will entail progressive rehabilitation of each strip (1 ha) as mining progress. The Applicant proposes the following with regard to rehabilitation of the mined-out strips:

- The mining plan will be such that topsoil is stockpiled for the minimum possible time through rehabilitating different mining blocks progressively as mining continues.
- To ensure minimum impact on drainage, the applicant will take care not to leave any depressions in the mining floor. A surface slope (even if minimal) will be maintained across the mining floor in the drainage direction, so that all excavations are free draining.
- After mining, any steep slopes at the edges of excavations will be reduced to a minimum and profiled to blend with the surrounding topography.
- The stockpiled topsoil will then be evenly spread over the entire mining area, so that there is a depth of 500 mm of sandy topsoil above the underlying clay. The depth will be monitored during spreading to ensure that coverage is adequate and even.
- The Applicant will strive to (when possible) spread topsoil at a time of the year when vegetation cover can be established as quickly as possible afterwards, so that erosion of returned topsoil by both rain and wind, is minimized.
- A cover crop will be planted and established immediately after spreading of topsoil to stabilize the soil and protect it from erosion.
- The rehabilitated area will monthly be monitored for erosion, and appropriately stabilized if any erosion occurs.
- The Applicant will ensure monthly monitoring of weeds/invasive plants that may germinated within the rehabilitated areas.

Final rehabilitation will entail the removal of all infrastructure and equipment from the site according the closure objectives that will be stipulated in an approved closure plan. Final landscaping, levelling and top dressing will be done on all areas not yet rehabilitated including the processing and stockpile areas. Control of weeds and invasive plant species is an important aspect after topsoil replacement and seeding has been done in an area. Site management will implement an alien invasive plant species management plan during a 24 months' aftercare period to address germination of problem plants in the area.



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APPLICATION FOR CLOSURE

Once the full mining area was rehabilitated the mining right holder will submit a closure application to the Department of Mineral Resources 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 need 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 Fouche 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 Scoping Report (DSR) on or before 2 September 2019. If we do not receive any comments from you on or before 2 September 2019, 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 Scoping Report (DSR) will be submitted to the Department of Mineral Resources – Western Cape (DMR) for review purposes. This report will also be made available to the public for a 30 days review period. An



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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 DSR will then be updated to reflect the comments received during the public commenting period. Thereafter, the Final Scoping Report (FSR) will be submitted to DMR for its consideration as part of the authorization process in terms of the NEMA, 2014 regulations (as amended 2017). A copy of the FSR will be made available on the Greenmined Environmental website. Once the Final Scoping Report has been accepted by the DMR, the Draft Environmental Impact Assessment Report (DEIAR) will be prepared, inclusive of all the specialist studies, and also made available to the public for a 30-day commenting period. An electronic copy of the DEIAR report will also be published on the Greenmined Environmental website. All registered I&AP's and stakeholders will be notified of the commenting period in advance.

Upon expiry of the commenting period the DEIAR will be updated to reflect the comments received during the public commenting period. Thereafter, the Final EIAR will be submitted to the DMR for its consideration as part of the authorization process in terms of the NEMA 2014 regulations (as amended by GNR 326 effective 7 April 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

Name/Name	
Organisation/Instansie	
Interest/Belange	
Postal Address/Pos Adres	
Tel	
Fax/Faks	
E-mail/E-pos	



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COMMENTS/ OPMERKINGS

Object / No Objection:	
Request additional information:	
Concerns:	

Signature: _____



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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 cursive script that reads 'Fouche'.

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Christine Fouche
Greenmined Environmental