## PROPOSED SAND MINE ON A PORTION OF PORTION 2 (REMAINING EXTENT) OF FARM 199 RD, CLANWILLIAM, WESTERN CAPE PROVINCE.

## SITE SENSITIVITY REPORT



## **NOVEMBER 2024**

**REFERENCE NUMBER: W**C30/5/1/3/2/10349MP

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### **EXECUTIVE SUMMARY**

The Applicant, Skemervlei Trust, applied for environmental authorisation and a mining permit to mine sand from a portion of Portion 2 (Remaining Extent) of Farm 199, Clanwilliam, Western Cape Province. The proposed mining area will be 1.7 ha and will be developed over an area currently used for agricultural purposes. The position of the permit area was chosen to avoid the disturbance of natural fynbos. The mineral (sand) will be loaded with a front-end-loader directly from the footprint area onto a truck that delivers it to the clients. Little to no stockpiling required. No washing of sand is needed. Due to the small scale of the operation no infrastructure, other than a chemical toilet, will be established within the mining footprint. The proposed project does not require any electrical connections, and no chemicals will be stored on site. Vehicle/equipment maintenance will be done at an existing off-site workshop (Clanwilliam Town) of the Applicant, and the area will be reached via an existing farm road.

The proposed project triggers 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 (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. This report, the Final Basic Assessment Report, forms part of the departmental requirements, and presents the first report of the EIA process.

### **Project description**

The proposed mining area of the Applicant will be 1.7 ha and will be developed over an area currently used for agricultural purposes. The mining method is representative of the small-scale mining industry where the mineral (sand) is loaded with a front-end-loader (FEL) directly from the footprint area onto a truck that delivers it to the clients. Mining will be implemented with little to no stockpiling required. No washing of sand is needed. Due to the small scale of the operation no infrastructure, other than a chemical toilet, will be established within the mining footprint. The proposed project does not require any electrical connections, and no chemicals will be stored on site. Vehicle/equipment maintenance will be done at an existing off-site workshop (Clanwilliam Town) of the Applicant, and the area will be reached via an existing farm road.

The proposed mining method will implement strip mining and be representative of the small scale mining industry where the mineral (sand) is loaded with a front-end-loader (FEL) directly from the footprint area onto a truck that delivers it to the clients. Little to no stockpiling is required and no washing of sand is needed.

The mining activities will be as listed below:

- Stripping and stockpiling of the topsoil from a 1 ha strip;
- Loading and hauling of the sand from the open strip;
- Sloping and landscaping of the mined strip prior to the opening and mining of the consecutive strip; and
- Replacing the topsoil and vegetating the disturbed area.

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Should the MP be issued and the mining of dolerite be allowed, the proposed project will comprise of activities that can be divided into three key phases namely the:

- (1) Site establishment/construction phase which will involve the demarcation of the permitted mining area and the identification of the first 1 ha strip to be mined. Site establishment may necessitate the clearing of vegetation (that established through succession), the stripping and stockpiling of topsoil, and the introduction of the mining machinery.
- (2) Operational phase that will entail the strip mining of sand from the approved footprint area through direct excavation. The Applicant will make use of a front-end-loader to load the sand directly onto a truck that will deliver it to the clients. Little to no stockpiling will be required and no washing of sand is needed.
- (3) *Decommissioning* phase which entails the rehabilitation of the affected environment prior to the submission of a closure application to the Department of Mineral Resources (DMRE) in accordance with section 43(4) of the MPRDA, 2002. The Closure Application

will be submitted in terms of Regulation 62 of the MPRDA, 2002, and Government Notice 940 of NEMA, 1998 (as amended).

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Figure 1: Satellite view of the proposed mining permit area (yellow polygon) of Skemervlei Trust (image obtained from Google Earth).

This report addresses the findings of the Screening Tool Report (Appendix N), generated from the National Web Based Environmental Screening Tool, and provides motivation for the various specialist studies identified to be conducted. As per the Screening Tool Report, the proposed site is located within a very high area from an agricultural perspective, a high sensitivity area from an animal species perspective, a low sensitivity area from an aquatic biodiversity perspective, a high sensitivity area from a civil aviation perspective, a medium sensitivity area from a plant species perspective, a low

sensitivity area from a defense perspective, a high sensitivity form a paleontology perspective and a very-high sensitivity area from a terrestrial biodiversity perspective.

## Summary of specialist reports.

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form):-

Table 1: Summary of specialist reports

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT  (Mark with X if applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED	
The screening report for an environmental authorisation, as required in terms of the 2014 NEMA EIA Regulations on a portion of Portion 2 (Remaining Extent) of Farm 199, Clanwilliam, Western Cape Province. identified the following list of specialist assessment for inclusion in the assessment report:				
Agricultural Impact Assessment;				
Archaeological and Cultural Heritage Impact Assessment;				
Paleontology Impact Assessment;				
Terrestrial Biodiversity Impact Assessment;				
Aquatic Biodiversity Impact Assessment;				
Hydrology Assessment;				
Noise Impact Assessment;				
Radioactivity Impact Assessment;				
Traffic Impact Assessment;				
Geotechnical Assessment;				
Socio-economic Assessment;				

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- Plant Species Assessment;
- Animal Species Assessment.
- Civil aviation Impact Assessment

Skemervlei Trust (hereafter referred to as the applicant) appointed Greenmined Environmental (Pty) Ltd as the environmental impact assessment practitioner (EAP) to undertake the EIA associated with the mining permit application. In light of this Greenmined would like to respond as follows to the list of required specialist studies:

Agricultural Impact Assessment (AIA):

The proposed mining footprint will be developed over an area currently used as center pivots. The earmarked mining area directly borders an existing quarry. The decision to cease agricultural activities on this plot was driven by the landowner's commitment to sustainable practices. If the sand mining project were to continue, it would be beneficial for the farm as the removal of topsoil will allow them to get to the more nutrient rich soil for future farming purposes. According to the AIA (Appendix G) the conclusion of this assessment is that the proposed mining will not have an unacceptable negative impact on the agricultural production capability of the site. If rehabilitation is successful, the land is likely to have a slightly higher agricultural potential than what it was pre-mining. With effective mitigation, the impact on agricultural potential is therefore assessed as having low significance.

Archaeological and Cultural Heritage Impact Assessment (HIA) & Paleontology Impact Assessment (PIA):

A Notice of Intend to Develop will be submitted to SAHRIS – WP and should they require a HIA and/or PIA the appropriate specialists will be commissioned to undertake the studies.

Terrestrial Biodiversity Impact Assessment (TBIA) & Animal Species Assessment (ASA):

The screening tool report shows that the earmarked area partially extends into a high to medium animal sensitive area. Ground truthing on the site has shown that the site has been disturbed years ago and is situated right next to an operating mining area.

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Aquatic Biodiversity Impact Assessment (ABIA) & Hydrology Assessment (HA):

Due to the nature of the sand to be mined (heavy), very little to no water is needed as dust levels are typically low. Dust generated on the access road will as far as possible be managed through alternative dust suppression methods in order to restrict water use to the absolute minimum. Under very windy/dusty conditions the permit holder might have to substitute the above-mentioned dust suppression methods with the spraying of water, in which case water will be bought and transported to the farm in a water truck that will moisten the problem area. A maximum of 10 000 l/month is expected to be needed during the dry months. The screening report shows that the aquatic biodiversity combined sensitivity of the area is low. There are no watercourses within the proposed application area, no need could be identified for an ABIA and/or HA.

Noise Impact Assessment (NIA):

The potential impact on the noise ambiance of the receiving environment is expected to be of low significance due to the location of the proposed mining area being far away from residential dwellings and will be bordering an existing mine. Due to the small scale of the operation a NIA is not deemed applicable.

Radioactivity Impact Assessment

A radioactivity impact assessment is not deemed necessary for the proposed mining operation that will not store any chemicals on site, perform activities of radioactive nature or generate hazardous waste of radioactive nature.

Traffic Impact Assessment (TIA):

The proposed mining area can be reached with an existing farm road that will be upgraded where needed. The property has direct access to the N7 via a formal turn off that will also be used by the mining contractor. The Department of Roads will be consulted during the EIA process, and should they require a traffic impact assessment, the appropriate specialist will be contracted for the study. However, at this stage no need could be identified for a traffic impact assessment.

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS	REFERENCE TO APPLICABLE SECTION OF
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		THE EIA REPORT	RECOMMENDATIONS HAVE BEEN INCLUDED
		(Mark with X if applicable)	
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#### Geotechnical Assessment:

No reason for a geotechnical assessment could be identified as no permanent infrastructure will be established at the proposed mining area.

#### Socio-economic Assessment (SEA):

The quarry on the property will create job opportunities, generate income that will benefit the landowner, local as well as national economy, and indirectly assist with the improvement of road and other infrastructure in the surrounding area. The Applicant is in negotiations with the landowner of the property. No mining employees will reside at the proposed mining area, and therefore the potential negative impact of the proposed activity on the socio-economic status of the surrounding area is deemed to be low. Considering this, no socio-economic assessment is not deemed necessary

#### Civil Aviation Impact Assessment:

A civil aviation impact assessment is not deemed necessary for the proposed mining activities since the operations will have no effect on the air corridor that is situated above the area. The proposed operations will not consist of any high infrastructure or signal preventing equipment that will prevent airplanes from flying. The proposed mining activities is at 830 ft which makes the safe flying altitude much higher than the operating altitude of the proposed quarry and will not infringe on air traffic operations even if aircraft do fly directly over the proposed mining area. The lowest safe altitude for aircraft will still allow more than enough clearance so that mining activities does not infringe on air traffic.