

**BACKGROUND INFORMATION DOCUMENT (BID) FOR THE PROPOSED PROSPECTING RIGHT APPLICATION FOR RARE EARTHS, MOLYBDENUM ORE & COPPER ORE ON THE REMAINING EXTENT, PORTION 01, 02, 03, 04, 05, 06 & 07 OF THE FARM KOMKANS 141 SITUATED WITHIN THE ADMINISTRATIVE DISTRICT OF VAN RHYNSDORP, WESTERN CAPE PROVINCE.**

**COMPETENT AUTHORITY: DEPARTMENT OF MINERAL RESOURCES AND ENERGY**

**APPLICATION REFERENCE: WC 30/5/1/1/2/ 10392 PR**

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## TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
1 PROJECT BACKGROUND .....	1
2 PROJECT LOCATION.....	1
<b>3 Policy and Legislative Context.....</b>	<b>2</b>
4 DESCRIPTION OF THE PROPOSED ACTIVITIES .....	5
4.1 Phase 1: Literature review and Field Mapping .....	6
4.1.1 Literature Review .....	6
4.1.2 Mapping .....	6
4.2 Phase 2: Geophysical Survey.....	6
4.3 Phase 3: Discovery Drilling and Sampling.....	6
4.3.1 Phase 3: Resource drilling and sampling.....	7
4.3.2 Phase 5: Pre-feasibility study.....	7
4.4 Activities associated with the proposed prospecting .....	7
<b>4.4.1 Site Access .....</b>	<b>7</b>
4.4.2 Access roads.....	8
4.4.3 Drill station establishment .....	8
4.4.4 Core Drilling .....	8
4.5 Project scheduling.....	8
5 THE EIA PROCESS .....	9
5.1 LISTED ACTIVITIES.....	9
5.2 The Project’s EIA Process .....	9
6 PUBLIC PARTICIPATION PROCESS .....	10
6.1 HOW CAN YOU GET INVOLVED .....	10
6.2 NOTICE OF ENVIRONMENTAL REPORT: .....	10
6.3 HOW TO CONTACT US .....	11

# 1 PROJECT BACKGROUND

Tambuka Pty Ltd proposes to undertake prospecting activities for Rare Earths, Molybdenum Ores and Copper Ore.

The proposed prospecting activities triggered listed activities in terms of the Environmental Impact Assessment (EIA) Regulations of 2017 gazetted in terms of the National Environmental Management Act (NEMA), no 107 of 1998. The EIA process must therefore be undertaken by an Independent Environmental Assessment Practitioner (EAP). Tambuka Pty Ltd has appointed Mielalani Consultancy, an independent consulting company, to conduct an Environmental Impact Assessment (EIA) process in terms of the EIA Regulations of 2017, to evaluate the potential impacts of the proposed project.

# 2 PROJECT LOCATION

The proposed prospecting activities will be undertaken in respect with the remaining extent and portion 01- 07 of the farm Komkans 141 within Matzikama Local Municipality under the Jurisdiction of West Coast District Municipality in Western Cape Province. The proposed site is located approximately about 40 Kilometres west of Nuwerus town.

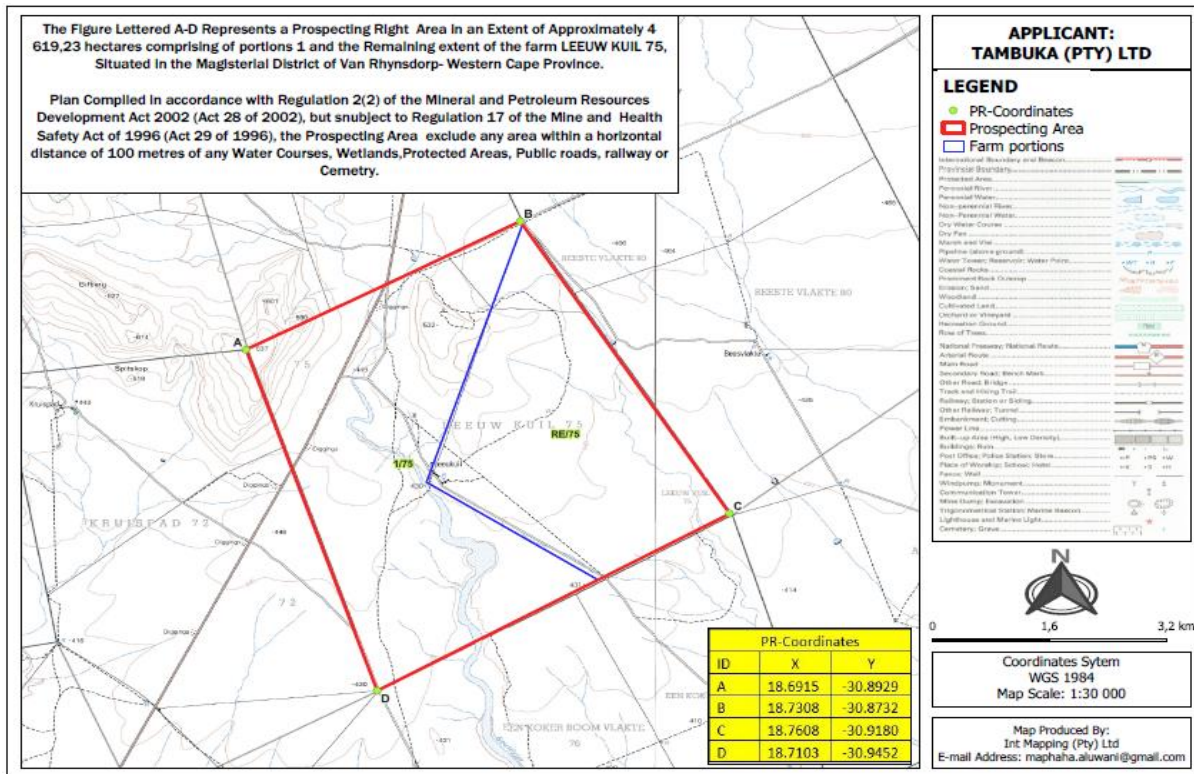


Figure 2-1: Locality Map

### 3 Policy and Legislative Context

Applicable legislation and guidelines used to compile the report	Applicability to the proposed prospecting project
Constitution of South Africa, specifically section 24(a), (b)(i) – (iii).	The prospecting activities will only proceed after effective consultation to protect the Rights of interested and affected parties.
Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) section 16(1)(a)-(c).	The application for prospecting right was lodged and all required documents submitted.
National Environmental Management Act (107; 1998) section 23(1) & (2), 24(1); & 24(4)(b)(i) – (vii).	<ul style="list-style-type: none"> <li>✓ The receiving environment will be thoroughly assessed;</li> <li>✓ Probable impacts will be identified and their mitigation measures and monitoring mechanisms developed;</li> <li>✓ Financial Provision for rehabilitation will be determined and the applicant will pay the amount before the right is issued;</li> <li>✓ Affected and Interested Parties will be engaged and given opportunities to get involved in the EIA Process.</li> </ul>
NEMA Environmental Impact Assessment (EIA) Regulations, 2014 as amended; GNR 326 and GNR 327.	<ul style="list-style-type: none"> <li>✓ All triggered listed activities have been identified and applied for;</li> <li>✓ The Basic Assessment Report and the Environmental Management Programme will be compiled in terms of Appendix 1 and 4 of GNR 326.</li> <li>✓ The public participation will be done as per the said Regulations.</li> </ul>
National Environmental Management: Waste Act	The project activities do not trigger a waste management license but proper waste management measures will be addressed in the EMPr.

Applicable legislation and guidelines used to compile the report	Applicability to the proposed prospecting project
Section 38 of the National Heritage Resources Act (Act No. 25 of 1999).	Investigations will be made to assess the Heritage Resources on site should there be any.
The National Environmental Management Biodiversity Act (NEM:BA), 2004 (Act No. 10 of 2004), provides for:	The receiving environment will be assessed which will include investigation of the terrestrial ecology.
The National Water Act (NWA) (Act No. 36 of 1998)	✓ There are watercourses within the proposed site, the activities must be conducted such that water availability and quality is not impacted.
National Water Act, 1998 (Act No. 36 Of 1998). Regulation 704 (GN 704) Regulations on use of water for mining and related activities	
Mine Health and Safety Act, 1996 (Act No. 29 of 1996);	Activity based risk assessment will be conducted prior undertaking the site prospecting activities.
Guideline document for the evaluation of the quantum of closure-related financial provision provided by a mine; 2005.	The financial provision will be calculated based on this guideline.
National Freshwater Ecosystems Priority Areas (NFEPA, Nel et al., 2011);	Investigations will be conducted to determine if there are any NFEPA Wetlands resources on site.
Mining and Biodiversity Guidelines 2013	The site sensitivity will be assessed against the Guideline

<b>Applicable legislation and guidelines used to compile the report</b>	<b>Applicability to the proposed prospecting project</b>
White Paper on Environmental Management Policy, 1997	Probable impacts will be investigated, assessed and mitigation measures provided.
White Paper on the Conservation and Sustainable Use of South Africa' s Biological Diversity, 1997	Investigations will be conducted to determine ecological site sensitivities
World Heritage Convention Act, 1999	Investigations will be conducted to identify heritage and cultural resources
Guideline on Need and Desirability, Department of Environmental Affairs; 2017	The Need and Desirability for the proposed project will be investigated, assessed and reported in terms of the guideline.
Stakeholder Engagement, Integrated Environmental Management, Information Series 3; 2002	The public Participation Process will be undertaken in terms of this guideline and the 2017 EIA Regulations.
Scoping, Integrated Environmental Management, Information Series 2, Department of Environmental Affairs and Tourism (DEAT), Pretoria; 2002	The project environmental scoping will be undertaken in terms of the guidelines. The scoping process will be undertaken to ensure that all key aspects of the proposed activities were understood and investigated.
Guideline 5: Assessment of Alternatives and Impacts in support of the Environmental Impact Assessment Regulations, 2006	Project alternatives will be investigated.

#### **4 DESCRIPTION OF THE PROPOSED ACTIVITIES**

Prospecting is the search of clues that indicates that there are ore bodies contain Rare Earths and Molybdenum Ore, deposit beneath the surface. It is generally the search of Rare Earths, Molybdenum Ore and Copper Ore, to determine if they are mineable at a profit. The confidence of mineral deposit is gained through using maps and historical data, geophysics, ground truthing, geochemistry which are considered non-invasive activities.

When the local geology is understood, siting for drilling can then be undertaken. Drilling is done with fairly large machinery that use diamond-tipped, hollow drill 'bits' which produce varying amounts of 'core' depending on the extensiveness of the drill program. Diamond-tipped bits are used because they can go through the hardest of rock, and the core produced is cylindrical and not typically more than a couple inches in diameter. The details of each drill hole (including direction and depth) are recorded in much detail, each meter of core is marked with the depth that it came from and which hole, if there's been multiple drilled.

Once core has been obtained, samples are then sent to a laboratory facility to be 'assayed', which is essentially assessing the ore body physical and chemical properties in the rock. Using this data from the assaying, along with the records of where the assayed drill core came from, the data is re-interpreted to determine subsequent phases of follow-up drilling. If drilling continues, different drilling techniques are used to build confidence in the deposit by determining the size and grade of the 'strike' and 'dip'.

The objective will be to produce a 3D resource model of where and how the ore body is located underground. All this information is used to complete an 'official resource estimate', which is a non-biased report that is required to have been developed by a 'Qualified Person' (QP). The 'Official Resource Estimate' will outline the categories of mineral resources (inferred, indicated, and measured) as well as the quantity and grade of each resource category.

Prospecting activities will be undertaken in five different phases of which each is dependent on the preceding phase. Each phase will provide information that will determine whether the prospecting activities should be continued or abolished.

## **4.1 Phase 1: Literature review and Field Mapping**

### **4.1.1 Literature Review**

Phase 1 will include the collection and interpretation of all available data and the compilation of a Geographic Information Systems (GIS) database. The information to be collected will include aerial photos, Orthophoto, aeromagnetic data, Topo-cadastral maps, and geological maps, results of historic exploration programmes and any other published literature and maps. The desktop study will aid in compiling a preliminary geological model of the area to be utilized in the planning geological mapping and sighting of drill holes. It also includes accruing results from the companies that has already worked on the area. This provides information such as geological setting, biodiversity as well as water management.

### **4.1.2 Mapping**

Generally mapping involves the geologist walking the area and making observations which are then recorded on a map. To enhance the quality and reliability of geological maps data obtained during geophysical surveys will be used. Mapping is completed that meaningful structural and geological data may be derived from it and to confirm that the desktop study is accurate.

## **4.2 Phase 2: Geophysical Survey**

The applicant will undertake aeromagnetic surveys to map the subsurface lithology without undertaking invasive prospecting activities. The aeromagnetic survey is critical for locating ore bodies. Once the position of the ore is known the drilling sites can then be sited. A provisional drill sites will be made available with Draft Reports. The provisional plan will be updated based on the outcome of the geophysical surveys.

## **4.3 Phase 3: Discovery Drilling and Sampling**

The results of the Phase 1 and 2 will be used to assist in the ideal location of drill holes at maximum depth of 250 m. Cores will be sampled and prepared for laboratory analysis. This phase is aimed at establishing if there are ore deposits within the proposed site.

### **1.1.1 Phase 4: Sample analysis/ Assaying**

The assaying will be conducted to determine the mineral content for each core at a South African National Accreditation System (SANAS) accredited laboratory.



Sample analysis will inform if there are applied ore deposits within the proposed site. Should there be ore deposits applied on site, preliminary economic assessment will be conducted.

#### **1.1.2 Phase 5: Preliminary economic assessment**

A preliminary economic assessment is a study conducted to determine whether a project has the potential to be viable. At this stage, the mineralization, regardless of its quantity and quality, is always considered to be a mineral resource. This study is generally based on industry standards rather than derived from detailed site-specific data.

#### **4.3.1 Phase 3: Resource drilling and sampling**

Subsequent to Phase 3 drilling, the results will be used to design a systematic drill holes to define the site resource. This drilling programme will be more focussed on parts on which the ore deposits were intersected. At this point the position of the systematic drill holes is provisional and subjected to change based on outcomes of various phases.

#### **4.3.2 Phase 5: Pre-feasibility study**

The pre-feasibility and feasibility studies are more detailed. By the time a decision is made to proceed with a pre-feasibility study, a preliminary mineral resource report has been finalized and an orebody model demonstrating its shape, tonnes, and grade is available. A resource cannot be converted to a reserve unless it backed up by at least a pre-feasibility study. Their results will show with more certainty whether the project is viable. At this point, the mineral resource, or a portion thereof, becomes a mineral reserve. The activities associated with the Prospecting Work Programme will be scheduled over a period of five years

### **4.4 Activities associated with the proposed prospecting**

#### **4.4.1 Site Access**

The undertaking of prospecting activities will require access into privately owned properties. Access into these properties must be through access agreements contracts signed between each property owner and Tambuka (Pty) Ltd. The access agreements will be a legal document effective from the date of signing until the exit contract is signed off. The access agreement contracts will detail specific conditions relevant to each property owner.

#### **4.4.2 Access roads**

There is an existing road through the site, the same road will be primary access road into the prospecting area. New access roads will be created to reach the drilling stations.

#### **4.4.3 Drill station establishment**

The establishment of the drill stations will chiefly be dictated to by the underlying geology, however sensitive features must be protected at all times. The provided drill stations layout map is provisional and subjected to change based on outcomes of other preceding phases.

#### **4.4.4 Core Drilling**

The primary objective is to obtain drill cores for assaying. The affected parties must be consulted and informed of the drilling programme which details the duration of the proposed activities and their input be incorporated into the programme.

#### **4.5 Project scheduling**

The department of Mineral Resources and Energy allows for a maximum of five (5) years to conduct prospecting activities. The five years' period will include project planning and sourcing of the required materials and equipment. At least 5 working days will be required at each drill station and a maximum of twenty boreholes are proposed (can be less than that) and as such an uninterrupted drilling programme can be completed in five months.

## 5 THE EIA PROCESS

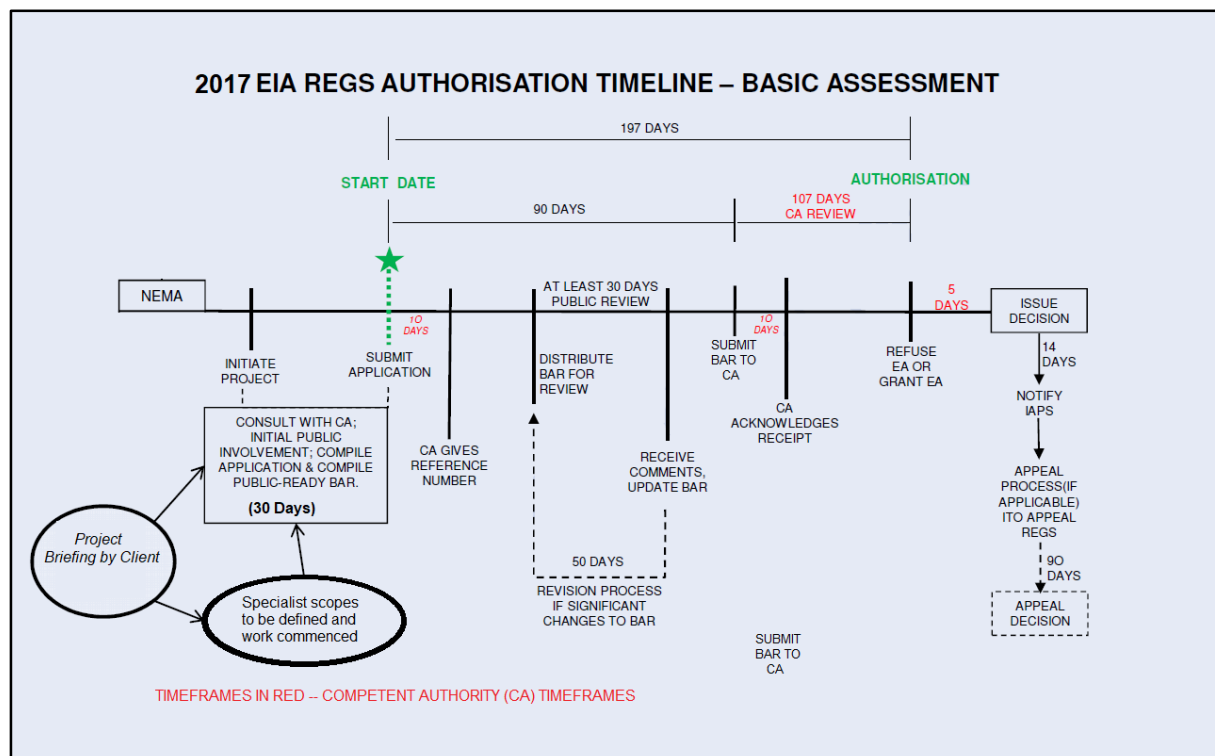
The proposed ore prospecting activities have triggered activities listed in Listing Notice 1 (GNR 327) of the EIA Regulations and therefore require a Basic Assessment Process to be undertaken

### 5.1 LISTED ACTIVITIES

Applicable Listing Notice	Activity No and Description	Listed Activity relevancy to the project
GNR 327 of 2017	<p><b>Listing Notice 1: Activity 20:</b></p> <p>Any activity which requires a prospecting right in terms of section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).</p>	<p>Tambuka proposes to undertake Rare Earths Molybdenum Ore and Copper Ore, prospecting activities on the Remaining extent and portion 01 – 07 of the farm Komkrans 141.</p>

### 5.2 The Project’s EIA Process

As discussed above the proposed Prospecting activities have triggered activities in Listing Notice 1 (GNR 327) and therefore a Basic Assessment process must be undertaken.



## **6 PUBLIC PARTICIPATION PROCESS**

The public participation process is the process of identifying, inviting and engaging with potential and registered interested and affected parties (I&APs). According to Chapter 6 of the EIA Regulation of 2017 (GNR 326), the I&APs (potential and registered) must be notified about the proposed Prospecting activities through fixed notices, newspaper advert, and written notices (SMS, WhatsApp, emails, etc.).

The registered IAPs must in terms of this regulation be provided with a minimum of 30 days to review all environmental reports which in minimum must be the Basic Assessment Report and the Environmental Management Programme.

An I&APs register will be maintained for submission to Western Cape Department of Mineral Resources and Energy on completion of the Public Participation Process. All the received correspondence will be included in the final reports to be submitted to the WC DMRE.

### **What Public Participation is not?**

- Not a public relations exercise;
- Not a means to satisfy personal grievances – rather to record issues related to the proposed construction activities and to respond to them

### **What is expected from the Public?**

- The Public is expected to participate and be involved in the decision making by giving relevant comments to the project.

### **6.1 HOW CAN YOU GET INVOLVED**

- By responding (by phone, fax or e-mail) to our invitation and confirm your involvement in the process
- By completing the attached comment sheet/ form and mailing or faxing before the 30 days' public participation time period is over.
- By telephonically contacting consultants if you have a query, comment on the project within 30-days public participation process period.

### **6.2 NOTICE OF ENVIRONMENTAL REPORT:**

The Environmental Reports will be made available to all registered Interested and Affected Parties through emails for review for a period of 30 days. The reports will also be emailed upon request.

### 6.3 HOW TO CONTACT US

In order to participate in the process and/or provide comments and or to register as an Interested and Affected Party (I&APs) pertaining to the above-proposed activity, you are invited to contact Mielelani Consultancy within the prescribed time period. We may be contacted as follows:

Principal EAP	Khuliso V Ramulondi (Pr.Sci.Nat; Reg. EAP) khuliso@mielelani.co.za / 081 312 3951
EAP	Phathutshedzo Mugagadeli Phathu@mielelani.co.za / 073 796 6769
Address	21 Sunriseview, 24 Iron terrace, Westpark, Pretoria, 0183
Fax	086 560 5316
Preferred Email	consultations@mielelani.co.za

***See the comment sheet appended to this BID***

**REGISTRATION SHEET FOR THE PROSPECTING RIGHT APPLICATION BY TAMBUKA (PTY) LTD:**

**REPLY SLIP: PLEASE FILL-IN AND RETURN**

**DMRE REF NO. WC 30/5/1/1/2/10392 PR**

**ATTENTION: Phathutshedzo Mugagadeli**

**Tel: 012 012 5580 / 082 404 8733/ 081 312 3951**

**Email: consultations@mielelani.co.za/ info@mielelani.co.za**

Name:			Surname:	
Tel:		Fax:		Cell:
Address:				
Email:				
Record your comments below:				
Signature:				
Details of another person whom you think should be consulted:				
Name & Surname:				
Name of Institution:				
Tel/ Cell or Fax:				
Address:				

*Signature:.....*

*Date:.....*

***THANK YOU FOR YOUR CONTRIBUTION***

***You may use your own document to comment if you so wish***