

# BACKGROUND INFORMATION DOCUMENT

**BHEKIMUZI SHARE 1 TRUST**

*Prospecting Right Ref: KZN30/5/1/1/2/10866PR*

**Prospecting Right and Environmental Authorisation for the  
Proposed Bhekimuzi Share 1 Trust Project**

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EXPLORATION | MINING | BENEFICIATION

## PURPOSE OF THE DOCUMENT

The purpose of this Background Information Document (BID) is to consult with lawful landowner(s) and all Interested and Affected Parties (I&APs) of the proposed prospecting project and to provide the I&APs with the opportunity to receive information, provide comments, and to raise any concerns related to the prospecting right application process as required.

*Background Information Document: Basic Assessment Process for a Prospecting Right Application, Ulundi Magisterial District, Kwa-Zulu Natal Province.*

## INTRODUCTION

Bhekimuzi Share 1 Trust submitted an application for a Prospecting Right and an Environmental Authorisation in order to prospect for coal. The application for the Prospecting Right was given provisional acknowledgement by the Kwa-Zulu Natal Province Department of Mineral Resources on the 3<sup>rd</sup> of April 2019. The aim of the proposed project is to explore and quantify the potential coal reserve. In order to undertake prospecting activities, Bhekimuzi Share 1 Trust requires a granted Prospecting Right (PR) in terms of the Mineral and Petroleum Resources Development Act (MPRDA, Act No.28 of 2002). Bhekimuzi Share 1 Trust is also required to obtain an Environmental Authorisation (EA) in terms of the National Environmental Management Act (NEMA, Act No. 107 of 1998) which requires the submission of a Basic Assessment Report (BAR) and an Environmental Management Programme (EMPR). Geopoint Africa (Pty) Ltd has been appointed by Bhekimuzi Share 1 Trust as the Environmental Assessment Practitioner (EAP) to assist in complying with these requirements.

## AIM OF THE BID

This document aims to provide the following:

- To provide background information to landowners and interested and affected parties (I&APs) on the proposed prospecting activities and the legal framework.
- To give an overview of environmental baseline information and environmental impacts that may potentially occur.
- To explain the Public Participation Process (PPP) to be followed.
- To consult stakeholders and provide them the opportunity to register as I&APs.

## LOCALITY

The area of interest is approximately 15 929.95Ha and is 33km north of Ulundi. The proposed prospecting area is located within the Ulundi Magisterial District. Figure 1 below indicates the locality map.

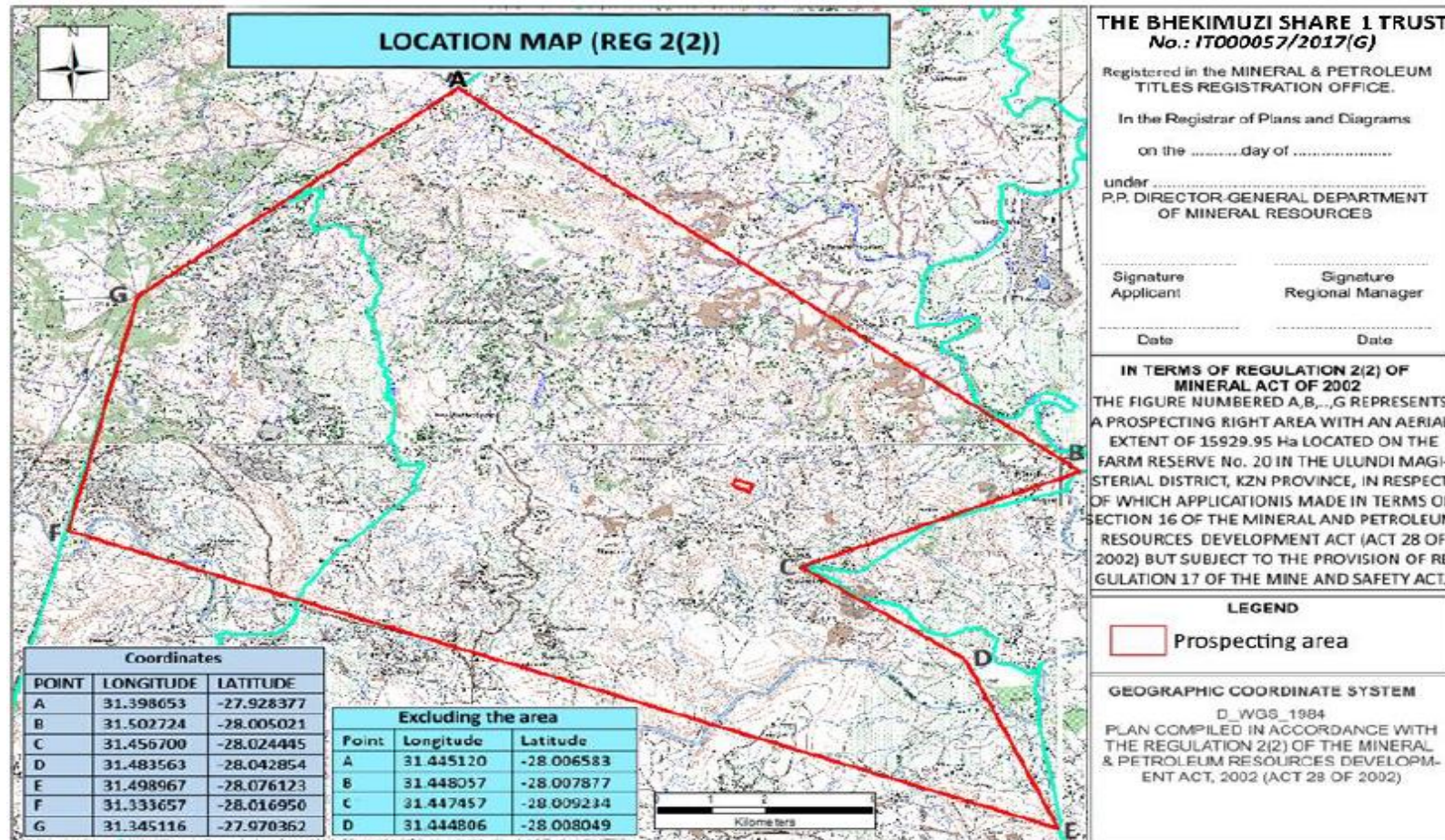


Figure 1: Locality Map of Farm Reserve No. 20 15840GU

## THE NEED FOR THE PROJECT

The proposed mineral to be mined is coal with the purpose of supplying it to local, regional and international customers. Coal dominates South Africa's indigenous energy resource base. It provides approximately 77% of South Africa's primary energy need. This is unlikely to change anytime soon because there is a lack of a suitable alternative to coal as an energy source. Many of the deposits can be exploited at relatively favourable costs and as a result, a large coal mining industry has developed. Approximately 28% of the country's coal production is exported.

This project will not only benefit the company but the community as well. The project will contribute to the economic development in the Local Municipal area. This is because:

- The project has the potential to improve the living standard of people residing within and around affected communities by offering job opportunities for the locals and will therefore alleviate poverty. The jobs created would change their lives for the better, they shall be given an opportunity to gain experience within the prospecting sector of the mining industry and earn an income.

## LEGISLATIVE REQUIREMENTS

The prospecting right application is subjected to the following Acts:

- The Mineral and Petroleum Resources Development Act, 2002 (act no.28 of 2002) ("MPRDA"). In terms of the MPRDA, the application for a prospecting right is subject to an application for an environmental authorisation in terms of NEMA.
- NEMA GN 983, Listing Notice 1, Activity Number 20: Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the MPRDA (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to the prospecting of a mineral resource, including

activities for which an exemption has been issued in terms of section 106 of the MPRDA.

## BASIC ASSESSMENT PROCESS

The Basic Assessment (BA) Process is a tool used to obtain an objective view of the potential impacts of a proposed project including environmental, social and economic impacts. A BAR is compiled as part of the Prospecting Right Application to ensure that potential impacts associated with the proposed prospecting activity are identified, considered and mitigated. It is intended to supply the competent authority with sufficient information to make an informed decision in granting or refusing an environmental authorisation associated with the prospecting right application.

The Basic Assessment Report will encompass the following:

- Description of the local environment including environmental conditions, historic and cultural aspects and socio economic conditions,
- Identification and assessment of the significance of potential impacts of the proposed prospecting activities on the local environment,
- Evaluation of the proposed mitigation and management options available to minimise any negative impacts and to enhance any positive impacts,
- A record of any issues, comments and concerns raised by I&AP's and minutes of any meetings held with stakeholders.

The BA can be described as two interlinked processes which result in a BAR. Namely the Technical Process and the Public Participation Process:

### I. **Technical process involves :**

- ✓ Submitting an Application form to the DMR via online portal;
- ✓ Compiling the Draft BAR
- ✓ Submit the Draft Bar to the DMR and I&APs for comment
- ✓ Incorporate comments into final Draft BAR
- ✓ Submit final BAR to the DMR

## II. Public participation:

Public input is an important legislated requirement of the prospecting right application process. The proposed PPP for this study will include a number of steps, as listed below:

- ✓ Issuing notification of this proposal to:
  - ❖ Owners and occupiers of the farms as well as those adjacent to the site;
  - ❖ The municipal councillor and local taxpayers association;
  - ❖ The municipality which has jurisdiction;
  - ❖ Any organ of the state having jurisdiction;
- ✓ Placing an advert in a local newspaper;
- ✓ Placing a notice on the site;
- ✓ Meetings with landowners and key I&APs, as required; and
- ✓ Public review of the BAR.
- ✓ Documenting stakeholder correspondence within the Draft BAR that will be made available for public review.
- ✓ Notifying the stakeholders when the final BAR is available for public review and the submission thereof
- ✓ Notifying stakeholders when the Environmental Authorisation is issued.

## PROJECT DESCRIPTION

Invasive and non-invasive prospecting activities will be undertaken as part of the proposed Prospecting Work Programme. The main activities to be undertaken includes:

### Phase 1: Non-invasive Prospecting

This phase is made up of the non-invasive prospecting methods. These will take place across the whole property. These are as follows:

Desktop analysis (satellite imagery, available mapping, literature review, etc.). This phase has already been initiated through a literature review of geological articles and previous prospecting which took place on site. The synthesis of this information and the use of the

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information gained from this prospecting cycle will provide the full picture of the deposit as required by the applicant.

### **Phase 1b**

Site establishment will simply consist of delineation of the survey control points in the field and surface geological mapping will continue. The logistical facility will be required on site.

### **Phase 1c and 1d**

Phase 1c and 1d are the first steps in defining the geological model. The first actual prospecting will consist of hand collected rock samples in the stream channels or the target areas for geochemical sampling. The sample need only be about 0.5kg and will be sent for geochemical analysis. Although the taking of such samples can be deemed to be an invasive prospecting method, the required sample is so small and given that it is a collection of loose samples (i.e. not requiring a mechanical release from the ore body) and that it will be collected on foot, the impact is so minor as to be considered non-invasive. The types commonly collected will include deflation, loam, stream sediment and rock chip samples. The samples will be sent for analysis.

### **Phase 1d**

A detailed ground magnetic survey over the project area will be conducted to map the mineral zone contacts and potential different facies within the mineral zone, as well as to locate cross-cutting dykes and structures. No samples will be taken and no digging is required at this stage.

### **Phase 1e**

The information gained from the ground-magnetic survey may result in a possible review of proposed pits/trenches or /and drill positions. If this does prove to be the case, then such minor amendments to the Prospecting Work Programme will be lodged with the Department of Mineral Resources, to cater for such changes. Note however that even though the position of the drill holes may alter slightly, the method and environmental impact attenuation measures will not require adjustment-just the positions of the drill holes.

This is an evaluation project and the recovery of mineral quality will be the essential elements of the programme. To this end, samples of the mineralized zones will be extracted by drilling or excavated from pits/trenches. The processing of these samples will be as follows:

1. Assaying
2. Bulk sample treatment for mineral value

### **Description of the planned invasive Activities**

#### Phase 2: Drilling

##### Drilling method

Drilling will be conducted and supervised by Geopoint Africa. The samples will be logged by geologist and transported to the laboratory for full analysis. Note that at each drill site it may be required to drill a series of fanned holes (i.e. holes at different angles from the same position). Drilling will be conducted vertically and inclined. This will result in less environmental damage given that fewer sites will be disturbed.

##### Drilling layout

Phase 2 is initiated by the convening of the appropriate persons to conduct the following tasks:

- ✓ Locate the positions of the core drill holes.
- ✓ Locate and mark access routes to the drill sites. Existing roads will be used wherever possible.
- ✓ Educate / train the staff conducting the prospecting on environmental issues.

The location of the drill-holes will be determined once mapping is completed. Note that the positions of these holes may change on the back of the non-invasive prospecting results. Access for a water tanker with a limited volume of 200-220ℓ of water per hole will be required.

#### Administrative, Decision-making and Rehabilitation

During this phase, the following will take place:

- ✓ The results of the drilling will be fully assessed to obtain an overall picture.



- ✓ Final reporting as required by law will be lodged to the Department of Minerals and Resources.
- ✓ Decision will be made on the way forward.

There are 3 main options:

1. Discontinue the entire operation – should this option be chosen, then the applicant will be required to conduct full rehabilitation of the sites. Closure application will then be lodged and the site eventually left.
2. Continue prospecting - Should such strategy be employed, then rehabilitation of the site may in some places be delayed until the end of the extended prospecting license, if need be. Application for Prospecting license renewal must be lodged timeously and will include metallurgical sampling (and may include additional drilling).
3. Submit mining license application – should prospecting yield positive results, then a mining license application may be lodged at that stage. The entire site will be rehabilitated to prepare the site for future mining that will probably take place as a continuous backfill operation.

## POSSIBLE IMPACTS OF THE LISTED ACTIVITIES

The majority of impacts will be associated with the invasive prospecting stage of the project. The invasive prospecting is comprised of borehole drilling at various locations within the Prospecting Area in order to determine the viability of any future mining operation. Impact assessment methods were developed to:

- ✓ Identify the potential impacts of a proposed development on the social and natural environment;
- ✓ Predict the probability of these impacts.
- ✓ Evaluate the significance of the potential impacts.

Impacts associated with listed activities:

**I. Waste Management**

All waste generated at the drilling site will be collected in plastic or steel drums and removed from site and disposed of at an appropriate waste facility. Hazardous waste will be collected and stored separately and disposed of at an appropriate facility. Chemical toilets will be provided for the employees and sewage will be disposed of at the nearest waste tip or sewage farm. Potential impacts associated with waste management on site include potential contamination of soil and surface water bodies with waste. If the appropriate mitigation measures are adhered to, including making use of portable toilets, buffering of sensitive landscapes, using reputable contractors and disposing of waste at a registered waste facilities the potential impact significance shall be low.

**II. Access roads**

The applicant will require access to the site for both personnel and machinery associated with prospecting activities. Existing routes will be used as much as possible and new access routes will be created only when necessary. Potential impacts associated with the creation and use of access roads include soil compaction, potential hydrocarbon contamination of soil, potential disturbance to wetlands and buffer zones (in instances where prospecting activity proceeds indiscriminately), generation of dust on gravel roads, emissions into the atmosphere through the use of diesel powered equipment, machinery and vehicles, increased noise levels and potential road degradation. However, with the appropriate mitigation strategies in place, including applying buffers to sensitive landscapes and using existing roads and access tracks wherever possible, the significance of these potential impacts can be reduced to low/ moderate-low.

### III. Water Use

Water required for the operation of the drilling rig as well as the potable water for domestic use will be brought in with a water bowser. The details of where the water will be sourced from and the amount required will be finalised at a later stage.

**\*NB: All the possible impacts will be discussed in detail during the public meeting.**

## REHABILITATION

Upon completion of the drilling of each borehole, those that have production potential will be capped, while those with no potential will be sealed and closed. The site will be cleared of all incidental oils and chemicals. All imported materials with potential for contamination will be removed and disposed of at the nearest appropriate waste facility. The sludge pond created by the drilling operations will be pumped out and the mud disposed of at the nearest appropriate waste facility. The running surface of the drilling site will be scarified and the topsoil returned as and where it was removed. Vegetation establishment will be monitored and supplemented as necessary. All works and procedures will be conducted in terms of a written agreement with the land owner and communities. Rehabilitation of the boreholes will be undertaken as soon as drilling has been completed at each site.

## DECISION MAKING BY THE COMPETENT AUTHORITY

The Department of Mineral Resources (DMR) is the competent authority in respect of both the NEMA and the MPRDA processes. Based on the information provided in the BA, the DMR will make a decision regarding the granting of the Prospecting Right authorisation. A Prospecting Right requires an approved environmental authorisation and technical and financial competence which will form part of the decision making for the Prospecting Right application. I&APs will be notified and given direction and information about the appeals process once an Environmental Authorisation has been granted or rejected.

## TIME FRAMES AND IMPORTANT DATES

The Draft BAR and EMP Report will be available as an electronic copy and will be made available for download via dropbox upon request.

In due course a public notice will be advertised within a local Newspaper that will inform I&APs about the public meeting date, venue and time.

I&AP's are invited to review the report and kindly submit any comments to Miss Martha Monoke by no later than the 20<sup>th</sup> of June 2019 using the contact details provided below.

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**The I&APs Registration form to be used has been attached.**

