

BACK GROUND INFORMATION DOCUMENT

Basic Assessment in terms of NEMA and the MPRDA

Minerano Resources Rare Earth Elements – Prospecting Right Application

Reference: WC30/5/1/1/2/10245 EMP

July 2016

PURPOSE

This Background Information Document (“BID”) is intended to provide Interested and Affected Parties (“I&APS”) with information including details regarding the Basic Assessment Application and the manner in which I&APs can provide input or voice any concerns regarding the application. This document also forms part of the formal public participation process (PPP) for the proposed application.

If you wish to register as an I&AP please complete the registration form included in this BID, along with any comments or concerns you wish to voice to the contact listed below. Your details will then be included in the database of stakeholders and you will receive further information as well as documents for review and comment as they become available.

Your comments will ensure that all issues of concern are incorporated into the final Basic Assessment Report and be considered in all decision making processes by the Department of Mineral Resources.

For Enquiries please contact:

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Menar Holding
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Tel: 011 594 9100

BACKGROUND

Minerano Resources (Pty) Ltd, Formerly known as Jamistax (Pty) Ltd, (“Minerano”) submitted a Prospecting Right Application to the Department of Mineral Resources (DMR) on 27 May 2016. The application has since been accepted by the DMR, and Minerano has been instructed to proceed with the PPP and relevant environmental processes.

PROJECT DESCRIPTION

The Prospecting Right application has been submitted to prospect for Rare Earth and associated minerals on portions 52 and 53 of the farm Bitterfontein 47 and portion 4 of Louwxs Cyfer 46. The proposed Prospecting Right area is approximately 5351.98 Ha and is located 7.5km North West of Bitterfontein (refer to **Appendix 1 – Project Locality** and **Appendix 2 – Site Map**).

Prospecting activities will comprise of both non-invasive and invasive methods and may include: desktop and literature studies, geophysical surveys, field surveys and drilling. The Prospecting Right process is expected to be undertaken over a period of 3 years with the potential for renewal depending on results and studies undertaken.

PROJECT MOTIVATION

South Africa is one of the new emerging markets in Rare Earth Mineral production and is set to become a significant contributor to a market that is predominantly supplied by China. Due to the increased demand for Rare Earth Minerals coupled with China’s restriction on the exportation of the valuable element there is a need for increased production and exportation of these minerals. The geology of the prospecting area which includes the Quaternary System, Kliphoek Granite, Kamieskroon Gneiss and Bitterfontein FM Hardeveld Super group, indicates the potential of Rare Earth Elements.

Rare Earth elements are used in a variety of things worldwide. The primary rare earth uses are in the electronics, such as rechargeable batteries, computer memory, cell phones, DVDs, magnets, car catalytic converters, fluorescent lighting, and several other instruments. Other important usage of rare earth metals is in the industries that make use of phosphors, catalysts, and polishing compounds and even air pollution control.

LEGISLATIVE BACKGROUND

The Prospecting Right Application is subject to the following Acts:

- the National Environmental Management Act, 1998 (Act No.107 of 1998) (“NEMA”); and,
- the Mineral and Petroleum Resources Development Act, 2002 (act no.28 of 2002) (“MPRDA”).

In terms of the MPRDA an application for a Prospecting Right is subject to an application for environmental authorisation in terms of NEMA.

The following listed activities are applicable to the proposed project, and thus the application is subject to a Basic Assessment (“BA”) and Environmental Management Plan

- **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, 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.

Cabanga Environmental has been appointed as the Independent Environmental Assessment Practitioners (“EAP”) to review the BA Report and to oversee the PPP for the Prospecting Right Application.

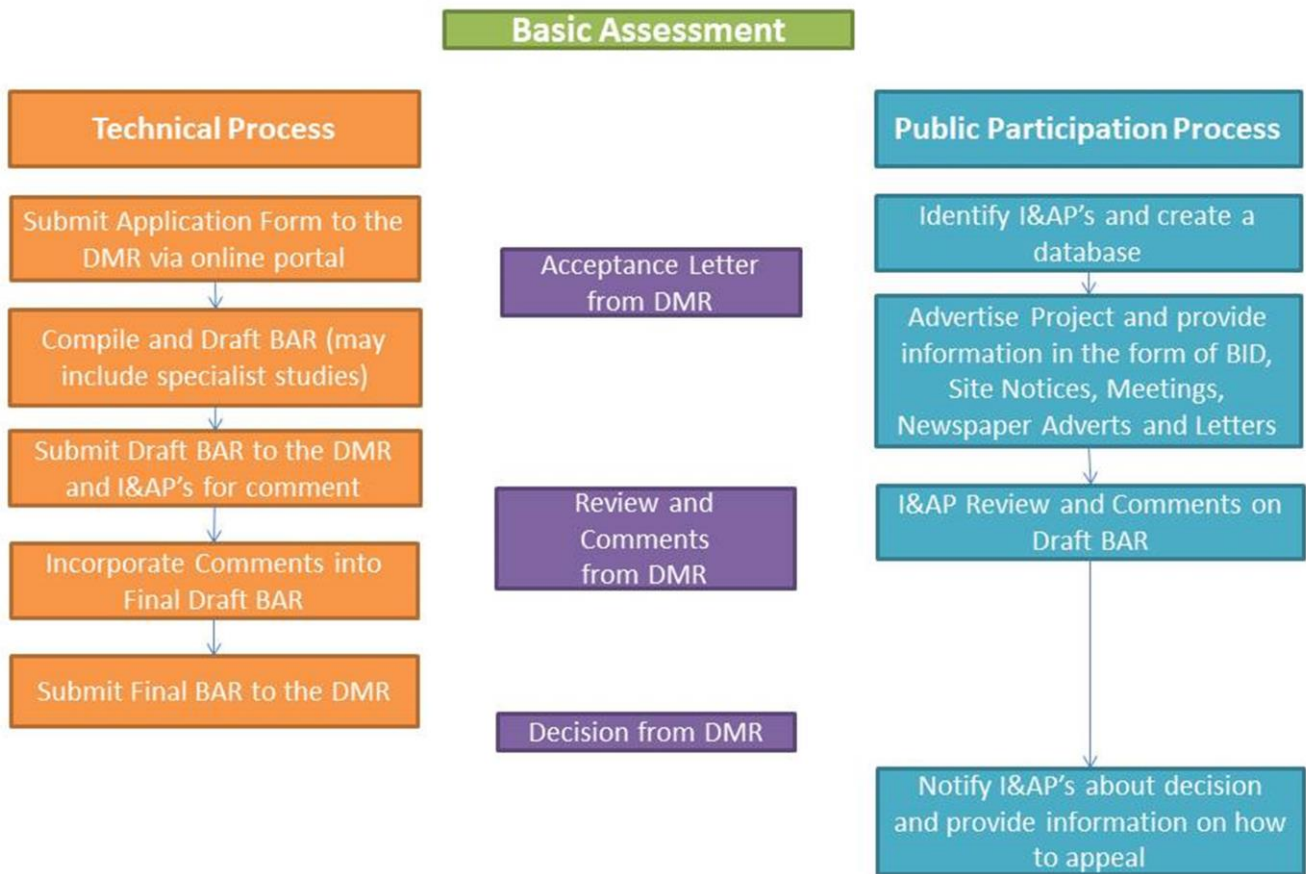
BASIC ASSESSMENT

The 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 BA Report is compiled as part of the Prospecting Right Application to ensure that potential impacts associated with the proposed prospecting activities 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 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 BA Report. Namely the Technical Process and the Public Participation Process:



Impacts Associated with 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: (1) identify the potential impacts of a proposed development on the social and natural environment; (2) predict the probability of these impacts and (3) evaluate the significance of the potential impacts. The timeframe for the prospecting activities is approximately 5 years with invasive prospecting activities expected to span approximately 12 months. The following activities will be undertaken or are associated with prospecting activities to be undertaken:

(a) Access roads

Minerano will require access to the site for both person and machinery associated with drilling activities. 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.

(b) Drilling

Potential impacts associated with the borehole drilling include localised dips in topography if boreholes collapse after material is displaced, cracks and disruption to geological layers, potential compaction of soils, potential hydrocarbon contamination of soil, potential disturbance to wetlands and buffer zones (in instances where prospecting activity proceeds indiscriminately), cracks and disruption to aquifers and irresponsible use of water and water wastage, 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 such as applying buffers to sensitive landscapes, using the latest technology, using biodegradable lubricant, casing the boreholes to prevent collapse and contamination of groundwater resources and the rehabilitation of each borehole drilling site following drilling, the significance of these impacts can be reduced to low/moderate-low.

(c) Ablution facilities (portable toilets)

Potential impacts associated with ablation facilities on site include potential contamination of soil with sewage and potential contamination of surface water bodies with sewage. If the appropriate mitigation measures are adhered including making use of portable toilets, buffering of sensitive landscapes, using reputable contractors and disposing of sewerage at a registered sewerage facility the potential impact significance is low.

(d) General overall prospecting activities

The following impacts are potentially associated with the prospecting programme as a whole; potential contamination of soil with indiscriminately dumped waste or littering, potential contamination of surface water features with indiscriminately dumped waste or littering, potential contamination of groundwater through seepage from indiscriminately dumped waste or litter, alien invasive encroachment and alienation of, and disturbance to, animals. The impact significance can be reduced to low with the appropriate mitigation measures including adherence to the environmental management plan, educating all persons working on site regarding best environmental practice, and proper rehabilitation of borehole sites.

The general overall prospecting activities potential for temporary employment during this phase and socio-economic benefits for small business in the area, as well as the potential for further development should the prospecting programme be fruitful. No mitigation measures are necessary as this is a positive impact for the area.

PUBLIC PARTICIPATION

An important aspect of the BA process is the public participation process which allows I&AP's an opportunity to provide comments on the proposed activities and be informed about the process. This component will allow I&AP's to both influence the course of the technical investigations and review its findings.

I&AP's are any stakeholders, land owners and any otherwise interested or affected persons who would like to comment on or be informed about the project.

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 this, in conjunction with other information such as BEE, technical and financial competence will form part of the decision making for the Prospecting Right application.

Once the competent authority has reached a decision regarding the granting or rejection of the Environmental Authorisation all I&AP's will be notified and given direction and information about the appeals process.

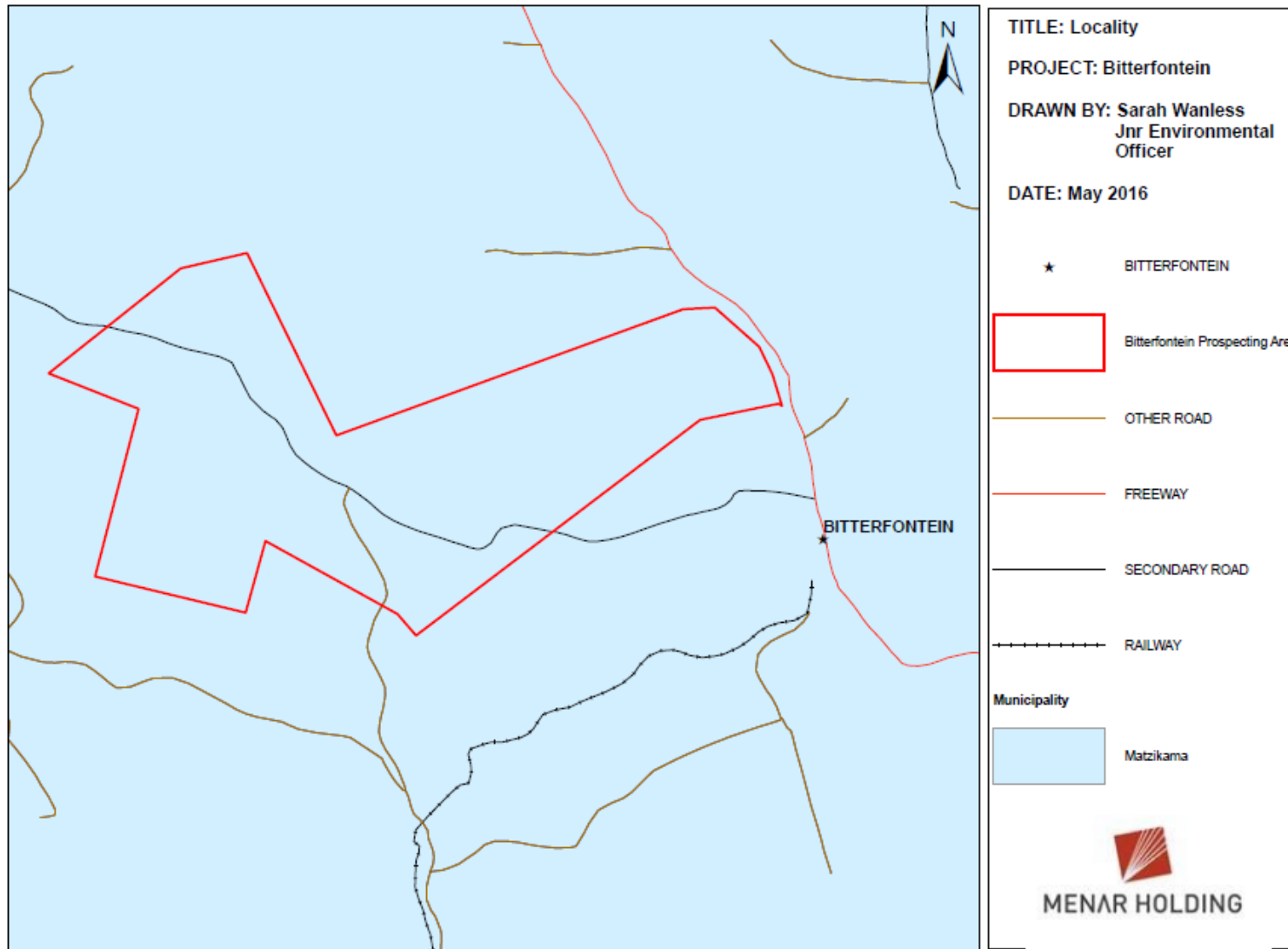
TIME FRAMES AND IMPORTANT DATES

The Draft BA and EMP Report will be available for review from **14th July 2016** at **Bitterfontein Primary School**. An electronic copy can also be made available for download via dropbox on request.

I&AP's are invited to review the report and kindly submit any comments to reach Ms. Lauren Flinders by no later than **Monday 15th August 2016** using the contact details provided below.

Please see page 8 for the I&Aps Registration form

Appendix 1: Locality of Bitterfontein Prospecting Area, Western Cape Province





TITLE: Locality
PROJECT: Bitterfontein
DRAWN BY: Sarah Wanless
Jnr Environmental
Officer
DATE: May 2016

★ BITTERFONTEIN

 Bitterfontein Prospecting Area


 OTHER ROAD

 FREEWAY

 SECONDARY ROAD

 RAILWAY

Municipality

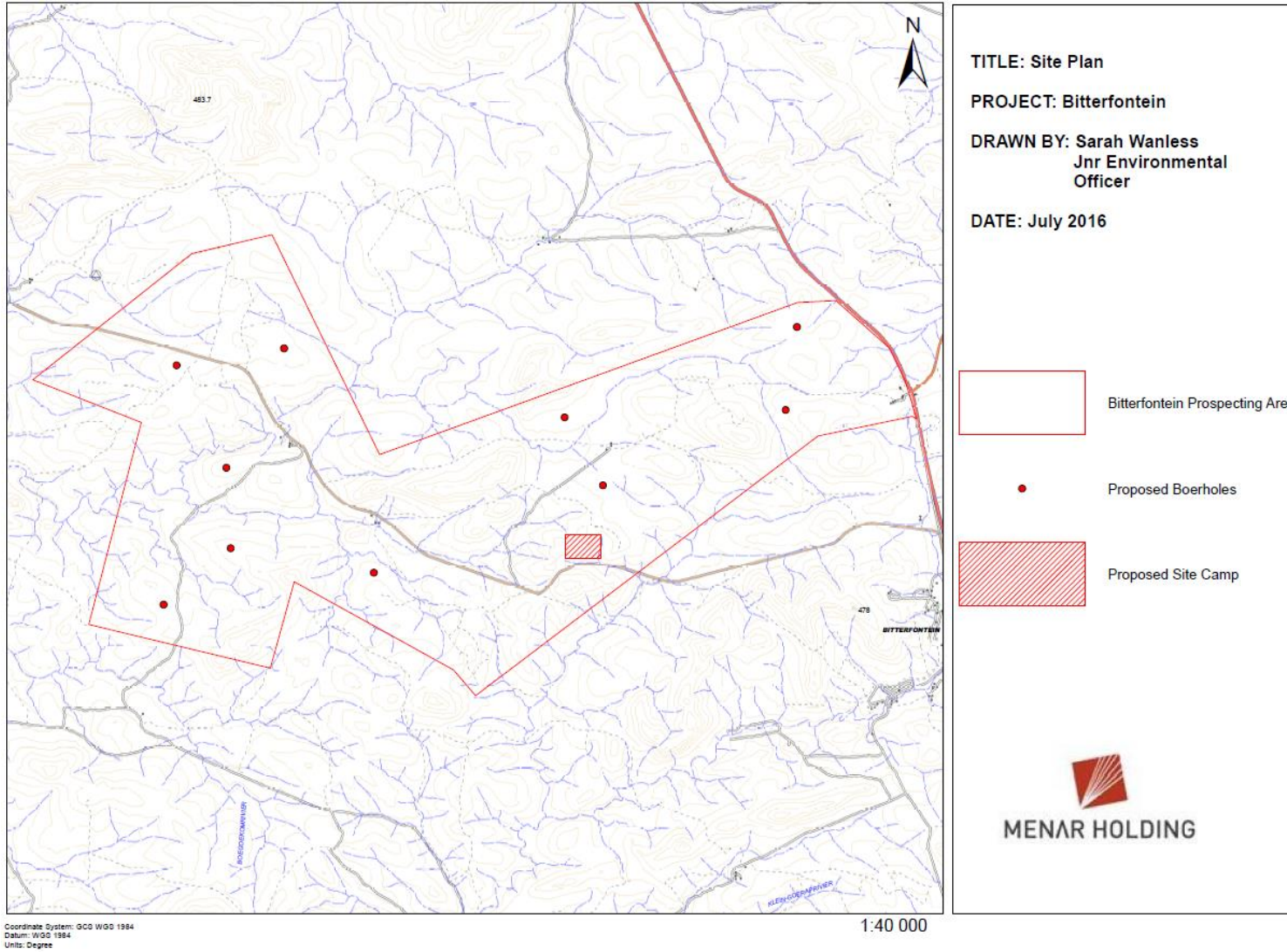
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MENAR HOLDING

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree

1:50 000

Appendix 2: Site Map for Bitterfontein Prospecting Area, Western Cape Province



I&AP REGISTRATION FORM

Full Name _____ Organisation/affiliation/reason for interest _____

Telephone _____ Fax _____ Email _____

Postal Address _____

Preferred method of communication (circle the appropriate option): Telephone/Fax/Email/Post

Comments:

Please complete and return to the contact listed below in order to register as an I&AP.

Ms Lauren Flinders

Menar Holding

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