# BACKGROUND INFORMATION DOCUMENT

**Public Participation Process** 

NC 30/5/1/1/2/10927PR. 9/11/2013



### **BACKGROUND INFORMATION DOCUMENT**

## FINSCH DIAMOND MINE (PTY) LTD, A GROUP OF PETRA DIAMONDS

### 1. Introduction

Finsch Diamond Mine (Pty) Ltd, a group of Petra Diamonds (Alluvial and Kimberlites) has received notice of acceptance from the DMR in respect of their application for prospecting Right for Diamonds on the following farms:

- Portion 3 of the farm 299,
- Portion 1 and the remaining extent of the farm 298.

The proposed prospecting area falls within the Siyanda District Municipality and Kgatelopele local Municipality located at Danielskuil town, situated in Hay District, Northern Cape. See figure 1 showing the location of the proposed area.

Finsch Diamond Mine (Pty) Ltd, is required to comply with the requirements of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), "MPRDA", in terms of section 16(4) of the MPRDA, the company is required to ;

- Submit online a copy of an Environmental Management Plan before 23 October 2013; and
- ❖ To notify in writing and consult with the landowners (Traditional and Title Deed Owners), lawful land occupier, any other person (incl. adjacent and non-adjacent properties) whose socio-economic conditions may be directly affected, local municipalities, relevant Government Departments and Agencies and submit the results of such consultation to the Department of Mineral Resources on or before the 11 September 2013.

Geoscientific Mineral Resources was appointed by Finsch Diamond Mine (Pty) Ltd, a group of Petra Diamonds (Pty) Ltd as the independent consultant to conduct the Public Participation process as part of the Environmental Management Plan Process (EMP). As stipulated in terms of Section 16 (4) b of the MPRDA (Act 28 of 2002), I&APs need to be notified and consulted with, as part of a Prospecting Right Application (PRA).



## 2. Purpose of the background information document

The purpose of this document is:

- To notify potential stakeholders of the prospecting right application-Department of Mineral Resources Reference NC 30/5/1/1/2/10927PRPR.
- Provide background information regarding the proposed prospecting activities for a period of five years.
- Invite potential stakeholders to register themselves as interested and affected parties and to raise issues of importance, share their input, comments and or concerns to inform the scope of studies that forms part of the Environmental Management Plan.
- To provide information on the initial environmental work to be done to meet requirements of the Environmental and Prospecting Legislative.
- To inform the Affected and Interested Parties of the requirements in terms of all governing legislation.

Petra Diamonds and Geoscientific Mineral Resources process seeks to gather comments, suggestions, issues and concerns of stakeholders.

# 3. Information regarding the proposed prospecting area.

The proposed prospecting area falls within the Kgatelopele local Municipality located at Danielskuil town, situated in Hay District, Northern Cape. (Fig 1).



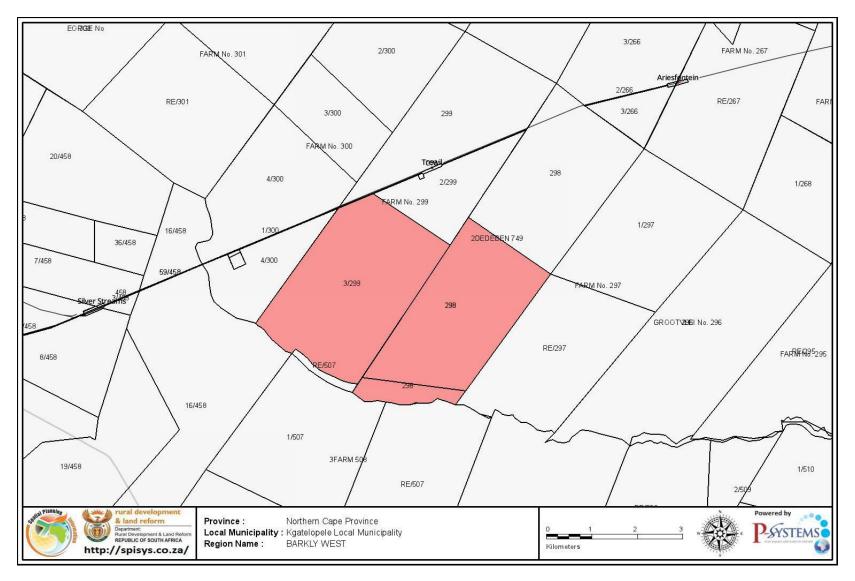


Figure 1: Location of the Proposed Prospecting Area



## 4. Petra Diamonds - A Brief Overview

Petra Diamonds SA (Pty) Ltd has lodged an application for prospecting rights with the Department of Mineral Resources, and the acceptance was received on the 01 August 2013.

Environmental Management Plan will be drafted and submitted to the Department of Mineral Resources on the **23**<sup>rd</sup> **October 2013**.

## 5. Geological overview

The area under application covers 6 593 Ha, and is situated approximately 125Km east of Kimberley and approximately 60km east of Barkley West, in the Frances Baard District of the Northern Cape Province of South Africa (Figure 1).

The area lies towards the eastern edge of the Griqualand West basin, and consists of dolomite, limestone and chert of the Reivilo formation (2567Ma). The Griqualand West basin carbonates are known to host base metal mineralization, such as the Pering Pb-Zn deposit, as well as Mn/Co wad mineralization. These shallow water carbonate deposits forms the lower section of the Campbell and Subgroup of the Ghaap Group, and are overlain by recent cover of calcrete and sand (Figure 2). The Ghaap Group sediments are underlain by volcanic rocks of the Ventersdorp Supergroup in the area applied for.

# 6. Proposed prospecting activity description

The prospecting activities are divided into three categories:

## A. Compliance Period

This includes the investigation and studies done to compile and submit this EMP to the Department of Mineral Resources until the granting of the permit.

## **B.** Operational Period

This includes the construction phase, Operational and Decommissioning phase.



#### i. Construction Phase

The construction phase will commence on the 2nd year upon granting of the Prospecting Right application as the applicant will spend the first year focusing on a desktop study by means of sourcing published geological reports, infrastructure mapping, satellite imagery and existing geophysical information if available.

The proposed operation site will be established during this phase whereby the dedicated areas will be demarcated. This phase will include erecting temporary structures, e.g. toilets and the construction of access roads and drill sites.

During this phase consultation is required with the surface owners on the construction of temporary roads during the construction phase, as well as the routes to be used by prospecting vehicles and machinery.

During this phase, the infrastructure for the proposed prospecting activity is constructed and will include the following:

# ii. Operational Phase

The operational phase will be conducted in broken stages; namely

- Loam Sampling,
- Geophysics.
- Drilling estimated at 6 boreholes,
- Excavation/ pitting estimated at 1 pit,
- Transporting of kimberlites bulk sampling material, and
- Rehabilitation.

# i. Prospecting Work

The detailed geology and diamond potential of the area is relatively unknown, and as such exploration work will commence from a very basic level

The prospecting work programme will be designed in phases, each phase conditional on the success of the previous phase. The phased exploration program is described below, and summarized in table 1 below



## ii. Phase 1: Data Acquisition and Desktop Study:

A desktop study of all available data for the area will be performed in order to accumulate as much regional and historical data around the area as possible. This includes published geological reports, infrastructure mapping, satellite imagery and existing geophysical information if available, both primary (Kimberlite or Lamproite) and secondary (alluvial) diamond deposits will be targeted.

# iii. Phase 2: Target Generation, ground truthing and delineation:

Should the initial results of the desktop study be encouraging, further data will be generated through wide spaced grid loam sampling and ground or possibly airborne geophysical work in order to determine if there are positive indications of the existence of either a primary or secondary diamondiferous deposit on the exploration area? Targets generated during the sampling and geophysical surveys will be ground-truthed and tested by drilling if deemed necessary

If any of the exploration targets give a positive result, a drilling program will be undertaken in order to delineate and give a preliminary assessment of the diamond potential of the deposit identified.

# iv. Phase 3: Bulk Sampling and Feasibility Assessment:

Should delineation and initial evaluation of the deposit indicate a sufficient size and grade to warrant further evaluation, an appropriate bulk sampling program will be undertaken in order to establish grade and confirm its viability for mining

### **Bulk Sampling**

Should the deposit indicate a sufficient size and diamond potential from KIM and MiDa sampling to make it potentially economically viablele, an appropriate bulk sampling program will be undertaken in order to confirm grade, diamond quality and size frequency distribution. Again the exact position of a bulk sample excavations is impossible to pinpoint at this stage, as no known kimberlites are currently known in the area applied for. However, figure 3 shows a hypothetical sample pit on a 0.5Ha kimberlite body less than 15m of cover. The dimensions and tonnages stated in the diagram are what would be expected for such an excavation. The excavation would allow for a bulk sample of at least 10,000 tonnes of kimberlite to be excavated, which would be treated at Petra's existing reduction and treatment facilities at Sedibeng Diamond Mine.



The operational phase itself will have impacts on the environment and these impacts will have immediate effects (e.g. noise, dust and pollution). If the site is monitored on a continual basis during the operational phase, it is possible to identify these impacts as they occur. These impacts can then be mitigated.

## Foreseen Impacts

**Air quality deterioration**: Dust generation through the use of access roads and tracks. Air pollution through vehicle entrainment is expected to be negligible due to the small scale of the project. Air pollution from exhaust fumes.

**Loss of topsoil**: Topsoil could be compacted and sterilised by movement of staff and vehicles (very limited area).

**Biodiversity**: Loss of natural vegetation and habitat for fauna (very small scale). Possible road kills and worker's harvesting of flora and fauna could also result in a loss of biodiversity.

**Noise**: Noise generated by the vehicles and prospecting equipment. This is particularly relevant to IAPs that reside in close proximity to the borehole site and excavation location.

Land use: Loss of economic function of disturbed area during prospecting activities and potential loss of land capability post prospecting (very limited area)

## C. Decommissioning phase/ Closure Period:

The decommissioning phase will only commence once all the prospecting is completed. During decommissioning all this phase all erected structures, e.g. chemical toilets, fences on demarcated areas, equipment, drill sites, excavation and access roads on permission of the surface owners will be rehabilitated to their previous state.

Although rehabilitation will be done concurrently with the prospecting, filling of the final void and re-instatement of roads will be done after the completion of the prospecting operation.

# 7. Who are the interested and affected parties?

❖ Any person, company or authority that will be directly affected by the proposed prospecting activity can register as an interested and affected party (I&AP). This includes, but is not limited to landowners, tenants, municipal and provincial



authorities, interest groups and conservation groups. The stakeholder database can be compiled through networking and advertising.

- ❖ As stipulated in section 16 of Act 28 of 2002 of the MPRDA, interested and affected parties, also often referred to as stakeholders, need to be notified and consulted with, as part of the application process for a prospecting right. All identified potential stakeholders will be notified of the prospecting right application and are requested to register themselves as interest and affected parties if they feel it is relevant.
- Kindly note that only registered interested and affected parties will receive follow up information as the application process continues. Any person can at any time throughout the application process identify and register him/ herself as an interest and affected parties, keeping in mind that some processes would already be completed at that time.
- All interested and affected parties are invited to also identify other parties they should feel should be notified regarding this prospecting right application or to share this information document with them. Please notify Geoscientific Mineral Resources of any other party you feel should be included in the contact database, we need to contact them directly.
- ❖ Interested and affected parties are invited to share their input, concerns, comments and or suggestions throughout the process. Please note that the process is structured according to specific timeframes and we kindly request that you keep to the specified timeframes which will be communicated to registered interested and affected parties throughout the process. Input received will be included in the Consultation Report and EMP to be submitted to the Department of Mineral Resources.

## 8. IMPORTANT

- Please contact Geoscientific mineral resources to register yourself or your company/ organisation as an interested and affected party on or before 30 September 2013.
  Only registered interested and affected party will receive further information and notification regarding this prospecting right application.
- Kindly send your comments and or concerns, preferably in writing to Geoscientific Mineral Resources, P.O.Box 110142, Hadison Park, Kimberley, 8306 or by email to



<u>ndi@geoscientific.net</u> or fax to 086-5381069. You are welcome to contact Geoscientific Mineral Resources on 053 831 5194.

• You are welcome to use the attached Registration and Comment sheet or to write a letter, email or send a fax.

P. O. 110142

ENVIROMENTAL MANAGEMENT STUDY FOR THE PROPOSED PROSPECTING ACTIVITIES FOR PROSPECTING OF DIAMOND ON PORTION 3 OF THE FARM 299, PORTION 1 AND REMAINING EXTENT OF THE FARM 298, IN THE HAY DISTRICT, NORTHERN CAPE PROVINCE.

## REGISTRATION AND COMMENTS FORM FOR THE PUBLIC PARICIPATION PROCESS.

Facsimile: 053-842 0373

Kimberley	Tel: 053-842 1152
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PERSONAL DETAILS	
Title:First Name:	
Surname:	
E-mail:	
Telephone:Fax No:	
Organisation:	
Capacity:	
Physical address:Code:	
Town:	
Postal Address:	
Town:	
1. What is your main area of interest with regards to the Prospecting	g project?
2. Do you have any points of concern, objection or support regarding	g the proposed project?
	2 F F F J
YES / NO	
IF YES", please give reasons.	
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3. Are there any additional stakeholder's who you feel should be consulted with regards to the proposed project?	
3. Are there any additional stakeholder 3 who you reer should be consulted with regards to the proposed project:	
YES/ NO	
TES/ NO	
If "Yes" please give details and contact details below:	
if tes please give details and contact details below.	
SIGNATURE	DATE