

PROSPECTING RIGHT APPLICATION FOR DIAMONDS ON PORTION 23, 27, 61, AND 62 OF THE FARM BEYNESPOORT 335 JR, CULLINAN MAGISTERIAL DISTRICT, GAUTENG PROVINCE

# **BACKGROUND INFORMATION DOCUMENT**

# **EURAFRICAN DIAMOND CORPORATION (PTY) LTD**

**OCTOBER 2018** 

DMR REFERENCE NO.: GP 30/5/1/1/2/10550 PR

#### 1 PROJECT BACKGROUND

Eurafrican Diamond Corporation (Pty) Ltd (herein referred to as "Eurafrican") has a applied for Prospecting Right in terms of section 16 of the Mineral and Petroleum Resources Development Act (MPRDA), 2002 (Act No. 28 of 2002) for Diamond (DIA), Diamond (Alluvial-DA), Diamond (General-D), and Diamond (In Kimberlite) on portions of the farm Beynespoort 335 JR, located within the jurisdiction of the Cullinan Magisterial District, in the Gauteng Province.

The application was lodged on the 28<sup>th</sup> of August 2018 with the Department of Mineral Resources (DMR) Gauteng Regional Office. The extent of the area applied for covers approximately 68.21995 hectares. The project area is represented in the figure below.

To prove the resources (diamonds and associated minerals), an exploration program must be implemented for the project, including detailed geological mapping, ground magnetic survey, and core drilling. From the geological findings, a resource/reserve estimate will be calculated and finally a more realistic data will be obtained using polygon approach and with several considerations taken hence defining the estimate on the basis of three categories: measured, indicated, and inferred. The resource estimate will be further refined and a mineable reserve will be quantified using geological reserve interpellation.

#### 2 <u>DESCRIPTION OF THE PROJECT</u>

The proposed prospecting works programme will focus on investigating a cluster of small kimberlite pipes (e.g. Schuller, Annexe, Montrose, and National) associated with the Cullinan Kimberlites. Approximately 7 exploration boreholes will be developed as shown in the figure below. Prospecting will be carried out in 4 phases over a period of 4 years (48 months), comprising of invasive and non-invasive planned activities, including pre-feasibility assessments.

# Phase 1: Data Acquisition (including Desktop Studies) and Geophysical Survey

The non-invasive methods will include:

• Acquisition of existing data;

- Computer modeling of existing data;
- Pre-mining feasibility;
- Environmental Impact Assessment;
- Market studies and sales agreements;
- Social-economic studies.

### **Data Acquisition**

A desktop study of all available data of the area will be undertaken to accumulate historical data for the application area. These include reviewing published geological reports and historical core data from the Council for Geoscience.

## **Geophysical Survey**

A handheld proton Magnetometer will be used to undertake the Geophysical survey. Readings will be taken every 5 meters (minimum) along traverse lines. A base station will be used to record any changes in the earth magnetic field during the field survey. Field data will be obtained based on the principles and guidelines as outlined in the Geophysical Field Manual for technicians – the Magnetic Method, SAGA; A.T. Roux.

A GPS will be used to record the data point locations. No roads will need to be constructed for this survey. No trees will need to be removed during this survey.

# Phase 2 and 3: Core Drilling and Sampling

The invasive methods include:

- Diamond core drilling;
- Logging and sampling;
- Sample analysis;
- Geospatial modeling and evaluation;
- Mine design and planning;
- Environmental impact and programme studies.

Boreholes will be drilled at pre-determined sites on the properties. A 63.5 mm diameter core drill will be used to drill the geological boreholes. The time required is 24 months to complete all core drilling and rehabilitation of the core drilled holes. All boreholes will be logged with descriptions of all layers intersected.

#### **Site Preparation**

- Site clearance (borehole sump area (10m width x 10 m breadth) the site is cleared of all vegetation and levelled;
- Topsoil will not be removed on site.

## **Rig/Drill Preparation**

- A drill rig is placed on site for the drilling of a diamond core borehole with 63.5 mm
   diameter. Top of hole lined with a steel casing to suitable depth if required;
- Small sumps (about 0.25 m³ in volume) will be excavated. These sumps are used to recycle water used during the drilling process;
- The entire drill area is fenced off with barricade tape that will serve as access control,

#### **Drilling Activities**

- Diamond core drilling commences. This process uses water for cooling and is powered by a diesel engine, with an estimated usage of about 500 litres per shift;
- 7 x boreholes (600 m depth x 10 m width x 10 m breadth) will be drilled on predetermined positions;
- Core material are removed as the drilling progresses and sent to the Laboratory for further analysis. The core material will be kept for future reference;
- The drill bit has to be removed to extract the core material. Drilling does not take place continuously. This is coupled with general maintenance of the associated equipment.
   Major maintenance is not done on site.

## **Phase 4: Pre-Feasibility Studies**

This phase will be comprised of the following key aspects:

- Geological modelling
- Resources determination
- Development of Mining Works Programme (mine planning)
- Mining Right Application
- Integrated Water Use Licence Application
- Waste Management Licence Application
- Development of Social and labour Plan

## **Resource Estimation and 3D Modeling**

A resource will be estimated and signed by a Competent Person. The estimation will include the tonnage and quality within this area of interest. Any boreholes where significant core losses (greater than ten percent) have been recorded cannot be incorporated into the resource estimates.

## **Pre-Feasibility Programme**

A multi-disciplinary pre-feasibility study will be done based on the geological model and Indicated Resource outlined above.

The outcome of the pre-Feasibility Study will be a complete mine and plant design, together with a preliminary EMP for the operations. The associated infrastructure, human resourcing, and social and labour plan will have been completed to 15% accuracy. Should this prove positive, the full feasibility study work will commence.

The Feasibility Study will essentially improve the degree of accuracy of the pre-Feasibility to <10% accuracy. This will include the detailed mine design, preparation and application for the Water Use Licence, EMP, Mining Right Application; and placement of provisional orders for construction. The outcome of the Feasibility Study will provide a blueprint for construction, procurement and project finance.

## 3 PROJECT LOCALITY

The proposed prospecting program lies on the northern parts of the Gauteng Province within the Magisterial District of Cullinan. The Gauteng Province is located in the heart of South Africa and is bordered by Limpopo Province to the north, Mpumalanga Province on the east, Free State Province to the south, and on North West Province on the western boundary. The project area is located 6 km north-west of Cullinan and 21 km south-west of Pretoria on portions of the farm Bynespoort 335 JR in the Gauteng Province. The project site covers an area of about 68.21995 hectares (ha) in extent and lies at geographical coordinates -25.650000° south and 28.4570000° east. Access to the site is via the R573 main road which traverses through portion 61 and 62 of the farm Bynespoort 335 JR. The project area falls under City of Tshwane Metropolitan Municipality. The project area falls within Quaternary Catchment A23B (Pienaars River Catchment) of the Crocodile (West) and Marico water management area (WMA).

The project area is represented in the Regulation 2(2) plan below. The extent of the proposed prospecting right area is about 68.21995 hectares.

#### 4 PURPOSE OF THIS DOCUMENT

This document aims to provide you, Interested and/or Affected Party (I &AP), with information regarding the Environmental Authorisation Process being undertaken for the proposed prospecting operation by Eurafrican Diamond Corporation. Any person, company, authority or other entity that might be directly or indirectly affected by the proposed prospecting activities are invited to register as an Interested and Affected Party. This includes, but is not limited to landowners, tenants, municipal and provincial authorities, Non-Government Organisations and conservation groups.

This document details how you can become involved in the project, receive information, raise any issues of concern or interest regarding the proposed project. The sharing of information forms the basis of the Public Participation Process and offers you the opportunity to become actively involved in the project from the onset. Inputs from the I & APs ensures that all

potential environmental issues are considered within the context of the proposed mining project.

#### **5 PROJECT MOTIVATION**

South Africa is known for its abundance of mineral resources. It is estimated to have the world's fifth-largest mining sector in terms of gross domestic product value and its mining companies are key players in the global industry. South African mining and mining real estate remains attractive for development. Mining creates an environment that lead the community to be more involved in the projects and result in more sustainable job creation strategies within the surrounding communities as well as attracting foreign investment.

In addition, the South African economy heavily relies on the mining sector. Mining for diamond minerals will boost the current struggling national economy. The mining sector has provided more employment opportunities for the citizens in general. The provincial citizens of the Gauteng Province will be awarded more employment opportunities. Should the proposed prospecting operation be authorized and yield a viable mine, the following economic development activities will result:

- Job creation
- Development of skills
- Potential for business opportunities
- Establishment of bursaries and scholarships
- Stimulate economic activities in the local vicinity

#### 6 IDENTIFIED LIST ACTIVITIES

In terms of the 2014 Environmental Impact Assessment (EIA) Regulations enacted in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (as amended), the proposed operation will involve activities that fall within the ambits of Government Notice (GN) 983 (08 December 2014). The proposed project will require authorisation from the Department of Mineral Resources (DMR) through the Basic Assessment Process outlined in GNR 982.

A Basic Assessment Process (BAR) is an effective planning and decision-making tool, which allows for the identification of potential environmental consequences of a proposed project, and its management through the planning process. The process will involve consultation with interested and affected parties (I &APs) and submit a Basic Assessment and Environmental Management Plan Report to the DMR.

Table 1: Project Listed Activity as per GNR 983

Notice	Activity Number	Description
Listing Notice 1 (GNR	20	Any activity including the operation of that activity
325-April 2017)		which requires a prospecting right in terms of
		section 16 of the Mineral and Petroleum Resources
		Development Act, 2002 (Act No. 28 of
		2002), including associated infrastructure,
		structures and earthworks, directly related to
		prospecting of a mineral resource, including
		activities for which an exemption has been issued in
		terms of section 106 of the Mineral and Petroleum
		Resources Development Act, 2002 (Act No. 28 of
		2002).

#### 7 BASIC ASSESSMENT PROCESS

A Basic Assessment Report (BAR) is an effective planning and decision-making tool, which allows for the identification of potential environmental consequences of a proposed project, and its management through the planning process. The Basic Assessment (BA) process being followed consists of the following key steps (also shown in the figure overleaf):

- Submission of Notice of Intent to authorities (DMR)
- Announcement of BA process via newspaper advert, letters, site notices, with invitation to register in I & AP database

- Submission of the consultation report to DMR
- Release of Draft BA Report for review by all stakeholders
- Submission of the Final BA report to authorities for decision making
- Communication of the authority decision to all I & APs.

# 8 <u>SUMMARY POTENTIAL NEGATIVE AND POSITIVE IMPACTS ASSOCIATED</u> WITH THE PROPOSED PROJECT

The potential environmental and social impacts associated with the proposed prospecting operation include:

- Noise caused by the drilling rig travelling to and being established on each site, the
  diesel engine driving the drill, vehicles going to and from the drilling site and the voices
  of the drilling crew;
- Dust generated by the drilling operation and vehicles travelling gravel roads;
- Disturbance of soil from drill pad preparation and compaction;
- Disturbance of flora and fauna
- Disturbance or damage to cultural and heritage resources such as graves or historical features;
- Potential contamination of soil, surface water and groundwater with hydrocarbons (oil, diesel, grease, etc);
- Friction between local residents/landowners and prospecting personnel;
- If drilling is undertaken close to any residence, lodge, guest house or game farm, receptors may experience the noise, the visual appearance, the associated traffic and the presence of the drilling crew on the property as intrusive;
- It is not anticipated that the prospecting activities will have any lasting material effects on existing land uses on the prospecting areas or any other areas in their vicinity.

Background Information Document

**Prospecting Right Application** 

**WHAT IS YOUR ROLE?** 

If you consider yourself as an I & AP for the proposed project, we encourage you to make use of

the opportunities created by the Public Participation Process to become involves and raise any

issues or concerns which affect and/or interest you. By completing and submitting the

accompanying response form, you automatically register yourself as an I&AP for this project,

and ensure that your comments, concerns or queries raised regarding the project will be noted.

Interested I&AP's are invited to register by submitting their name, contact information and

interest in the project to the Environmental Assessment Practitioner before the 16<sup>th</sup> of

November 2018.

**10 PUBLIC MEETING** 

A public meeting will be held as follows:

Venue: Cullinan Community Sports Centre Date: 3<sup>rd</sup> November 2018 (Saturday)

Time: 11:00-13:00 PM

11 AVAILABILITY OF THE DRAFT BASIC ASSESSMENT REPORT AND

**ENVIRONMENTAL MANAGEMENT PLAN** 

The Draft Basic Assessment Report and Environmental Management Plan will be available for

public review and comment from the 18<sup>th</sup> of October 2018 to the 16<sup>th</sup> of November 2018 at

following venues:

• Rayton Community Library: Cnr Oakley and Montrose Street, Rayton, 1001

(-25.739800° south and 28.530767° east)

• Refilwe Community Library: Cnr Rumo and Tswalopele Street, Refilwe, 1003

(-25.739800° south and 28.530767° east)

• Online at: www.sakalandtebo.co.za

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# 12 WHO SHOULD YOU CONTACT?

Please direct all comments, queries or issues to:

Contact Person: Mr. Mandla Masango

Sakal and Tebo (Pty) Ltd

**Cell:** (+27) 72 714 8556 **Fax:** (+27) 86 560 4741

**E-mail:** mandlamasango@outlook.com

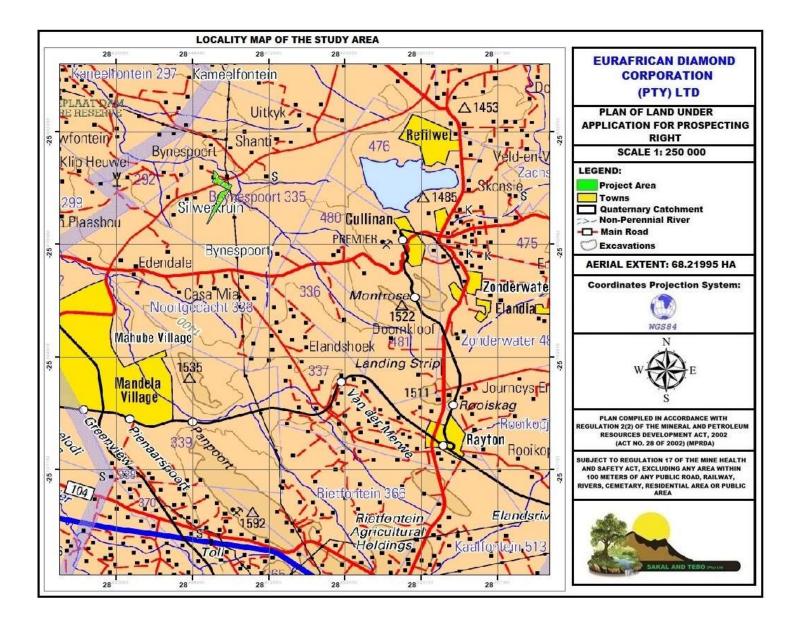
Birchwood Court, West Wing, 43 Montrose Street, Vorna Valley, Midrand, 1686

# 13 APPENDICES

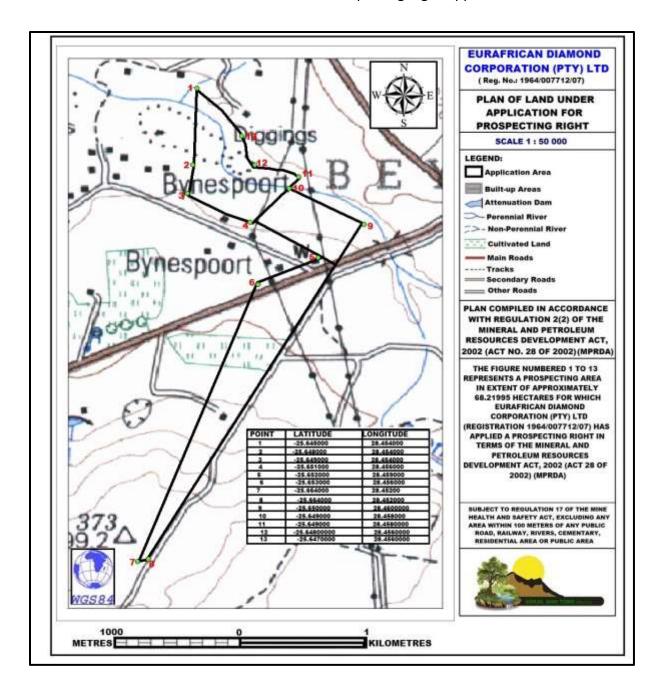
**APPENDIX A: LOCALITY MAP** 

**APPENDIX B: REGISTRATION AND COMMENT SHEET** 

**APPENDIX C: CONSULTATION QUESTIONNAIRE** 







## **REGISTRATION AND COMMENT SHEET**

DMR REF: **GP 30/5/1/1/2/10550 PR** 

APPLICANT: Eurafrican Diamond Corporation (Pty) Ltd

Please send your registration and comment sheet to:

Mr. Mandla Masango

Sakal and Tebo (Pty) Ltd

Cell: (+27) 72 714 8556

Fax: (+27) 86 719 9509

E-mail: mandlamasango@outlook.com

Birchwood Court, West Wing,

43 Montrose Street, Vorna Valley,

Midrand, 1686

Kindly register me as Interested and Affected Party and provide me with the relevant information and communication regarding		YES	NO
this project.			
I would like to receive information or notices by	Post	Email	Fax
COMMENTS			

Please also register the following people:							
Name	Tel	Cell	Email				
1.							
2.							
3.							
4.							
5.							
Please provide your details below:							
Title & Name							
Organisation/Capacity							
Postal Address							
Telephone							
Cell phone							
Email							
Signature							
Date							

Thank you for your valuable contribution.

# QUESTIONNAIRE FOR INTERESTED AND AFFECTED PARTIES IN RESPECT OF PROSPECTING RIGHT APPLICATIONS

The information below is requested purely for use in the updating of the Basic Assessment Report and Environmental Management Plan for the properties referred to below.

APPLICANT: EURAFRICAN DIAMOND CORPORATION (PTY) LTD (I	REG. NO.: 1964/007712/07)				
PROPERTY: PORTION 23, 27, 61, AND 62 OF THE FARM BEYNE	SPOORT 335 JR				
IURISIDICTION: MAGISTERIAL DISTRICT OF CULLINAN, CITY OF TSHWANE METROPOLITAN					
MUNICIPALITY, GAUTENG PROVINCE					
DMR REF: GP 30/5/1/1/2/10550 PR					
Name of respondent:					
Capacity/Farm residing (e.g. owner, tenant etc)					
Contact details/address:					
1. What type of access exists on the property?					
2. Do access roads, if any, pass through other privately ov	vned property, if so what are the				
requirements to use such road (e.g. permission fro	m neighbours or other surface				
owners)					
3 What is the main activity on the property (e.g. cultivation	n cattle tarming etc)?				

- 4. Describe the dominant natural vegetation on the property, if any (savannah, grassroots, woody, forest etc)?
- 5. To your knowledge, are there any protected species (plants or animals) present on the property? If so, please provide brief details.
- 6. If known, what is the average depth to the water table (ground water) on the property?
- 7. Are there any historical buildings or grave sites on the property? If so, please provide brief details.
- 8. If you are the owner of the property, are you sole owner or there other individuals, trusts or companies that share the legal title? If so please provide contact details so that we can consult them too.
- 9. Is the owner resident on the property?
- 10. Are there residents other than the owner on the property? If so, roughly how many people are residents? Please provide their contact details ( or for one representative if applicable)
- 11. Please also provide contact details of everyone else you think should be considered as an interested and affected party with regard to this property.

Background Information Document	Prospecting Right Application
Signature	
Date	