

# DIGBY WELLS

## ENVIRONMENTAL

### BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED PLATREEF UNDERGROUND MINE NEAR MOKOPANE, LIMPOPO PROVINCE

NEMA ref No: 12/1/9/2-W32;

LIM/EIA/0000538/2013,

NEMWA ref no: 12/9/11/L1224/5,

MPRDA ref no: LP30/5/1/2/2/10067MR

*\*This document is also available on request in Sepedi, Tsonga and Afrikaans*

#### **Project Number:**

PLA1677

#### **Prepared for:**

Platreef Resources (Pty) Ltd ("Platreef")

#### **PURPOSE OF THIS DOCUMENT**

This Background Information Document (BID) is available to Interested and Affected Parties (I&APs) in order to provide information regarding Platreef's intention to develop a mine outside of Mokopane. I&APs are invited to provide comments regarding the proposed project. Digby Wells Environmental (Digby Wells) has been appointed by Platreef to undertake the Environmental and Social Impact Assessment (ESIA) for the proposed project.

#### **For any project related information, contact:**

Steve Horak ([steve.horak@digbywells.com](mailto:steve.horak@digbywells.com)) or

Lerato Ratsoenyane ([lerato.ratsoenyane@digbywells.com](mailto:lerato.ratsoenyane@digbywells.com))

Tel: 011 789 9495

Fax: 011 789 9498

Web site: [www.digbywells.com](http://www.digbywells.com)

Digby Wells and Associates (South Africa) (Pty) Ltd  
(Subsidiary of Digby Wells & Associates (Pty) Ltd). Co. Reg. No. 2010/008577/07.  
Fern Isle, Section 10, 359 Pretoria Ave Randburg Private Bag X10046, Randburg,  
2125, South Africa  
Tel: +27 11 789 9495, Fax: +27 11 789 9498, [info@digbywells.com](mailto:info@digbywells.com),  
[www.digbywells.com](http://www.digbywells.com)

Directors: A Sing\*, AR Wilke, LF Koeslag, PD Tanner (British)\*, AJ Reynolds  
(Chairman) (British)\*, J Leaver\*, GE Trusler (C.E.O)

\*Non-Executive



## BACKGROUND

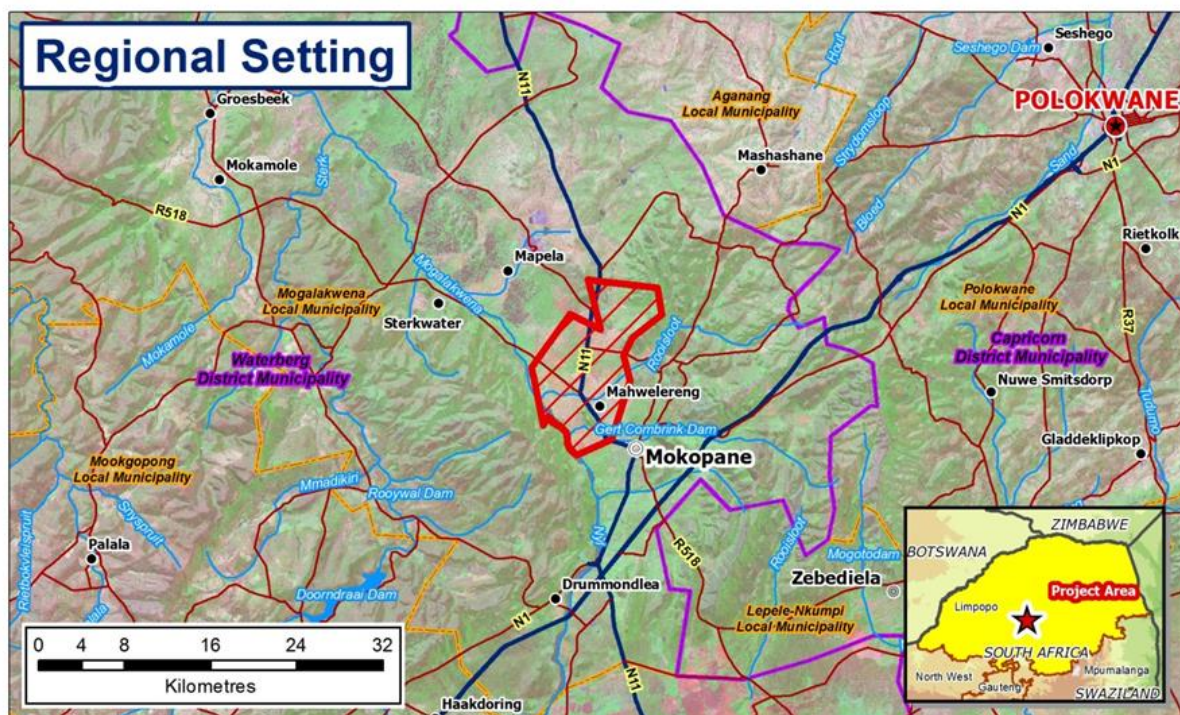
Platreef Resources (Pty) Ltd. (Platreef), is 90%-owned by Ivanplats and 10%-owned by a Japanese consortium of Itochu Corporation; Japan Oil, Gas and Metals National Corporation and JGC Corporation. This figure reflects the current ownership structure of Platreef which will alter after acquisition of the Mining Rights to include the proposed BEE Partners. Ivanplats is involved in prospecting for and the development of copper, platinum, gold, nickel and iron ore deposits, mainly in Africa.

Platreef was granted the prospecting rights over the farms Turfspruit 241 KR and Macalacaskop 243 KR and have been prospecting for more than 15 years. Prospecting activities included shallow and deep drilling programmes. Through these activities, a Platinum Group Metals (PGM) reef on the farm Turfspruit 214 KR was discovered and the decision was taken to develop this resource into an underground mine known as the Platreef Project. The mining right application was submitted to the Department of Mineral Resources (DMR) on 6 June 2013.

## PROJECT DESCRIPTION

### Project Location

The Platreef Project is situated on the Northern Limb of the Bushveld Igneous Complex (BIC), approximately 10km north of the town of Mokopane (formerly Potgietersrus) on the farms Macalacaskop 243 KR and Turfspruit 241 KR. The farm Rietfontein 2 KS also forms part of the project site. All the farms fall within the Mogalakwena Local Municipality in the Waterberg District Municipality of the Limpopo Province.



### Mining and Processing

Highly mechanised bulk underground mining methods will be used to mine the reef. With access to the underground mine via a production shaft, three ventilation shafts will also be developed to provide ventilation to the underground operation. The ore mined may be crushed underground and all ore and waste will then be hoisted from the mine via the production shaft. Waste will be stockpiled



on surface and further studies are taking place to investigate the beneficiation of the waste. Ore is then sent to a concentrator plant for processing. The concentrator plant will use a mill/floatation process to produce a concentrate which will primarily consist of Platinum, Palladium, Rhodium, Gold and Nickel. Initially, all the concentrate will be sold to local smelters for further beneficiation, with the potential of developing a smelter, owned by Platreef, at a later stage. The life of mine is expected to be 30 years based on a 3 million ton a year production rate. Ongoing studies are investigating expansion cases.

### Employment and Economic Development

In the order of ±2000 people will be employed during the operation of the mine at full production. Platreef has also developed a Social and Labour Plan (to be approved) which plans the sustainable local economic development of the communities impacted by the mine and will also provide the skills for people to remain economically active after mine closure.

### Infrastructure

The proposed mine will have the following above ground structures but is not limited to:

- Concentrator plant;
- Shafts and headgear;
- Waste rock dump;
- Tailings storage facility;
- Change houses;
- A waste management site;
- Raw water storage dams;
- Pollution control dams;
- Offices;
- Workshops;
- River crossings ;
- Pipelines;
- Fuel storage facilities;
- Power lines;
- Roads;
- Stores;
- Control rooms; and
- Medical station.

### Water and power supply

The amount of raw water required for the operation is approximately 8 000– 10 000 litres a day (m<sup>3</sup>/day) and will be supplied by Lebalelo Water Users Association.



Power supply is currently being investigated with Eskom, to increase the power supply for the mining activities to 63 Mega Watts (MW).

## Access roads

The project site will be accessed from the N11 and the R518 to transport equipment onto and off the site. From the N11, access to the proposed mine and plant sites exist, however, it will be necessary to construct new intersections and upgrade the existing dirt road to the site.

## ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

In order for any mining and mining related activities to commence, an environmental authorisation process needs to be conducted to obtain the required licenses (e.g. mining right) from various authorities. Digby Wells Environmental (Digby Wells) has been appointed by Platreef as the independent Environmental Assessment Practitioner (EAP) to undertake the required environmental, regulatory and Public Participation Processes.

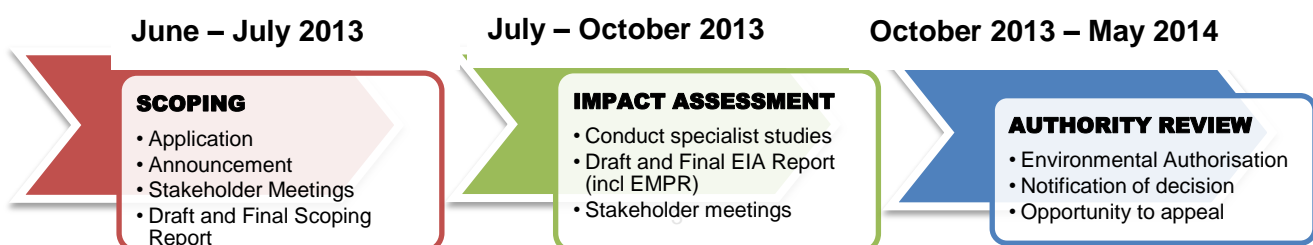
## Regulatory Requirements

The following authorisations will be applied for as per the requirements of various laws and the related regulations:

- Environmental Impact Assessment (EIA) and Environmental Management Programme (EMP) authorisation according to the National Environmental Management Act (Act No. 107 of 1998) (NEMA) and its associated listed activities as amended. Authorisation will be required from the Limpopo Department of Economic Development, Tourism and Environmental Affairs (LEDET);
- An approved EIA and EMP is required according to Mineral and Petroleum Resources Development Act (Act No. 28 of 2002) (MPRDA) from the Limpopo Department of Mineral Resources (DMR);
- An Integrated Water Use Licence (IWUL) as per the National Water Act (Act No 36 of 1998) (NWA) is required from the Department of Water Affairs (Limpopo Province); and
- An Integrated Waste Management Licence as per the National Environmental Management Waste Act (Act No. 107 of 1998) (NEM:WA) is required from the Department of Environmental Affairs (DEA).

## Application process

The application process is divided into the Scoping, Impact Assessment and Decision Making phases.



The public have the opportunity to be involved in the project throughout the ESIA process. During the scoping phase the draft and final scoping reports will be made available for public review and Interested and Affected Parties (I&APs) will be invited to attend a public meeting where the report will be presented. During the impact assessment phase the draft and final EIA / EMP be placed on public review and a second public meeting will be held. All inputs received from the public will be sent through to the authorities to assist them in the decision making process. Once a decision has been reached by the authorities all registered I&APs will be informed of the decision as well as the appeal process which can be followed.

### Environmental/Specialist Studies

The impact assessment phase will include specialist studies to investigate the project area and potential negative and positive impacts. Specialist studies to be undertaken will include the following:

- Heritage and Archaeology;
- Hydrology Assessment;
- Aquatic Ecology;
- Noise Assessment;
- Visual and Topography Assessment;
- Plants and Animals Assessments;
- Soil and Land Use;
- Geohydrology Assessment;
- Air Quality Assessment;
- Social Impact Assessment;
- Traffic Assessment; and
- Wetland Study.



## Public Participation Process

The Public Participation Process (PPP) is an essential component for any ESIA process to ensure I&APs are provided with an opportunity to provide comments regarding the proposed project. Digby Wells, together with Barnstone, will facilitate the PPP and any comments received from I&APs will be recorded and will contribute to the decision making process. All I&APs are requested to register with Digby Wells at the contact details provided.

## Registration as and I&AP

To ensure that you are registered as an I&AP and to receive updated project information please complete the attached registration form.

Comments and registration forms can be sent to:



Digby Wells Environmental

Steve Horak ([steve.horak@digbywells.com](mailto:steve.horak@digbywells.com)) or

Lerato Ratsoenyane ([lerato.ratsoenyane@digbywells.com](mailto:lerato.ratsoenyane@digbywells.com))

Tel: 011 789 9495

Fax: 011 789 9498

Web site: [www.digbywells .com](http://www.digbywells.com)

Project Number PLA1677