Quanto Environmental Solutions cc

06 September 2012

DMR Reference No.: GP 30/5/1/2/2 (349) PR

PLATINUM GROUP METALS (RSA) (PTY) LTD

PROSPECTING RIGHT APPLICATION ON THE FARM KLIPFONTEIN 268 JR IN THE GAUTENG PROVINCE

BACKGROUND INFORMATION DOCUMENT

INTRODUCTION

Wildebeest Platinum (Pty) Ltd. ("the Applicant") a subsidiary of Platinum Group Metals (RSA) (Pty) Ltd. ("the Company") applied for an extension of a prospecting right in terms of Section 102 of the Mineral and Petroleum Resource Development Act, No. 28 of 2002 ("MPRDA") on the Farm Klipfontein 268 JR in the Gauteng Province. The prospecting area applied for is in extent of 1399.7453 hectares and is situated in the immediate surroundings of the Rosslyn and Soshanguve area. The prospecting area is located approximately 15 km north west of Pretoria and falls within the City of Tshwane Metropolitan Municipality.

Table 1: Location of the proposed project area

Province	Gauteng
Magisterial district	Pretoria
Local Authorities	City of Tshwane Metropolitan Municipality
Prospecting Area – Farm (s)	Klipfontein 268 JR
Prospecting Right Area - Farm portion (s)	• Portion 16, 34, 35, 37, 38, 40, 68, 69, 70, 71, 72, 73, 75, 76, 109, 122, 129, 145, 146, 147, 148, 149, 170, 179, 188, 189, 192, 194, 195, 196, 198, 199, 200, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 221, 223, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 245, 279 and 281 of the Farm Klipfontein 268 JR • Remainder of Portion 28, 31, 32, 33, 36, 41, 42, 43, 44, 74, 79, 111, 112, 113, 163, 164, 193, 162, 216, and 242 of the Farm Klipfontein 268 JR
Mineral(s) applied for	U, PGM, Au, Cr, Ni, Cu, Mo, RE, Ag, Co, V, Zn, Pb
Neighbouring town	Rosslyn and Soshanguve
Surrounding communities	Ga-Rankuwa, Soshanguve South, Mapetla, Hoekfontein, Ga-Matlou, Ga-Kwate, Tshwara, Ramolapong, Moumong, and Kgabalatsane.
Use of immediately	Mining, farming and industrial.

adjacent land	
Catchment	Crocodile West Marico Catchment and the Quaternary catchment A23K and A21J

Quanto Environmental Solution cc ("QES") is the independent firm of consultants that has been appointed by the company to undertake the completion of the Environmental Management Plan (EMP). Batho Earth was appointed as the public participation consultant to facilitate the public participation process

The application for an extension of a Prospecting Right (in terms of Section 102 of the MPRDA) was compiled and submitted to the Department of Mineral Resources (DMR) on 02 November 2011. The application was accepted by the DMR on 11 June 2012 where the applicant was requested by the DMR to consult with all relevant landowners and Interested and Affected Parties (I&APs) and is required to submit a Consultation Report to the DMR detailing the results of the consultation process.

In terms of Section 16(4) of the MPRDA the EMP must be submitted to the DMR 60 days after the application acceptance date thus 30 days after the submission of the Consultation Report.

PROJECT LOCATION

The prospecting area is located on the western limb of the Bushveld Igneous complex ("BIC") with respective distances to major towns and communities displayed in table form below. The proposed property area falls within the jurisdiction of the City of Tshwane Metropolitan Municipality within Region 1. The affected wards are 4 and 37.

The total area applied for measures approximately 1399.7453 hectares. The Regulation 2(2) Plan indicating the area applied for is attached to this document.

Specifically the prospecting area is north of the R555 extending over the agricultural holdings of Rosslyn. Onderstepoort is situated to the east and the farm Medunsa 237 JR to the west of the prospecting area. Neighbouring towns of Soshanguve-south borders the prospecting area to the north. The Rosslyn Industrial area is situated to the south of the prospecting area. Neighbouring towns of Ga-Rankuwa borders the prospecting area to the west. The area is characterised as agricultural land.

The Sandspruit flows through the north-western corner of the prospecting area in a north-westerly direction.

The communities that are located within a 5 km radius from the proposed prospecting site are, Soshanguve South, Soshanguve East, Soshanguve A, Ga-Rankuwa Unit 2, 3, 6, and 7.

Table 2: Location of neighbouring towns/communities with respect to the prospecting site (Measured from the border of the prospecting site to the closest community/village centre).

Town/Community	Distance (km)	Direction From Project Site
Soshanguve South	Borders	North
Soshanguve East	Borders	North and East
Soshanguve A	Borders	East
Ga-Rankuwa Unit 2	1.5	West
Ga-Rankuwa Unit 3	2.5km	West
Ga-Rankuwa Unit 6	1km	West
Ga-Rankuwa Unit 7	2km	North-West

PROJECT DESCRIPTION

The area to be targeted for prospecting forms part of the Bushveld Igneous Complex ("BIC"). The mafic rocks of the BIC host layers rich in Platinum Group Elements (PGEs), chromium and vanadium and constitute the world's largest known resource of these metals. The potential economic horizons in the proposed prospecting area are the Merensky (MR) and UG2 Reefs situated in the Critical Zone of the Rustenburg Layered Suite (RLS) of the BIC. The MR and UG2 generally form part of a well-known layered sequence which is mined by other platinum mining companies in the area.

The Merensky Reef has traditionally been the most important platinum producing layer in the BIC. In addition to the PGE mineralization associated with the Merensky Reef, all chromites in the Critical Zone at time contain elevated concentrations of PGE. The UG2 Chromitite Layer is the only chromitite layer that is significantly exploited for PGE at present.

It is envisaged that the proposed prospecting will be conducted over a five (5) year period. The Prospecting Work Programme is structured around three fundamental stages, namely:

1. Area selection
2. Data gathering; and
3. Data evaluation.

At any stage during the prospecting operation, if the results are negative and no-economical mineralization is delineated, the programme could be stopped. The opposite is also applicable – if any sign of viable economical mineralization (mine scale) be delineated, it could lead to fast tracking of the programme.

Main Prospecting Activities

The Prospecting Work Programme (PWP) will consist of both Non-Invasive and Invasive Prospecting Methods.

Non-Invasive Activities will include:

- a desktop study on data availability on generic/conceptual geological model. Use of datasets supplied by the Government (Council of Geoscience) could include regional geological and geophysical plans that could be used.
- Geological Mapping to be conducted with the use of ortho-photos and aerial photography and satellite imagery of the area.
- Geophysical Survey methods on the target area.

Invasive activities will include:

- Drilling – the presence of concealed mineralization / ore body can only be confirmed and outlined by drilling. Diamond boreholes will be drilled to ascertain the sequence stratigraphy and potential prospective reef horizons. A follow up exploration drilling program will be conducted as the source for gaining ground truth information of the potential ore body and to prove continuity in the third dimension. This drilling will be conducted in a basic one phase approach. Primary Exploration drilling on a widely spaced grid which is intended to simply delineate the mineralization.

  Diamond drilling of BQ (outside diameter core of 36.4mm) size will be the preferred drilling method but as the nature of the mineralization are established other forms of drilling could be used such as percussion, reverse circulation and rotary blast be used.

With the above being said, non-invasive prospecting methods will not have an impact on the receiving environment. Invasive activities (drilling) will have an impact, although limited, on the receiving environment.

Activities associated with drilling will include the establishment of temporary access roads where existing access roads cannot be used. These access roads will be tracks and will be utilised for the duration of the prospecting phase. A number of small drilling sample sites will be cleared from vegetation in order to allow for the drilling operation to continue. Water will be sourced off site in the event where no water is available on site. Water will be circulated throughout the drilling operation and is needed to cool the drill rig. Circulated water will be stored in temporary plastic lined sumps and cleaned with oil water separators for reuse. The area to be cleared will generally not exceed 20m X 20m. The figure below illustrates a typical drill site with lined sumps and sampled drill core to be sent for analysis.

Figure 2: Typical prospecting drill site.

Description of Construction, Operational and Decommissioning Phases

Construction activities:

No physical construction activities will take place as no permanent infrastructure will be established. Activities will relate to the possible establishment of a temporary access road as well as the clearing of vegetation on prospecting sites / drill sites. Topsoil is stored in order to allow for future rehabilitation. Topsoil dumps are covered during windy and rainy months in order to limit soil erosion.

Operational activities:

The drill rig will be brought onto site for drilling. The drill rig will target the Merensky Reef and UG2 reef for drill core which will be sent to a laboratory for analysis. Water stored on the drill site will be

circulated to cool the drill rig (tip) until drilling on the site is complete. The drill rig will move systematically from one site to another up until the desired number of prospecting holes have been drilled. It can take from a couple of days to more than a month to drill one site depending on technical problems or geotechnical rock conditions.

In most instances the drill crew stay close to the drilling site in temporary accommodations facilities (such as mobile homes). The energy source utilised is gas. Fire is not permitted, especially during the winter months. Waste is separated on site in accordance with the principles of waste recycling and reuse as stipulated by the National Environmental Management Waste Act (NEM:WA).

Rehabilitation activities:

Rehabilitation activities will entail the following:

- Rehabilitation of each drill site concurrently with drilling program. As drill rig moves off the particular site the site will be rehabilitated;
- Ensure that all hydrocarbons are removed from the site and separated from the water;
- All other domestic waste drums removed from the site and waste disposed of at a registered municipal waste management facility. No waste is to be burned or buried at any time during prospecting.
- Plastic liners to be removed prior to final rehabilitation. Where possible liners will be reused or alternatively disposed of;
- Topsoil as previously removed and stockpiled will be spread evenly over the area;
- The area will be ripped where needed (i.e. in cases where subsoils have been compressed);
- Generally topsoil contains seeds needed for future rehabilitation however, vegetation establishment will be monitored and where needed additional seeds planted for indigenous vegetation establishment.

POTENTIAL IMPACTS PER ACTIVITY

Activity: Earth Clearing:

This activity will relate to earth clearing for the establishment of prospecting drill sites. These sites will be approximately 20m x 20m each. A number of these site might be established, the number of sites to be determined from the non invasive prospecting methods.

The activity will entail the clearing of vegetation, small shrubs (i.e. herbaceous layer) and grasses. Indigenous trees will not be removed. Vegetation will be removed by means of manual labour or by means of earth moving equipment. Topsoil will then be removed and stockpiled for future site rehabilitation.

The impacts associated with this activity could relate to:

- Impacts on Fauna and Flora; and
- Possible Soil erosion;

Activity: Site Establishment

This activity will entail the establishment of each prospecting site. There might be one, two (or more) active prospecting sites at any given time during the prospecting operations. Site establishment will include setting up of contractors camp (mobile homes), bringing equipment including drill rig onto site. Service and mechanical equipment will also be brought onto site.

Site establishment could result in the following impacts:

- Generation of waste
    - Domestic and hazardous (hydrocarbons) waste
- Soil contamination
    - This could occur in the event of hydrocarbon spillages although well contained.
- Soil erosion
    - If soils (as a result of earth clearing) are left exposed.
- Water pollution
    - A major hydrocarbon spill could lead to surface water pollution if left unattended

Activity: Drilling

Drilling of the area will be undertaken by diamond core drilling using a core drilling technique. A drill bit with a diameter of 36,4mm will be used. The drill bit is attached to the drill string, which is suspended from the drill rig's derrick and then rotated in the hole. During the first part of the drilling operation the drill bit would crush the rock into small particles called cuttings. The cuttings will be removed from the bottom of the hole by the drilling fluid. Once the top section of the hole has been drilled a steel casing would be inserted to secure the wall of the hole and also to prevent any groundwater contamination.

The impacts associated with drilling are listed below:

- Groundwater and surface water contamination
- Noise
- Surface water contamination from drilling fluid (water)

On completion of drilling the drill core will be transported to an on-site core shed where the core will be logged. This activity will not impose any significant environmental impacts as this activity only entails the temporary storage of drill cores.

Activity: Site Rehabilitation

This activity will involve the removal of all equipment and personnel from the site. Linings in sumps will be removed and should be transported to the next site if still usable. If no longer usable it will be disposed of offsite.

Once all equipment has been removed the sumps can be backfilled and the area levelled with the topsoil as stockpiled during initial earth clearing activities.

Impacts as a result of site rehabilitation are:

- Soil erosion
- Flora
- Fauna

CONSULTATION WITH INTERESTED AND AFFECTED PARTIES

The consultation process with I&APs is governed in terms of Section 10 of the MPRDA. Section 10 (1) of the MPRDA, the Regional Manager must in the prescribed manner –

(a) Make known that an application for a prospecting right, mining right or mining permit has been received in respect of the land in question; and

(b) Call upon interested and affected persons to submit their comments regarding the application within 30 days from the date of the notice".

After the date of the notice received from the Regional Manager, the Consultation Report must be submitted to the DMR within 30 days giving the results of the consultation process. All comments received from the I&APs will be included in this report. The EMP must be submitted to the DMR 30 days after the Consultation Report has been submitted. The findings of the EMP will also be communicated through to all I&APs and they will be afforded the opportunity to comment on these findings.

You may comment on the proposed prospecting activities, on or before 09 October 2012, by:

- Completing the comment and registration sheet enclosed with this document;
- Writing a letter or producing additional written submissions;
- By e-mail or telephone to Batho Earth; and

Contact details for Batho Earth:

BathoEarth

Ms Diana Verster or Ms Ingrid Snyman
P.O. Box 35130, Menlo Park, 0102
Fax: 087 807 4536
Mobile: 073 157 7362 (Diana) or 082 779 2750 (Ingrid)
E-mail: diana@bathoearth.co.za or ingrid@bathoearth.co.za

I&AP REGISTRATION FORM

Surname	
Name	
Organisation	
Position / title	
Postal Address	
Tel	
Fax	
E-mail address	

Please indicate with an **X** whether you would like to be kept informed of the EIA process

Yes, I would like to be informed	**YES**
No, I am not interested	**NO**

If "yes" how would you like to be informed? (please mark the appropriate block with an "**X**")

E-mail	
Fax	
Post	

Comments: (Please attach additional pages if required)

Thank you for your participation

Please be assured that your comments will form part of documents to be submitted to the decision-making authority.

BathoEarth
Ms Diana Verster or Ms Ingrid Snyman
P.O. Box 35130, Menlo Park, 0102
Fax: 087 807 4536
Mobile: 073 157 7362 (Diana) or 082 779 2750 (Ingrid)
E-mail: diana@bathoearth.co.za or ingrid@bathoearth.co.za