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ENVIRONMENTAL



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## Environmental Authorisation Application: Prospecting Right Application for Paardekraal 279JQ, Phase 2

## Notification of Intent to Develop

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**Project Number:**

APM3249

**Prepared for:**

Rustenburg Platinum Mines (Pty) Ltd

June 2015

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|----------------------|--|
| <b>Report Type:</b>  | <b>Notification of Intent to Develop</b>   |
| <b>Project Name:</b> | <b>Environmental Authorisation Application: Prospecting Right Application for Paardekraal 279JQ, Phase 2</b> |
| <b>Project Code:</b> | <b>APM3249</b>   |

| <b>Name</b>   | <b>Responsibility</b> | <b>Signature</b> | <b>Date</b> |
|---|-----------------------|------------------|-------------|
| Natasha Higgitt<br>Assistant Heritage Consultant<br>ASAPA Member No.335 | NID Compilation       |                  | June 2015   |

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## 1 Introduction

Digby Wells Environmental (Digby Wells) has been appointed by Rustenburg Platinum Mines (Pty) Ltd (RPM) to submit an Environmental Authorisation (EA) application in support of a Prospecting Right Application (PRA). The PRA is for portion 21 of the farm Paardekraal 279 JQ in the North West Province near Rustenburg. The PRA will be applied for in terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended) (MPRDA). The EA will be completed simultaneously in terms of the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations, 2014 with reference to listed activity 20 of GN R. 983.

Digby Wells Environmental (Digby Wells) was appointed to undertake the environmental baseline studies required for the EA and PRA, according to national legislative requirements, best practices standards and principles.

### 1.1 Project Location

|  |   |
|--|---|
| <b>Name of property/ies</b>                              | Paardekraal   |
| <b>Erf or farm number/s</b>                              | Paardekraal 279JQ portion 21  |
| <b>Coordinates of approximate centre of project area</b> | -25.598503<br>27.298974   |
| <b>Town or District</b>                                  | Rustenburg Magisterial District   |
| <b>Responsible Municipality</b>                          | Rustenburg Local Municipality   |
| <b>Maximum extent of proposed development</b>            | Study is limited to 15.4 ha<br>Maximum extent estimated at 400 m <sup>2</sup> : proposed prospecting will be limited to four 100 m <sup>2</sup> drill sites, developed over four years. |
| <b>Current use</b>                                       | Agricultural  |
| <b>Predominant land use/s of surrounding properties</b>  | Residential, Agricultural, Mining   |

## 2 Project / Development Details

The PRA is for the prospecting of Platinum Group Metals (PGM) and associated minerals. Prospecting activities will include invasive and non-invasive methods. Non-invasive methods include a ground magnetic survey and a non-intrusive survey that will not have an impact on the receiving environment. The ground magnetic survey will aid in the identification of areas to be drilled to obtain the required data for the mapping of the ore body. Datasets supplied by the Council of Geoscience will be used in conjunction with remote sensing methods such as satellite and aerial imagery, airborne geophysical surveys and field reconnaissance of the area to aid in the determination of the potential extent of the ore body.



Invasive methods will include diamond core drilling to ascertain the stratigraphic sequence and reef horizons of the ore body. It is anticipated that a maximum of four boreholes will be drilled over a five year period. It is expected that each prospecting sites will require a footprint area of approximately 100 m<sup>2</sup> (10 m x 10 m). Cleared topsoil will be stockpiled on site to a maximum height of one meter.

No permanent infrastructure will be constructed as part of the prospecting activities. Activities associated with the prospecting include the establishment of temporary roads/tracks where existing roads cannot be used, the clearing of vegetation for the drill rig and establishment of three sumps to separate and store oil, sludge and water. The sumps, access roads/tracks and prospecting sites will be rehabilitated following the prospecting activities.

## 2.1 NHRA Section 38 Triggers

The following aspects of Section 38 of the NHRA may be triggered by the proposed project.

| NHRA Section 38 (1) Activities / Triggers  |  | Summary description<br>(e.g. 500 m conveyor belt, open cast pit, etc.)                               |
|--|--|--|
| a  | Any linear development or barrier >300 m   | Possibility that new access track could exceed 300 m threshold.                                      |
| b  | Any bridge or similar structure >50 m  | None   |
| c  | Any development or activity that will change the character of a site:                                  | The proposed prospecting drilling will not change the character of sites exceeding these thresholds. |
|  | i    ≥5 000m <sup>2</sup> in extent  |  |
|  | ii    Involving ≥3 existing erven/<br>subdivisions   |  |
| iii    Involving ≥3 or more erven/<br>divisions consolidated within past 5<br>years. |  |  |
| d  | Rezoning of a site ≥10 000 m <sup>2</sup> in extent.   | No rezoning will be required.  |
| e  | Other triggers, e.g.: in terms of other legislation, (i.e.: National Environment Management Act, etc.) | MPRDA<br>NEMA  |

## 2.2 Activities

The following activities will take place during the lifespan of the proposed project.

| Construction                                | Operation            | Decommissioning and Closure    |
|---|----------------------|--------------------------------|
| Road/route clearance and vegetation removal | Prospecting/drilling | Rehabilitation of project area |
| Topsoil removal and stockpiling             |                      |                                |



## 2.3 Additional Impact Assessment Process

The following impact assessment process/es are currently being undertaken for the proposed project.

|  |                                       |
|--|---------------------------------------|
| Legislation, i.e. NEMA, MPRDA, etc.                              | MPRDA and NEMA                        |
| Consenting Authority that has/will receive information           | Department of Mineral Resources (DMR) |
| Present phase of process at Authority, e.g. Draft Scoping Report | Basic Assessment Report               |

## 3 Identified / Known Heritage Resources and Potential Impacts

The following categories of heritage resources as defined in Section 3 of the NHRA are known to occur within the proposed study area.

|         |  |
|---------|--|
| 3(2)(a) | <b>Places, buildings, structures and equipment of cultural significance</b>  |
|         | <u>Description of resource:</u> Highly unlikely, given that the study area is situated in a significantly altered landscape.                                     |
|         | <u>Potential impact:</u> None / negligible   |
| 3(2)(b) | <b>Places to which oral traditions are attached or which are associated with living heritage</b>   |
|         | <u>Description of resource:</u> None identified  |
|         | <u>Potential impact:</u> Unlikely, given the relatively small extent of the study area and that it is private property used primarily for agricultural purposes. |
| 3(2)(c) | <b>Historical settlements and townscapes</b>   |
|         | <u>Description of resource:</u> None   |
|         | <u>Potential impact:</u> None  |
| 3(2)(d) | <b>Landscapes and natural features of cultural significance</b>  |
|         | <u>Description of resource:</u> None identified  |
|         | <u>Potential impact:</u> None  |
| 3(2)(e) | <b>Geological resources of scientific or cultural importance</b>   |
|         | <u>Description of resource:</u> None.  |
|         | <u>Potential impact:</u> None.   |



|         |  |
|---------|--|
| 3(2)(f) | <b>Archaeology and/or palaeontology (Including archaeological sites and material, fossils, rock art, battlefields &amp; wrecks)</b>  |
|         | <u>Description of resource:</u> Unknown in terms of archaeology, but may occur.<br>None in terms of palaeontology, the study area is underlain by the Bushveld Complex   |
|         | <u>Potential impact:</u> Possible in terms of archaeology, but limited given the current state of the cultural landscape and land use that may have already damaged or destroyed any viable archaeological deposits.<br>None in terms of palaeontology as the Bushveld Complex not contain palaeontological material                               |
| 3(2)(g) | <b>Graves and burial grounds</b>   |
|         | <u>Description of resource:</u> None currently identified in the study area.<br><u>Potential impact:</u> None given that proposed prospecting sites and access routes can be redesigned to avoid any impacts on burial grounds and graves  |
| 3(2)(a) | <b>Other human remains</b>   |
|         | <u>Description of resource:</u> None identified<br><u>Potential impact:</u> None, given that proposed prospecting sites will only be superficially cleared of surface vegetation, and access tracks will similarly be superficial. However, accidental chance finds of unknown / unidentified human remains are inherent risks during development. |
| 3(2)(h) | <b>Sites of significance relating to the history of slavery in South Africa</b>  |
|         | <u>Description of resource:</u> None.<br><u>Potential impact:</u> None   |
| 3(2)(i) | <b>Movable objects</b>   |
|         | <u>Description of resource:</u> None<br><u>Potential impact:</u> None  |

### 3.1 Illustrative Material

See draft Heritage Basic Assessment report

(<http://www.sahra.org.za/sahris/cases/paardekraal-prospecting-right-application>)



## 4 Recommendation

|   |                   |   |                             |
|---|-------------------|---|-----------------------------|
| <b>Is a Heritage Impact Assessment required?</b>  |                   | <input checked="" type="checkbox"/> Yes                       | <input type="checkbox"/> No |
| <b>If NO, provide motivation:</b>   |                   |   |                             |
| <b>If YES, provide suggested components that may be required or undertaken during HIA.</b>  |                   |   |                             |
| <input checked="" type="checkbox"/>   | Archaeology       | <input type="checkbox"/>                                      | Architecture                |
| <input type="checkbox"/>  | Built Environment | <input checked="" type="checkbox"/>                           | Burial Grounds and Graves   |
| <input type="checkbox"/>  | Palaeontology     | <input checked="" type="checkbox"/>                           | Public Participation        |
| <input type="checkbox"/>  | Townscapes        | <input type="checkbox"/>                                      | Visual Impact               |
| <input type="checkbox"/>  | Other:            |   |                             |
| <p>Based on our understanding of the cultural landscape and the identified heritage resources within the local study area, Digby Wells recommends that a Heritage Basic Assessment be completed that should focus on: the following:</p> <ul style="list-style-type: none"> <li>■ The potential archaeological record of the study areas;</li> <li>■ Identify any potential burial grounds or graves; and</li> <li>■ Integrate the overall Stakeholder Engagement Process that will be conducted for this project.</li> </ul> <p>It is further recommended that the Heritage Basic Assessment is exempted from the following:</p> <ul style="list-style-type: none"> <li>■ Assessment on the palaeontology of the study area;</li> <li>■ Assessment on built environment; and</li> <li>■ Assessment of intangible and living heritage.</li> </ul> |                   |   |                             |
| <b>Recommendations made by:</b>   |                   |   |                             |
| <b>Name:</b> Natasha Higgitt  |                   | <b>Capacity:</b> Assistant Heritage Consultant: Archaeologist |                             |
| <b>Name:</b> Johan Nel  |                   | <b>Capacity:</b> Manager: HRM unit                            |                             |