

# mineral resources

Department: Mineral Resources REPUBLIC OF SOUTH AFRICA

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

### **IMPORTANT NOTICE**

#### Kindly note that:

- 1. As from 8 December 2014, this document serves as the application form, and incorporates the requisite documents that are to be submitted together with the application for the necessary environmental authorisations in terms of the said Acts.
- 2. This application form is applicable while the Mineral and Petroleum Resources Development Amendment Act of 2008 is in effect; as the form may require amendment should the Act be further amended.
- 3. Applicants are required to apply for the necessary water use licence and any other authorisations nor licences to the relevant competent authorities as required by the relevant legislation. Upon acceptance of an application for a right or permit in terms of the MPRDA, applicants will be required to provide evidence to the Regional Manager that a water use licence has been applied for.
- 4. The Regional Manager will respond to the application and provide the reference and correspondence details of the Competent Authority, and in the event that the application for a right or permit is accepted, together with the date by which the relevant environmental reports must be submitted. Notwithstanding anything that may appear to be stated to the contrary in the acceptance letter, the timeframes are in fact aligned and the prescribed timeframes for the submission of documents as regulated by the NEMA regulations must be strictly adhered to.
- 5. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
- 6. The failure to submit complete information as required in this application form may result in the refusal of the application for an environmental authorisation and consequently of the right or permit applied for.
- 7. This application must be submitted through the SAMRAD online application system of the Department of Mineral Resources under "Other documents to upload".
- 8. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.
- 9. Please note that an application fee is payable in terms of the National Environmental Management Act and the National Waste Management Act, which fees must be paid upon lodgement of the application. Should the said application fees not be paid as prescribed the application for a right or permit in terms of the Mineral and Petroleum Resources Development Act cannot be considered to have been made in the prescribed manner and the said application for a right or permit will have to be rejected. In this regard the type of applications must be identified in the table below.

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### PLEASE STATE TYPE OF AUTHORISATIONS BEING APPLIED FOR

APPLICATION TYPE	APPLICABLE FEE	Mark with an X where applicable
NEMA S&EIR application on its own	R 10,000.00	
NEMA BAR application on its own	R 2,000.00	Х
NEMWA S&EIR application on its own	R 10,000.00	
NEMWA BAR application on its own	R 2,000.00	
NEMA S&EIR application combined with NEMWA S&EIR application	R 15,000.00	
NEMA BAR application combined with NEMWA BAR application	R 3,000.00	
NEMA S&EIR application combined with NEMWA BAR application	R 11,000.00	

### 1. CONSULTATION BASIC ASSESSMENT AND/OR SCOPING REPORT

This application is for a Basic Assessment process and therefore the public consultation process will be undertaken in accordance with the full set of requirements as set out in Government Notice Regulation 982 of December 2014. The public participation process to be undertaken for the Project has been outlined Section 6 of this application form. Due to the sensitive nature surrounding Prospecting Right Applications, no public consultation has been undertaken prior to the submission of the application. This Application form details the public consultation to be undertaken for the Project, once the application has been accepted.

### 2. DETAILS OF THE APPLICANT

Project Applicant:	Rustenburg Platinum Mi	nes Limited	
Registration number (if any):	1931/003380/06		
Trading name (if any):	Rustenburg Platinum Mi	nes Limited	
Responsible person: (E.g. CEO, Director, etc.)	Mr Barry Jones		
Contact person:	Mr Barry Jones		
Physical address:	55 Marshall Street Johannesburg		
Postal address:	P.O. Box 62179, Marshalltown		
Postal code:	2107	Cell:	+27 83 484 9925
Telephone:	+27 11 373 6111	Fax:	+27 11 373 5111
Email:	barry.jones@angloamer	ican.com	·

# 3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	Mr Duncan Pettit – Project Manager		
	Digby wells Environmen	เล	
Professional affiliation/registration:			
Contact person:	Mr Dupoop Bottit		
(if different from EAP)			
Company:	Digby Wells Environmental		
Physical address:	Fern Isle, Section 10, 359 Pretoria Avenue, Randburg		
Postal address:	Private Bag X10046, Randburg		
Postal code:	2125	Cell:	+27 83 644 5855
Telephone:	+27 11 789 9495	Fax:	+27 11 789 9498
Email:	duncan.pettit@digbywells.com		

If an EAP has not been appointed please ensure that an independent EAP is appointed as stipulated by the NEMA Regulations, prior to the commencement of the process.

The declaration of independence and the Curriculum Vitae (indicating the experience with environmental impact assessment and relevant application processes) of the EAP must also be attached as **Appendix 1**.

### 4. PROJECT DESCRIPTION

	The proposed Prospecting Right area on the following farm:
Farm Name:	Portion 53 of the Farm Waterval 306 JQ
Application Area (Ha):	6.5 ha
	Rustenburg Magisterial District
Magisterial District:	Rustenburg Local Municipality
	Bojanala Platinum District Municipality
Distance and direction from nearest town:	1.5 km east of Rustenburg
21 digit Surveyor General Code for each farm portion:	T0JQ000000030600053
Locality Map:	A locality map of the Project has been attached as Appendix 2.
	Rustenburg Platinum Mines Limited (RPM), a subsidiary of Anglo American Platinum Limited (Anglo American Platinum), intends to apply for a Prospecting Right and Environmental Authorisation for Portion 53 of the farm Waterval 306 JQ. The Prospecting Right Application is for the prospecting of Platinum Group Metals (PGM) and associated minerals, including:
	Palladium (Pd);
	Rhodium (Rh);
	<ul> <li>Iridium (Ir);</li> </ul>
Description of the overall activity:	<ul> <li>Osmium (Os);</li> </ul>
(Indicate Mining Right,	<ul> <li>Platinum (Pt);</li> </ul>
Mining Permit, Prospecting	■ Gold (Au);
Production Right,	Copper (Cu);
Exploration Right,	<ul> <li>Nickel (Ni);</li> </ul>
Technical co-operation	Cobalt (Co);
permit, Additional listed	■ Silver (Ag); and
activity)	Chromium (Cr).
	Digby Wells Environmental has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake the Basic Assessment Process in support of a Prospecting Right Application for the Project.
	Prospecting Operations
	Prospecting activities will include invasive and non-invasive methods.
	Non-invasive methods include a ground magnetic survey and are non- intrusive and do 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, remote sensing methods such as satellite and aerial imagery, airborne geophysical surveys and field reconnaissance of the area will also be undertaken to aid in the determination of the potential extent of the ore body.
Invasive methods will include the diamond core drilling to ascertain the stratigraphy sequence and reef horizons of the ore body. The core drilling will utilise a BQ size (outside diameter core of 36.4 mm).
It is anticipated that a maximum of four boreholes will be drilled over a 5 year period.
Prospecting Infrastructure
No permanent infrastructure will be constructed as part of the prospecting activities. Activities associated with the prospecting operations include the establishment of temporary access roads/tracks where existing roads cannot be used, the clearing of vegetation for the drill rig and the establishment of three sumps to separate and store oil, sludge and water. The sumps, access roads/tracks and prospecting site will be rehabilitated following the prospecting activities. The prospecting sites will be an area of approximately 10 m by 10 m. Cleared topsoil will be stockpiled on site to a maximum height of 1 m.

### 5. ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as Appendix 3).

There are currently no environmental authorisations for Portion 53 of the farm Waterval.

(For an application for authorisation that involves more than one listed activity that, together, make-up one development proposal, all the listed activities pertaining to this application must be indicated. Please note that any authorisation that may result from this application will only cover activities specifically applied for).(Attach a proposed site plan, drawn to a scale acceptable to the competent Authority, showing the location of all the activities to be applied for, as Appendix 4).

A plan of the Project site has been included in Appendix 4. There will be no permanent infrastructure constructed for the prospecting activities and, as a result, no infrastructure has been included in the plan in Appendix 4. The proposed locations of the prospecting sites has not been undertaken as it will be subject to non-invasive prospecting activities prior to the drilling of prospecting boreholes. An indicative prospecting site extent is too small to be provided in Appendix 4.

NAME OF ACTIVITY Mining (E.g. Excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads pipelines, power lines, conveyors, etc.)	AERIAL EXTENT OF THE ACTIVITY (Ha or m <sup>2</sup> )	LISTED ACTIVITY Mark with an X where applicable or affected.	APPLICABLE LISTING NOTICE (GNR 983, GNR 984 or GNR 985)	WASTE MANAGEMENT AUTHORISATION (Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)
Site clearance and vegetation removal.	100 m²			
Establishment of access roads/tracks.	Dependant on Prospecting site location.			
Topsoil stockpiling.	3 m <sup>3</sup>			
Development of three sumps (oil-sludge-water separation).	3 m <sup>3</sup>			
Drilling of prospecting boreholes.	100 m²	X – Activity 20	GNR 983	
Rehabilitation (topsoil cover, ripping and vegetation establishment).	100 m²			

# 6. PUBLIC PARTICIPATION

(Provide details of the public participation process proposed for the application as required by Regulation.)

### Details of the Public Participation Process (PPP) followed.

#### IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES TO BE CONSULTED

Identification Criteria		Mark with an X where applicable	
		Yes	No
Will the landowner be spec	ifically consulted?	x	
Will the lawful occupier on t	he property other than the Landowner be consulted?	x	
Will a tribal authority or hos	t community that may be affected be consulted?	x	
Will recipients of land claim	s in respect of the area be consulted?	x	
Will the landowners or lawf	ul occupiers of neighbouring properties be identified?	x	
Will the local municipality b	e consulted?	x	
Will the Authority responsible for power lines within 100 metres of the area be consulted?		x	
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?		x	
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)		x	
Will the Provincial Department responsible for the environment be consulted?		x	
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?		x	
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?		X	
Other, SpecifyNon-Governmental Organisations (CBOs) will also be notified of the Project and will be provided with an opportunity to provide feedback and/or suggestions.		ommunity-Based will be provided	

### DETAILS OF THE ENGAGEMENT PROCESS TO BE FOLLOWED

Due to the sensitive nature surrounding Prospecting Right Applications, no public consultation will take place prior to the acceptance of the Application by the Department of Mineral Resources (DMR). Once the acceptance of the Application form has been received, Project announcement will take place. The table below details the public consultation that will take place during the various phases of the Basic Assessment Process.

	The PPP for the Project will follow the steps provided for each phase below.
	Announcement Phase:
	<ul> <li>Development of the Interested and Affected Party (I&amp;AP) database;</li> </ul>
	<ul> <li>Directly affected landowners will be informed of the environmental licence application;</li> </ul>
	<ul> <li>Directly and indirectly affected landowners, land occupiers, key stakeholders, tribal authorities, local municipality, NGOs, CBOs and the national and provincial regulatory authorities will be notified of the proposed Project and will be provided with a Background Information Letter (BIL) and announcement letter with comments and registration form;</li> </ul>
Steps to be taken to notify interested and affected parties (Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one	<ul> <li>Site notices will be placed at, and directly around the proposed Project site to notify I&amp;APs in the area of the Basic Assessment process and Prospecting Right Application and associated activities, as well as the opportunity to submit written comments for consideration / register as an I&amp;AP</li> </ul>
be specifically consulted regardless of whether or not they attended public meetings. Photographs of notice boards,	<ul> <li>An advertisement will be placed in one (1) local newspaper notifying I&amp;APs of the proposed Project as well as inviting comments;</li> </ul>
and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application must	<ul> <li>The PPP will be detailed in a chapter in the Basic Assessment Report (BAR);</li> </ul>
be attached as <b>Appendix</b> )	<ul> <li>The BAR will be placed at public places and on the Digby Wells website for the prescribed 30 day comment period; and</li> </ul>
	<ul> <li>A Comment and Response Report (CRR) will be compiled which will include all the comments that have been raised by I&amp;APs throughout the PPP.</li> </ul>
	Basic Assessment Phase:
	<ul> <li>A letter detailing the availability of the Basic Assessment Report will be sent to all I&amp;APs</li> </ul>
	<ul> <li>The BAR will be made available for public review for a period of 30 days;</li> </ul>
	<ul> <li>All comments received will be captured in the CRR.</li> </ul>
	Environmental Authorisation Phase:
	Once the competent authority has made a decision about the

	environmental authorisation, I&APs will be informed of the decision and the regulatory appeal procedure by email and post. In addition, as required by legislation, a newspaper advertisement will be placed in a local newspaper.
Information to be provided to Interested and Affected Parties.	<ul> <li>Compulsory <ul> <li>I&amp;APs will be provided the following information:</li> <li>The site plan;</li> <li>List of activities to be authorised;</li> <li>Scale and extent of activities to be authorised;</li> <li>Typical impacts of activities to be authorised (E.g. Surface disturbance, dust, noise, etc.);</li> <li>The duration of the activity; and</li> <li>Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land).</li> </ul> </li> <li>Other, specify: I&amp;APs will also be provided with a breakdown of</li> </ul>
	the Basic Assessment process as well as where they may submit their comments.
Information to be required from Interested and Affected Parties.	<ul> <li>Compulsory</li> <li>To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions;</li> <li>To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity;</li> <li>To provide information on current land uses and their location within the area under consideration;</li> <li>To provide information on the location of environmental features on site to make proposals as to how and to what standard the impacts on site can be remedied requested to make written proposals; and</li> <li>To mitigate the potential impacts on their socio economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied).</li> </ul>
	<b>Other</b> , <b>specify</b> : I&APs will also be requested to provide the details of any other parties that may potentially be interested in or impacted on by the project.

# 7. DESCRIPTION OF THE ASSESSMENT PROCESS TO BE UNDERTAKEN

ITEM	DESCRIPTION
	The environmental attributes of the Project site will be identified through a biophysical and social baseline investigation. The baseline investigations included the following steps:
Environmental attributes.	<ul> <li>Desktop review of available literature (i.e. existing specialist studies of the Project area, guideline documents including Environmental Management Frameworks);</li> </ul>
Environmental attributes associated with the development footprint will	<ul> <li>Review of available aerial imagery of the Project area and identification of potential areas of sensitivity (i.e. wetlands, settlements etc.). Areas of sensitivity were identified based on specialist expertise;</li> </ul>
be determined.	<ul> <li>A rating of the potential environmental and social sensitivities will be provided and based on specialist expertise and guideline/reference documents; and</li> </ul>
	<ul> <li>All sensitive areas identified will be mapped using a Geographic Information System (GIS).</li> </ul>
Identification of impacts and risks. Describe the process that will be used to identify impacts and risks.	Impact identification is performed by determining the source, pathway and potential receptors. In essence the potential for any change to a resource or receptor brought about by the presence of a Project component or by a Project-related activity will be identified. Perceived impacts, as raised by I&APs will also be considered during this assessment.
Consideration of alternatives. Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.	The Project area is limited in extent (6.5 ha), with the proposed prospecting sites expected to have minimal impacts on the environment due to the expected extent of the disturbed sites (100 m <sup>2</sup> ). The locations of the prospecting sites will be determined through non-invasive prospecting methods. As a result of the above, there will be limited alternatives available for consideration. The specialist baseline studies will highlight any sensitive environments or receptors, providing recommendations should alternative sites be investigated as opposed to prospecting within or in close proximity to sensitive areas.
Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks of each individual activity.	The impact significance rating process has been included as Appendix 7.
Contribution of specialist reports. Describe how specialist reports, if required, will be taken into consideration	<ul> <li>The BAR will be supplemented with specialist input. The specialist input will include a baseline environment investigation, as well as impact assessment and the recommendation of mitigation measures. The specialist inputs include the following:</li> <li>Fauna and Flora;</li> </ul>
and inform the impact	<ul> <li>Heritage Assessment and Notification of Intent to Develop (NID);</li> </ul>

identification, assessment and remediation process.	<ul> <li>Hydrological;</li> <li>Geohydrology and Geology;</li> <li>Soil, Land Use and Land Capability;</li> <li>GIS; and</li> <li>Closure.</li> </ul> During the baseline study, specialists will undertake desktop based research on the Project area to gain an understanding of the surrounding environment. The baseline phase will result in a specialist baseline input which will provide a description of the respective environmental or social resource/receptors, identify sensitive features and describe the potential impacts that may occur. Mitigation measures will be provided to prevent, manage and avoid potential impacts. The specialist input will inform the contents of the Basic Assessment Report, as well as provide the potential sensitive environments that will form the basis for alternatives.
Determination of impact management objectives and outcomes. Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.	<ul> <li>All specialists will identify management objectives, desired outcomes, applicable standards and performance indicators for the impacts identified for their respective areas. The following will be taken into consideration when considering management measures:</li> <li>National legislation;</li> <li>Provincial legislation;</li> <li>Local by-laws;</li> <li>Industry best practice guidelines;</li> <li>Relevant policy/framework documents; and</li> <li>Relevant company policy and practice.</li> </ul>

# 8. OTHER AUTHORISATIONS REQUIRED

	Mark with an X where applicable										
LEGISLATION	AUTHOR REQU	RISATION JIRED	APPLICATION SUBMITTED								
	Yes	No	Yes	No							
SEMAs											
National Environmental Management: Air Quality Act		x		x							
National Environmental Management: Biodiversity Act		x		x							
National Environmental Management: Integrated Coastal Management Act		x		x							
National Environmental Management: Protected Areas Act		x		x							
National Environmental Management: Waste Act		x		x							
National legislation											
Mineral Petroleum Development Resources Act	x		x								
National Water Act		x		x							
National Heritage Resources Act	x		x								
Others: There are no other environmental licencing application requirements for the project.											

Please provide proof of submission of applications in Appendix 5.

The Prospecting Right Application has been submitted as part of this application for environmental authorisation. The Heritage Assessment and Notification of Intent to Develop will be submitted to the South African Heritage Resource Agency (SAHRA) concurrently with the submission of the BAR for public review.

In the event that an authorization in terms of the National Environmental Waste Management Act is required for any of the activities applied for please state so clearly in order for such an authorisation to be considered as part of this application.

This application does not include, or require, activities for a Waste Management Licence.

### 9. DRAFT EMPR

For consultation purposes, provide a high level approach to the management of the potential environmental impacts of each of the activities applied for.

Note: The Construction Phase as detailed below does not include physical construction activities, but rather the clearing of vegetation in preparation for site establishment.

ACTIVITIES E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.)	PHASE (Of operation in which activity will take place). State: Planning and design, Pre- Construction; Construction, Operational, Rehabilitation, Closure, Post closure.	SIZE AND SCALE (of Disturbance) (volumes, tonnages and hectares or m <sup>2</sup> )	TYPICAL MITIGATION MEASURES (E.g. storm water control, dust control, noise control, access control, rehabilitation etc.)	<b>COMPLIANCE WITH STANDARDS</b> (A description of how each of the recommer environmental management standards or pr
Site clearance and vegetation removal.	Construction	100 m <sup>2</sup>	<ul> <li>Limit footprint of disturbed areas and avoid areas of high ecological sensitivity;</li> <li>Erosion control;</li> <li>Cultural heritage management; and</li> <li>Spill Response Plan.</li> </ul>	Site selection in accordance with G 36 of 1998) (NWA). The National Environmental Manag (NEMBA) affords threatened or p Protected species will be identified a Development of a <i>Chance Find Pro</i> Resources Act, 1999 (Act No. 25 of
Establishment of access roads/tracks.	Construction	Dependant of Prospecting site location.	<ul> <li>Limit footprint of disturbed areas and avoid areas of high ecological sensitivity;</li> <li>Erosion control;</li> <li>Dust control;</li> <li>Cultural heritage management; and</li> <li>Spill Response Plan.</li> </ul>	Development of a <i>Chance Find Pro</i> Resources Act, 1999 (Act No. 25 of
Topsoil stockpiling.	Construction	3 m <sup>3</sup>	<ul> <li>Stormwater management;</li> <li>Erosion control;</li> <li>Topsoil stockpiling; and</li> <li>Cultural heritage management.</li> </ul>	Protected of the environment throug (Act No. 107 of 1998) (NEMA).
Development of three sumps (oil-sludge-water separation).	Construction	3 m <sup>3</sup>	<ul> <li>Soil stockpiling;</li> <li>Stormwater management; and</li> <li>Waste management.</li> </ul>	Site selection in accordance with GI Best Practice Guidelines in accorda
Drilling of prospecting boreholes.	Operation	100 m <sup>2</sup>	<ul> <li>Clean and dirty water separation;</li> <li>Treatment and re-use of water (where practical);</li> <li>Provision of spill management equipment (sumps);</li> <li>Waste management;</li> <li>Noise control; and</li> <li>Access control.</li> </ul>	Site selection in accordance with GI Noise control according to Environ 1989) (ECA). Protected of the environment throug
Rehabilitation (topsoil cover, ripping and vegetation establishment).	Closure	100 m <sup>2</sup>	<ul> <li>Vegetation establishment;</li> <li>Dust control;</li> <li>Access control; and</li> <li>Rehabilitation.</li> </ul>	Rehabilitation in accordance with th Act, 2002 (Act No. 28 of 2002) (MPI

ndations herein will comply with any prescribed ractices that have been identified by competent authorities)

GN R 704 of the National Water Act, 1998 (Act No.

gement: Biodiversity Act, 2004 (Act No. 10 of 2004) protected species a legal status and protection. and either avoided or trans-located.

*rocedure* in accordance with the National Heritage f 1999) (NHRA).

ocedure in accordance with the National Heritage <sup>7</sup> 1999).

gh National Environmental Management Act, 1998

N R 704 of the NWA.

N R 704 of the NWA. Inmental Conservation Act, 1989 (Act No. 73 of

gh NEMA.

ne Mineral and Petroleum Resources Development RDA) and NEMA.

### 10. CLOSURE PLAN

In the space provided under each heading below, please provide a high level description of the plan for closure and the information that will be provided in the draft EMPR accompanying draft basic assessment report or environmental impact reports going forward.

Items	Description								
Baseline environment Describe how the baseline environment will be determined with the input of interested and affected parties and due cognizance of the current land uses and or existing biophysical environment	All information applicable and currently available for the Project site and larger areas will be reviewed (this will include existing specialise baseline studies for the project site) to determine the baseline environment. Information regarding current land uses and existing biophysical environment gathered from interested and affected parties during the Public consultation will also be taken into consideration whe describing the baseline environment.								
<b>Closure objectives</b> Describe the closure objectives and the extent to which they will be aligned to the baseline environment	The closure objectives will be to rehabilitate the prospecting sites to their natural or predetermined state, or to a land use that conforms to the generally accepted principle of sustainable development through restoration, remediation, rehabilitation and stabilisation. The information review will enable the setting of objectives for rehabilitation and will form the basis of the baseline report sections contained within the BAR.								
Rehabilitation Plan Describe the scale and aerial extent of the prospecting or mining listed activities to be authorised, including the anticipated prospecting or mining area at the time of closure, and confirm that a site rehabilitation plan drawn to a suitable scale will be provided in the draft EMPR to be submitted together with the draft EIR or Basic Assessment Report as the case may be	The approximate size of the Prospecting Right area is 6.5 ha. The prospecting sites will be approximately 100 m <sup>2</sup> in extent and a maximum of one borehole will be drilled per 12 month period over the five year period. Access roads/tracks will be determined based on the prospecting site locations and will aim to use the shortest possible route, while avoiding sensitive areas.								
<b>Rehabilitation Cost</b> Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof	A closure cost model will be compiled using Microsoft Excel. The matrix model will consist of an input sheet, containing measurements of the disturbed areas, a standard rate sheet and a summary sheet, which summarises the costs for closure. The matrix model calculates the cost of rehabilitating the access roads/tracks and the prospecting site. The rehabilitation will include the backfilling of the sumps, removal of all equipment, backfilling of the topsoil, ripping and vegetating the disturbed areas. The preliminary closure cost is estimated between R 40 000 and R 50 000 based on the DMR's "Guideline Document for the Evaluation								

	of the Quantum of Closure Related Financial Provision".
Decommissioning Considering that rehabilitation must take place upon cessation of an activity, describe when each of activities applied for will be rehabilitated in terms of either the cessation of the individual activity or the cessation of the overall prospecting or mining activity.	Each Prospecting site will be rehabilitated immediately following the cessation of the drilling activities for that individual site. All Prospecting sites will be rehabilitated fully prior to the cessation of the Prospecting Right



Signature of the applicant/Signature on behalf of the applicant:

Rustenburg Platinum Mines Limited

Name of Company (if applicable):

7 April 2015

Date:

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( )

( )

( )

# Appendix 1: Declaration and Curriculum Vitae of the EAP

#### I, Duncan Pettit, declare that -

#### General declaration:

- I act as the independent environmental practitioner in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process;
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not all the particulars furnished by me in this form are true and correct;
- I will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the Act.

#### **Disclosure of Vested Interest:**

 I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

Signature of the EAP:

**Digby Wells Environmental** 

Name of Company (if applicable):

7 April 2015

Date:



### **DUNCAN PETTIT**

Mr. Duncan Pettit Environmental Consultant Environmental Legal Services Digby Wells Environmental

### **1 EDUCATION**

2009 – 2012:	BSc Environmental Management: Zoology Stream (UNISA)
2007:	Matriculated at St. David's Marist College

### 2 EMPLOYMENT

May 2013 – Present: Digby Wells Environmental as an Environmental Consultant

### **3 EXPERIENCE**

Duncan is currently employed at Digby Wells Environmental as an Environmental Consultant. Duncan is part of the Environmental Legal Services Department and has undertaken positions of Project Administrator and Project Manager in numerous Projects. Duncan has been involved in projects that include Prospecting Rights Performance Assessments, the compilation of Environmental Management Plans (EMP) and Integrated Waste Management Licenses (IWML).

Some of the Projects Include:

- Anglo American Platinum: Environmental Management Plan Performance Assessments;
- Anglo American Platinum: Prospecting Right EMP Reports;
- Anglo American Platinum: Public Participation Process for new Prospecting Right Applications, Mpumalanga Province;
- BHP Billiton Energy Coal South Africa Environmental Impact Assessment for the Klipspruit Extension: South Project;
- BHP Billiton Energy Coal South Africa Environmental Impact Assessment for the Klipspruit Extension: Weltevreden Project;
- Universal Coal: Roodekop Coal Mine Waste Licence Basic Assessment Report;
- Anglo American Thermal Coal: Scoping for an Integrated Waste Management Licence;
- Copper Sunset Sand: Section 102 Amendment for Mining Right expansion;

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- Eskom Holdings (SOC) Limited Environmental Authorisation EIA Process for the management of decant at Kilbarchan Colliery, Newcastle;
- Randgold Resources EMP Audit for Kibali Gold Mine, Democratic Republic of Congo;
- Harmony Gold: Section 102 Amendment to storage facilities;
- Sable Platinum (Pty) Ltd: Prospecting Right EMP Report;
- ERGO Mining: EMP Consolidation;
- ERGO Mining: Reclaimed Dumps Mine Closure; Risk and Performance Assessment;
- Platreef Resources: Bulk Sampling Basic Assessment Report;
- Exxaro Grootegeluk Coal Mine: Water Use Licence and Integrated Water and Waste Management Plan;
- Exxaro Grootegeluk Coal Mine: Basic Assessment Report for Listed Activities associated with the railway expansion;
- Sasol Mining Basic Assessment Report and Integrated Water Use Licence for the Mooikraal to Sasolburg Operations Pipelines.

Appendix 2: Project Locality Map



# Appendix 3: Environmental Authorisations – N/A

No Environmental Authorisation have been applied for or granted for the Project site.

# Appendix 4: Project Infrastructure Map





# Appendix 5: Proof of Submission of Application

This Application for Environmental Authorisation was submitted with the Prospecting Right Application.

# Appendix 6: Proof of Public Participation

No public consultation has taken place for the Project. Due to the sensitivity regarding Prospecting Right Applications, no consultation will take place prior to the acceptance of the Application by the DMR. The public consultation plan that will be undertaken following the acceptance of the Application is detailed in Section 6 of the Application.

# Appendix 7: Impact Significance Rating Process



The significance rating process follows the established impact/risk assessment formula:

Significance = Consequence x Probability x Nature

Where

Consequence = Intensity + Extent + Duration

And

Probability = Likelihood of an impact occurring

And

Nature = Positive (+1) or negative (-1) impact

Note: In the formula for calculating consequence, the type of impact is multiplied by +1 for positive impacts and -1 for negative impacts

The matrix calculates the rating out of 147, whereby Intensity, Extent, Duration and Probability are each rated out of seven as indicated in Table 7-1. The weight assigned to the various parameters is then multiplied by +1 for positive and -1 for negative impacts.

Impacts are rated prior to mitigation and again after consideration of the mitigation measure proposed in this EIA/EMP Report. The significance of an impact is then determined and categorised into one of eight categories, as indicated in Table 7-2, which is extracted from Table 7-1. The description of the significance ratings is discussed in Table 7-3.

It is important to note that the pre-mitigation rating takes into consideration the activity as proposed, i.e. there may already be certain types of mitigation measures included in the design (for example due to legal requirements). If the potential impact is still considered too high, additional mitigation measures are proposed.

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Pating	Severity/Irreplaceability		Spatial scale	Duration/Irrovaraibility	Probability				
Rating	Environmental	Social, cultural and heritage	Spatial Scale	Duration/inteversibility					
7	Very significant impact on the environment. Irreparable damage to highly valued species, habitat or eco system. Persistent severe damage. The positive impact will result in a significant improvement to the initial/post disturbance environmental status and will benefit ecological and natural resources.	Irreparable damage to highly valued items of great cultural significance or complete breakdown of social order. The positive impact will be of high significance which will result the improvement of the socio-economic status of a greater area beyond the boundary of the directly affected of the community and/or promote archaeological and heritage awareness and contribute towards research and documentation of sites and artefacts through phase two	International The effect will occur across international borders	Permanent: No Mitigation No mitigation measures of natural process will reduce the impact after implementation.	Certain/ Definite. The impact will occur regardless of the implementation of any preventative or corrective actions.				
	<u> </u>	assessments.		<b></b>					
	Significant impact on highly valued species, habitat or ecosystem.	Irreparable damage to highly valued items of cultural significance or breakdown of social order.	National Will affect the entire country	Permanent: Mitigation measures of natural process will reduce the impact	Almost certain/Highly probable It is most likely that				
6	significance which will result in a vast improvement to the environment such as ecological diversification and/or rehabilitation of endangered species	The positive impact will be of high significance and will result in the upliftment of the surrounding community and/or contribute towards research and documentation of sites			the impact will occur.				

### Table 7-1: Impact assessment parameter ratings



Pating	Severity/Irreplaceability		Spatial scale	Duration/Irrovorsibility	Probability				
Rating	Environmental	Social, cultural and heritage	Spatial Scale	Duration/inteversionity	FIODADIIILY				
		and artefacts through phase two assessments							
5	Very serious, long-term environmental impairment of ecosystem function that may take several years to rehabilitate The positive impact will be moderately high and will have a long term beneficial effect on the natural environment	Very serious widespread social impacts. Irreparable damage to highly valued items The positive impact will be moderately high and will result in visible improvements on the socio- economic environment of the local and regional community, and/or promote archaeological and heritage awareness through mitigation	Cercle/ Region Will affect the entire Cercle or region	Project Life The impact will cease after the operational life span of the project.	Likely The impact may occur.				
4	Seriousmediumtermenvironmentaleffects.Environmentaldamagecanbereversed in less than a yearThepositiveimpacton	On-going serious social issues. Significant damage to structures / items of cultural significance The positive impact on the socio- economic environment will be of a	Commune Area Will affect the whole municipal area	Long term 6-15 years	Probable Has occurred here or elsewhere and could therefore occur.				



Pating	Severity/Irreplaceability		Spatial scale	Duration/Irrovorsibility	Brobability
ixating	Environmental	Social, cultural and heritage	Spallal Scale	Duration/inteversionity	Frobability
	environment will be moderate with visible improvement to the natural resources and regional biodiversity	moderate extent and benefits should be experience across the local extent and/or potential benefits for archaeological and heritage conservation			
3	Moderate, short-term effects but not affecting ecosystem function. Rehabilitation requires intervention of external specialists and can be done in less than a month. The positive impact will be moderately beneficial to the natural environment, but will be short lived.	Ongoing social issues. Damage to items of cultural significance. The positive impact will be moderately beneficial for some community members and/or employees, but will be short lived and/or there will be a moderate possibility for archaeological and heritage conservation	Local Local extending only as far as the development site area	Medium term 1-5 years	Unlikely Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur.
2	Minor effects on biological or physical environment. Environmental damage can be rehabilitated internally with/ without help of external consultants. The positive impacts will be minor and slight environmental improvement will be visible.	Minor medium-term social impacts on local population. Mostly repairable. Cultural functions and processes not affected. Minor positive impacts on the social/cultural and/ or economic environment	Limited Limited to the site and its immediate surroundings	Short term Less than 1 year	Rare/ improbable Conceivable, but only in extreme circumstances and/ or has not happened during lifetime of the project but has happened elsewhere. The



Pating	Severity/Irreplaceability		Spatial scale	Duration/Irrovorsibility	Probability
Rating	Environmental	Social, cultural and heritage	Spatial Scale	Duration/inteversionity	FIODADIIILY
					possibility of the
					impact materialising
					is very low as a
					result of design,
					historic experience
					or implementation of
					adequate mitigation
					measures
	Limited damage to minimal area of	Low-level repairable damage to	Very limited	Immediate	Highly unlikely/None
	low significance, (e.g. ad hoc spills	commonplace structures.	Limited to	Less than 1 month	Expected never to
	within plant area). Will have no		specific		happen.
	impact on the environment.	The positive impact on social and	isolated parts		
1		cultural aspects will be insignificant	of the site.		
•	The positive impact on the				
	environment will be insignificant				
	and will not result in visible				
	improvements				



	Significance																																					
7	-14	7 -14	0 -	133	-126	-119	-112	-105	-98	-91	-84	-77	-70	-63	-56	-49	-42	-35	-28	-21	21	28	35	42	49 56	663	3 70	77	84	91	98	105	112	119	126	133	140	147
6	6-120	6 -12	0 -	114	-108	-102	-96	-90	-84	-78	-72	-66	-60	-54	-48	-42	-36	-30	-24	-18	18	24	30	36	42 48	3 54	160	66	72	78	84	90	96	102	108	114	120	126
5	5-10	5 -10	0 -	95	-90	-85	-80	-75	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	15	20	25	30	35 4(	) 45	5 50	55	60	65	70	75	80	85	90	95	100	105
4	-84	-80	-	76	-72	-68	-64	-60	-56	-52	-48	-44	-40	-36	-32	-28	-24	-20	-16	-12	12	16	20	24	28 32	2 36	640	44	48	52	56	60	64	68	72	76	80	84
, 3	8 <mark>-63</mark>	-60	-	57	-54	-51	-48	-45	-42	-39	-36	-33	-30	-27	-24	-21	-18	-15	-12	-9	9	12	15	18	21 24	127	7 30	33	36	39	42	45	48	51	54	57	60	63
2	2-42	-40	-	38	-36	-34	-32	-30	-28	-26	-24	-22	-20	-18	-16	-14	-12	-10	-8	-6	6	8	10	12	14 16	5 18	320	22	24	26	28	30	32	34	36	38	40	42
1	-21	-20	-	19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	3	4	5	6	78	9	10	11	12	13	14	15	16	17	18	19	20	21
	-21	-20	-	19	-18	-17	-16	-15	-14	-13	-12	-11	-10	-9	-8	-7	-6	-5	-4	-3	3	4	5	6	78	9	10	11	12	13	14	15	16	17	18	19	20	21

### Table 7-2: Probability/Consequence Matrix

Consequence

Score	Description	Rating					
109 to 147	A very beneficial impact that may be sufficient by itself to justify implementation of the project. The impact may result in permanent positive change	Major (positive)					
73 to 108	A beneficial impact which may help to justify the implementation of the project. These impacts would be considered by society as constituting a major and usually a long-term positive change to the (natural and / or social) environment	Moderate (positive)					
36 to 72	An important positive impact. The impact is insufficient by itself to justify the implementation of the project. These impacts will usually result in positive medium to long-term effect on the natural and / or social environment	Minor (positive)					
3 to 35	A small positive impact. The impact will result in medium to short term effects on the natural and / or social environment	Negligible (positive)					
-3 to -35	An acceptable negative impact for which mitigation is desirable but not essential. The impact by itself is insufficient even in combination with other low impacts to prevent the development being approved. These impacts will result in negative medium to short term effects on the natural and / or social environment	Negligible (negative)					
-36 to -72	An important negative impact which requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which in conjunction with other impacts may prevent its implementation. These impacts will usually result in negative medium to long-term effect on the natural and / or social environment	Minor (negative)					
-73 to -108	A serious negative impact which may prevent the implementation of the project. These impacts would be considered by society as constituting a major and usually a long-term change to the (natural and / or social) environment and result in severe effects	Moderate (negative)					
-109 to -147	A very serious negative impact which may be sufficient by itself to prevent implementation of the project. The impact may result in permanent change. Very often these impacts are immitigable and usually result in very severe effects	Major (negative)					

### Table 7-3: Significance Rating Description

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