## **BASIC ASSESSMENT, ENVIRONMENTAL MANAGEMENT PROGRAMME AND CLOSURE PLAN FOR THE CLOSURE OF THE DOORNSPRUIT AND ROODEKRAALSPRUIT PROSPECTING RIGHT**

Doornspruit 84 JQ and Roodekraalspruit 113 JQ

## **AUGUST 2019**

SUBMITTED FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) IN RESPECT OF LISTED **ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE** MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (ACT 28 OF 2002) (AS AMENDED)

Name of applicant: Royal Bafokeng Resources Platinum (Pty) Ltd Unincorporated Joint Venture Tel no: (011) 123-4567 Fax no: (011) 123-4567 Postal address: Private bag X18, Northlands, 2116 Physical address: No. 2 Fricker road, Illovo, 2196 File reference number SAMRAD: NW 30/5/1/1/2/878 (10369) SLR

SLR Project No.: 710.09003.00139 Report No.: 1 evision No.: Final for DMR review ugust 2019

## DOCUMENT INFORMATION

Title	Basic Assessment, Environmental Management Programme and Closure Plan for the Closure of the Doornspruit and Roodekraalspruit Prospecting Right	
Applicant	The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture	
Project Manager	Alessandra Pheiffer	
Project Manager e-mail	apheiffer@slrconsulting.com	
Authority Reference No	NW 30/5/1/1/2/878 (10369) PR	
SLR Project No	710.09003.00139	
Keywords	Doornspruit and Roodekraalspruit, Impala, Royal Bafokeng Resources Platinum, Prospecting, Closure, North West	
Report Date	August 2019	
Report Status	Final for DMR Review	

f

## **REPORT COMPILATION**

REPORT COMPILED BY: Chiara D'Egidio Kotze

otze

Chiara D'Egidio Kotze Environmental Assessment Practitioner **REPORT REVIEWED BY:** Alessandra Pheiffer

Alessandra Pheiffer Reviewer (PrSciNat)

## **BASIS OF REPORT**

This document has been prepared by an SLR Group company with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture (RBRP/Impala JV) for part or all of the services it has been appointed to carry out. It is subject to the terms and conditions of that appointment.

SLR shall not be liable for the use of or reliance on any information, advice, recommendations and opinions in this document for any purpose by any person other than RBRP/Impala JV. Reliance may be granted to a third party only in the event that SLR and the third party have executed a reliance agreement or collateral warranty.

Information reported herein may be based on the interpretation of public domain data collected by SLR, and/or information supplied by RBRP/Impala JV and/or its other advisors and associates. These data have been accepted in good faith as being accurate and valid.

SLR disclaims any responsibility to RBRP/Impala JV and others in respect of any matters outside the agreed scope of the work.

The copyright and intellectual property in all drawings, reports, specifications, bills of quantities, calculations and other information set out in this report remain vested in SLR unless the terms of appointment state otherwise.

This document may contain information of a specialised and/or highly technical nature and readers are advised to seek clarification on any elements which may be unclear to it. Information, advice, recommendations and opinions in this document should only be relied upon in the context of the whole document and any documents referenced explicitly herein and should then only be used within the context of the appointment.

## BASIC ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE CLOSURE OF THE DOORNSPRUIT AND ROODEKRAALSPRUIT PROSPECTING RIGHT

#### **EXECUTIVE SUMMARY**

#### **PROJECT BACKGROUND**

The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture (RBRP/Impala JV) hold a prospecting right MPT number 497/2007 PR (DMR reference number NW 30/5/1/1/2/878 (10369) PR) for platinum group metals (PGMs), silver, gold ore, cobalt , chrome ore, copper ore, nickel ore, iron ore, vanadium ore and sulphur (in pyrite) on a portion of the farm Doornspruit 84 JQ (Doornspruit) as well as the remaining extent of the farm, portion 2, the remaining extent of portion 6, portion 8, a portion of portion 3, a portion of portion 4 and a portion of portion 5 of the farm Roodekraalspruit 113 JQ (Roodekraalspruit). The prospecting right area is located approximately 22 km north east of Rustenburg in the Rustenburg Local Municipality and the Bojanala Platinum District Municipality in the North West Province. The regional and local settings are illustrated in Figure 1 and Figure 2 respectively. The abovementioned prospecting right is included in Appendix A.

Between September 2006 and August 2014, Impala on behalf of the RBRP/Impala JV, undertook prospecting activities on the farms Doornspruit and Roodekraalspruit, during which time fourteen approved exploration drill holes were drilled.

Impala has faced tremendous economic and financial challenges throughout the last few years. The RBRP/Impala JV thus proposes to close the Doornspruit and Roodekraalspruit prospecting right.

SLR Consulting (Africa) (Pty) Ltd (SLR), an independent firm of environmental assessment practitioners (EAP), has been appointed by Impala on behalf of the RBRP/Impala JV to manage the environmental authorisation processes associated with the closure of the Doornspruit and Roodekraalspruit prospecting right.

#### SUMMARY OF AUTHORISATION REQUIREMENTS

Prior to the closure of the prospecting right, the following is required:

- A Closure Certificate from the DMR in terms of Section 43(4) of the MPRDA.
- An environmental authorisation from the DMR in terms of the NEMA, as amended. The Environmental Impact Assessment (EIA) Regulations being followed are Government Notice Regulation (GNR) 982 of 4 December 2014, as amended. The relevant listed activities are included in Section 3.1.

#### STAKEHOLDER ENGAGEMENT

The stakeholder engagement process commenced prior to the submission of the Basic Assessment Report (BAR) and has continued throughout the environmental assessment process. As part of this process, commenting authorities and interested and affected parties (I&APs) were given the opportunity to review the background information document (BID) and the draft BAR and submit questions and comments to the project team. All comments submitted to date by the commenting authorities and I&APs have been included and addressed in this final BAR.

The draft BAR was distributed for a 30-day comment period from 10 July 2019 to 12 August 2019 in order to provide I&APs with an opportunity to comment on any aspect of the proposed project and the findings of the BA process. Copies of the full report were available on the SLR website (at https://slrconsulting.com/za/slr-documents/) and hard copies were available at the Roodekraal Community Hall, Rustenburg Public Library and the Royal Bafokeng Civic Centre. Electronic copies (compact disk) of the report were available from SLR, at the contact details provided below. Summaries of the BAR were available in English and Setswana and were placed at the Roodekraal Community Hall, Rustenburg Public Library and the Royal Bafokeng Civic Centre.

All comments received during the review process have been addressed in this final BAR that is being submitted for decision-making.

SLR Consulting (Africa) (Pty) Ltd Attention: Alex Pheiffer or Clive Phashe PO Box 1596, Cramerview 2060 (if using post please call SLR to notify us of your submission) Tel: (011) 467 0945 Fax: (011) 467 0978 E-mail: <u>apheiffer@slrconsulting.com</u> or <u>cphashe@slrconsulting.com</u>

#### IMPACTS AND MANAGEMENT ACTIONS

This section provides a summary of the assessment of the potential impacts. The potential impacts/risks have been assessed against the prospecting right closure objective which is to return any areas disturbed by prospecting activities to the pre-project state. Given that decommissioning and rehabilitation of each drill site was undertaken once drilling of each site was completed, this assessment focusses on potential residual impacts/risks as a result of the rehabilitation phase only. The assessment of the unmitigated scenario takes into account that decommissioning and rehabilitation activities have already been implemented in line with the management measures outlined in the approved prospecting EMPr, therefore the assessment of the mitigated scenario is where additional mitigation measures are deemed necessary. The table below provides a summary of the potential impacts in no particular order of importance.

Aspect	Potential impact	Reference to mitigation measures	Significance (takes into account measures implemented as per approved EMPr)	
			Unmitigated	Mitigated
Flora and Fauna	Loss of flora and fauna through lack of or poor rehabilitation	No additional mitigation or monitoring is deemed necessary.	Very Low	Not Applicable
Land-use	Loss of pre-prospecting land uses through lack of or poor rehabilitation	No additional mitigation or monitoring is deemed necessary.	Very Low	Not Applicable
Visual	Change in the visual landscape of the area	No additional mitigation or monitoring is deemed necessary.	Insignificant	Not Applicable
Socio-economic	Negative and positive socio-economic impacts	No additional mitigation or monitoring is deemed necessary.	Very Low	Not Applicable

#### **ENVIRONMENTAL STATEMENT**

The assessment of the project indicates that the potential for negative residual impacts/risks is very low to insignificant. It follows that no additional active mitigation or monitoring is required.

## CONTENTS

EXEC	UTIVE SUMMARY	II
INTRO	ODUCTION	1
PROJE	CT OVERVIEW	1
Purpc	DSE OF THIS REPORT	1
Summ	1ary of Authorisation Requirements	4
Terms	S OF REFERENCE	4
Oppor	RTUNITY TO COMMENT	4
PART	A – SCOPE OF ACTIVITY AND ENVIRONMENTAL IMPACT ASSESSMENT	6
1	DETAILS OF THE APPLICANT AND THE EAP	7
1.1	APPLICANT DETAILS	7
1.2	DETAILS OF THE EAP WHO PREPARED THE REPORT	7
1.3	Expertise of the eap	7
2	LOCATION OF ACTIVITY	9
2.1	LOCATION OF OVERALL ACTIVITY	9
2.2	LOCALITY MAP	9
3	DESCRIPTION OF THE SCOPE OF THE ACTIVITY	10
3.1	LISTED AND SPECIFIED ACTIVITIES	10
3.2	DESCRIPTION OF THE PROSPECTING ACTIVITIES	10
4	POLICY AND LEGISLATIVE CONTEXT	14
4.1	LEGISLATIVE CONSIDERATION IN THE PREPARATION OF THE BASIC ASSESSMENT REPORT	14
4.2	Guidelines, Policies, Plans and Frameworks	16
4.3	LEGISLATIVE BAR CONTENT REQUIREMENTS	16
5	NEED AND DESIRABILITY OF THE PROJECT	21
5.1	ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES	21
5.2	PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT	21
5.3	RATIONALE FOR THE PROPOSED PROJECT ACTIVITY	21
6	MOTIVATION FOR THE PREFERRED SITE, ACTIVITIES AND TECHNOLOGY ALTERNATIVES	22
7	FULL DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED ALTERNAT	
	WITHIN THE SITE	23
7.1	DETAILS OF THE DEVELOPMENT FOOTPRINT CONSIDERED	23
7.2	DETAILS OF THE PUBLIC PARTICIPATION PROCESS FOLLOWED	
7.3	SUMMARY OF ISSUES RAISED BY I&APS	25
7.4	Environmental attributes associated with the alternatives	
7.5	ENVIRONMENTAL IMPACTS AND RISKS	
7.6	METHODOLOGY USED IN DETERMINING THE SIGNIFICANCE OF ENVIRONMENTAL IMPACTS	
7.7	POSITIVE AND NEGATIVE IMPACTS OF THE PROPOSED ACTIVITY AND ALTERNATIVES	
7.8	Possible management actions that could be applied and the level of Risk	
7.9	Motivation where no alternative sites were considered Statement motivating the preferred alternative	
7.10		
8	FULL DESCRIPTION OF THE PROCESS UNDERTAKEN TO IDENTIFY, ASSESS AND RANK THE IMPACTS AND R	
0.1	THE ACTIVITY WILL IMPOSE ON THE PREFERRED SITE THROUGH THE LIFE OF THE ACTIVITY	
8.1 8.2	Description of the process undertaken to identify impacts Final Environmental Audit	
8.3	PINAL ENVIRONMENTAL AUDIT	
8.4	A DESCRIPTION OF THE ENVIRONMENTAL IMPACTS AND RISKS IDENTIFIED DURING THE ENVIRONMENTAL ASSESSMENT PROCESS	
8.5	Assessment of the significance of each impact and risk and an indication of the extent of to which the issue and	
	CAN BE AVOIDED OR ADDRESSED BY THE ADOPTION OF MANAGEMENT ACTIONS	
9	ASSESSMENT OF EACH IDENTIFIED POTENTIALLY SIGNIFICANT IMPACT AND RISK	59

10	SUMMARY OF SPECIALIST REPORT FINDINGS	.60
11	ENVIRONMENTAL IMPACT STATEMENT	.61
11.1	SUMMARY OF KEY FINDINGS	
11.2	FINAL SITE MAP	
11.3	SUMMARY OF THE POSITIVE AND NEGATIVE IMPACTS AND RISKS OF THE PROPOSED ACTIVITY AND IDENTIFIED ALTERNATIVES	
12	IMPACT MANAGEMENT OBJECTIVES AND OUTCOMES FOR INCLUSION IN THE EMPR	
12.1	PROPOSED MANAGEMENT OBJECTIVES AND OUTCOMES FOR ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS	
13	ASPECTS FOR INCLUSION AS CONDITIONS OF THE AUTHORISATION	
14	ASSUMPTIONS, UNCERTAINTIES, LIMITATIONS AND GAPS IN KNOWLEDGE	
14.1	Environmental assessment limit	
15	REASONED OPINION AS TO WHETHER THE PROPOSED ACTIVITY SHOULD OR SHOULD NOT BE AUTHORISEI	
15.1 15.2	Reasons why the activity should be authorized or not Conditions that must be included in the authorisation	
<b>16</b>	PERIOD FOR WHICH AUTHORISATION IS REQUIRED.	
	UNDERTAKING	
17	FINANCIAL PROVISION	
<b>18</b> 18.1	FINANCIAL PROVISION METHOD TO DERIVE THE FINANCIAL PROVISION	
18.2	CONFIRM THAT THE AMOUNT CAN BE PROVIDED FOR FROM OPERATING EXPENDITURE	
19.2	SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY	
19.1	IMPACT ON THE SOCIO-ECONOMIC CONDITIONS OF ANY DIRECTLY AFFECTED PERSON.	
19.2	IMPACT ON ANY NATIONAL ESTATE REFERRED TO IN SECTION 3(2) OF THE NATIONAL HERITAGE RESOURCES ACT	
20	OTHER MATTERS REQUIRED IN TERMS OF SECTIONS 24(4)(A) AND (B) OF THE ACT	
PART	B - ENVIRONMENTAL MANAGEMENT PROGRAMME AND CLOSURE PLAN	
21	DETAILS OF THE EAP	
22	DESCRIPTION OF THE ASPECTS OF THE ACTIVITY	.74
23	COMPOSITE MAP	.75
24	DESCRIPTION OF THE IMPACT MANAGEMENT OBJECTIVES INCLUDING MANAGEMENT STATEMENT	.76
24.1	DETERMINATION OF CLOSURE OBJECTIVES	.76
24.2	PROCESS FOR MANAGING ANY ENVIRONMENTAL DAMAGE, POLLUTION OR ECOLOGICAL DEGRADATION AS A RESULT OF UNDERTAKE A LISTED ACTIVITY	
24.3	Potential risk of Acid Mine Drainage	
24.4	VOLUMES AND RATE OF WATER USE FOR MINING	
	HAS A WATER USE LICENCE BEEN APPLIED FOR?	
24.6	IMPACTS TO BE MITIGATED IN THEIR RESPECTIVE PHASES	.76
25	IMPACT MANAGEMENT OUTCOMES	.77
26	IMPACT MANAGEMENT ACTIONS	.78
27	FINANCIAL PROVISION	.79
27.1	DETERMINATION OF THE AMOUNT OF THE FINANCIAL PROVISION	.79
28	MECHANISMS FOR MONITORING COMPLIANCE AND PERFORMANCE AGAINST THE EMPR	.82
29	FREQUENCY OF SUBMISSION OF PERFORMANCE ASSESSMENT REPORT	.83
30	ENVIRONMENTAL AWARENESS PLAN	.84
31	SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY	.85
32	UNDERTAKING	.86
33	REFERENCES	

#### APPENDICES

APPENDIX A: EXISTING AUTHORISATIONS	А
APPENDIX B: EAP CURRICULUM VITAE AND REGISTRATION	В

APPENDIX C: STAKEHOLDER ENGAGEMENT	. C
APPENDIX D: DETAILED ASSESSMENT OF POTENTIAL IMPACTS	D
APPENDIX E: COMPOSITE MAP (FIGURE 6)	. E
APPENDIX F: DETAILED ENVIRONMENTAL AUDIT PROCEDURE	
APPENDIX G: LETTER OF RECOMMENDATION FOR EXEMPTION (PISTORIUS, 2019)	G

#### LIST OF TABLES

TABLE 1-1: APPLICANT DETAILS	7
TABLE 1-2: DETAILS OF THE BA PROJECT TEAM	7
TABLE 2-1: DESCRIPTION OF THE PROPERTY	9
TABLE 3-1: PROJECT ACTIVITIES AND ASSOCIATED LISTED ACTIVITIES	
TABLE 4-1: LEGAL FRAMEWORK	
TABLE 4-2: GUIDELINE AND POLICY FRAMEWORK	16
TABLE 4-3: CONTENTS OF THE BAR	
TABLE 4-4: CONTENTS OF THE CLOSURE PLAN	
TABLE 7-1: PUBLIC PARTICIPATION PROCESS UNDERTAKEN AS PART OF THE BAR	23
TABLE 7-2: I&APS THAT SUBMITTED WRITTEN/TELEPHONIC CORRESPONDENCE DURING THE PROCESS	
TABLE 7-3: SUMMARY OF ISSUES RAISED BY I&APS	26
TABLE 7-4:LANDOWNERSHIP WITHIN AND IMMEDIATELY ADJACENT TO THE DOORNSPRUIT	=
ROODEKRAALSPRUIT PROSPECTING RIGHT AREA	
TABLE 7-5: IMPACT ASSESSMENT METHODOLOGY	49
TABLE 8-1: LIST OF POTENTIAL IMPACTS AS THEY RELATED TO THE PROPOSED PROJECT	
TABLE 9-1: ASSESSMENT OF SIGNIFICANT IMPACTS AND RISKS	
TABLE 11-1: SUMMARY OF POTENTIAL IMPACTS	
TABLE 12-1: ENVIRONMENTAL OBJECTIVES AND OUTCOMES	62

#### LIST OF FIGURES

FIGURE 1: REGIONAL SETTING	2
FIGURE 2: LOCAL SETTING	
FIGURE 3: LAYOUT OF DECOMMISSIONED PROSPECTING DRILL SITES	13
FIGURE 4: PHOTOGRAPHS OF DECOMMISSIONED DRILL HOLES	55
FIGURE 5: AREA UNDER CLOSURE INCLUDING THE FINAL AND FUTURE LAND USE	80

## ACRONYMS AND ABBREVIATIONS

Acronym / Abbreviation	Definition
ВА	Basic Assessment
BAR	Basic Assessment Report
BID	Background Information Document
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
I&APs	Interested and Affected Parties
MPRDA	Mineral and Petroleum Resources Development Act
NEMA	National Environmental Management Act
SACNASP	South African Council for Natural Scientific Professions
SLR	SLR Consulting (Africa) (Pty) Ltd

#### INTRODUCTION

This chapter provides a brief description of the project background, describes the purpose of this report, summarises the legislative authorisation requirements, provides the study terms of reference and outlines the opportunity for comment.

#### **PROJECT OVERVIEW**

The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture (RBRP/Impala JV) hold a prospecting right MPT number 497/2007 PR (DMR reference number NW 30/5/1/1/2/878 (10369) PR) for platinum group metals (PGMs), silver, gold ore, cobalt, chrome ore, copper ore, nickel ore, iron ore, vanadium ore and sulphur (in pyrite) on a portion of the farm Doornspruit 84 JQ (Doornspruit) as well as the remaining extent of the farm, portion 2, the remaining extent of portion 6, portion 8, a portion of portion 3, a portion of portion 4 and a portion of portion 5 of the farm Roodekraalspruit 113 JQ (Roodekraalspruit). The prospecting right area is located approximately 22 km north east of Rustenburg in the Rustenburg Local Municipality and the Bojanala Platinum District Municipality in the North West Province. The regional and local settings are illustrated in Figure 1 and Figure 2, respectively. The abovementioned prospecting right is included Appendix A.

Between September 2006 and August 2014, Impala on behalf of the RBRP/Impala JV undertook prospecting activities on the farms Doornspruit and Roodekraalspruit, during which time fourteen approved exploration drill holes were drilled.

With the current economic environment and metal prices RBRP/Impala JV has decided to exit from this Prospecting Right through a closure application.

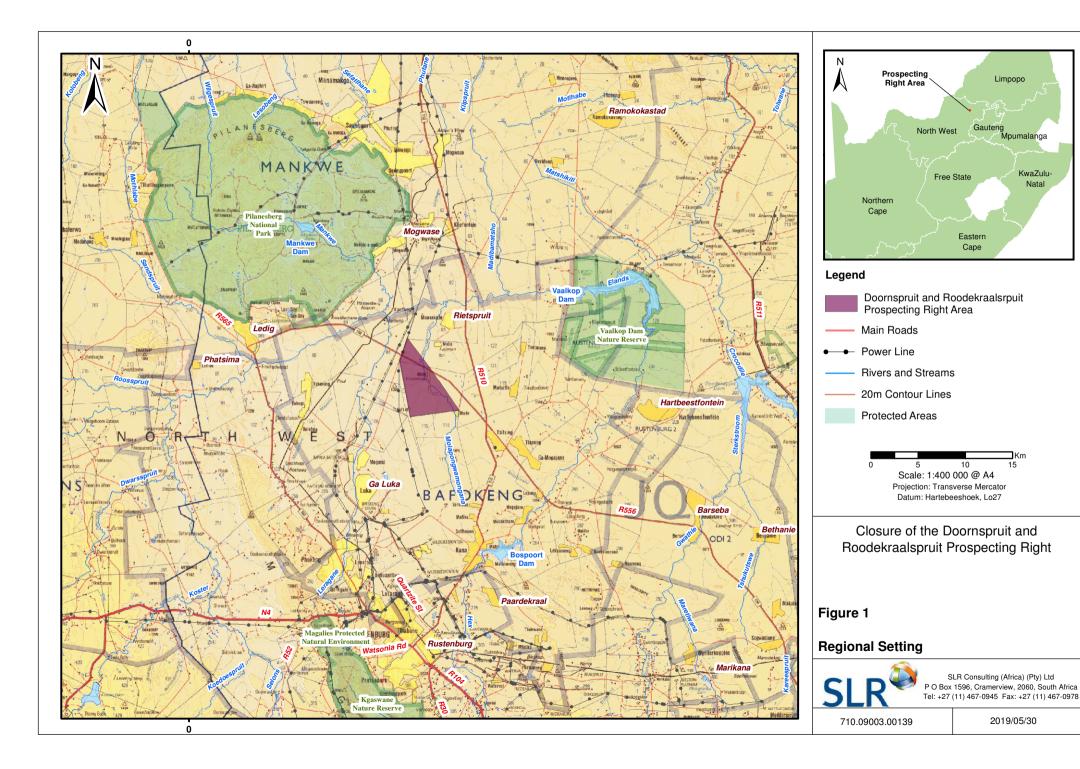
SLR Consulting (Africa) (Pty) Ltd (SLR), an independent firm of environmental assessment practitioners (EAP), has been appointed by Impala on behalf of the RBRP/Impala JV to manage the environmental authorisation processes.

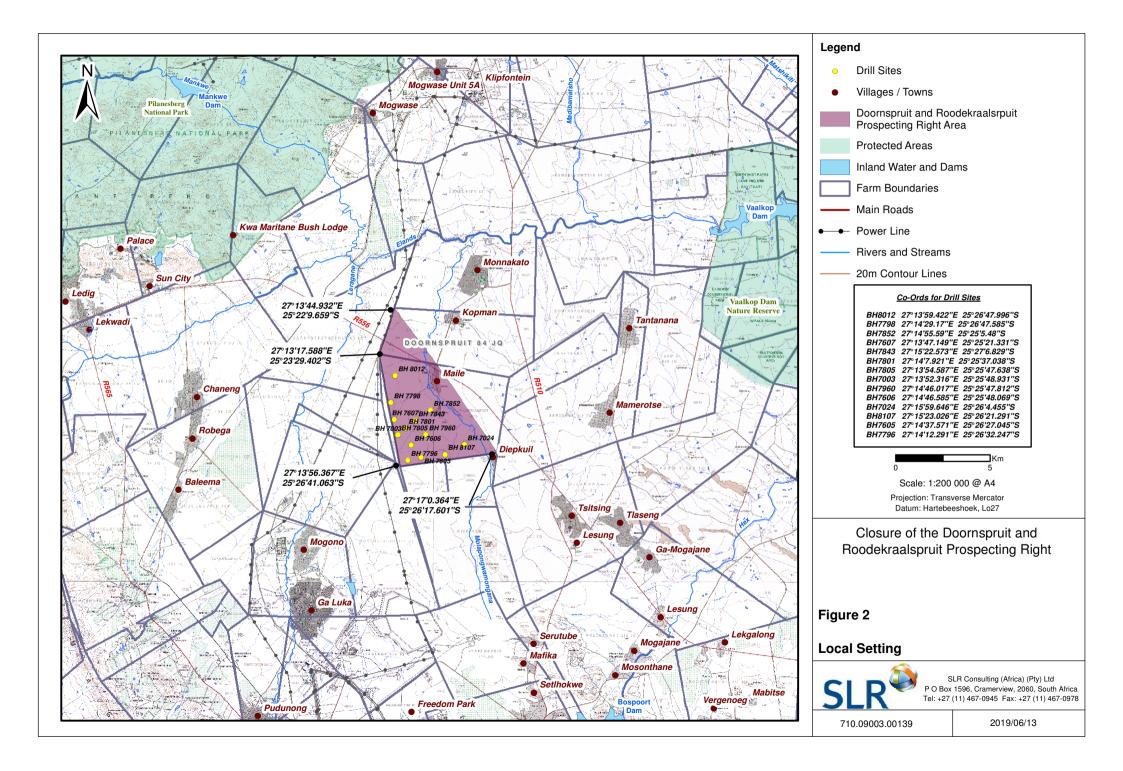
#### PURPOSE OF THIS REPORT

This Basic Assessment Report (BAR) has been compiled and distributed for review and comment as part of a Basic Assessment (BA) process that is being undertaken for the closure of the Doornspruit and Roodekraalspruit Prospecting Right, near Rustenburg in the North West Province.

This BAR provides a description of the proposed closure project and the affected environment; summarises the BA process followed to date; presents to a closure plan for the project; identifies and assesses the key impacts associated with the decommissioning and closure of the prospecting right and presents management and mitigation measures.

Interested and Affected Parties (I&APs) were asked to comment on the BAR (see Section below). The document was then be updated into a final report, giving due consideration to the comments received. This final BAR is being submitted to the Department of Mineral Resources for consideration as part of the application for Environmental Authorisation in terms of Chapter 5 of the National Environmental Management Act, 1998 (No. 107 of 1998) (NEMA), as amended.





#### SUMMARY OF AUTHORISATION REQUIREMENTS

Prior to the closure of the proposed prospecting right, the following is required:

- A Closure Certificate from the DMR in terms of Section 43(4) of the MPRDA;
- An environmental authorisation from the DMR in terms of the NEMA, as amended. The Environmental Impact Assessment (EIA) Regulations being followed are Government Notice Regulation (GNR) 982 of 4 December 2014, as amended. The relevant listed activities are included in Section 3.1.

#### **TERMS OF REFERENCE**

SLR, as the independent EAP, is responsible for undertaking the required environmental regulatory process and conducting the public participation process. The terms of reference for the environmental regulatory process are to:

- Make application for Environmental Authorisation of the project in terms of NEMA;
- Make application for the Closure of the proposed project in terms of the MPRDA;
- Ensure the BA is undertaken in accordance with the requirements of NEMA and the EIA Regulations 2014 (as amended);
- Ensure the BA is undertaken in an open, participatory manner to ensure that all potential impacts are identified;
- Undertake a formal public participation process, which includes the distribution of information to I&APs and provides the opportunity for I&APs to raise any concerns/issues, as well as an opportunity to comment on all BA documentation;
- Integrate all information, including the findings of the specialist studies and other relevant information, into a Basic Assessment Report to allow an informed decision to be taken on the proposed project.

Further to this and in accordance with Appendix 1 of the EIA Regulations 2014 (as amended), the objectives of a BA process is to:

- determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;
- identify the alternatives considered, including the activity, location, and technology alternatives;
- describe the need and desirability of the proposed alternatives;
- through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage, and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on these aspects to determine -

(i) the nature, significance, consequence, extent, duration, and probability of the impacts occurring;

(ii) the degree to which these impacts can be reversed, may cause irreplaceable loss of resources; and can be avoided, managed or mitigated;

- through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to:
  - (i) identify and motivate a preferred site, activity and technology alternative;
  - (ii) identify suitable measures to avoid, manage or mitigate identified impacts; and
  - (iii) identify residual risks that need to be managed and monitored.

This BA process consists of a series of steps to ensure compliance with these objectives and the EIA Regulations 2014. The process involves an open, participatory approach to ensure that all impacts are identified and that decision-making takes place in an informed, transparent and accountable manner.

#### **OPPORTUNITY TO COMMENT**

The draft BAR was distributed for a 30-day comment period from 10 July 2019 to 12 August 2019 in order to provide I&APs with an opportunity to comment on any aspect of the proposed project and the findings of the BA process. Copies of the full report were available on the SLR website (at https://slrconsulting.com/za/slr-documents/) and

hard copies were available at the Roodekraal Community Hall, Rustenburg Public Library and the Royal Bafokeng Civic Centre. Electronic copies (compact disk) of the report were available from SLR, at the contact details provided below. Summaries of the BAR were available in English and Setswana and were placed at the Roodekraal Community Hall, Rustenburg Public Library and the Royal Bafokeng Civic Centre.

All comments received during the review process have been addressed in this final BAR.

SLR Consulting (Africa) (Pty) Ltd Attention: Alex Pheiffer or Clive Phashe

PO Box 1596, Cramerview 2060 (if using post please call SLR to notify us of your submission)

Tel: (011) 467 0945 Fax: (011) 467 0978

E-mail: apheiffer@slrconsulting.com or cphashe@slrconsulting.com

# PART A – SCOPE OF ACTIVITY AND ENVIRONMENTAL IMPACT ASSESSMENT

### 1 DETAILS OF THE APPLICANT AND THE EAP

#### **1.1 APPLICANT DETAILS**

The applicant for the project is the Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture (RBRP/Impala JV). Details are provided in Table 1-1 below.

#### TABLE 1-1: APPLICANT DETAILS

Name:	The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture (RBRP/Impala JV)	
Address:	Impala Platinum Limited – Head Office No. 2 Fricker Road Illovo 2196	
Contact No.	+27 11 731 9063	
Responsible person:	Elrina Lategan	

#### 1.2 DETAILS OF THE EAP WHO PREPARED THE REPORT

As noted in Chapter 1, SLR has been appointed as the independent EAP to undertake the BA for the proposed closure of the prospecting right. The details of the EAP project team that are undertaking this BA are provided in Table 1-2.

SLR has no vested interest in the proposed project other than fair payment for consulting services rendered as part of the BA process and has declared its independence as required by the EIA Regulations 2014 (as amended). An undertaking by SLR is provided in Section 17.

#### TABLE 1-2: DETAILS OF THE BA PROJECT TEAM

General			
Organisation	SLR Consulting (Africa) (Pty) Ltd		
Postal address	PO Box 1596, Cramerview, 2060		
Tel No.	(011) 467 0945		
Fax No.	(011) 467 0978		
Name	Tasks and roles	Email	
Alessandra (Alex) Pheiffer (SLR)	BAR, EMPr, Closure plan and process reviewer	apheiffer@slrconsulting.com	
Stephen van Niekerk (SLR)	Financial provision reviewer	svanniekerk@slrconsulting.com	
Chiara Kotze (SLR)	Management of the BA process, including public consultation, process review, specialist study review and report compilation	ckotze@slrconsulting.com	
Clive Phashe (SLR)	Project assistant and public consultation	cphashe@slrconsulting.com	

#### 1.3 EXPERTISE OF THE EAP

Chiara Kotze holds an MSc degree in Ecology, Environment and Conservation and has approximately seven years of relevant experience. Alex Pheiffer holds an MSc degree in Environmental Management and is registered as a

professional natural scientist (Environmental Management) with the South African Council for Natural Scientific Professions (SACNASP) (Appendix B). Alex Pheiffer has over 16 years of relevant experience. Both Chiara Kotze and Alex Pheiffer have been involved in several impact assessments for large scale mining developments in southern Africa. Clive Phashe holds a Bachelor of Science in Life and Environmental Sciences from the University of Johannesburg. Clive has over a year's experience within the environmental consulting field. Clive has assisted in a variety of mining projects since joining the company.

Relevant curricula vitae (including proof of registrations) are attached in Appendix B.

## 2 LOCATION OF ACTIVITY

#### 2.1 LOCATION OF OVERALL ACTIVITY

A description of the property on which the proposed project is located is provided in Table 2-1

Description	Details
Farm Name	Doornspruit 84 JQ and Roodekraalspruit 113 JQ
Closure application area (ha)	2603 ha
Magisterial district	The Prospecting Right area is located within the Rustenburg Magisterial District and in the Bojanala Platinum District Municipality.
Distance and direction from nearest town	The proposed project site is located approximately 22 km north west of Rustenburg (Refer to Figure 1).
21-digit Surveyor General	Portion of the farm Doornspruit 84 JQ - B0JQ0000000008400000
Code for each farm portion	Remaining extent of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300000
	Portion 2 of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300002
	The remaining extent of portion 6 of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300006
	Portion 8 of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300008
	Portion of portion 3 of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300003
	Portion of portion 4 of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300004
	Portion of portion 5 of the farm Roodekraalspruit 113 JQ - B0JQ0000000011300005
Co-ordinates (Refer to Figure	North eastern corner: 27°13'44.932"E; 25°22'9.659"S
2)	South eastern corner: 27°17'0.364"E; 25°26'17.601"S
	South western corner: 27°13'56.367"E; 25°26'41.063"S
	North western corner: 27°13'17.588"E; 25°23'29.402"S

#### 2.2 LOCALITY MAP

The regional and local settings are illustrated in Figure 1 and Figure 2, respectively.

## **3** DESCRIPTION OF THE SCOPE OF THE ACTIVITY

This chapter lists the applicable listed activities and provides general information on the proposed project and a description of the proposed closure of the prospecting right.

#### 3.1 LISTED AND SPECIFIED ACTIVITIES

The proposed project triggers a listed activity for which authorisation, is required in terms of the NEMA. The associated listed or specified activity is summarised in the table below. The legislative context pertaining to the listed activity is outlined in Section 4.

Description of the proposed project activity	Aerial extent of the activity (ha)	Listed activity (mark with an x)	Listed activity number, applicable listing notice and activity description
Closure of already decommissioned prospecting activities (which include drill sites, access tracks). It should be noted that no drilling or related activities have taken place since 2014.	Prospecting right area requiring closure: 2603 ha (extent of the prospecting right area)	X	Activity 22 of Listing Notice 1 (GNR 983) The decommissioning of any activity requiring – (i) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002); but excluding the decommissioning of an activity relating to the secondary processing of a – (a) mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource; or (b) petroleum resource, including the refining of gas, beneficiation, oil or petroleum products; – in which case activity 31 in this Notice applies. This is applicable to the decommissioning of the boreholes since "decommissioning" means to take out of active service permanently or dismantle partly or wholly, or closure of a facility to the extent that it cannot be readily re-commissioned. This activity is triggered as a closure certificate is being applied for in terms of Section 43 of the MPRDA for closure of a Prospecting Right.

#### TABLE 3-1: PROJECT ACTIVITIES AND ASSOCIATED LISTED ACTIVITIES

#### 3.2 DESCRIPTION OF THE PROSPECTING ACTIVITIES

#### 3.2.1 Overview of prospecting activities

Prospecting activities undertaken between September 2006 and August 2014 included:

- Use of existing roads/ tracks (as far as possible).
- Establishment and use of new access tracks where prospecting related vehicles had to deviate from existing roads.
- Drilling of fourteen approved drill holes (BH7003, BH7024, BH7605, BH7606, BH7607, BH7796, BH7798, BH7801, BH7805, BH7843, BH7852, BH7960, BH8012 and BH8107; Figure 3)
- Establishment and use of site equipment and support facilities (drill rigs, trucks, compressor, plastic lined drilling water containment facility (sump), water cart, core sample trays) and portable chemical toilets etc.

#### 3.2.2 Decommissioning and rehabilitation of disturbed areas

Decommissioning and rehabilitation took place immediately after exploration work at each drill site was completed. This usually took between one and three days. Decommissioning and rehabilitation activities at each site included the following steps:

- Removal of all equipment, structures and materials;
- Removal of any waste and disposal at an appropriately permitted waste site;
- Sealing and capping of all drill holes and installation of a 0.8 x 0.8 x 0.8 m concrete block and standpipe for easy identification.
- Replacing and levelling topsoil (where removed);
- Scarifying/ripping areas were soils have been compacted; and
- Areas were left to naturally re-vegetate.

These steps were based on the regulatory requirements for rehabilitation of the prospecting sites as detailed in the approved EMPr (see Text box below for an outline of the rehabilitation commitments). It should be noted that at the time of compiling the prospecting EMP, the DMR's standard EMP format was relevant.

Rehabilitation commitments as detailed in the approved EMPr (dated 25 August 2005 and 16 November 2007 (Amendment 1):

- The environment affected by the mining/ prospecting operations shall be rehabilitated by the holder, as far as is practicable, to its natural state or to a predetermined and agreed to standard or land use which conforms with the concept of sustainable development. The affected environment shall be maintained in a stable condition that will not be detrimental to the safety and health of humans and animals and that will not pollute the environment or lead to the degradation thereof;
- Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre mining/ prospecting situation;
- Roads shall be ripped or ploughed, and if necessary, appropriately fertilised (based on a soil analysis) to ensure the regrowth of vegetation. Imported road construction materials which may hamper regrowth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining/prospecting operation, be corrected and the area be seeded with a seed mix to the Regional Manager's specification;
- All infrastructure, equipment, plant, temporary housing and other items used during the mining period will be removed from the site (section 44 of the MPRDA);
- Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on the site; and
- Final rehabilitation shall be completed within a period specified by the Regional Manager.

#### Passive Phase - Aftercare and maintenance

Typically, a period of aftercare and maintenance is applied to each rehabilitated drill site to ensure closure objectives are being met. Given the nature of the prospecting activities, a 2 to 3-year period of maintenance and aftercare is usually applied.

For the drill sites the aftercare and maintenance activities included the monitoring of erosion and vegetation establishment and control and eradication of alien invasive plants.

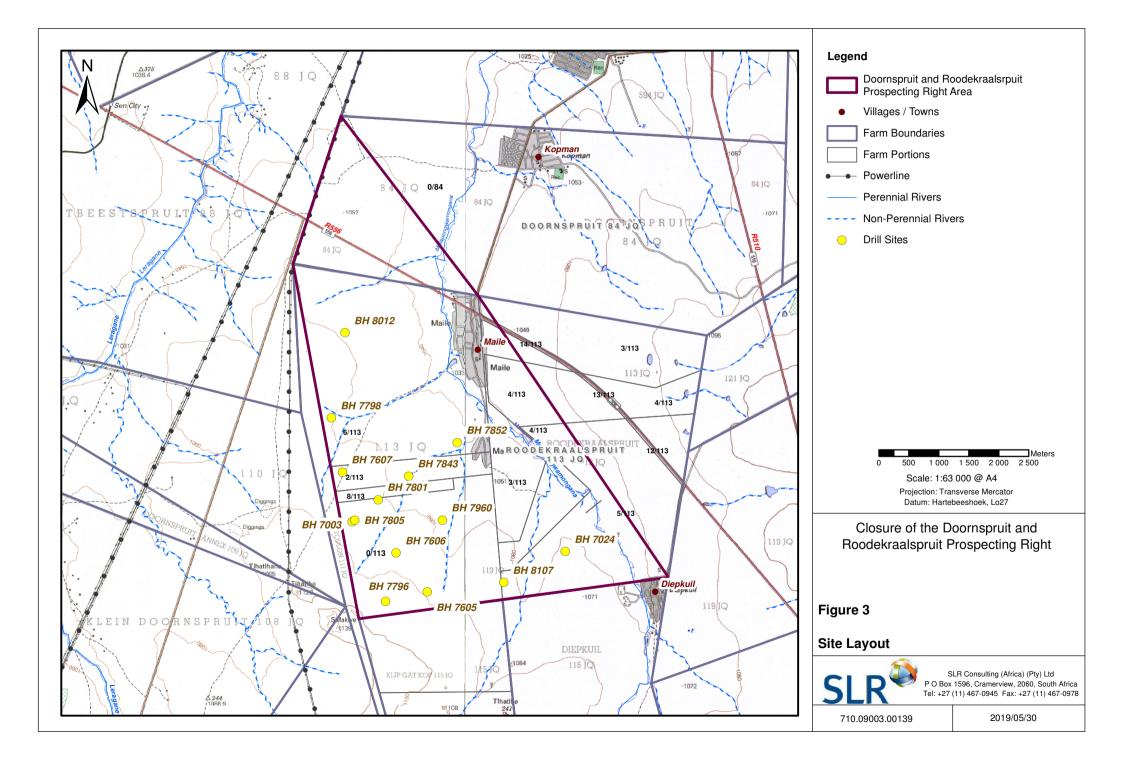
#### 3.2.3 A summary of progressive rehabilitation and current status of the disturbed areas

Progressive rehabilitation took place as prospecting activities advanced. Rehabilitation commenced as each drill site was completed and decommissioned. Rehabilitation activities were aligned with RBRP/Impala JV's approved EMP and closure objectives, and included the activities outlined in Section 3.2.2 above.

A site visit was conducted on 24 April 2019 and it was noted that thirteen of the drill sites had vegetation reestablished to a satisfactory level (BH7003, BH7024, BH7605, BH7606, BH7607, BH7796, BH7798, BH7801, BH7805, BH7843, BH7852, BH8012 and BH8107).

Drill site BH7960 showed a patch of land where vegetation has not re-established. Approximately 90% of the site was re-vegetated. The over-use of the area by cattle has likely hampered re-vegetation at this site. Figure 4 shows how the re-vegetation of the site has progressed over time as well as cattle using the area. Cattle seem to use this area to sleep on at night as well as using the area during the day. No further mitigation or monitoring is deemed necessary.

The final environmental audit completed forms part of this submission. Further detail is included in the final environmental audit in Section 8.2.



## 4 POLICY AND LEGISLATIVE CONTEXT

This chapter outlines the key legislative requirements applicable to the proposed project and outlines the guidelines, policies and plans that have been taken into account during the BA process.

#### 4.1 LEGISLATIVE CONSIDERATION IN THE PREPARATION OF THE BASIC ASSESSMENT REPORT

In accordance with the EIA Regulations 2014 (as amended) and the DMR BAR template requirements, all legislation and guidelines that have been considered in the BA process must be documented. Table 4-1 below provides a summary of the applicable legislative context.

#### TABLE 4-1: LEGAL FRAMEWORK

Applicable legislation and guidelines used to compile the report	Reference where applied	How does this development comply with and respond to the policy and legislative context?
Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), as amended and supporting Regulations	Introduction and Table 4-3	An outline of the legislation is presented in Section 4.1.1. The project will require a closure certificate.
National Environmental Management Act (No. 107 of 1998) (NEMA), as amended and 2014 EIA Regulations, as amended	Introduction, Section 3.1, and Table 4-3	An outline of the legislation is presented in Section 4.1.2. The project will need to comply with the principles of NEMA. The project also triggers a listed activity.
Financial Provisioning Regulations, 2015 (GN 1147)	Section 18 and 27	A Financial Provision is required in line with the NEMA Regulations and is included in this report.
Alien Invasive Species Regulations GN 598 of 2014 in terms of the NEM:BA	Section 0 and 7.4.1	These regulations have been used to inform the rehabilitation of the site.
Alien and Invasive Species List, GN 864 of 2016		
National Heritage Resources Act (No 25 of 1999).		

#### 4.1.1 Mineral and Petroleum Resources Development Act, 2002 and Regulations (No. 28 of 2002)

The Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA) governs the acquisition, use and disposal of mineral and petroleum resources. Section 43 of the MPRDA governs the issuing of a closure certificate. In this regard, the holder of a prospecting right remains responsible for any environmental liability, pollution, ecological degradation, the pumping and treatment of extraneous water, compliance to the conditions of the environmental authorisation and the management and sustainable closure thereof, until the Minister has issued a closure certificate in terms of the Act to the holder of the prospecting right.

Upon the lapsing, abandonment or cancellation of the right the holder of a prospecting right must apply for a closure certificate.

No closure certificate may be issued unless:

- the Council for Geoscience has confirmed in writing that complete and correct prospecting reports in terms of Section 21(1) of the MPRDA have been submitted to the Council for Geoscience;
- the complete and correct records, drill hole core data or core-log data that the Council of Geoscience may deem relevant, have been lodged with the Council for Geoscience; or
- in the case of the holder of a permit or right, the complete and correct surface and the relevant underground geological plans have been lodged with the Council for Geoscience.

Regulation 57 of the Mineral and Petroleum Resources Development Regulations details the requirements for applying for closure certificates by a holder of a prospecting right.

In this regard a closure application must be accompanied by:

- A closure plan contemplated in Regulation 62;
- An environmental risk report contemplated in Regulation 60;
- A final performance assessment report contemplated in Regulation 55(9); and
- A completed application form contemplated in Regulation 57.

The proposed project is for the closure of a prospecting right. Therefore, the project requires a closure certificate in terms of Section 43 of the MPRDA, and therefore an application as contemplated in Regulation 57 is required in order for the DMR to consider closure of the prospecting site. This information has been included in this report.

In addition, the regulations define the following terms:

- Residual environmental impact means the environmental impact remaining after a closure certificate has been issued.
- Latent environmental impact means any environmental impact that may result from natural events or disasters after a closure certificate has been issued; and

#### 4.1.2 National Environmental Management Act, 1998

The National Environmental Management Act, 1998 (No. 107 of 1998), as amended, establishes principles and provides a regulatory framework for decision-making on matters affecting the environment. All organs of state must apply the range of environmental principles included in Section 2 of NEMA when taking decisions that significantly affect the environment. Included amongst the key principles is that all development must be socially, economically and environmentally sustainable and that environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably. The participation of I&APs is stipulated, as is that decisions must take into account the interests, needs and values of all I&APs.

Chapter 5 of NEMA provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals. Section 24 provides a framework for granting of environmental authorisations. To give effect to the general objectives of Integrated Environmental Management, the potential impacts on the environment of listed or specified activities must be considered, investigated, assessed and reported on to the competent authority. Section 24(4) provides the minimum requirements for procedures for the investigation, assessment, management and communication of the potential impacts.

In terms of the management of impacts on the environment, Section 24N details the requirements for an EMPr.

#### EIA Regulations 2014

The EIA Regulations, 2014 (as amended by GN No. 326 of 7 April 2017) promulgated in terms of Chapter 5 of NEMA provide for control over certain listed activities. These listed activities are detailed in Listing Notice 1 (as amended by GN No. 327 of 7 April 2017), Listing Notice 2 (as amended by GN No. 325 of 7 April 2017) and Listing Notice 3 (as amended by GN No. 324 of 7 April 2017). The undertaking of activities specified in the Listing Notices is prohibited until Environmental Authorisation has been obtained from the competent authority. Such Environmental Authorisation, which may be granted subject to conditions, will only be considered once there has been compliance with the EIA Regulations, 2014.

The EIA Regulations, 2014 (as amended) set out the procedures and documentation that need to be complied with when applying for Environmental Authorisation. The proposed project triggers an activity listed in Government GN 983 (Listing Notice 1; as amended) (refer to Table 3-1) and therefore a BA process is required in order for the DMR to consider the application in terms of NEMA.

Since the proposed project is for the closure of a prospecting right, a closure plan and an environmental audit report are required in terms of Appendix 5 and 7 of the EIA Regulation, respectively.

#### 4.2 GUIDELINES, POLICIES, PLANS AND FRAMEWORKS

The guidelines, policies and plans listed in Table 4-2 have been taken into account during the BA process, where applicable.

#### TABLE 4-2: GUIDELINE AND POLICY FRAMEWORK

Guideline	Governing body	Relevance
Public participation guideline in terms of NEMA (2017)	Department of Environmental	The purpose of this guideline is to ensure that an adequate public participation process is undertaken during the BA process.
Guideline on need and desirability (2017)	Affairs	This guideline informs the consideration of the need and desirability aspects of the proposed project.
Planning for Integrated Mine Closure: toolkit; International Council on Mining and Metals.	International Council on Mining and Metals	This toolkit aims to assist in making decisions based on consideration of closure aspects in a holistic manner.
Rustenburg Local Municipality Integrated Development Plan 2018-2019	Rustenburg Local Municipality	The Rustenburg Local Municipality Integrated Development Plan is the principle strategic instrument guiding all planning, management, investment and development within the province in order to provide best solutions towards sustainable development.
Bojanala Platinum District Municipality Integrated Development Plan 2017-2022	Bojanala Platinum District Municipality	The Bojanala Platinum District Municipality Integrated Development Plan is the principle strategic instrument guiding all planning, management, investment and development within the province in order to provide best solutions towards sustainable development.

#### 4.3 LEGISLATIVE BAR CONTENT REQUIREMENTS

This document has been prepared in accordance with the DMR BAR template format and was informed by the guidelines posted on the official DMR website. This report also complies with the requirements of the NEMA and Appendix 1 and Appendix 4 of EIA Regulations 2014, as amended (GN 982). Table 4-3 provides a summary of the requirements, with cross references to the report sections where these requirements have been addressed.

Regulation 19(7) of the EIA Regulations 2014 notes that the content of a closure plan may be combined with the content of an EMPr on condition that the requirements of both Appendices 5 and 4, respectively, are met. These requirements, with cross references to the report sections where these requirements have been addressed are included in Table 4-3.

BAR requirement as per the DMR template	BAR requirements as per the 2014 NEMA regulations, as amended	Reference in the EMPr report
Part A of DMR report template	Appendix 1 of the NEMA regulations, as amended	Section/Appendix
Details of the EAP.	Details of the EAP who prepared the report.	Section 1.2.
Expertise of the EAP.	Details of the expertise of the EAP, including curriculum vitae.	Section 1.3 and Appendix B.
Location of overall activity.	The location of the activity, including - the 21-digit Surveyor General code of each cadastral land parcel. Where available the physical address and farm name. Where the required information is not available, the coordinates of the boundary of the property or properties.	Section 2

#### TABLE 4-3: CONTENTS OF THE BAR

BAR requirement as per the DMR template	BAR requirements as per the 2014 NEMA regulations, as amended	Reference in the EMPr report
Locality plan.	A plan which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale, or, if it is a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken or on land where the property has not been defined, the coordinates within which the activity is to be undertaken.	Section 2.
Description of the scope of the proposed overall activity.	A description of the scope of the proposed activity, including all listed and specified activities triggered. A description of the activities to be undertaken, including associated structure and infrastructure.	Section 3.
Policy and legislative context.	A description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks, and instruments that are applicable to this activity and have been considered in the preparation of the report; and how the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks, and instruments	Section 4.
Need and desirability of the proposed activity.	A motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location.	Section 5.
Motivation for the overall preferred site, activities and technology alternative.	A motivation for the preferred site, activity and technology alternative.	Section 6.
A full description of the process followed to reach the proposed development footprint within the site.	A full description of the process followed to reach the proposed development footprint within the approved site.	Section 7.
Details of the development footprint alternatives considered.	Details of all the alternatives considered.	Section 7.1.
Details of the public participation process followed.	Details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs.	Section 7.2.
Summary of issues raised by I&APs.	A summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them.	Section 7.3.
Environmental attributes associated with the alternatives.	The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects.	Section 7.4.
Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts including the degree of the impacts.	The impacts and risks identified, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts can be reversed, may cause irreplaceable loss of resources and can be avoided, managed and mitigated.	Section 7.5.
Methodology used in determining the nature, significance, consequence, extent, duration and probability of potential environmental impacts and risks.	The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives.	Section7.6.
The positive and negative impacts that the proposed activity (in terms of the initial site	Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical,	Section 7.7.

BAR requirement as per the DMR template	BAR requirements as per the 2014 NEMA regulations, as amended	Reference in the EMPr report
layout) and alternative will have on the environment and the community that may be affected.	biological, social, economic, heritage and cultural aspects.	
The possible management actions that could be applied and the level of risk.	The possible management actions that could be applied and level of residual risk.	Section 7.8.
Motivation where no alternative sites were considered.	The outcome of the site selection matrix. If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such.	Section 7.9.
Statement motivating the alternative development location within the overall site.	A concluding statement indicating the preferred alternatives, including preferred location of the activity.	Section 7.10.
Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (in respect of the final site layout) through the life of the activity.	A full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity including a description of all environmental issues and risks that were identified during the environmental impact assessment process and an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.	Section 8.
Assessment of each identified potentially significant impact and risk.	An assessment of each identified potentially significant impact and risk including cumulative impacts, the nature, significant and consequence of the impact and risk, the extent and duration of the impact and risk, the probability of the impact and risk occurring, the degree to which the impact can be reversed, the degree to which the impact and risk may cause irreplaceable loss of a resources and the degree to which the impact and risk can be avoided, managed or mitigated.	Section 9 and Appendix D.
Summary of specialist reports.	Where applicable the summary of the findings and recommendations of any specialist report complying with Appendix 6 of these Regulations and an indication as to how these findings and recommendations have been included in the final assessment report.	Section 10.
Environmental impact statement.	An environmental impact statement which contains a summary of the key findings of the environmental impact assessment, a map at an appropriate scale which superimposes the proposed activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers and a summary of the positive and negative impacts and risks of the proposed activity and identified alternatives.	Section 11.
Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr.	Based on the assessment, and where applicable, recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr.	Section 12.
Aspects for inclusion as conditions of authorisation.	Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of authorisation.	Section 13.
Description of any assumptions, uncertainties and gaps in knowledge.	A description of any assumptions, uncertainties and gaps in knowledge which relate to the assessment and management actions proposed.	Section 14.
Reasoned opinion as to whether the proposed activity should or should not be authorised.	Reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation.	Section 15

BAR requirement as per the DMR template	BAR requirements as per the 2014 NEMA regulations, as amended	Reference in the EMPr report
Period for which environmental authorisation is required.	Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required and the date on which the activity will be concluded, and the post construction monitoring requirements finalised.	Section 16.
Undertaking.	An undertaking under oath or affirmation by the EAP in relation to the correctness of the information provided in the reports, the inclusion of comments and inputs from stakeholders and I&APs, the inclusion of inputs and recommendations from the specialist reports where relevant and any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties.	Section 17.
Financial provision.	Where applicable, details of any financial provisions for the rehabilitation, closure, and ongoing post decommissioning management of negative environmental impacts.	Section 18.
Specific information required by the competent authority.	Any specific information required by the competent authority.	Section 19.
Other matter required in terms of section 24(4)(a) and (b) of the Act.	Any other matter required in terms of section 24(4)(a) and (b) of the Act.	Section 20.
Part B of the DMR report template	Appendix 4 of the NEMA regulations	Section/Appendix
Details of EAP.	Details of the EAP who prepared the EMPr and the expertise of that EAP to prepare the EMPr, including curriculum vitae.	Section 21.
Description of the aspects of the activity.	A detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description.	Section 22.
Composite map.	A map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers.	Section 23.
Description of impact management objectives including management statements.	A description of the impact management objectives, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including planning and design, pre-construction activities, construction activities, rehabilitation of the environment after construction and where applicable post closure; and where relevant, operation activities.	Section 24.1.
Impacts to be mitigated in their respective phases.	-	Section 24.6
Impact management outcomes.	A description and identification of impact management outcomes required for the aspects contemplated in paragraph above.	Section 25
Impact management actions.	A description of proposed impact management actions, identifying	Section 26.
Financial provision.	the manner in which the impact management objectives and outcomes be achieved, and must, where applicable, include actions to avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation; comply with any prescribed environmental management standards or practices; comply with any applicable provisions of the Act regarding closure, where applicable and comply with any provisions of the Act regarding financial provisions for rehabilitation, where applicable.	Section 27.
Mechanism for monitoring compliance with and	The method of monitoring the implementation of the impact management actions.	Section 28.

BAR requirement as per the DMR template	BAR requirements as per the 2014 NEMA regulations, as amended	Reference in the EMPr report
the environmental management programme and reporting	management actions.	
thereon.	An indication of the persons who will be responsible for the implementation of the impact management actions.	
	The time periods within which the impact management actions must be implemented.	
	The mechanism for monitoring compliance with the impact management actions.	
	A program for reporting on compliance, taking into account the requirements as prescribed by the Regulations.	
Environmental Awareness Plan.	An environmental awareness plan describing the manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work; and risks must be dealt with in order to avoid pollution or the degradation of the environment.	Section 30.
Specific information required by the competent authority.	Any specific information that may be required by the competent authority.	Section 31.
Undertaking.	-	Section 32.

#### TABLE 4-4: CONTENTS OF THE CLOSURE PLAN

NEMA Closure Report Requirements as per Appendix 5 of NEMA Regulations	Reference in the EMPr report
Details of the EAP who prepared the closure plan	Section 1.2.
The expertise of that EAP.	Section 1.3, Appendix B.
Closure objectives.	Section 24.1
Proposed mechanisms for monitoring compliance with and performance assessment against the closure plan and reporting thereon.	Section 28
Measures to rehabilitate the environment affected by the undertaking of any listed activity or specified activity and associated closure to its natural or predetermined state or to a land use which conforms to the generally accepted principle of sustainable development, including a handover report, where applicable.	Section 3.2.3
Information on any proposed avoidance, management and mitigation measures that will be taken to address the environmental impacts resulting from the undertaking of the closure activity.	Section 26
A description of the manner in which it intends to modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation during closure; remedy the cause of pollution or degradation and migration of pollutants during closure; comply with any prescribed environmental management standards or practices; and comply with any applicable provisions of the Act regarding closure.	
The process for managing any environmental damage, pollution, pumping and treatment of extraneous water or ecological degradation as a result of closure.	
Time periods within which the measures contemplated in the closure plan must be implemented.	Section 26
Details of all public participation processes conducted in terms of regulation 41 of the Regulations, including copies of any representations and comments received from registered interested and affected parties; a summary of comments received from, and a summary of issues raised by registered interested and affected parties, the date of receipt of these comments and the response of the EAP to those comments; the minutes of any meetings held by the EAP with interested and affected parties and other role players which record the views of the participants; where applicable, an indication of the amendments made to the plan as a result of public participation processes conducted in terms of regulation 41 of these Regulations.	Section 7.2
Where applicable, details of any financial provisions for the rehabilitation, closure and on-going post decommissioning management of negative environmental impacts.	Section 18 and 27

#### 5 NEED AND DESIRABILITY OF THE PROJECT

The DEA guideline on need and desirability (GNR 891, 20 October 2014) notes that while addressing the growth of the national economy through the implementation of various national policies and strategies, it is also essential that these policies take cognisance of strategic concerns such as climate change, food security, as well as the sustainability in supply of natural resources and the status of our ecosystem services. Thus, the over-arching framework for considering the need and desirability of development in general is taken at the policy level through the identification and promotion of activities / industries / developments required by civil society as a whole. The DEA guideline further notes that at a project level (as part of an EIA process), the need and desirability of the project should take into consideration the content of regional and local plans, frameworks and strategies.

#### 5.1 ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES

Due to the nature of prospecting projects, impacts on biodiversity are possible, albeit that they are limited. The proposed closure of the Doornspruit and Roodekraalspruit Prospecting Right implies that Impala/RBRP Joint Venture will not undertake further exploration activities in the area and in this regard, biodiversity will be allowed to restore to its pre-project state. It should however be noted that biodiversity in the prospecting right area has already been compromised by local land uses (subsistence livestock grazing etc.). The decommissioning and rehabilitation are therefore aligned with ensuring ecological sustainable development and use of natural resources.

#### 5.2 PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT

Community/society priorities are officially expressed through public documents including the provincial growth and development strategy and spatial development framework documents. In this regard, the priorities of the Rustenburg Local Municipality's Integrated Development Framework (IDP) and the Bojanala Platinum District Municipality IDPs are mainly focused around provision of basic services and infrastructure, diversified economic growth and job creation, maintaining a clean, green and healthy municipal environment and sustainable rural development. Although that Impala/RBRP Joint Venture's closure of the Doornspruit and Roodekraalspruit prospecting right precludes the possibility of future mining of that area by the Impala/RBRP Joint Venture, this does allow for new third-party applications to be lodged with the DMR. This in turn, has the potential for increased economic benefits to third party applicants (should a viable mineable resource be found during prospecting), thereby aligning with the planned growth and development objectives contained in the IDPs.

#### 5.3 RATIONALE FOR THE PROPOSED PROJECT ACTIVITY

Impala has faced tremendous economic and financial challenges throughout the last few years.

As a result thereof, Impala undertook a strategic review of its Impala Rustenburg Operation, and assessed the outlook going forward, particularly in response to the prevailing market conditions. The review included the Roodekraalspruit, Doornspruit, Klipgatkop and Diepkuil Joint Venture projects, adjacent to the Impala Rustenburg Operation.

To this effect a joint decision was made by the RBRP/Impala JV not to proceed with the Joint Venture. The Joint Venture project area was originally secured as certain potential future shafts (for example 18 shaft) at Impala would have exploited some of the mineral resources underlain by this Joint Venture project area. Effectively all plans to develop such new mining infrastructure have been shelved by Impala.

#### 6 MOTIVATION FOR THE PREFERRED SITE, ACTIVITIES AND TECHNOLOGY ALTERNATIVES

The proposed project is the closure of a prospecting right associated with a specific area. Decommissioning activities have been completed. This section is therefore not applicable. Refer to Section 7.1 for further detail.

#### 7 FULL DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED ALTERNATIVES WITHIN THE SITE

#### 7.1 DETAILS OF THE DEVELOPMENT FOOTPRINT CONSIDERED

This report is in support of a closure application for a prospecting right and therefore development footprint alternatives (relating to site, activity or technology) are not applicable.

#### 7.1.1 The "no-go" alternative

The "no-go" alternative would mean that the Doornspruit and Roodekraalspruit prospecting right would not be closed and the status quo would remain (i.e. for prospecting activities to be undertaken by Impala/RBRP joint venture).

#### 7.2 DETAILS OF THE PUBLIC PARTICIPATION PROCESS FOLLOWED

This section describes the public participation process undertaken during the BAR process. The public participation process was undertaken in accordance with the requirements of Chapter 6 of Regulations 982 of 4 December 2014 (EIA Regulations), as amended. In addition to this, consideration was also given to the public participation guideline in terms of the NEMA (2017).

#### 7.2.1 Public Participation Process undertaken to date

A public participation process is being undertaken to inform the BA process and included consideration of the Closure Plan consultation requirements in terms of the NEMA EIA Regulations. A record of the public participation process undertaken is outlined in Table 7-1 below. The purpose of the public participation process was to notify landowners, land users and other key stakeholders of the proposed project and to provide them with opportunity to raise any initial issues or concerns regarding the proposed project.

Supporting documentation is presented in Appendix C.

Steps	Details
DMR Pre- application meeting	<ul> <li>A pre-application meeting was held with the DMR in Klerksdorp on 10 May 2019. The purpose of the meeting was:</li> <li>To provide information pertaining to the project</li> <li>To outline the motivation for the proposed closure</li> <li>To provide an overview of the environmental process relevant to the project</li> <li>To provide an overview of the existing status of the environment</li> <li>To outline and obtain input on the potential environmental/cultural impacts</li> <li>To outline and obtain input on the planned public participation process.</li> </ul>
Focused Meetings	<ul> <li>Focused meetings were held with:</li> <li>The Royal Bafokeng Administration on 20 April 2019</li> <li>The Roodekraalspruit Maile community on 25 April 2019</li> <li>The purpose of the meetings was:</li> <li>To provide information pertaining to the project</li> <li>To outline the motivation for the proposed closure</li> <li>To provide an overview of the environmental process relevant to the project</li> <li>To provide an overview of the existing status of the environment</li> </ul>

#### TABLE 7-1: PUBLIC PARTICIPATION PROCESS UNDERTAKEN AS PART OF THE BAR

	- To outline the potential environmental/cultural impacts
	- To outline and obtain input on the planned public participation process.
	Copies of the meeting minutes are included in Appendix C.
Notification of the land claims commissioner	The land claims commissioner was consulted in order to verify the status of land claims on the farm Doornspruit 84 JQ and Roodekraalspruit 113 JQ. The proof of correspondence is attached in Appendix C.
I&AP database	A database was compiled with input from the Impala stakeholder engagement team and is updated on an on-going basis for the duration of the project. The project database identified and included landowners, land users and lawful occupiers within the prospecting right area, as well as those immediately adjacent to the projecting right area. In addition, the project database included surrounding I&APs, and regulatory authorities. All stakeholders registered on the project database received a copy of the Background Information Document (BID), and SMS notification of the proposed project and are being notified that the BAR is available for public and regulatory authority review and comment. Landowner, land user, commenting authorities and other I&AP details were verified through a deed search and/or telephonic discussions. A copy of the project database is included in Appendix C.
Background Information Document (BID)	<ul> <li>A BID (in English and Setswana) was compiled by SLR and distributed to I&amp;APs and commenting authorities registered on the project database. In addition, copies of the BID were made available at the Roodekraal Community Hall. The BID provided: <ul> <li>Information about the proposed prospecting right closure.</li> <li>Information about the baseline environment of the prospecting right area</li> <li>Information about the environmental assessment process (Basic Assessment Process).</li> <li>Information on how I&amp;APs and commenting authorities can have input into the environmental assessment process.</li> </ul> </li> <li>A registration and response form was attached to the BID, which provided I&amp;APs with an opportunity to register as an I&amp;AP and submit comments on the proposed project. Copies of the BID in English and Setswana are included in Appendix C.</li> </ul>
Site notices	SLR placed laminated site notices (in English and Setswana) on the fence along the R556, along the boundary fence of the prospecting right areas as well as the Roodekraalspruit Maile village area. Photographic proof is included in Appendix C. A map illustrating the location of the site notices is also included in Appendix C
Newspaper advertisements	A block advertisement was placed in the Rustenburg Herald newspaper on 15 May 2019. A copy of the advertisement is included in Appendix C.
Draft BAR	The draft BAR was distributed for a 30-day comment period from 10 July 2019 to 12 August 2019 in order to provide I&APs and commenting authorities with an opportunity to comment on any aspect of the proposed project and the findings of the BA process. Copies of the correspondence is included in Appendix C.
Site visit	The Rustenburg Local Municipality requested a site visit which was held on 7 August 2019. A copy of the site visit record is included in Appendix C.

Approximately fourteen written submissions were received from I&APs during the public participation process (see Appendix C).

In addition, Impala has also engaged directly with the Mofoko and Mosito families. Proof of this consultation (letter) has been included in Appendix C.

#### TABLE 7-2: I&APS THAT SUBMITTED WRITTEN/TELEPHONIC CORRESPONDENCE DURING THE PROCESS

State Departments and Organs of State	Traditional leadership
Natasha Higgitt (SAHRA)	Roodekraalspruit Maile Kgosana and Executive Commitee
Chris Tshisevhe (DMR)	Land Claim Commissioner
C. Theunissen (DWS)	L.J. Bogatu
Federation for A Sustainable Environment	IAPS/Landowners
Mariette Liefferink	Boitshepo Essau Mafoko

#### 7.2.2 Review of the BAR

The draft BAR was made available for commenting authority and I&AP review and comment for 30 days. Summaries of the BAR (in English and Setswana) were made available to all I&APs registered on the I&AP database (via email) and hard copies of the summary document were available at the Roodekraal Community Hall, the Rustenburg Public Library and the Royal Bafokeng Civic Centre. A hard copy of the report was made available at the Roodekraal Community Hall, the Rustenburg Public Library and the Royal Bafokeng Civic Centre. A hard copy of the report was made available at the Roodekraal Community Hall, the Rustenburg Public Library and the Royal Bafokeng Civic Centre. In addition, I&APs were notified that the BAR and/or summary is available for review via SMS. An electronic copy was also been made available on the SLR website.

Commenting authorities received an electronic copy and a hard copy of the BAR.

#### 7.2.3 Completion of the BAR

Following closure of the BAR commenting period, all comments received have been incorporated and responded to in a Comments and Responses Report. Where required the BAR was updated to address comments received. The final report including I&AP comments has been submitted to DMR for consideration and decision-making. Registered I&APs will receive notification of the final submission to the DMR.

After the DMR has reached a decision registered I&APs will be notified of the outcome of the application, the reasons for the decision and details of the appeal process.

#### 7.3 SUMMARY OF ISSUES RAISED BY I&APS

All written comments received have been collated and responded to in a Comments and Responses Report (see Table 7-3 below).

In summary, issues raised related mainly to:

- Wanting access to the prospecting results;
- Clarification of reasons for the closure and what happens after the prospecting right has been closed;
- Clarification of prospecting activity authorisation;
- Property access;
- Closure Plan requirements;
- Financial provisions; and
- Public participation.

#### TABLE 7-3: SUMMARY OF ISSUES RAISED BY I&APS

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
Regulatory department				
Department of Mineral Reso	ources (DMR)			
Chris Tshisevhe	16 May 2019 (email)	Your e-mail and its attachment are hereby acknowledged. In order for this office to effectively evaluate you proposed closure of prospecting rights, you are hereby requested to complete an application form (DME 270) for a closure certificated which must be accompanied by necessary closure supporting reports. Should you have any query regarding the content of this e-mail kindly contact Mr Christopher Tshisevhe on 071 475 8362 as soon as possible. A copy of DME 270 has been attached for your information.	The required form and the necessary supporting documents form part of this report.	Refer to Appendix C
Neo Kgokong	23 May 2019 (email)	<ol> <li>You do not need to apply for an EA for decommissioning, a closure certificate application and supporting documents will suffice.</li> <li>Because of the above, you do not need to compile a BAR, but a final performance assessment report on the approved EMP is required.</li> <li>I hope that is covered, basically the closure process is as it has been in terms of the MPRDA.</li> </ol>	<ol> <li>It is SLR's understanding that the provisions of section 24F of NEMA apply. In this regard, any listed activity in listing notice 1 triggered by the project requires that a basic assessment process be followed. NEMA defines "decommissioning" as follows: " or closure of a facility to the extent that it cannot be readily re-commissioned". Based on this, Activity 22 of Listing Notice 1 (see activity description below) is triggered as a closure certificate is required in terms of Section 43 of the MPRDA for closure of a Prospecting Right.</li> <li>Activity 22 of Listing Notice 1 (GNR 983) The decommissioning of any activity requiring – (i) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002); but excluding the decommissioning of an activity relating to the secondary processing of a –</li> </ol>	1. Table 3-1

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
			<ul> <li>(a) mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource; or</li> <li>(b) petroleum resource, including the refining of gas, beneficiation, oil or petroleum products; – in which case activity 31 in this Notice applies.</li> <li>2. A final performance assessment / environmental audit was conducted and the details have been included in this report as well as the separate MPRDA Closure Plan Report submitted.</li> </ul>	2. Section 8.2
South African Heritage Reso	urces Agency (SAHRA)			
Natasha Higgitt	15 May 2019 (email)	Please note that all development applications are processed via our online portal, the South African Heritage Resources Information System (SAHRIS) found at the following link: http://sahra.org.za/sahris/. We do not accept emailed, posted, hardcopy, faxed, website links or DropBox links as official submissions. Please create an application on SAHRIS and upload all documents pertaining to the Environmental Authorisation Application Process. As per section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA), an assessment of heritage resources must form part of the process and the assessment must comply with section 38(3) of the NHRA. Once all documents including all appendices are uploaded to the case application, please ensure that the status of the case is changed from DRAFT to SUBMITTED. Please ensure that all documents produced as part of the EA process are submitted as part of the application, and are submitted to SAHRA at the beginning of the Public Review periods. Once all these documents have been uploaded, I will be able to issue an informed comment as per section 38(4) and	A case was opened on the SAHRIS website and the applicable documentation was uploaded.	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		38(8) of the NHRA.		
Natasha Higgitt	10 June 2019 (SAHRIS)	Thank you for notifying SAHRA of the Environmental Authorisation (EA) and Closure of a Prospecting Right on Doornspruit 84 and Roodekraalspruit 113 JQ near Rustenburg, Rustenburg Local Municipality and the Bojanala Platinum District Municipality in the North West Province (NW 30/5/1/1/2/878 (10369) PR). As the proposed development is undergoing an EA Application process in terms of the National Environmental Management Act, 107 of 1998 (NEMA), NEMA Environmental Impact Assessment (EIA) Regulations for activities that trigger the Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA)(As amended), it is incumbent on the developer to ensure that a Heritage Impact Assessment (HIA) is done as per section 38(3) and 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA). This must include an archaeological component, palaeontological component and any other applicable heritage components. The HIA must be conducted as part of the EA Application in terms of NEMA and the NEMA EIA Regulations. The quickest process to follow for the archaeological component would be to contract a qualified archaeologist (see www.asapa.co.za or www.aphp.org.za to provide an Archaeological Impact Assessment (AIA). The AIA must comply with the SAHRA 2007 Minimum Standards: Archaeological and Palaeontological Component of Impact Assessments. The Minimum Standards make reference to a Letter of Recommendation for Exemption from further studies that the appointed specialist may submit, should they feel that it is appropriate. No further assessment of palaeontological resources is required as the development footprint is located	A Letter of Recommendation for Exemption has been provided by the heritage specialist Dr. Julius Pistorius.	Appendix G

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		<ul> <li>within an area of insignificant sensitivity as per the SAHRIS PalaeoSensitivity map.</li> <li>Any other heritage resources as defined in section 3 of the NHRA that may be impacted, such as maritime archaeology, built structures over 60 years old, sites of cultural significance associated with oral histories, burial grounds and graves, graves of victims of conflict, and cultural landscapes or viewscapes must also be assessed.</li> <li>The draft BAR with appendices must be submitted to the SAHRIS application at the beginning of the Public Review period so that informed comments may be issued.</li> </ul>		
Natasha Higgitt	05 August 2019 (SAHRIS)	<ul> <li>The following comments are made as a requirement in terms of section 3(4) of the NEMA Regulations and section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the Final BAR and EMPr:</li> <li>38(4)a – The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has no objections to the proposed closure;</li> <li>38(4)b – The recommendations provided by the heritage specialists are supported and must be adhered to. No specific conditions are provided for the development;</li> <li>38(4)c(i) – If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Natasha Higgitt/Phillip Hine 021 462 5402) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an</li> </ul>	These requirements have been included in the BAR (this table) and addressed under Section 7.8. The final report will be loaded to the SAHRIS site.	Appendix C Section 7.8

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		<ul> <li>offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;</li> <li>38(4)c(ii) – If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Thingahangwi Tshivhase/Mimi Seetelo 012 320 8490), must be alerted immediately as per section 36(6) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;</li> <li>38(4)d – See section 51(1) of the NHRA;</li> <li>38(4)e – The following conditions apply with regards to the appointment of specialists: <ul> <li>If heritage resources are uncovered during the course of the development, a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the heritage resources. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;</li> </ul> </li> <li>The Final BAR and EMPr must be submitted to SAHRA for record purposes; The decision regarding the EA Application must be communicated to SAHRA and uploaded to the SAHRIS Case application.</li></ul>		
Department of Water and Sa	anitation			
C. Theunissen	17 May 2019 (email)	Impala Platinum Ltd & Royal Bafokeng Resources Platinum (Pty) Ltd Unincorporated Joint Venture (Impala/RBRP Joint Venture) ptn , Doornspruit 84 JQ, re/ext of the farm, ptn 2, re/ext/ptn 6,8 p/p 3, p/p 4,	Not applicable	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		p/p 5, Roodekraalspruit NW 30/5/1/1/2/878 (10369 PR) This office acknowledges the receipt of your documents regards to the above-mentioned on 17 May 2019 (Task T232/2019). The office responsible for this area is: Ms Sebenzile Ntshangase and can be contacted at (012) 253-1026.		
<b>Regional Land Claims Comm</b>	nissioner			
L.J. Bogatu	02 July 2019 (email)	<ul> <li>Land Claim enquiry: Roodekraalspruit 113 JQ</li> <li>We confirm that as at the date of this letter no land claim appears on our database in respect to the above property.</li> <li>This includes the database for claims lodged by 31</li> <li>December 1998; and those lodged between 1 July 2014 and 27 July 2016 in terms of the Restitution of Land Rights Amendment Act, 2014.</li> <li>Whilst the commissioner takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commissioner's control, particularly relating to claims that have been lodged but not yet gazetted such as:</li> <li>1. Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description.</li> <li>2. Some land claimants provide the geographic descriptions of the land they claim without mentioning the particular actual property description they claim dispossession of rights against the land.</li> <li>The Commission therefore does not accept any liability whatsoever if through the process further investigation of claims it is found that there is in fact a land claim in respect of the above property. If you are aware of any change in the description of the above</li> </ul>	Not applicable	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		property after 19 June 1913 kindly supply us with such description so as to enable us to do further research		
L.J. Bogatu	11 July 2019 (email)	Land Claim enquiry: Portion farm Doornspruit 84 JQ (Doornspruit), remaining extent of portion of the farm Doornspruit and remaining extent of portion 6, 8, a portion of portion 3, a portion of portion 4 and portion of portion 5 of the farm Roodekraalspruit 113 JQ. I acknowledge receipt of your letter dated the 10 July 2019 regarding the above-mentioned matter. Kindly note that a formal response could be expected from our office within the next 7 (seven) working days. Should you however require additional information, you can contact Ms. K.W. Mothupi.	Not applicable	Refer to Appendix C
L.J. Bogatu	29 July 2019 (email)	<ul> <li>Farm Doornspruit 84 JQ</li> <li>We confirm that there is an existing land claim against the property above, however the claims were dismissed on the basis that it does not meet the requirements of Section 2 of the Restitution of Land Rights Act No. 22 of 1994.</li> <li>Whilst the commissioner takes reasonable care to ensure the accuracy of the information it provides, there are various factors that are beyond the Commissioner's control, particularly relating to claims that have been lodged but not yet gazetted such as:</li> <li>Some Claimants referred to properties they claim dispossession of rights in land against using historical property descriptions which may not match the current property description.</li> <li>Some land claimants provide the geographic descriptions of the land they claim without mentioning the particular actual property description they claim dispossession of rights against the land.</li> <li>The Commission therefore does not accept any liability whatsoever if through the process further</li> </ul>	Not applicable	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		investigation of claims it is found that there is in fact a land claim in respect of the above property. If you are aware of any change in the description of the above property after 19 June 1913 kindly supply us with such description so as to enable us to do further research.		
Rural, Environment and Agr	icultural Development		-	
Ellis Thebe	11 July 2019 (email)	Prospecting right Doornspruit 84 JQ and Roodekraalspruit 113 JQ Royal Bafokeng Resources Platinum in North West Province. The department have received the request to comment on the prospecting right Doornspruit 84 JQ on 09 July 2019. Please note the request has been assigned to Ms Tshegofatso Lekgari. The file reference number is NWP/DMR/42/2019.	Not applicable	Refer to Appendix C
Rustenburg Local Municipal	ity			
Kelebogile Mekgoe	07 August 2019 (site inspection)	A site visit was held with Kelebogile Mekgoe. Following the Rustenburg Local Municipality site- inspection on 07 August 2019, the municipality requested an extension of up to 15 August 2019 to draft and send their comments.	Not applicable	Refer to Appendix C
Royal Bafokeng Administrat	tion			
Royal Bafokeng Administration	20 April 2018 (focused meeting)	The RBA will forward the presentation and the information through to their councillors. If an additional meeting is required by either the councillors or the land claimants, SLR will make proper arrangements to accommodate these.	Not Applicable	Not Applicable
Roodekraalspruit Maile Kgo	sana and Executive Com	nittee		
Jack Mataboge	25 April 2019 (focused meeting)	What happens after the prospecting right has been closed?	The mineral resource becomes available for third party applications.	Refer to Appendix D
Keorapetse Mosito	25 April 2019 (focused meeting)	What led to the abandoning of this project?	Impala has faced tremendous economic and financial challenges throughout the last few years.	Refer to Section 5.3

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
			As a result thereof, Impala undertook a strategic review of its Impala Rustenburg Operation, and assessed the outlook going forward, particularly in response to the prevailing market conditions. The review included the Roodekraalspruit, Doornspruit, Klipgatkop and Diepkuil Joint Venture projects, adjacent to the Impala Rustenburg Operation.	
			To this effect a joint decision was made by the Impala Platinum Ltd / Royal Bafokeng Resources Platinum Unincorporated Joint Venture not to proceed with the Joint Venture. The Joint Venture project area was originally secured as certain potential future shafts (for example 18 shaft) at Impala would have exploited some of the mineral resources underlain by this Joint Venture project area. Effectively all plans to develop such new mining infrastructure have been shelved by Impala. (Response from Impala).	
Keorapetse Mosito	25 April 2019 (focused meeting)	No one gave us feedback regarding what they found there. Is the information obtained by Impala during the PR surveys freely available?	From the current drilling done, it appears as if the general geology will be typical to the geology of the western Bushveld Complex in the existing and surrounding shafts of Impala. Results from the drilling program to date confirmed the presence of the Merensky and UG2 Reefs within the prospecting right area. Drilling information can be obtained from the Geological Council of South Africa. (Response from Impala).	Refer to Appendix C
Keorapetse Mosito	25 April 2019 (focused meeting)	Is it possible for any company to open a shaft if the depth of the resource is not an issue to them?	Under the prevailing economic climate and metal prices it would be difficult for any company to open a shaft due to the depth of the reef horizons and the high temperature of the virgin rock at these depths. Refrigeration cooling would be required at a very high cost. (Response from Impala)	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
Landowners				
Boitshepo Essau Mafoko	04 June 2019 (email)	Who gave Impala the right to prospect and drill holes in our properties?	A prospecting right was granted by the Department of Minerals and Energy (DME) (presently the Department of Mineral Resources) (DMR) on the 6 <sup>th</sup> December 2006 to the Royal Bafokeng Resources Platinum (Pty) Ltd (51% shareholding) and Impala Platinum Ltd (49% shareholding) unincorporated joint venture (RBRP/Impala JV) for prospecting on inter alia various portions of the farm Roodekraalspruit 113 JQ; prospecting right MPT number 497/2007 PR (DMR reference number NW 30/5/1/1/2/878 (10369) PR). A copy of the prospecting right is attached in Appendix A. (Response from Impala). The Mafoko Family has been and continues to be registered as an I&AP and has been informed throughout the prospecting project.	Refer to Appendix C
Boitshepo Essau Mafoko	04 June 2019 (email)	According to the Rehabilitation process, who accepted the Rehabilitation process on behalf of my family (Mafoko's)?	The rehabilitation was done in line with the Environmental Management Programme commitments and objectives, as submitted to the DME and approved by the DMR as part of the prospecting right application. A Landowner Indemnity Form will need to be completed by each landowner. This will be made available to landowners at the same time that the BAR and Closure Plan Report are made available for review. Closure site inspections by the DMR will be required as part of the closure application process, before a closure certificate may be issued in respect of the said prospecting right in terms of the Mineral and Petroleum Resources Development Act, 2002. (Response from Impala).	Refer to Appendix C
Boitshepo Essau Mafoko	04 June 2019 (email)	If Impala accept that they have wronged us, when will they reimburse the Mafoko family?	No compensation or reimbursement will be made by Impala, as Impala acted in accordance with all of its legislative obligations and responsibilities. (Response from Impala).	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
Boitshepo Essau Mafoko	10 July 2019 (email)	True. Mafoko's family has been informed throughout the prospecting project but they have never granted Impala the right to prospect on their land as there were outstanding matters which Impala failed to address. Unless if signing the attendance register automatically binds someone to be in agreement.	Signing an attendance register provides proof of attendance at a meeting and includes the contact details to be used for ongoing communication (SLR). It is not clear what outstanding matters the comment makes reference to. Impala followed the necessary consultation processes prior to the commencement of Prospecting activities (response from Impala).	Refer to Appendix C
Boitshepo Essau Mafoko	10 July 2019 (email)	If the DMR has approved the environmental management program, will then the family be required to fill the landowner indemnity form for formality purposes.	The landowner indemnity form is not related to the approval of the environmental management program. The closure application process is a separate process to the previously approved EMP. The landowner indemnity form should be completed by the landowner in a manner that is appropriate to the landowner and returned to SLR.	Refer to Appendix C
Boitshepo Essau Mafoko	10 July 2019 (email)	Kindly see 'Annexure A' which is a response from Geological Council of South Africa regarding Impala on Keorapetse Mosito concern.	Impala has duly submitted to the Council of Geoscience of South Africa all the legislative required Prospecting Work Programme reports on behalf of the RBRP/Impala JV. In terms of Section 30 (5) of the MPRDA, any data, information or reports lodged with the Council of Geoscience in terms of section 21 must be kept confidential until such time as the right, permit or permission has lapsed or is cancelled, or terminated. This information is hence now under the control of the Council of Geoscience (response from Impala). After Impala enquired on the matter, the Council of Geoscience of South Africa has informed Impala that although the Mafoko family might be the surface owners, because the family does not hold a prospecting right over the property, the Council of Geoscience will not make any geological information available to the family. The family will hence need to approach the said Council / DMR in the matter further (response from	Refer to Appendix C

Interested and affected party	Date comment received	lssues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
			Impala). From the current drilling done, it appears as if the general geology will be typical to the geology of the western Bushveld Complex in the existing and surrounding shafts of Impala. Results from the drilling program to date confirmed the presence of the Merensky and UG2 Reefs within the prospecting right area (response from Impala).	
Boitshepo Essau Mafoko	10 July 2019 (email)	As Impala acted in accordance with all legislative obligations and responsibilities then did they consider the property Act? If so can they provide the proof from Mafoko's giving them authority to prospect.	<ul> <li>Impala is not sure to which "Property Act", is being referred to by Mr Mafoko. However:</li> <li>1. In terms of Section 5 of the MPRDA: <ol> <li>A prospecting right granted in terms of the MPRDA and registered in terms of the Mining Titles Registration Act, 1967, is a limited real right in respect of the mineral and the land to which such right relates (Section 5(1)). This means that Impala as the holder of the prospecting right has the right to exercise its rights and obligations granted to it in terms of the MPRDA, relating to the said mineral and land to which it relates.</li> </ol> </li> <li>1.2 In terms of Section 5(2) of the MPRDA, a holder of a prospecting right has the right to: <ol> <li>enter the land to which such right relates together with his or her employees, and bring onto that land any, machinery or equipment or lay down any surface, underground infrastructure which may be required for the purpose of prospecting;</li> <li>prospect for his or her own account on or under that land for the mineral or petroleum for which such right has been granted;</li> </ol> </li> </ul>	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
			<ul> <li>(c) remove and dispose of any such mineral found during the course of prospecting;</li> <li>1.3 In terms of Section 5A, a person may only prospect once he or she has obtained an environmental authorisation; a prospecting right and has given the landowner or lawful occupier of the land 21 days written notice of its intention to commence with prospecting activities on his or her land. All of these requirements have been met by Impala as the holder of the prospecting right.</li> <li>1.4 Section 54 of the MPRDA allows for the regulatory process to be followed, by either the land owner or the holder of a prospecting right, when either of the parties has suffered or is likely to suffer any loss or damage as a result of the other parties' conduct on the land, whichever is the case.</li> <li>Impala hence does not require in terms of the MPRDA and its limited real right as the holder of the relevant prospecting right, the authority of the Mafoko family, as the landowner, to prospect on their land. (response from Impala)</li> </ul>	
Boitshepo Essau Mafoko	26 July 2019 (email)	Kindly refer to annexure PA19 regarding land right/property right (reference is made from the document that was issued/published by the centre of environmental right).	Impala has noted the concern. Should the Mafoko family wish to take this issue further Section 54 of the MPRDA provides a mechanism for doing so (response from Impala).	Refer to Appendix C
Boitshepo Essau Mafoko	26 July 2019 (email)	As per information on report lodged with the council of geoscience is affecting us directly. We therefore under Section 18(1) of the promotion of access to information Act 2000 (Act No. 2 of 2000) require the information to be submitted to us (kindly see attached document – Form J750).	Mr Mafoko was consulted and advised (05 August 2019) to complete the required forms and to send to the correct recipients in this case the Council of Geoscience in order to obtain the required information. No further response has been received in relation to this aspect.	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
Boitshepo Essau Mafoko	26 July 2019 (email)	Regarding the landowner indemnity form (please see attached documentation/email from the Department of Mineral Resources) (Annexure 2.1)	The landowner indemnity form sent to the Mafoko and Mosito families on 09 July 2019 was the form sent by the DMR (Ntanganedzeni Mushome) to Impala on 18 July 2018. Please refer to the email attached with the response provided. SLR engaged further with Mr Mafoko via email and telephonically to clarify this point. Mr Mafoko indicated that due to the properties being held within an estate the signature needs to be the Senior head of the family. He indicated that this could only be done on Saturday 17 August 2019.	Refer to Appendix C
Boitshepo Essau Mafoko	26 July 2019 (email)	On Annexure SLR2 you stated clearly that the Mafoko's have been informed throughout the prospecting project however we asked you if there were any resolution or did the family grant Impala the right to enter their properties. We were never even informed about the commencement of their prospecting.	Impala acknowledges that they started prospecting activities prior to formally notifying landowners. However, when the activities were stopped by Mr Mafoko in 2009, discussions took place and it was also clarified that drilling had not taken place on portion 8. Following this Impala undertook numerous meetings with the Mafoko family regarding the prospecting activities. Records of these meetings can be provided to the DMR on request (response from Impala)	Refer to Appendix C
Federation for A Sustainabl	e Environment			
Mariette Liefferink	13 August 2019 (email)	The following comments are submitted on behalf of the Federation for Sustainable Environment (FSE). The FSE is a federation of community based civil society organisations committed to the realisation of the constitutional right to an environment that is not harmful to health or well-being, and to having the environment sustainably managed and protected for future generations. Their mission is specifically focussed on addressing the adverse impacts of mining and industrial activities on the lives and livelihoods of vulnerable and disadvantaged communities who live and work near South Africa's mines and industries. We respectfully request permission to submit our comments one day after the time for comment	At the end of the review period (12 August 2019), the draft documents on the website automatically expired and were no longer available. The final version of the report (including comments made during the review period) will be made available on the SLR website for viewing. The FSE will be notified and provided a link to the SLR website.	Refer to Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		<ul> <li>prescribed.</li> <li>From a reading of the above-mentioned Background Information Documents (BAR), we infer that: <ul> <li>14 exploration drill holes and 8 exploration drill holes were drilled in terms of the Doornspruit and Roodekraalspruit and Klipgatkop Prospecting Rights respectively;</li> <li>The applications for closure are in terms of section 43(3) of the Mineral and Petroleum Resources Development Act (28 of 2002);</li> <li>The applications for closure are motivated by the fact that Impala faces tremendous economic and financial challenges;</li> <li>The potential impacts of the closure applications on flora and fauna and land-use are minimal and the socio-economic and visual impacts were also assessed as minimal.</li> <li>No additional mitigation or monitoring is deemed necessary for the above-mentioned impacts.</li> </ul> </li> <li>We were unsuccessful in accessing the copies of the full reports of the above-mentioned applications on the SLR website this morning, that is, the 13<sup>th</sup> of August, 2019 hence our comments are grounded upon the summaries of the Basic Assessment and Environmental Management Programme and Closure Plan and are generic.</li> </ul>		
		Firstly, according to the South African Human Rights Commission's (SAHRC) findings and directives pursuant to its National Hearing on the Underlying Socio-Economic Challenges of Mining Affected Communities in South Africa, the Applicant should solicit the community's consent, and "the community shall decide whether to grant its consent in terms of	The public participation process was undertaken in accordance with the requirements of Chapter 6 of Regulations 982 of 4 December 2014 (EIA Regulations), as amended. In addition to this, consideration was also given to the public participation guideline in terms of the NEMA (2017). SLR believes that the public participation process undertaken for this project was of	Section 7.2.1 and Table 7-2. Appendix C

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		<ul> <li>the community's customary law and practices, provide that such process shall be transparent, democratic and participatory."</li> <li>From a reading of the Comments and Response Reports we noticed that comments of only 3 or 4 community members are recorded. We infer from the comments of the community members that there was inadequate closure preparation (which should have commenced at the start of the prospection operations) and that the perceptions and expectation of the community members were not adequately managed during the prospecting operations. To exemplify: <ul> <li>What happens after the prospecting right has been closed?</li> <li>What led to the abandoning of this project?</li> <li>No one gave us feedback regarding what they found there. Is the information obtained by Impala during the PR surveys freely available?</li> <li>Is it possible for any company to open a shaft if the depth of the resource is not an issue to them?</li> <li>Who gave Impala the right to prospect and drill holes in our properties?</li> <li>According to the Rehabilitation process, who accepted the Rehabilitation process on behalf of my family (Mafoko's)?</li> <li>If Impala accept that they have wronged us, when will they reimburse the Mafoko family?</li> </ul> </li> <li>It begs the question whether the public participation process was conducted along formulaic lines or allowed for broad based public participation. The FSE has observed that Environmental Assessment Practitioners (EAPs) often apply the same stakeholder</li> </ul>	an appropriate requirement for the scale and nature of a prospecting right. Details on the public participation process is detailed in Section 7.2.1 and table 7-2. Proof of correspondence is included in Appendix C.	

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		<ul> <li>group template for every project and only engage with representatives from each group. This mechanistic approach disallows serendipitous input from the community. In terms of the principles of the National Environmental Management Act (107 of 1998), the participation of vulnerable, disadvantaged and marginalised members of mining affected communities must be encouraged as well as the participation by women and the youth.</li> <li>Broad based public engagement with communities and broad support are essential since: <ul> <li>It will help the Applicant to access local knowledge such as biophysical knowledge of climate, fauna and flora and historical landuse patterns;</li> <li>It will enhance community participation in identifying post-project options an ultimately taking ownership of post closure initiatives.</li> <li>The mining affected communities will have to live with the legacy.</li> </ul> </li> </ul>		
		Secondly, from our understanding of the 2014 EIA Regulations (Appendix 5), a closure plan must include- (a) details of - (i) the EAP who prepared the closure plan; and (ii) the expertise of that EAP; (b) closure objectives; (c) proposed mechanisms for monitoring compliance with and performance assessment against the closure plan and reporting thereon; (d) measures <b>to rehabilitate the environment</b> affected by the undertaking of any listed activity or specified activity and associated closure <b>to its natural or</b>	The Closure Plan was compiled taking into consideration Appendix 5 of the EIA Regulations and the rehabilitation that has taken to date in line with the approved EMPr. Table 4-4 provides details on where each item of Appendix 5 is addressed within the BAR.	Table 4-4

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		<ul> <li>predetermined state or to a land use which conforms to the generally accepted principle of sustainable development, including a handover report, where applicable;</li> <li>(e) information on any proposed avoidance, management and mitigation measures that will be taken to address the environmental impacts resulting from the undertaking of the closure activity.</li> <li>With reference to the closure objectives that need to be achieved, such objectives must include, from a generic perspective, the following: <ul> <li>Immediate harm to human health and safety must be eliminated;</li> <li>Groundwater must be fit for current and future domestic and other uses consistent with agreed current and future land use;</li> <li>Surface water must be fit for current and future basic human needs and aquatic ecosystems requirements;</li> <li>Risk of harm to non-aquatic organisms must be eliminated; and</li> <li>Soil (property) must be fit for use consistent with current and future land use.</li> </ul> </li> <li>It is hoped that the above-mentioned legal requirements were complied with in the preparation of the closure plan and will be complied with in the</li> </ul>		
		Thirdly, in terms of "National Environmental Management Act (107/1998): Regulations pertaining to the Financial Provision for Prospecting, Exploration, Mining or Production Operations", the Applicant must make financial provision for: "5 (c) remediation and management of latent or residual environmental impacts which may become	Prospecting has not taken place on the properties in five years (since 2014). Typically, a period of aftercare and maintenance is applied to each rehabilitated drill site to ensure closure objectives are being met. Given the nature of the prospecting activities, a 2 to 3-year period of	Section 27.1.6

Interested and affected party	Date comment received	Issues raised	Response provided by SLR unless otherwise stated	Section and paragraph reference in this report where the issues and or responses were incorporated
		known in future, including the pumping and treatment of polluted or extraneous water." Even though the impacts were assessed as low and no mitigation and monitoring measures are proposed, we recommend that the Applicant follows the precautionary approach and make sufficient financial provision for any potential residual and latent impacts.	maintenance and aftercare is usually applied. The drill sites have already had more than 3 years of monitoring, maintenance and aftercare. No residual or latent impacts were identified. In addition, no further maintenance or aftercare activities are deemed necessary; thus, the calculated financial provision is R0.00.	
		Fourthly, it is imperative that regional mine closure strategies for the North West Province be developed and implemented in order to prevent or minimise adverse long-term socio-economic and environmental impacts, and to create a self-sustaining natural ecosystem or alternate land use.	The proposed project is for the closure of prospecting rights that involved the drilling of prospecting boreholes. No alternative land uses were identified other than to rehabilitate disturbed areas in a manner that achieves similar environmental conditions to that of the surrounding land. The prospecting right areas were and continue to be used for cattle grazing. The closure of the prospecting rights does not affect this grazing land use.	Appendix D Section 3.2.3

# 7.4 ENVIRONMENTAL ATTRIBUTES ASSOCIATED WITH THE ALTERNATIVES

Environmental attributes associated with the prospecting right area are presented in this section.

As part of verifying baseline conditions within the site, SLR undertook a site visit of the prospecting right area in April 2019. In addition, where relevant, information from available reports (see reference list included in Section 33) has been used.

It was noted during the site visit that grazing by livestock has influenced the environmental attributes of the area.

To provide a visual context of the site conditions at each drill hole, photographs reflecting the current status of the sites (taken in April 2019) are presented in Figure 5.

# 7.4.1 Baseline environment affected by the proposed activity

#### Geology

Geologically, the prospecting right area is located in the western Bushveld Complex.

The Bushveld Complex is vertically (or stratigraphically) subdivided into the basal Marginal Zone, Critical Zone, Middle Zone and Upper Zone. The Critical Zone contains various layers of chromitite, which are of economic interest for chrome and platinum group elements (PGE). The Critical Zone is subdivided into a Lower Group (LG1 to LG7 Chromitite Layers), Middle Group (MG1 to MG4 Chromitite Layers) and an Upper Group (UG1 to UG3 Chromitite Layers). The PGE-carrying Merensky Pyroxenite, which only contains minor chromitite stringers, is developed above the Upper Group Chromitite Layers. During prospecting, Impala targeted the Merensky and UG2 reefs in order to evaluate the potential for future exploitation of platinum group metals (PGMs). These reefs are located in the Rustenburg Layered Suite of the Critical Zone. The Merensky Reef is about 2 500 m below surface in the eastern parts of the area, with the UG2 Reef about 80 m deeper (Metago, 2008).

Given the non-invasive nature of exploration drilling (when compared to mining), the geology baseline is expected to be in its pre-project state.

## Topography

The topography of the prospecting area is virtually flat open veldt with a slight slope to the northeast towards the Molapongwamongana River. The altitude in the project area varies from 1 100 meters above mean seal level (mamsl) to 1 040 mamsl. To the south west outside the prospecting area there are two koppies varying in altitude between 1126 mamsl and 1139 mamsl. The area is approximately 52.4 km north west of the highest peak of the Magaliesberg Range (Nooitgedacht), which is at 1853 mamsl (Metago, 2008).

In the broader area, the topography has been influenced by mining activities. The topography of the prospecting right area itself has been influenced by human and livestock activity, with evidence of erosion and compaction of soils not attributable to prospecting activities.

## Climate

The area has a semi-arid climate, with summer rainfall (averaging 730 mm per annum over the last five years) and temperatures of more than 35°C during the day time. The winters are dry with mild temperatures and occasional frost (Impala Platinum Limited, 2019).

The prospecting area falls within the Highveld Climatic Zone 85 % of the mean annual precipitation falls during summer as thunderstorms. The thunderstorms generally occur every 3 to 4 days in summer and are of short duration and high intensity. Temperatures in this climatic zone are generally mild, but low minima can be

experienced in winter due to clear night skies. Generally, winds are light, but south-westerly winds associated with thunderstorms are typically strong and gusty (Metago, 2007 *in* SLR Consulting, 2016).

Rainfall and temperature affect the rate at which vegetation can recover. In previous years, contributing factors to impacting effective re-establishment at the sites included prevailing climatic conditions (high temperatures and below average rainfall) (SLR Consulting, 2018)

# Soils and Land capability

Much of the prospecting area is dominated by Arcadia "black turf" soils which are dark, strongly structured, usually calcareous, clayey soils.

There is no real difference between the topsoil and subsoil layers. The shrink-swell nature of the soils means that within a short time, natural mixing of horizons will take place. In profile the soils have a relatively homogenous texture and structure from the surface downwards (Metago, 2008).

## Biodiversity

The area is located in open veldt and falls within the Savanna Biome, specifically the Zeerust Thornveld and Central Sandy Bushveld. There is the potential for red data species and protected species to occur in the area and the Central Sandy Bushveld has high conservation significance. The land on and surrounding the prospecting right is used for grazing purposes (Metago, 2008).

# Surface water

The prospecting right area falls within the Crocodile (West) Marico Water Management Area (WMA) and is within the A22F quaternary catchment. Non-perennial tributaries cross throughout the prospecting right area and feed into the non-perennial drainage line (Molapongwamongana). Flows only occur during times of fairly high rainfall. Drainage lines are considered to be sensitive ecological environments; no drilling took place within 100m of any drainage lines (Metago, 2008).

The non-perennial drainage line ultimately feed into the Elands River. The Elands River flows in an easterly direction, across the northern part of the survey area. The Elands River ultimately feeds into the Crocodile River (Metago, 2008).

Given then non-perennial nature of watercourses, there is no third-party reliance on surface water.

## Groundwater

The prospecting right area is underlain by two aquifers; a shallow weathered aquifers underlain by deeper fractured aquifers. The deeper fractured aquifers might show different characteristics due to potential preferred pathways along dykes and geological contacts. The groundwater levels in the shallow weathered aquifer vary between 3.7 and 19.3 mbgl with an average depth of 6.8 mbgl. The groundwater level for the deeper fractured aquifer varies between 9.3 and 48.6 mbgl with an average depth of 21.8 mbgl (SLR Consulting, 2016).

In the broader area, groundwater quality is generally marginal to poor due to elevated nitrate concentrations from surrounding mining activities. Third party water users rely on groundwater for domestic, irrigation or livestock watering. Use of groundwater for domestic purposes is generally limited because communities have access to reticulated water supply (SLR Consulting, 2016).

## Air Quality

The surrounding ambient air quality has been influenced by neighbouring mines, household fuel combustion and vehicle tailpipe emissions. Given the extent to which vegetation has re-established at drill sites, it is not expected that dust generated from exposed soils would influence the air quality baseline.

# Noise

The prospecting area is located in open veldt and the surrounding land is used for grazing and farming purposes and in this regard livestock, birds and human voices have been identified as the main sources of sound in the prospecting right area. In terms of the broader area, the prospecting area falls within a predominantly well-developed area due to the substantial mining activities. The R556 road between Pretoria and Sun City runs to the north and east of the prospecting area and the R510 road between Rustenburg and Thabazimbi runs to the south of the prospecting area.

# **Visual Aspects**

Drilled holes are demarcated by a cement beacon and an upright standpipe and are not visible from within the community of Maile/Rooikraal/Roodekraalspruit community, although this is not expected to materially alter the visual landscape which has already been influenced by the development of the rural community, its support infrastructure (powerlines, roads etc.) and subsistence farming activities.

# Heritage/Cultural and Palaeontological Resources

Heritage and cultural resources have been identified within the prospecting right area. There are formal and informal graves associated with the Maile/Rooikraal/Roodekraalspruit village (Metago, 2008). No drill sites were established close to these heritage sites

In the broader area there is the Thaba-ea Nape range of mountains which is part of a cultural landscape and as such a sensitive archaeological region. There are also hundreds of stone walled settlements which date from the Late Iron Age which are associated with the ancestral Tswana, particularly the Bafokeng whose descendants today still occupy numerous towns in the region (Metago, 2008).

# Socio-economic and Current Land Uses

Land ownership details within and immediately adjacent to the prospecting right area are provided in the table below. This section should be read with reference to Figure 5 which shows the below farms location relative to the prospecting right area.

The surface rights are mainly owned by the South African government, the Republic of Bophuthatswana and private individuals.

Portion	Landowner				
Roodekraalspruit 113 JQ (Prospecting Right Area)					
Remaining extent	Private landowners – 42 listed individuals				
Portion 2	Cornelis Mosito and Molife Mosito				
The remaining extent of portion 6	Private landowners – 91 listed individuals				
Portion 8	Jakonia Mofoeke				
A portion of portion 3	Republic of South Africa				
A portion of portion 4	Republic of South Africa				
A portion of portion 5	Republic of South Africa				
Doornspruit 84 JQ (Prospecting Right Area)					
A portion of the farm	Republic of Bophuthatswana				
Klipgatkop 115 JQ					
Portion 0	Republic of South Africa				
Diepkuil 116-JQ					
Portion 0	Republic of Bophuthatswana				
Toulon 111 JQ					
Portion 0	Republic of Bophuthatswana				

# TABLE 7-4:LANDOWNERSHIP WITHIN AND IMMEDIATELY ADJACENT TO THE DOORNSPRUIT AND ROODEKRAALSPRUIT PROSPECTING RIGHT AREA

Rietspruit 83 JQ					
Portion 0	Rustenburg Local Municipality				
Hartebeestspruit 88 JQ					
Portion 0	Republic of Bophuthatswana				
Sandbult 119 JQ					
Portion 0	SA Bantu Trust				

There is a known land claim from the Roodekraalspruit Tweerivier Land Claim Committee. Proof of correspondence is included in Appendix C

The prospecting right area covers a portion of the farm Doornspruit 84 JQ as well as the remaining extent of the farm, portion 2, the remaining extent of portion 6, portion 8, a portion of portion 3, a portion of portion 4 and a portion of portion 5 of the farm Roodekraalspruit 113 JQ. The area is rural in nature with villages scattered across the landscape. There is a village, Maile/Rooikraal/Roodekraalspruit, located within the prospecting area. Main land uses in the broader area is a mixture of agriculture, community/ suburban, mining activities and wilderness. Socio-economically, educational levels in the broader area are relatively low with a high level of unemployment.

The prospecting drill holes have been decommissioned since 2014 and the vegetation has been re-establishing. The prospecting area is currently being used by community livestock for grazing. There has been overgrazing and proliferation of invasive species on the site, though this is not unique to the drill sites and is across the farm.

# 7.4.2 Description of specific environmental features and infrastructure on the site

The environmental features and infrastructure in the broader prospecting right area is described in 7.4.1. In summary:

- The area comprises open veldt with a slight slope to the northeast towards the Molapongwamongana River.
- Visually, the landscape has been influenced by subsistence farming activities.
- There is evidence of cattle presence and grazing on site

# 7.4.3 Environment and current land use map

A conceptual map showing topographical information as well as land uses on and immediately surrounding the prospecting site is provided in Figure 5.

# 7.5 ENVIRONMENTAL IMPACTS AND RISKS

As noted in Section 7.1, no alternatives are applicable to the project and as such an assessment of alternatives is not applicable to the project.

## 7.6 METHODOLOGY USED IN DETERMINING THE SIGNIFICANCE OF ENVIRONMENTAL IMPACTS

Both the criteria used to assess the impacts and the method of determining the significance of the impacts is outlined in Table 7-5. This method complies with the method provided in the EIA guideline document. Part A provides the approach for determining impact consequence (combining intensity, extent and duration). Impact consequence and significance are determined from Part B and C. The consequence rating is considered together with the probability of occurrence in order to determine the overall significance of each impact. The interpretation of the impact significance is given in Part D. The significance of the impact can be related to the level of risk associated with a specific issue.

# TABLE 7-5: IMPACT ASSESSMENT METHODOLOGY

PART A: DEFINITIONS A	ND CRITERI	A*
Definition of SIGNIFICA	NCE	Significance = consequence x probability
Definition of CONSEQU	ENCE	Consequence is a function of intensity, spatial extent and duration
Criteria for ranking of the INTENSITY of environmental impacts	VH	Severe change, disturbance or degradation. Associated with severe consequences. May result in severe illness, injury or death. Targets, limits and thresholds of concern continually exceeded. Substantial intervention will be required. Vigorous/widespread community mobilization against project can be expected. May result in legal action if impact occurs.
	Н	Prominent change, disturbance or degradation. Associated with real and substantial consequences. May result in illness or injury. Targets, limits and thresholds of concern regularly exceeded. Will definitely require intervention. Threats of community action. Regular complaints can be expected when the impact takes place.
	М	Moderate change, disturbance or discomfort. Associated with real but not substantial consequences. Targets, limits and thresholds of concern may occasionally be exceeded. Likely to require some intervention. Occasional complaints can be expected.
	L	Minor (Slight) change, disturbance or nuisance. Associated with minor consequences or deterioration. Targets, limits and thresholds of concern rarely exceeded. Require only minor interventions or clean-up actions. Sporadic complaints could be expected.
	VL	Negligible change, disturbance or nuisance. Associated with very minor consequences or deterioration. Targets, limits and thresholds of concern never exceeded. No interventions or clean-up actions required. No complaints anticipated.
	VL+	Negligible change or improvement. Almost no benefits. Change not measurable/will remain in the current range.
	L+	Minor change or improvement. Minor benefits. Change not measurable/will remain in the current range. Few people will experience benefits.
	M+	Moderate change or improvement. Real but not substantial benefits. Will be within or marginally better than the current conditions. Small number of people will experience benefits.
	H+	Prominent change or improvement. Real and substantial benefits. Will be better than current conditions. Many people will experience benefits. General community support.
	VH+	Substantial, large-scale change or improvement. Considerable and widespread benefit. Will be much better than the current conditions. Favourable publicity and/or widespread support expected.
Criteria for ranking	VL	Very short, always less than a year. Quickly reversible
the DURATION of	L	Short-term, occurs for more than 1 but less than 5 years. Reversible over time.
impacts	М	Medium-term, 5 to 10 years.
	Н	Long term, between 10 and 20 years. (Likely to cease at the end of the operational life of the activity)
	VH	Very long, permanent, +20 years (Irreversible. Beyond closure)
Criteria for ranking	VL	A part of the site/property.
the EXTENT of	L	Whole site.
impacts	Μ	Beyond the site boundary, affecting immediate neighbours
	н	Local area, extending far beyond site boundary.
	VH	Regional/National

# PART B: DETERMINING CONSEQUENCE

INTENSITY = VL							
	Very long	VH	Low	Low	Medium	Medium	High
	Long term	Н	Low	Low	Low	Medium	Medium
DURATION	Medium term	М	Very Low	Low	Low	Low	Medium
	Short term	L	Very low	Very Low	Low	Low	Low
	Very short	VL	Very low	Very Low	Very Low	Low	Low
			INT	ENSITY = L			
	Very long	VH	Medium	Medium	Medium	High	High
	Long term	Н	Low	Medium	Medium	Medium	High
DURATION	Medium term	М	Low	Low	Medium	Medium	Medium
	Short term	L	Low	Low	Low	Medium	Medium
	Very short	VL	Very low	Low	Low	Low	Medium

Very long VH Medium High High High	Very High					
Long term H Medium Medium High	High					
DURATION Medium term M Medium Medium Medium High	High					
Short term L Low Medium Medium Medium	High					
Very short VL Low Low Low Medium	Medium					
INTENSITY = H						
Very long VH High High Very High Very High	Very High					
Long term H Medium High High High	Very High					
DURATION         Medium term         M         Medium         Medium         High         High	High					
Short term L Medium Medium High	High					
Very short VL Low Medium Medium Medium	High					
INTENSITY = VH						
Very long VH High High Very High Very High	Very High					
Long term H High High Very High	Very High					
DURATIONMedium termMMediumHighHigh	Very High					
Short term L Medium Medium High High	High					
Very short VL Low Medium Medium High	High					
VL L M H VH						
A part of the Whole site Beyond the Extending fa	r Regional/					
site/ property site, affecting beyond site	National					

PART C: DETERMINING SIGNIFICANCE							
PROBABILITY	Definite/	VH	Very Low	Low	Medium	High	Very High
(of exposure to	Continuous						
impacts)	Probable	Н	Very Low	Low	Medium	High	Very High
	Possible/	М	Very Low	Very Low	Low	Medium	High
	frequent						
	Conceivable	L	Insignificant	Very Low	Low	Medium	High
	Unlikely/	VL	Insignificant	Insignificant	Very Low	Low	Medium
	improbable						
			VL	L	М	н	VH
		CONSEQUENCE					

neighbours

EXTENT

but localised

PART D: INTERPRETATION OF SIGNIFICANCE						
Significance	Decision guideline					
Very High	Potential fatal flaw unless mitigated to lower significance.					
High	It must have an influence on the decision. Substantial mitigation will be required.					
Medium	It should have an influence on the decision. Mitigation will be required.					
Low	Unlikely that it will have a real influence on the decision. Limited mitigation is likely required.					
Very Low	It will not have an influence on the decision. Does not require any mitigation					
Insignificant	Inconsequential, not requiring any consideration.					

\*VH = very high, H = high, M= medium, L= low and VL= very low and + denotes a positive impact.

# 7.7 POSITIVE AND NEGATIVE IMPACTS OF THE PROPOSED ACTIVITY AND ALTERNATIVES

As noted in Section 7.1, no site layout or infrastructure locational alternatives are being considered and as such an assessment of alternatives is not applicable to the project. The preferred project alternative is assessed in Section 9.

# 7.8 POSSIBLE MANAGEMENT ACTIONS THAT COULD BE APPLIED AND THE LEVEL OF RISK

As part of the comments received from SAHRA, mitigation measures were included relating to uncovering heritage resources. Given that this application is for closure of the prospecting right and that no physical disturbances will be taking place, no further mitigation is deemed necessary.

Issues raised do not require any mitigation to be implemented, refer to Section 7.3 As such this section is not applicable.

# 7.9 MOTIVATION WHERE NO ALTERNATIVE SITES WERE CONSIDERED

No feasible alternatives exist for the proposed project and as such this section is not applicable. Refer to Section 7.1 for further detail.

# 7.10 STATEMENT MOTIVATING THE PREFERRED ALTERNATIVE

No feasible alternatives exist for the proposed project and as such this section is not applicable. Refer to Section 7.1 for further detail.

# 8 FULL DESCRIPTION OF THE PROCESS UNDERTAKEN TO IDENTIFY, ASSESS AND RANK THE IMPACTS AND RISKS THE ACTIVITY WILL IMPOSE ON THE PREFERRED SITE THROUGH THE LIFE OF THE ACTIVITY

# 8.1 DESCRIPTION OF THE PROCESS UNDERTAKEN TO IDENTIFY IMPACTS

Biophysical and socio-economic impacts associated with the proposed project were identified through a site visit undertaken by SLR.

As part of the public participation process, I&APs and commenting authorities (see Section 7.2) were provided with opportunities to provide input into the BAR process and comment on the proposed project, including the identification of environmental and socio-economic impacts.

# 8.2 FINAL ENVIRONMENTAL AUDIT

A final environmental audit was undertaken by SLR to inform the closure of the prospecting right

A site visit was conducted on 24 April 2019. Photographs of the site were taken at the prospecting sites and the general area around the boreholes (Figure 5). This final environmental audit was informed by the following:

- Previous Prospecting EMP Performance Assessments.
- Previous Impala prospecting reports.
- Review of available photographs (2013, 2015 and 2017) of the drill sites.
- Observations from walking/driving through the prospecting right area.

Based on the above, the following findings are noted for the final environmental audit:

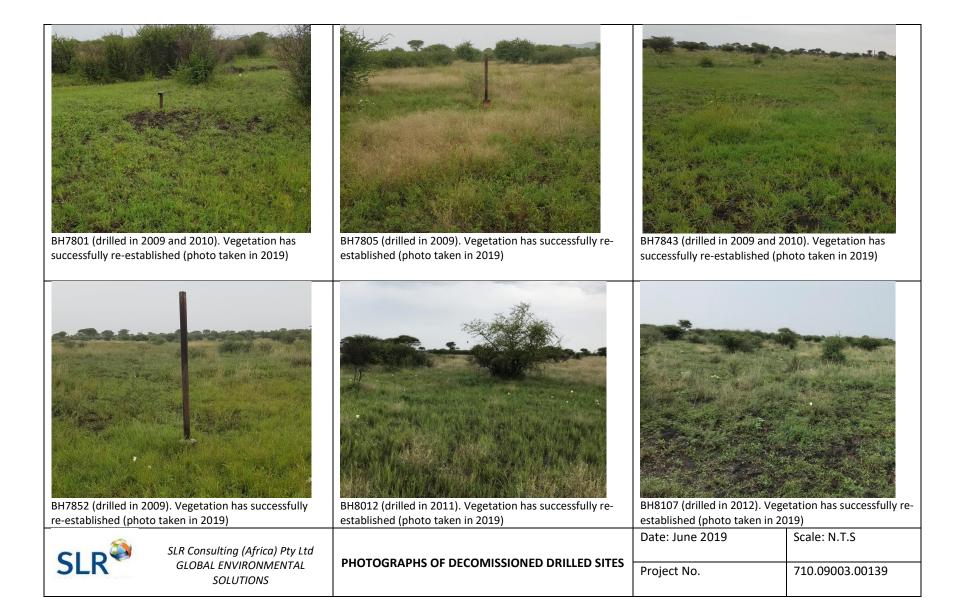
- There are currently no drilling activities taking place on site. Fourteen drill sites were completed during the prospecting period.
- During the April 2019 site visit, no clear distinction could be seen between the areas that had been drilled and the surrounding area. There was evidence of cattle across the prospecting area.
- There has been grazing and proliferation of invasive species on the site, though this is not unique to the drill sites and is across the farm. Evidence of cattle was seen on site.
- A short summary of the status of each drill site is provided below.
  - Drill sites BH7003, BH7605, BH7805, BH7843, BH7852, and BH8012: The vegetation has re-established. There is presence of invasive species. The vegetation has re-established to a satisfactory level and no additional monitoring is deemed necessary.
  - Drill site BH7024: This area could not be accessed as it was overgrown. Considering the area is overgrown and cannot be accessed, it is assumed that the vegetation has re-established well, and at the very least similar to the other drill sites. No additional mitigation or monitoring is deemed necessary.
  - Drill sites BH7606, BH7607, BH7796, BH7798, BH7801, and BH8107: The vegetation has re-established well. Small areas around the boreholes are still not vegetated completely and have exposed soil. There is presence of invasive species. The vegetation has re-established to a satisfactory level and no additional mitigation or monitoring is deemed necessary.
  - Drill site BH7960: In the most recent Prospecting EMP Performance Assessment (SLR, February 2018) it was recommended that monitoring of the drill site be undertaken until such time as vegetation has re-established to a satisfactory level. During the most recent site visit in April 2019, there was some improvement to the re-establishment of vegetation. However, there is still a patch of land that is exposed and has not re-vegetated. In comparison to the post-drilling photograph from 2015, there has been an improvement and the exposed area has decreased. The rest of the area surrounding this exposed section is well vegetated. The 2013 pre-drilling photograph shows that the area in general was very sparse. There is presence of invasive species and evidence of cattle using this area. Impala personnel have indicated that cattle have been seen to sleep in this area at night and use the area during the day. The photographs in Figure 4 show the progression of vegetation re-establishment on site over

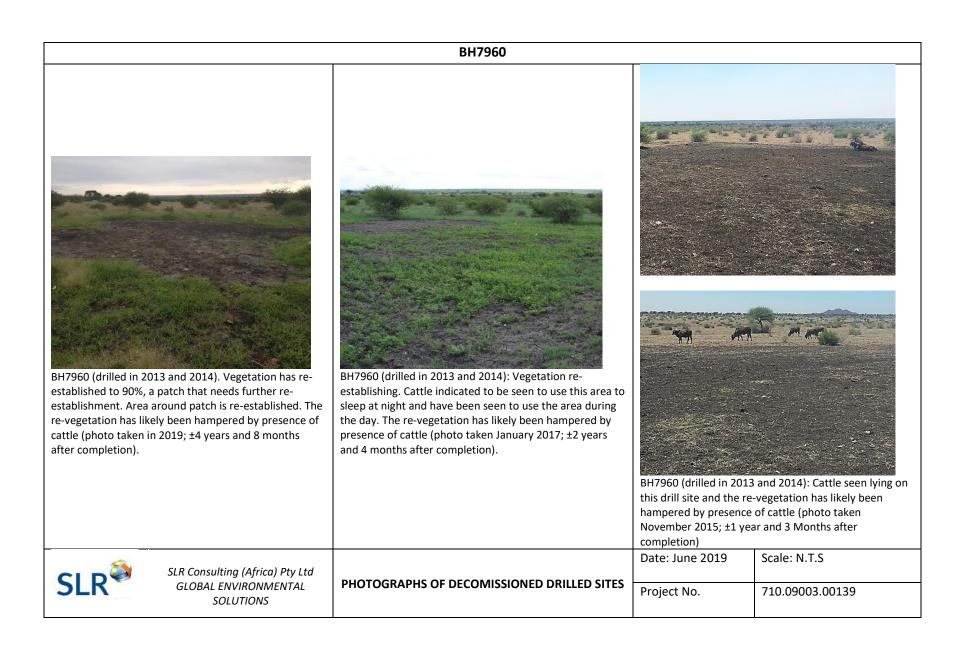
the years and evidence of cattle using the area. While the area is not 100% re-established, further mitigation or monitoring is not deemed necessary as the over-use of this area is likely hampering the re-establishment of vegetation, and unlikely as a result of previous prospecting activities.

- Summary:
  - Drill sites where additional management and monitoring is required: 0
  - Drill sites re-established to a satisfactory level: 12 (BH7003, BH7605, BH7606, BH7607, BH7796, BH7798, BH7798, BH7801, BH7805, BH7843, BH7852, BH7960, BH8012, and BH8107)
  - Drill sites assumed to have re-established to a satisfactory level: 1 (BH7024)

The detailed assessment procedure is described in detail in Appendix F.

BH7003 (drilled in 2006). Vegetation has successfully re- established (photo taken in 2019)	BH7605 (drilled in 2009). Vegetation has successfully re- established (photo taken in 2019)	BH7606 (drilled in 2009). Veget established (photo taken in 201	
BH7607 (drilled in 2009). Vegetation has successfully re- established (photo taken in 2019)	BH7796 (drilled in 2009). Vegetation has successfully re- established (photo taken in 2019)	BH7798 (drilled in 2009 and 20 successfully re-established (pho	10). Vegetation has
SLR Consulting (Africa) Pty Ltd GLOBAL ENVIRONMENTAL SOLUTIONS	PHOTOGRAPHS OF DECOMISSIONED DRILLED SITES	Date: June 2019 Project No.	Scale: N.T.S 710.09003.00139





# 8.3 DESCRIPTION OF THE PROCESS UNDERTAKEN TO ASSESS AND RANK THE IMPACTS AND RISKS

A description of the assessment methodology used to assess the severity of identified impacts (including the nature of impacts and the degree to which impacts may cause irreplaceable loss of resources), the extent of the impacts, the duration and reversibility of impacts, the probability of the impact occurring, and the degree to which the impacts can be mitigated is provided in Section 7.5.

# 8.4 A DESCRIPTION OF THE ENVIRONMENTAL IMPACTS AND RISKS IDENTIFIED DURING THE ENVIRONMENTAL ASSESSMENT PROCESS

Table 8-1 provides a description of the impacts on environmental and socio-economic aspects in respect of each of the main project actions / activities and processes that will be assessed in Section 8.

Potential impact	Activity	Alternative	Project phases
Loss of flora and fauna through lack of or poor rehabilitation	Replacement of topsoil Ripping of compacted soils Natural re-vegetation	Closure of the prospecting right	Closure and rehabilitation
Loss of pre-prospecting land uses through lack of or poor rehabilitation	Replacement of topsoil Ripping of compacted soils Natural re-vegetation	Closure of the prospecting right	Closure and rehabilitation
Change in the visual landscape of the area	Replacement of topsoil Ripping of compacted soils Natural re-vegetation	Closure of the prospecting right	Closure and rehabilitation
Negative and positive socio- economic impacts	Impala/RBRP joint venture's discontinuation of prospecting activities	Closure of the prospecting right	Closure and rehabilitation

TABLE 8-1: LIST OF POTENTIAL IMPACTS AS THEY RELATED TO THE PROPOSED PROJECT

# 8.5 ASSESSMENT OF THE SIGNIFICANCE OF EACH IMPACT AND RISK AND AN INDICATION OF THE EXTENT OF TO WHICH THE ISSUE AND RISK CAN BE AVOIDED OR ADDRESSED BY THE ADOPTION OF MANAGEMENT ACTIONS

The assessment of the significance of potential impacts, including the extent to which impacts can be avoided or mitigated, is included in Section 9 and Appendix D.

# 9 ASSESSMENT OF EACH IDENTIFIED POTENTIALLY SIGNIFICANT IMPACT AND RISK

A summary of the assessment of the biophysical and socio-economic impacts associated with the proposed project is provided in Table 9-1 below. A full description of the assessment is included in Appendix D.

#### TABLE 9-1: ASSESSMENT OF SIGNIFICANT IMPACTS AND RISKS

Activity	Potential impact	Aspects affected	Phase	Significance (Unmitigated)	Management actions type	Significance (Mitigated)	Extent to which the impact can be reversed, avoided or cause irreplaceable loss and the degree to which the impact and risk can be mitigated
Replacement of topsoil Ripping of compacted soils Natural re- vegetation	Loss of flora and fauna if through lack of or poor rehabilitation	Flora and Fauna	Closure and rehabilitation	Very Low	No additional mitigation or monitoring is required	Not Applicable	Can be avoided
Replacement of topsoil Ripping of compacted soils Natural re- vegetation	Loss of pre- prospecting land uses through lack of or poor rehabilitation	Land-use	Closure and rehabilitation	Very Low	No additional mitigation or monitoring is required	Not Applicable	Can be avoided
Replacement of topsoil Ripping of compacted soils Natural re- vegetation	Change in the visual landscape of the area	Visual	Closure and rehabilitation	Insignificant	No additional mitigation or monitoring is required	Not Applicable	Can be avoided
Closure of prospecting activities	Negative and positive socio- economic impacts	Socio-economic	Closure and rehabilitation	Very low	No additional mitigation or monitoring is required	Not Applicable	Can be avoided

# **10 SUMMARY OF SPECIALIST REPORT FINDINGS**

Given the nature of the project, it was not deemed necessary to undertake any project specific specialist studies. This section is therefore not applicable.

# **11 ENVIRONMENTAL IMPACT STATEMENT**

# **11.1 SUMMARY OF KEY FINDINGS**

This section provides a summary of the findings of identified and assessed potential impacts on the receiving environment. Decommissioning and rehabilitation activities have already taken place in line with the management measures outlined in the approved EMPr, therefore the assessment of the unmitigated scenario takes this into account. A summary of the potential impacts (as per Section 9) in the unmitigated scenario for the project is included in Table 11-1 below. Since no additional mitigation and monitoring is deemed necessary, the mitigated scenario is not applicable.

The assessment of the project presents the potential for limited/insignificant negative impacts to occur on the biophysical, social and socio-economic environments both within the prospecting right area and in the surrounding area.

Aspect	Potential impact	Impact significance of the impact (the ratings are negative unless otherwise specified)	
		Unmitigated	Mitigated
Flora and Fauna	Loss of flora and fauna if through lack of or poor rehabilitation	Very Low	Not Applicable
Land Use	Loss of pre-prospecting land uses through lack of or poor rehabilitation	Very Low	Not Applicable
Visual landscape	Change in the visual landscape of the area	Insignificant	Not Applicable
Socio- economic	Negative and positive socio-economic impacts resulting from Impala/RBRP joint venture's discontinuation of prospecting	Very low	Not Applicable

## TABLE 11-1: SUMMARY OF POTENTIAL IMPACTS

# **11.2 FINAL SITE MAP**

The final preferred site layout plan showing the location of the closed drill sites is included in Figure 3.

# 11.3 SUMMARY OF THE POSITIVE AND NEGATIVE IMPACTS AND RISKS OF THE PROPOSED ACTIVITY AND IDENTIFIED ALTERNATIVES

With reference to Sections 7.1 no site layout or infrastructure locational alternatives were considered and as such this section is not applicable.

# 12 IMPACT MANAGEMENT OBJECTIVES AND OUTCOMES FOR INCLUSION IN THE EMPR

Based on the outcome of the impact assessment the proposed management objectives and outcomes specific to the proposed project and for inclusion into the environmental management programme are detailed in this section.

# 12.1 PROPOSED MANAGEMENT OBJECTIVES AND OUTCOMES FOR ENVIRONMENTAL AND SOCIO-ECONOMIC IMPACTS

Specific environmental objectives to control, remedy or prevent potential impacts emanating from the proposed project are provided in Table 12-1 below.

Aspect	Environmental objective	Outcome
Flora and Fauna	To prevent the unacceptable loss of flora and fauna if any residual contamination exists and if re-vegetation isn't successful	Ensure that vegetation successfully re-establishes itself and no residual contamination remains on site.
Land use	To prevent loss of pre-mining land use if any residual contamination exists and if revegetation isn't successful.	Ensure that vegetation successfully re-establishes itself and no residual contamination remains on site, this allowing pre-project land uses to continue.
Visual landscape	To limit negative visual scaring of the landscape.	Ensure that vegetation successfully re-establishes itself so as to limit scaring of the landscape.
Socio-economic	To limit negative socio-economic impacts and enhance positive economic impacts.	Ensure that negative socio-economic impacts are managed through suitable communication structures.
		Ensure that positive socio-economic impacts are enhanced through suitable communication structures.

## TABLE 12-1: ENVIRONMENTAL OBJECTIVES AND OUTCOMES

# 12.1.1 Impacts that require monitoring programmes

No environmental impacts require any further monitoring; refer to Section 28 and Appendix D.

At the time of the 2019 site visit conducted, for thirteen of the drill sites vegetation had successfully re-established. For the one site there was a patch that still needed further re-establishment, but the area seems to be used by cattle. The use of the area by cattle for sleeping and the grazing on site likely has hampered the re-establishment of vegetation on site. No additional mitigation or monitoring is deemed necessary.

# **12.1.2** Activities and infrastructure

Decommissioning and rehabilitation activities have already taken place in line with the management measures outlined in the approved EMPr.

# **12.1.3** Management actions

Decommissioning and rehabilitation activities have already taken place in line with the management measures outlined in the approved EMPr. No additional mitigation is required (see Section 26).

# **12.1.4** Roles and responsibilities

The key personnel to ensure compliance to this BAR and EMPr are the operations executive and the Environmental Department Manager and officers. As a minimum, their roles, as they relate to the implementation of monitoring programmes and management activities, include:

- Ensuring that monitoring programmes and audits are scoped to be fit for purpose and included in the annual mine budget, where applicable.
- Identifying and appointing appropriately qualified specialists/engineers to undertake the monitoring programmes, where applicable.
- Establishing and maintaining good working relations with surrounding communities and landowners.
- Facilitating stakeholder communication, information sharing and a grievance mechanism.

# **13 ASPECTS FOR INCLUSION AS CONDITIONS OF THE AUTHORISATION**

With reference to Regulation 26 of GNR 982 of NEMA, additional conditions that should form part of the environmental authorisation that are not specifically included in the EMPr report include compliance with all applicable environmental legislation whether specifically mentioned in this document or not and which may be amended from time to time.

# 14 ASSUMPTIONS, UNCERTAINTIES, LIMITATIONS AND GAPS IN KNOWLEDGE

This BAR relies on SLR's professional opinion which has been informed by the following:

- Previous EMP Performance Assessments;
- Previous Financial Provision reports;
- Prospecting reports;
- Photographs taken in 2013, 2015 and 2017; and
- A Site visit in 2019.

It is assumed that revegetation will be continuing where rainfall patterns continue and over grazing is controlled.

#### **14.1 ENVIRONMENTAL ASSESSMENT LIMIT**

The EIA focuses on third parties only and does not assess health and safety impacts on employees and contractors because the assumption is made that these aspects are separately regulated by health and safety legislation, policies and standards, and that Impala/RBRP joint venture will adhere to these.

# 15 REASONED OPINION AS TO WHETHER THE PROPOSED ACTIVITY SHOULD OR SHOULD NOT BE AUTHORISED

#### 15.1 REASONS WHY THE ACTIVITY SHOULD BE AUTHORIZED OR NOT

The assessment of the project indicates that the potential for negative residual impacts/risks is very low to insignificant. It follows that no additional mitigation or monitoring is required.

#### 15.2 CONDITIONS THAT MUST BE INCLUDED IN THE AUTHORISATION

#### 15.2.1 Specific conditions for inclusion in the EMPr

Refer to Section 13.

#### **15.2.2** Rehabilitation requirements

Refer to Section 27.

# **16 PERIOD FOR WHICH AUTHORISATION IS REQUIRED**

Impala on behalf of the Impala/RBRP joint venture has already decommissioned the drill sites within the Doornspruit and Roodekraalspruit prospecting area. The environmental authorisation is required in support of the closure of this prospecting right.

## **17 UNDERTAKING**

I, Alessandra Pheiffer, the Environmental Assessment Practitioner responsible for compiling this report, undertake that:

- . The information provided herein is correct
- Comments and inputs from stakeholders and I&APs have been included and correctly recorded in this . report
- Inputs and recommendations from the specialist reports have been included where relevant .
- Any information provided to I&APs and any responses to comments or inputs made is correct or was correct • at that time.

Signature of EAP Signature of commissioner of oath OREN JAN VAN VREDE COMMISSIONER OF OATHS EX OFFICIO PROFESSIONAL ACCOUNTANT (S.A.) FOURWAYS MANOR OFFICE PARK UNIT 7, FOURWAYS ☎(011) 467 - 0945

16/8/2019 Date 16-08-2019 Date

# **18 FINANCIAL PROVISION**

#### **18.1 METHOD TO DERIVE THE FINANCIAL PROVISION**

The closure cost liability was calculated as per the methodology of the DMR guideline document of January 2005.

The amount determined for financial provision for the project is provided in Section 27. This complies with the NEMA Financial Provisioning Regulation (2015) requirements.

#### 18.2 CONFIRM THAT THE AMOUNT CAN BE PROVIDED FOR FROM OPERATING EXPENDITURE

No additional mitigation or monitoring is deemed necessary. This section is therefore not applicable.

# **19 SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY**

#### 19.1 IMPACT ON THE SOCIO-ECONOMIC CONDITIONS OF ANY DIRECTLY AFFECTED PERSON

The impacts associated with socio-economic conditions are discussed in Appendix D.

Direct socio-economic impacts include:

- Loss of social and economic benefits (to contractor) by not continuing with the prospecting, but it is assumed that the contractor would find contracts elsewhere.
- Social and economic benefits as a result of resource becoming available for other potential prospectors.

Indirect socio-economic impacts include:

• Loss of pre-prospecting land uses through lack of or poor rehabilitation.

The assessment of the project indicates that the potential for negative residual socio-economic impacts/risks is very low.

# 19.2 IMPACT ON ANY NATIONAL ESTATE REFERRED TO IN SECTION 3(2) OF THE NATIONAL HERITAGE RESOURCES ACT

Not applicable. No national estate will be affected as part of the project.

# 20 OTHER MATTERS REQUIRED IN TERMS OF SECTIONS 24(4)(A) AND (B) OF THE ACT

No other matters are required in terms of Section 24(4)(A) and (B) of the Act.

# PART B - ENVIRONMENTAL MANAGEMENT PROGRAMME AND CLOSURE PLAN

# 21 DETAILS OF THE EAP

The details of the EAPs who undertook the EIA process and prepared this EMPr and Closure Plan are provided in Part A, Section 1.

# 22 DESCRIPTION OF THE ASPECTS OF THE ACTIVITY

The activities that are covered in the EMPr and Closure Plan are included in Part A, Section 3.

# 23 COMPOSITE MAP

A map superimposing the proposed activity over the environmental sensitivities of the prospecting right area is included in Appendix E.

# 24 DESCRIPTION OF THE IMPACT MANAGEMENT OBJECTIVES INCLUDING MANAGEMENT STATEMENT

#### 24.1 DETERMINATION OF CLOSURE OBJECTIVES

The closure objectives for the project were developed against the local environmental and socio-economic context of the prospecting project (see Section 7.4), as well as, regulatory requirements (see Section 4) and perceived stakeholder expectations (see Section 7.2). Further information pertaining to the closure objectives identified for the project in provided in Section 27.1.1.

# 24.2 PROCESS FOR MANAGING ANY ENVIRONMENTAL DAMAGE, POLLUTION OR ECOLOGICAL DEGRADATION AS A RESULT OF UNDERTAKING A LISTED ACTIVITY

No additional mitigation or monitoring is deemed necessary. This section is therefore not applicable.

#### 24.3 POTENTIAL RISK OF ACID MINE DRAINAGE

Acid Mine Drainage is not a risk associated with prospecting activities and therefore has not been considered further in this report.

#### 24.4 VOLUMES AND RATE OF WATER USE FOR MINING

No water will be used and therefore this section is not applicable.

#### 24.5 HAS A WATER USE LICENCE BEEN APPLIED FOR?

No water uses are triggered by the closure of the prospecting right and therefore a water use license application is not applicable.

#### 24.6 IMPACTS TO BE MITIGATED IN THEIR RESPECTIVE PHASES

The assessment of potential impacts is included in Section 9 and Appendix D. No additional mitigation is required. This section is therefore not applicable

# **25 IMPACT MANAGEMENT OUTCOMES**

No additional mitigation is required. This section is therefore not applicable.

# 26 IMPACT MANAGEMENT ACTIONS

No additional mitigation is required. This section is therefore not applicable.

# **27 FINANCIAL PROVISION**

#### 27.1 DETERMINATION OF THE AMOUNT OF THE FINANCIAL PROVISION

#### 27.1.1 Closure objectives description and the alignment with the baseline environment

The closure objective is to return land disturbed by the prospecting operations to its pre-disturbed state. In this case, the pre-disturbed state was that of:

- Open veldt with a slight slope to the northeast towards the Molapongwamongana River.
- Evidence of cattle presence and grazing on site.
- Open veld used for grazing, farming.

#### 27.1.2 Confirmation that closure objectives have been consulted with landowners and I&APs

The intended final land use was outlined in the Background Information Document made available to landowners and I&APs for review and initial comment. The closure objective and closure plan for the prospecting right area is outlined in this report which was made available for review and comment to landowners and I&APs (see Section 7.2 for further details).

Comments received from landowners and I&APs have been summarised in Section 7.3 and included in full in Appendix C of this report.

#### 27.1.3 Regulatory requirements and conditions for closure

The regulatory requirements for closure are included in Section 4.

The conditions for closure are outlined below:

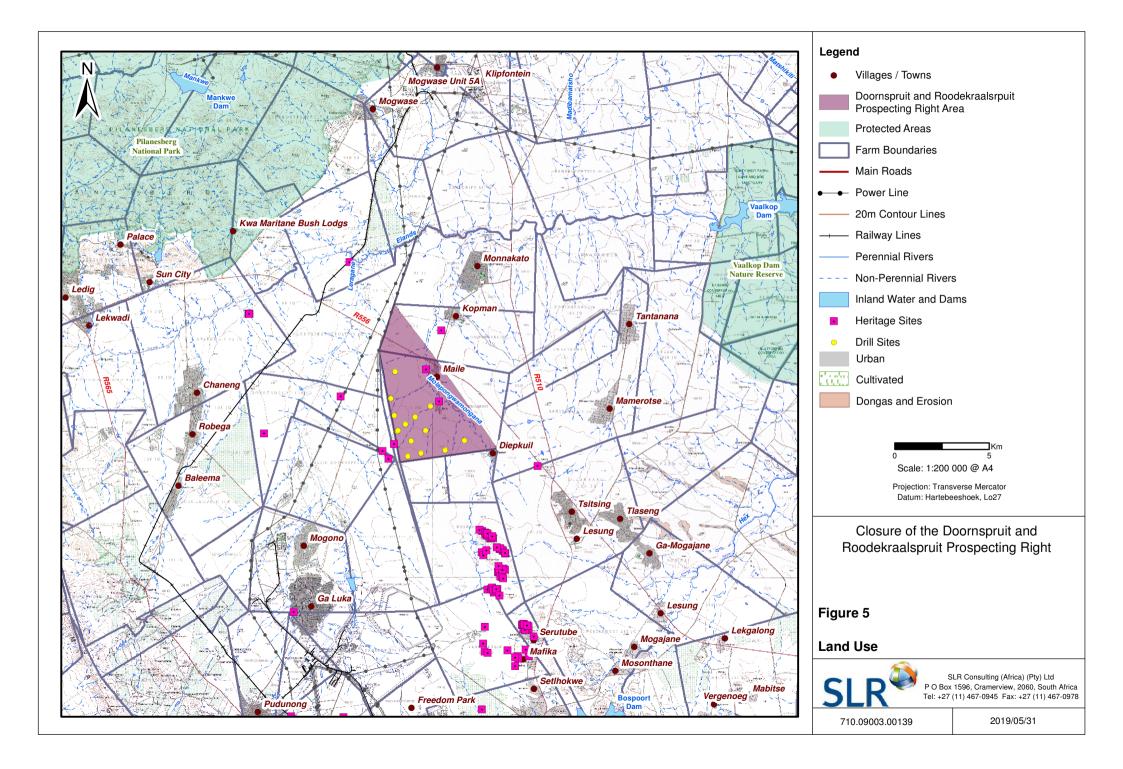
- Achieve physical stability over all landscapes disturbed by prospecting activities.
- Return land to its pre-disturbance potential.
- Maximise visual 'harmony' with the surrounding landscape.

#### 27.1.4 Rehabilitation plan

Rehabilitation of the prospecting sites has been undertaken as outlined in Section 3.2. In accordance with the NEMA Closure Plan requirements (Appendix 5 1(i)) of the EIA Regulations), a plan showing the area under closure including the final and future land use is presented in Figure 5.

#### 27.1.5 Compatibility of the rehabilitation plan with the closure objectives

It can be confirmed that the rehabilitation plan is compatible with the closure objectives given that the closure objectives were taken into account during the determination of the financial provision.



#### **27.1.6** Calculate and state the quantum of the financial provision

Based on the final environmental audit, the closure cost estimate below considers the following:

- There are currently no drilling activities taking place on site.
- Thirteen drill sites have re-established to a satisfactory level (BH7003, BH7024, BH7605, BH7606, BH7607, BH7796, BH7796, BH7798, BH7801, BH7805, BH7843, BH7852, BH8012 and BH8107) and no further maintenance or aftercare activities are deemed necessary.
- The re-vegetation of drill sites BH7960 is in progress. There is still a patch of exposed soil. However, the area is used by cattle (for lying down and grazing) which has likely hampered full vegetation re-establishment. No further maintenance or aftercare activities are deemed necessary.

Given that Impala on behalf of the Impala/RBRP Joint Venture is applying to close the prospecting right and no remaining boreholes will be drilled under the prospecting right, only the current closure liability has been included in this report.

No further maintenance or aftercare activities are deemed necessary; thus, the closure and rehabilitation costs are R0.00.

Impala submitted on behalf of the RBRP/Impala JV a financial guarantee of R122 000.000 (Guarantee number: G0657/402127/GLO; 28 February 2008) to the DMR for this prospecting right in 2008, which replaced the Financial Guarantee of R60 000.00 (Guarantee number: G0657/0319191/GLO) submitted to DMR in 2005. The updated final financial provision is calculated at R 0.00. Where the DMR agrees that the above is appropriate, the existing financial guarantee of R122 000.00 should be cancelled.

#### 27.1.7 Confirmation that the financial provision will be provided

An existing financial guarantee is in place. Where the DMR agrees that the above is appropriate, the existing financial guarantee of R122 000.00 should be cancelled (see Section 27.1.6 above).

# 28 MECHANISMS FOR MONITORING COMPLIANCE AND PERFORMANCE AGAINST THE EMPR

Monitoring of compliance and performance against the EMPr was done through bi-ennual performance assessments of the prospecting activities which were submitted to the DMR. This report presents the findings of the final performance assessment / environmental audit and therefore no further performance assessments / environmental audits are deemed necessary.

At the time of the 2019 site visit, for thirteen of the drill sites, vegetation had successfully re-established. For BH7960 there is still a patch of exposed soil, though this area is used by cattle and it likely this has hampered full revegetation of the area. No further mitigation or monitoring is deemed necessary. There was also the proliferation of alien invasive species on site. This was also seen in the broader area. With the re-vegetation of the drill sites (partly or wholly), the pre-prospecting land uses on and surrounding the drill sites can continue. Where re-vegetation is still in progress, mismanagement or overuse of the area could hamper long term use of the land and result in ongoing exposed areas.

# 29 FREQUENCY OF SUBMISSION OF PERFORMANCE ASSESSMENT REPORT

Given that this report is in support of an application for the closure of a prospecting right, this is not applicable.

# **30 ENVIRONMENTAL AWARENESS PLAN**

Given that this report is in support of an application for the closure of a prospecting right, an environmental awareness plan is not deemed necessary.

# **31 SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY**

Given that this report is in support of an application for the closure of a prospecting right, no further information is expected to be required by the competent authority.

#### **32 UNDERTAKING**

I, <u>Alessandra Pheiffer</u>, the Environmental Assessment Practitioner responsible for compiling this EMPr, undertake that:

- The information provided herein is correct;
- Comments and inputs from stakeholders and I&APs have been included and correctly recorded in this report;
- Inputs and recommendations from the specialist reports have been included where relevant; and
- Any information provided to I&APs and any responses to comments or inputs made is correct or was correct at that time.

Signature of EAR Signature of commissioner of EDE OREN JAN VAN VAN EDE COMMISSIONER OF OATHS EX OFFICIO PROFESSIONAL ACCOUNTANT (S.A.) FOURWAYS MANOR OFFICE PARK UNIT 7, FOURWAYS ☎(011) 467 - 0945

16 / 8/2019 Date

16-08-7019 Date



# **33 REFERENCES**

Impala Platinum Limited. 2019. Final geological report for prospecting closure done at a portion of the farm Doornspruit 84 JQ and a portion of the farm Roodekraalspruit 113 JQ (PR 497/2007), for the period 1 January 2008 to 31 December 2018.

Metago. 2007. Roodekraalspruit and Doornspruit prospecting EMP Amendment 1 -16 November 2007.

Metago. 2008. EMP amendment for seismic activities at Impala's Rustenburg mining and prospecting operations

- SLR Consulting. 2016. Amended environmental management programme for Impala Platinum Limited to incorporate prospecting rights on the farms Doornspruit 84 JQ, Roodekraalspruit 113 JQ, Klipgatkop 115 JQ and Diepkuil 116 JQ into the Impala adjacent converted mining right.
- SLR Consulting, 2018. Doornspruit 84 JQ and Roodekraalspruit 113 JQ: Prospecting Environmental Management Plan Performance Assessment (February 2018)

APPENDIX A: EXISTING AUTHORISATIONS

#### APPENDIX B: EAP CURRICULUM VITAE AND REGISTRATION

#### APPENDIX C: STAKEHOLDER ENGAGEMENT

#### Undertaken by SLR

- DMR pre-application meeting minutes (including presentation).
- Royal Bafokeng Administration meeting minutes (including presentation).
- Roodekraalspruit Maile Traditional Council meeting minutes (including presentation).
- NEMA application, proof of application fee payment, and acknowledgement of receipt from the DMR.
- Correspondence with the land claims commissioner.
- Newspaper advertisement placed in the Rustenburg Herald.
- Site notice including photographic record and map illustrating the location of the site notices.
- Background Information Document (BID) and proof of distribution.
- Written/telephonic comments received from I&APs on the BID.
- Correspondence on the draft BAR.
- Comments/Correspondence received on the draft BAR.
- Site visit record.

#### Undertaken directly by Impala

• Letter to the Mosito and Mafoko families on the notification of cessation of exploration projects.

#### APPENDIX D: DETAILED ASSESSMENT OF POTENTIAL IMPACTS

#### APPENDIX E: COMPOSITE MAP (FIGURE 6)

#### APPENDIX F: DETAILED ENVIRONMENTAL AUDIT PROCEDURE

APPENDIX G: LETTER OF RECOMMENDATION FOR EXEMPTION (PISTORIUS, 2019)



# **RECORD OF REPORT DISTRIBUTION**

Project Number:	710.09003.00139
Title:	Basic Assessment, Environmental Management Programme and Closure Plan for the Closure of the Doornspruit and Roodekraalspruit Prospecting Right
Report Number:	Final for DMR Review
Proponent:	The Royal Bafokeng Resources Platinum (Pty) Ltd / Impala Platinum Limited Unincorporated Joint Venture

Name	Entity	No.	Date issued	lssuer
Phumudzo Nethwadzi	Department of Mineral Resources	3 Hard Copies and 2 CDs	16 August 2019	C. Kotze
Carol Kenyon (Librarian)	SLR's offices in Johannesburg	1 Hard Copy	16 August 2019	C. Kotze

#### COPYRIGHT

Copyright for these technical reports vests with SLR Consulting (Africa) (Pty) Ltd unless otherwise agreed to in writing. The reports may not be copied or transmitted in any form whatsoever to any person without the written permission of the Copyright Holder. This does not preclude the authorities' use of the report for consultation purposes or the applicant's use of the report for project-related purposes.



## **AFRICAN OFFICES**

# **South Africa**

CAPE TOWN T: +27 21 461 1118

FOURWAYS T: +27 11 467 0945

SOMERSET WEST T: +27 21 851 3348

# Namibia

WINDHOEK T: + 264 61 231 287

