



## **VREDEFORT WEST EXTENSION PROSPECTING RIGHT**

### **FINAL BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT**

**Submitted in support of an Application for a Prospecting Right and Environmental Authorisation**

**Prepared on Behalf of:  
WHITE RIVERS EXPLORATION (PTY) LTD**

**DMR REFERENCE NUMBER:  
FS 30/5/1/1/3/2/1/10521 EM**

**22 OCTOBER 2018**

# VREDEFORT WEST EXTENSION PROSPECTING RIGHT

## FINAL BASIC ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

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2	22 October 2018	Final Basic Assessment Report and Environmental Management Programme Report

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## EXECUTIVE SUMMARY

White Rivers Exploration (Pty) Ltd (hereafter referred to as White Rivers Exploration, the Applicant) submitted an application for a Prospecting Right and an Environmental Authorisation in order to prospect for the following commodities:

- Silver
- Gold
- Coal
- Cobalt
- Copper
- Diamonds (Alluvial)
- Iron
- Manganese
- Molybdenum
- Nickel
- Lead
- Platinum Group Metals
- Rare Earths
- Sulphur
- Uranium
- Tungsten
- Zinc

The application for the Prospecting Right was accepted by the Free State Department of Mineral Resources – Regional Manager on the 25<sup>th</sup> June 2018. In addition, receipt of the application for an Environmental Authorisation was acknowledged by the Department on the 03<sup>rd</sup> July 2018. The proposed project will be known as Vredefort West Extension and it will aim to explore and quantify potential mineral resources.

In order to undertake prospecting activities, White Rivers Exploration require a granted Prospecting Right in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). White Rivers Exploration is also required to obtain an Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) which involves the submission of a Basic Assessment Report and Environmental Management Programme Report as well as undertaking a Public Participation Process. Shango Solutions have been appointed by White Rivers Exploration as the Environmental Assessment Practitioner to assist in complying with these requirements.

### **Purpose of this Document**

This document has been compiled in support of the Prospecting Right and Environmental Authorisation application and aims to assess any impacts associated with prospecting activities as detailed in the Prospecting Work Programme. It is important that Interested and Affected Parties are provided with an opportunity to review and comment on this assessment report, thereby contributing to the Basic Assessment process and assisting in identifying any additional risks or impacts that may be experienced. As such, a public consultation was undertaken for this application. The draft report was made available to Interested and Affected Parties for a period of 30 days ending on the 19<sup>th</sup> October 2018. This final report includes the results of consultation for submission to the Competent Authority (the Department of Mineral Resources) for decision-making.

### **Project Location**

The area of interest occupies a total of approximately 18 623.73 hectares over 90 farm portions, and it is situated within the Vredefort Magisterial District approximately 20.3 kilometres west of Parys, in the Free State Province of South Africa.

### **Proposed Activities**

Invasive and non-invasive prospecting activities will be undertaken as part of the proposed Prospecting Work Programme. The Prospecting Work Programme will be based on a phased approach over approximately five years. Continuation of the prospecting activities will be dependent on the successful completion of tasks constituting an orderly geological investigation. The scope of these activities is as follows:

The first three years of the proposed five year prospecting programme will be limited to non-invasive activities, namely (i) locating and acquiring historical data, (ii) inventory, capturing and QA/QC of data, (iii) desktop studies, (iv) field visit, (v) data synthesis, (vi) geophysical survey (if required), (vii) locating key historical borehole core (if available), (viii) re-logging and re-sampling of historical core as well as (ix) surface mapping and sampling.

During the first half of Year 4, trenching activities will occur. The intention is to excavate two trenches with each trench being excavated to a depth of 3 m, a length of 10 m and a width of 1.5 m. Reef exposures will be mapped and sampled, and the information acquired will be captured into a database and presented in useable GIS digital map formats. This information will then be integrated into the geological model in order to define the orebodies.

The second half of Year 4 and Year 5 will comprise non-invasive activities, namely (i) finalisation of the 3D geological model, (ii) resource estimation utilising the finalised geological model and (iii) undertaking a concept study.

### **Prospecting Targets**

The main targets for prospecting are the conglomerate layers (reefs) within the Witwatersrand rocks. The Witwatersrand rocks are thought to occur at relatively shallow depths (0 – 500 metres) in the application area as the application area is situated on the south-western portion of the Vredefort Dome.

### **Environmental Specialist Studies**

A comprehensive assessment was undertaken in support of the Vredefort West Extension project. Four specialist studies were undertaken, namely:

- Heritage Impact Assessment.
- Palaeontological Impact Assessment.
- Biodiversity (Fauna and Flora) Impact Assessment.
- Wetland Impact Assessment.

Based on the specialist assessments, it was determined that a number of sensitive features exist within the application area.

### **Summary of Key Findings**

The topography of the application area is characterised by ridges and valleys varying in altitude between 1 274 and 1 611 metres above mean sea level. It falls within the Vaal Water Management Area, which includes rivers such as the Wilge, Liebenbergsvlei, Mooi, Renoster, Vals, Sand, Vet, Harts, Molopo and Vaal rivers. The Vaal Water Management Area comprises 12 tertiary catchment areas, and the application area is specifically situated in the C70J, C23L, C70F and C70E Quaternary Catchments. The climate is characterised by summer rainfall and warm-temperate conditions with a mean annual precipitation of approximately 594 millimetres. Frost occurs regularly within winter months (approximately 38 days per year on average).

### **Biodiversity and Wetland Assessment**

The Biodiversity and Wetland Impact Assessments were conducted on a desktop level and a field survey was undertaken to increase confidence in the information obtained from the desktop studies. The field survey primarily focussed on the prospecting footprint (areas proposed for the excavation of two trenches). Based on the two assessments, the proposed prospecting footprint is situated predominantly within disturbed and semi-disturbed habitats. Although somewhat disturbed, it is believed that these areas may still support some faunal species, and there is a moderate likelihood that Species of Conservation Concern may occur. The application area does not overlap with, nor will it impact upon, any formally protected area.

According to Mucina and Rutherford (2006), the application area is situated across five vegetation types, namely (i) Vredefort Dome Granite Grassland, (ii) Andesite Mountain Bushveld, (iii) Gold Reef Mountain Bushveld, (iv)

Vaal Vet Sandy Grassland and (v) Central Free State Grassland. The prospecting footprint specifically occurs within Vredefort Dome Granite Grassland, which is classified as Endangered according to Mucina and Rutherford (2006) and Vulnerable according to the National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004): National List of Ecosystems that are threatened and in need of protection.

No true-Freshwater Ecosystem Priority Area wetlands or rivers were identified within the proposed prospecting footprint. Given the access limitations, only desktop data has been used to identify wetland areas. The 500 metre assessment boundaries could not be ground truthed. Ultimately, one hydrogeomorphic type has been identified and consists of four wetland units, of which all four are located outside of the 500 metre assessment boundaries.

#### **Heritage Impact Assessment and Palaeontological Impact Assessment**

A Heritage Impact Assessment and Palaeontological Impact Assessment were undertaken over the application area. The Heritage Impact Assessment was conducted on a desktop level and a field survey was undertaken in order to identify archaeological and heritage resources within the area proposed for the excavation of two trenches. Four cemeteries and several collapsed stone walls were identified during the field survey. The identified heritage and archaeological resources have been allocated the following Unique Site Reference Numbers:

- Mim Gro Cem-01
- Lindek Cem-01
- Rhebok Cem-01
- Onreg Cem-01
- Site complex-01

In terms of the South African Heritage Resources Agency Palaeontological Sensitivity Layer, the application area is classified as having low to high fossil sensitivity. According to the Palaeontological Impact Assessment, the two trench areas on the farm Mimosa Grove 491 fall on non-fossiliferous rocks of the Witwatersrand Supergroup while a section in the west occurs on sandstones and shales of the Vryheid Formation that could preserve fossil plants of the *Glossopteris* flora (early Permian).

#### **Environmental Impact Assessment**

This Basic Assessment was undertaken in order to identify all of the potential impacts associated with each phase of prospecting. Each of the identified risks and impacts were assessed following the impact methodology described in the body of this report. The assessment criteria include nature, extent, duration, magnitude/intensity, reversibility, probability, public response, cumulative impact, and irreplaceable loss of resources. Based on the impact assessment conducted by the Environmental Assessment Practitioner and the various specialists, the environmental impacts associated with the proposed prospecting activities are expected to be localised and of medium to low significance. The significance of the impacts can be reduced to low significance provided all recommended mitigation measures are implemented correctly.

#### **Environmental Management Programme Mitigation Measures**

The four specialists (Biodiversity (fauna and flora), Wetland, Heritage and Palaeontology) have recommended mitigation measures and proposed suitable monitoring programmes. These mitigation measures and monitoring programmes have been included as commitments in the Environmental Management Programme. It is anticipated that the implementation of the mitigation measures stipulated in the Environmental Management Programme will result in effective mitigation of the negative impacts. Conversely, the implementation of the mitigation measures designed to maximise the positive aspects of the project will result in a significant positive influence as a result of the proposed prospecting operations.

#### **Need and Desirability of the Project**

The proposed Vredefort West Extension Prospecting Right, if granted, will allow White Rivers Exploration to determine if economically viable mineral resources are present within the application area. Should prospecting prove successful and a resource quantified, it would indicate a potential viable economic activity in the form of mining which is likely to contribute greatly to the socio-economic status quo in the form of increased income, employment and other benefits.



mineral resources

Department:  
Mineral Resources  
REPUBLIC OF SOUTH AFRICA

## **BASIC ASSESSMENT REPORT**

**AND**

## **ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT**

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

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## IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining “will not result in unacceptable pollution, ecological degradation or damage to the environment”.

Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of Section 16(3)(b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of Section 17(1)(c) the Competent Authority must check whether the application has taken into account any minimum requirements applicable instructions or guidance provided by the Competent Authority to the submission of applications.

**It is therefore the instruction that** the prescribed reports required in respect of application for an environmental authorisation for listed activities triggered by an application for a right or a permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused.

**It is furthermore an instruction that** the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information requested herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the report, in order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

## OBJECTIVE OF THE BASIC ASSESSMENT PROCESS

The objective of the basic assessment process is to, through a consultative process-

- a) Determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context.
- b) Identify the alternatives considered, including the activity, location, and technology alternatives.
- c) Describe the need and desirability of the proposed alternatives.
- d) 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 the technology alternatives on the these aspects to determine:
  - i. The nature, significance, consequence, extent, duration, and probability of the impacts occurring to.
  - ii. The degree to which these impacts-
    - (aa) Can be reversed.
    - (ba) May cause irreplaceable loss of resources.



- (ca) Can be managed, avoided or mitigated.
- e) 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 manage, avoid or mitigate identified impacts.
  - iii. Identify residual risks that need to be managed and monitored.

This report has been designed to meet the requirements for a Basic Assessment Report and Environmental Management Programme as stipulated in the 2014 Environmental Impact Assessment Regulations (as amended) promulgated under the National Environmental Management Act, 1998 (Act 107 of 1998). The adjudicating authority for this application is the Department of Mineral Resource and this report has been compiled in accordance with the applicable Department of Mineral Resources Guidelines and Basic Assessment Report and Environmental Management Programme template.

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Appendix C: Details and Experience of EAP

Appendix D: Maps

Appendix E: Public Participation Process

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Appendix G: Impact Assessment Calculations

## Definitions

Abbreviation	Definition
Applicant	The person or party applying for Environmental Authorisation for a listed activity and who is responsible for ensuring the development complies with all relevant legislation whether or not they are the land owner.
BAR and EMPR	Basic Assessment Report and Environmental Management Programme. DMR document for joint BAR and EMPR related for mineral applications.
CA	Competent Authority.
DEA	The National Department of Environmental Affairs.
DMR	The Department of Mineral Resources. CA in South Africa for mineral right applications.
DWS	The Department of Water and Sanitation – both national offices and their various regional offices, which are divided across the country on the basis of water catchment areas.
EA	Environmental Authorisation. This constitutes the approval or dismissal of a project as issued by the relevant Competent Authority.
EAP	Environmental Assessment Practitioner.
EAR	Environmental Audit Report.
ECO	Environmental Control Officer.
EIA Regulations	Environmental Impact Assessment Regulations.
EIR and EMP	Environmental Impact Report and Environmental Management Programme. DMR document for joint EIR and EMPR related to mineral applications.
Environment	The Environment is defined in terms of the National Environmental Management Act (Act 107 of 1998) as the surroundings within which humans exist and that are made up of: The land, water and atmosphere of the earth: micro-organisms, plant and animal life, any part or combination of the first three items and the inter-relationships between them the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and wellbeing.
Fauna	All living biological creatures, usually capable of motion, including insects and predominantly of protein-based consistency.
Fence	A physical barrier in the form of posts and barbed wire or any other concrete construction, ("palisade"- type fencing included), constructed with the purpose of keeping humans and animals within or out of defined boundaries.
Flora	All living plants, grasses, shrubs, trees, etc., usually incapable of easy natural motion and usually capable of photosynthesis.
FP	Financial Provision.
FP Regulations	Regulations pertaining to the financial provision for prospecting, exploration, mining or production operations No. 1147 (effective 20 November 2015).
FRDCP	Final Rehabilitation, Decommissioning and Closure Plan.
GN	Government Notice.
HSE	Health, Safety and Environment.
I&AP	Interested and Affected Parties.
MEC	Member of the Executive Council.
MP	Mining Permit in terms of the MPRDA.
MPDRA	Minerals and Petroleum Development Act, No 28 of 2002.
MR	Mining Right in terms of the MPRDA.
PR	Prospecting Right in terms of the MPRDA.
SAHRA	South African Heritage and Resources Act, No25 of 1999.
SAMRAD	The web-based portal for mineral right applications and management – managed by the DMR.

# PART A:

## SCOPE OF ASSESSMENT AND BASIC ASSESSMENT REPORT

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### 1. INTRODUCTION

White Rivers Exploration (Pty) Ltd (hereafter referred to as White Rivers Exploration, the Applicant) submitted an application for a Prospecting Right (PR) and an Environmental Authorisation (EA) (Appendix A) in order to prospect for the following commodities:

- Silver
- Gold
- Coal
- Cobalt
- Copper
- Diamonds (Alluvial)
- Iron
- Manganese
- Molybdenum
- Nickel
- Lead
- Platinum Group Metals
- Rare Earths
- Sulphur
- Uranium
- Tungsten
- Zinc

The application for the PR was accepted by the Department of Mineral Resources (DMR) – Free State Regional Manager on the 25<sup>th</sup> June 2018. In addition, receipt of the application for an EA was acknowledged by the Department on the 03<sup>rd</sup> July 2018. The proposed project will be known as Vredefort West Extension and it will aim to explore and quantify potential mineral resources. In order to undertake prospecting activities, White Rivers Exploration require a granted PR in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (MPRDA). White Rivers Exploration is also required to obtain an EA in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) which involves the submission of a Basic Assessment Report (BAR) and Environmental Management Programme Report (EMPR) as well as undertaking a Public Participation Process (PPP). Shango Solutions have been appointed by White Rivers Exploration as the Environmental Assessment Practitioner (EAP) to assist in complying with these requirements.

It is anticipated that the following invasive and non-invasive activities will be undertaken, based on information presented in the associated Prospecting Work Programme (PWP) (Appendix B).

#### **Non-invasive prospecting activities**

Locate and acquire historical data

Data capture, QA/QC and database establishment

Desktop studies

Field visit

Data synthesis

Generation of geological models

Geophysical survey (if required)

Locate key historical borehole core (if available)

Re-logging and re-sampling of historical core

Surface mapping and sampling

Resource estimation

Concept study

**Invasive prospecting activities**

Excavation of two (2) trenches (10 m long, 1.5 m wide and 3 m deep each)

**1.1 Location of the Activity**

The area of interest occupies a total of approximately 18 623.73 hectares (ha) over 90 farm portions (Figure 1) and it is situated within the Vredefort Magisterial District approximately 20.3 kilometres (km) west of Parys, in the Free State Province of South Africa. Table 1 indicates the property details within the application area.

Table 1: Locality details.

Farm name	
	1. Bloemfontein 7 Portion 0/RE
	2. Bloemfontein 7 Portion 1
	3. Engels Kuil 30 Portion 0
	4. Lindekwees-Fontein 73 Portion 0/RE
	5. Witterand 103 Portion 0/RE
	6. Maria 115 Portion 0
	7. Rhebokfontein-West 117 Portion 0/RE
	8. Roodewal 119 Portion 0/RE
	9. Rhebokfontein 120 Portion 0/RE
	10. Cecilia 134 Portion 0/RE
	11. Cecilia 134 Portion 1
	12. Vlakkuil 152 Portion 0/RE
	13. Aprilskraal 217 Portion 0/RE
	14. Augustus Kraal 218 Portion 0/RE
	15. De West Rust 230 Portion 0/RE
	16. De West Rust 230 Portion 1
	17. De West Rust 230 Portion 2
	18. De Put 289 Portion 0/RE
	19. Leeuwdoorns 350 Portion 0/RE
	20. Leeuwdoorns 350 Portion 0/RE
	21. Leeuwdoorns 350 Portion 0/RE
	22. Leeuwdoorns 350 Portion 3
	23. Leeuwdoorns 350 Portion 4
	24. Leeuwdoorns 350 Portion 5
	25. Mount Surprise 357 Portion 0/RE
	26. Mount Jackson 358 Portion 0/RE
	27. Mount Jackson 358 Portion 1



28. Tevreden 374 Portion 0
29. Mimosa Grove 491 Portion 0/RE
30. Mimosa Grove 491 Portion 1
31. Mimosa Grove 491 Portion 2
32. Dora 492 Portion 0
33. Smaldeel 493 Portion 0
34. Brakdam 494 Portion 0/RE
35. Brakdam 494 Portion 1
36. Goedgedacht 504 Portion 0
37. Geluksvlei 605 Portion 0
38. Knapdaar 619 Portion 0
39. Kingsley 622 Portion 0/RE
40. Damplaats 626 Portion 0
41. Windhuk 630 Portion 0/RE
42. Cyferkuil 634 Portion 0
43. Palestina 635 Portion 0
44. Bellary 724 Portion 0
45. Klipheuvel 739 Portion 0
46. Goudini 742 Portion 0
47. Stillehoogte 744 Portion 0
48. Jacoba's Rust 747 Portion 0
49. Kroonvlei 766 Portion 0
50. Martha's Wil 797 Portion 0
51. Turfhoek 798 Portion 0
52. Morgenzon 799 Portion 0/RE
53. Morgenzon 799 Portion 2
54. Morgenzon 799 Portion 3
55. Morgenzon 799 Portion 4
56. Hercules 800 Portion 0/RE
57. Hercules 800 Portion 1
58. Hercules 800 Portion 4
59. Hercules 800 Portion 6
60. Verheugd 851 Portion 0/RE
61. Verheugd 851 Portion 3
62. Verheugd 851 Portion 4
63. Mooiplaats A 852 Portion 0/RE
64. Mooiplaats B 853 Portion 0/RE
65. Aberdeen B 974 Portion 0

	66. Mooihoek 975 Portion 0 67. Baltespoort 998 Portion 0/RE 68. Uitsoek 1011 Portion 0 69. Skaapplaas 1022 Portion 0/RE 70. Skaapplaas 1022 Portion 1 71. Skaapplaas 1022 Portion 2 72. Skaapplaas 1022 Portion 3 73. Uitkyk 1027 Portion 0/RE 74. Uitkyk 1027 Portion 1 75. Uitkyk 1027 Portion 2 76. Uitkyk 1027 Portion 3 77. Bren 1031 Portion 0 78. Kinderbewys A 1044 Portion 0 79. Kinderbewys B 1045 Portion 0 80. Eendekuil 1057 Portion 0/RE 81. Eendekuil 1057 Portion 1 82. Voordeel 1067 Portion 0 83. Vrugbaar 1107 Portion 0 84. Freda 1108 Portion 0 85. Maugwynheg 1136 Portion 0 86. Rhebokfontein Wes 1172 Portion 0 87. Smaragd 1173 Portion 0 88. Leeuwdoorns 1215 Portion 0 89. Mooiuitsig 1216 Portion 0/RE 90. Goudrif 1218 Portion 0		
<b>Application area (Ha)</b>	The application area extends over ninety (90) farm portions with a total area of 18 623.73 ha		
<b>Magisterial district</b>	Vredefort Magisterial District		
<b>Distance and direction from nearest town</b>	The application area is situated 20.3 km west of Parys and 12.7 km west of the town of Vredefort, in the Free State Province of South Africa. It can be accessed via Parys using the R59 and the R721 to Kroonstad		
<b>21 digit surveyor general code for each portion</b>	<b>Farm Name</b>	<b>Farm Portion</b>	<b>Surveyor General Code</b>
	1. Bloemfontein 7	RE/7	F0380000000000700000
	2. Bloemfontein 7	1/7	F0380000000000700001
	3. Engels Kuil 30	0/30	F0380000000000300000

	4. Lindekwees-Fontein 73	RE/73	F0380000000007300000
	5. Witterand 103	RE/103	F03800000000010300000
	6. Maria 115	0/115	F03800000000011500000
	7. Rhebokfontein-West 117	RE/117	F03800000000011700000
	8. Roodewal 119	RE/119	F03800000000011900000
	9. Rhebokfontein 120	RE/120	F03800000000012000000
	10. Cecilia 134	RE/134	F03800000000013400000
	11. Cecilia 134	1/134	F03800000000013400001
	12. Vlakkuil 152	RE/152	F03800000000015200000
	13. Aprilskraal 217	RE/217	F03800000000021700000
	14. Augustus Kraal 218	RE/218	F03800000000021800000
	15. De West Rust 230	RE/230	F03800000000023000000
	16. De West Rust 230	1/230	F03800000000023000001
	17. De West Rust 230	2/230	F03800000000023000002
	18. De Put 289	RE/289	F03800000000028900000
	19. Leeuwdoorns 350	RE/350	F03800000000035000000
	20. Leeuwdoorns 350	RE/350	F03800000000035000001
	21. Leeuwdoorns 350	RE/350	F03800000000035000002
	22. Leeuwdoorns 350	3/350	F03800000000035000003
	23. Leeuwdoorns 350	4/350	F03800000000035000004
	24. Leeuwdoorns 350	5/350	F03800000000035000005
	25. Mount Surprise 357	RE/357	F03800000000035700000
	26. Mount Jackson 358	RE/358	F03800000000035800000
	27. Mount Jackson 358	1/358	F03800000000035800001
	28. Tevreden 374	0/374	F03800000000037400000
	29. Mimosa Grove 491	RE/491	F03800000000049100000
	30. Mimosa Grove 491	1/491	F03800000000049100001

	31. Mimosa Grove 491	2/491	F0380000000049100002
	32. Dora 492	0/492	F0380000000049200000
	33. Smaldeel 493	0/493	F0380000000049300000
	34. Brakdam 494	RE/494	F0380000000049400000
	35. Brakdam 494	1/494	F0380000000049400001
	36. Goedgedacht 504	0/504	F0380000000050400000
	37. Geluksvlei 605	0/605	F0380000000060500000
	38. Knapdaar 619	0/619	F0380000000061900000
	39. Kingsley 622	RE/622	F0380000000062200000
	40. Damplaats 626	0/626	F0380000000062600000
	41. Windhuk 630	RE/630	F0380000000063000000
	42. Cyferkuil 634	0/634	F0380000000063400000
	43. Palestina 635	0/635	F0380000000063500000
	44. Bellary 724	0/724	F0380000000072400000
	45. Klipheuvel 739	0/739	F0380000000073900000
	46. Goudini 742	0/742	F0380000000074200000
	47. Stillehoogte 744	0/744	F0380000000074400000
	48. Jacoba's Rust 747	0/747	F0380000000074700000
	49. Kroonvlei 766	0/766	F0380000000076600000
	50. Martha's Wil 797	0/797	F0380000000079700000
	51. Turfhoek 798	0/798	F0380000000079800000
	52. Morgenzon 799	RE/799	F0380000000079900000
	53. Morgenzon 799	2/799	F0380000000079900002
	54. Morgenzon 799	3/799	F0380000000079900003
	55. Morgenzon 799	4/799	F0380000000079900004
	56. Hercules 800	RE/800	F0380000000080000000
	57. Hercules 800	1/800	F0380000000080000001

	58. Hercules 800	4/800	F0380000000080000004
	59. Hercules 800	6/800	F0380000000080000006
	60. Verheugd 851	RE/851	F0380000000085100000
	61. Verheugd 851	3/851	F0380000000085100003
	62. Verheugd 851	4/851	F0380000000085100004
	63. Mooiplaats A 852	RE/852	F0380000000085200000
	64. Mooiplaats B 853	RE/853	F0380000000085300000
	65. Aberdeen B 974	0/974	F0380000000097400000
	66. Mooihoek 975	0/975	F0380000000097500000
	67. Baltespoort 998	RE/998	F0380000000099800000
	68. Uitsoek 1011	0/1011	F0380000000101100000
	69. Skaapplaas 1022	RE/1022	F0380000000102200000
	70. Skaapplaas 1022	1/1022	F0380000000102200001
	71. Skaapplaas 1022	2/1022	F0380000000102200002
	72. Skaapplaas 1022	3/1022	F0380000000102200003
	73. Uitkyk 1027	RE/1027	F0380000000102700000
	74. Uitkyk 1027	1/1027	F0380000000102700001
	75. Uitkyk 1027	2/1027	F0380000000102700002
	76. Uitkyk 1027	3/1027	F0380000000102700003
	77. Bren 1031	0/1031	F0380000000103100000
	78. Kinderbewys A 1044	0/1044	F0380000000104400000
	79. Kinderbewys B 1045	0/1045	F0380000000104500000
	80. Eendekuil 1057	RE/105	F0380000000105700000
	81. Eendekuil 1057	1/1057	F0380000000105700001
	82. Voordeel 1067	0/1067	F0380000000106700000
	83. Vrugbaar 1107	0/1107	F0380000000110700000
	84. Freda 1108	0/1108	F0380000000110800000

	85. Maugwynheg 1136	0/1136	F0380000000011360000
	86. Rhebokfontein Wes 1172	0/1172	F0380000000011720000
	87. Smaragd 1173	0/1173	F0380000000011730000
	88. Leeuwdoorns 1215	0/1215	F0380000000012150000
	89. Mooiuitsig 1216	RE/1216	F0380000000012160000
	90. Goudrif 1218	0/1218	F0380000000012180000

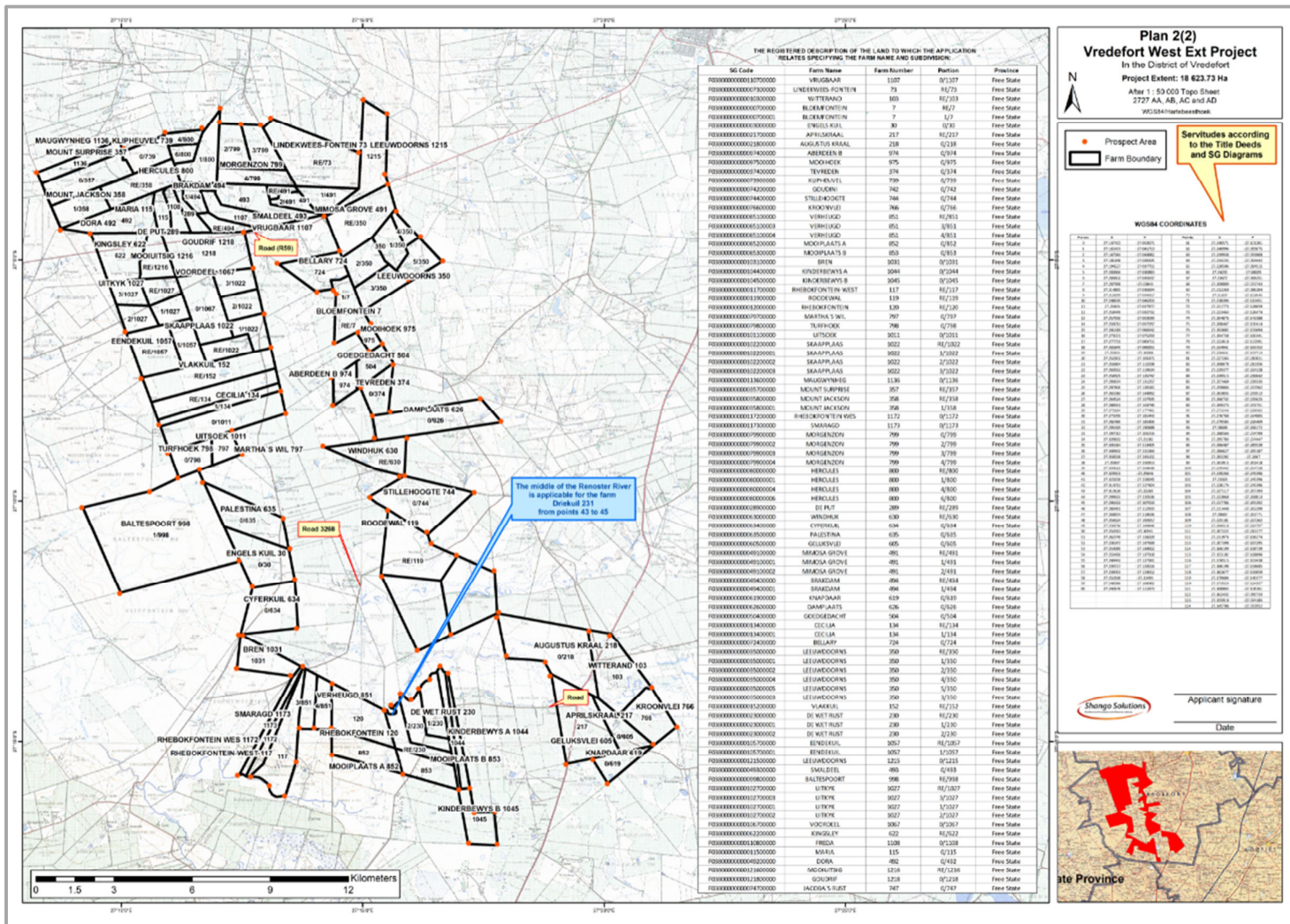


Figure 1: Locality map indicating the farm portions (refer to Appendix D for an enlarged map).

## 1.2 Details of the Environmental Assessment Practitioner

Shango Solutions was appointed by White Rivers Exploration as the Environmental Assessment Practitioner (EAP) to compile this report. The contact details of the Shango Solutions consultants who compiled this report are as follows:

- Name of the EAP: Shango Solutions
- Contact person: Zizo Siwendu or Mmakoena Mmola
- Tel No.: 011 678 6504
- Fax No.: 011 678 9731
- E-mail address: zizo@shango.co.za or mmakoena@shango.co.za

## 1.3 Expertise of the EAP

### 1.3.1 Qualifications of the EAP

In terms of Regulation 13 of the NEMA 2014 EIA Regulations (Government Notice 326), an independent EAP must be appointed by the Applicant to manage the application. Shango Solutions have been appointed by the Applicant as the EAP and are compliant with the definition of an EAP as defined in the 2014 EIA Regulations and the NEMA. This includes, inter alia, the requirement that Shango Solutions is:

- 1) Objective and independent.
- 2) Have expertise in conducting EIAs.
- 3) Comply with the NEMA, the Regulations and all other applicable legislation.
- 4) Take into account all relevant factors relating to the application.
- 5) Provide full disclosure to the Applicant and the relevant environmental authority.

Zizo holds a B.Sc. Honours Degree in Environmental Management. She has extensive auditing and environmental management experience, specifically in the mining environment. She has compiled several environmental studies in support of mineral right applications such as for Sungu Sungu Gas (Pty) Ltd, Motuoane Energy (Pty) Ltd, African Exploration, Mining and Finance Corporation, Atoll Metal Recovery, White Rivers Exploration (Pty) Ltd, West Wits Mining (Pty) Ltd, Mafuri Construction and Mining (Pty) Ltd, Evander Gold Mines (Pty) Ltd and Tetra 4 (Pty) Ltd (previously known as Molopo South African Exploration).

Mmakoena holds a B.Sc. Honours degree in Geochemistry. She has 2 years of experience in environmental auditing/permitting (including environmental audit and financial provision reports, environmental impact assessments, basic assessments and Environmental Authorisation applications) and public participation/stakeholder engagement.

### 1.3.2 Summary of EAP's Past Experience

Shango Solutions, registered as Dunrose Trading 186 (Pty) Ltd and established in April 2004, provides a diverse range of services to the mineral and mining sectors. Currently, 30 permanent multi-disciplinary employees and about 24 nationally and internationally recognised affiliates are employed. The company has a track record of successful project management and leadership, including complex multi-disciplinary assignments.

Consultancy activities straddle the entire mining value chain from exploration to beneficiation, thereby providing the client with complete solutions. Activities are performed in multi-disciplinary teams. Areas of specialisation include target generation, exploration, geodatabase compilation and management, geological modelling, resource estimation, mineral asset valuations, due diligences, desktop project reviews and technical reporting.



The company services the majority of the major mining houses, but also junior exploration companies, mineral resource investment firms, government institutions and departments and the artisanal and small-scale mining sectors. Shango Solutions collaborates closely with local and international experts in the mining and corporate industries. This, in conjunction with our affiliations with academic and parastatal institutions, ensures provision of the most innovative and appropriate solutions to clients.

Shango has completed in excess of 600 projects, of which the majority were located in Africa. The company consequently has extensive ground-based mining related experience throughout Africa, especially southern, eastern and north-west African states. Our extensive knowledge of the African minerals industry has attracted some of the largest names in mineral extraction to our client base. The project portfolio highlights our cross-sectorial approach and capability.

Shango incorporates in excess of 500 years of Africa-based mining and exploration experience. This includes, but is not limited to, gold, platinum, rare earth elements, base metals, uranium, coal, natural gas, ferrochrome, aggregate, heavy mineral sands and diamonds. Over the last decades, we have established comprehensive 2D Geographic Information Systems (GIS) databases throughout Africa, which consider geological and geophysical data, mineral occurrences, defunct and existing mines, infrastructure and mining statistics.

The declaration of independence of the EAP and the Curricula Vitae (indicating the experience with environmental impact assessment and relevant application processes) of the consultants that were involved in the Basic Assessment process and the compilation of this report are attached as Appendix C.

### 1.3.3 Specialist Consultants

The following specialist consultants provided inputs into this report:

- Biodiversity (Fauna and Flora) Impact Assessment: The Biodiversity Company
- Wetland Impact Assessment: The Biodiversity Company.
- Heritage Impact Assessment: NGT Holdings (NGT).
- Palaeontological Impact Assessment: NGT Holdings (NGT).

## 2. DESCRIPTION AND SCOPE OF THE PROPOSED ACTIVITY

Invasive and non-invasive prospecting activities will be undertaken as part of the proposed Prospecting Work Programme. The scope of these activities is as follows:

### Phase 1

#### 1.1. Investigate all Sources for Historical Data

[Year 1: 6 months]

Prospecting for gold in the Free State area started in the 1930's resulting in nearly 90 years' worth of exploration in the area. Hence, there exists a significant amount of historical exploration data in the Free State and over the project area. Obtaining and analysing this historical data will allow the fast tracking of prospecting activities.

#### 1.2 Obtain all Relevant Historical Data

[Year 1: 3 months]

Historical data detailing the position and economic potential of the target horizons will be identified for potential acquisition. The data obtained is anticipated to be in the form of historical borehole information, cadastral maps, geological maps, geophysical surveys (including existing published gravimetric, radiometric, magnetic, seismic and remote sensing data), as well as any information pertaining to previous exploration or mining will be consulted and integrated. The data will be scrutinised and verified (QA/QC procedure).

**1.3 Desktop Study****[Year 1: 3 months]**

A desktop study will be performed utilising all the data and historical reports obtained during Step 1.2.

**1.4 Field Visit****[Year 1: 1 week]**

A field visit will be undertaken to familiarise the applicant with surface features (such as infrastructure, outcrops, water bodies and wetlands) in the project area and to meet the surface landowners. During this visit farm boundaries within the project area and farming activities will be verified. An effort will be made to identify any factors that may impact the exploration programme.

**Phase 2****2.1 Data Synthesis and Generation of Initial Geological Model****Year 2: 6 months]**

The above data will be compiled into a geological database, which will be utilised to present the relevant data in useable Geographic Information System (GIS) digital map format. The different data sets will be plotted on a base map of the project and surrounding areas in order to develop a geological model. This model will be used to further refine the exploration programme for the target area.

**2.2 Ground Magnetic and Aeromagnetic Survey****[Year 2: 6 months]**

Regional aeromagnetic surveys are available and will be acquired and interpreted in conjunction with the borehole and other data during Year 1. Based on a favourable outcome of the work from Year 1, the decision will be taken to follow up with ground magnetic and localised aeromagnetic surveys.

**Phase 3****3.1 Location of Key Historical Drillhole Core, if Available****[Year 3: 3 months]**

Based on the initial geological model, specific key drillholes previously drilled in the area will be identified and negotiations with the owners undertaken to obtain access to the core.

**3.2 Re-logging and Re-sampling of Historical Drillholes****[Year 3: 3 months]**

Once access to the historical core is obtained, the core will be re-logged and, if necessary, re-sampled. This activity will allow verification of the historical borehole logs and consequently increase confidence in the data underpinning the geological model.

**3.3 Surface Mapping and Sampling****[Year 3: 6 months]**

In order to obtain familiarity with the nature and distribution of the different lithologies in the area of interest, geological mapping will be conducted. The aim is to gain a thorough understanding of the geology of the area of interest. Relationships between known geological entities such as Transvaal and Ventersdorp supergroups and underlying Witwatersrand Supergroup rocks will be examined to assist in defining the positions for the trenches. In addition to mapping, samples will be collected and submitted for analysis. If the analytical results are favourable, trenches will be excavated in Year 4.

**Phase 4****4.1 Trenching****[Year 4: 6 months]**

Two trenches are proposed for this phase of prospecting as the reefs are steeply dipping. Each trench will be excavated to a length of 10 m, a width of 1.5 m and a depth of 3 m. The trench will be excavated utilising a bulldozer or a mechanical digger (Figure 2). Reef exposures will be mapped and sampled. The information acquired will be captured into a database and presented in useable GIS digital map formats. This information will then be integrated into the geological model in order to define the orebodies. This activity will be conducted under the direct control of a trained supervisor who will ensure all aspects of Safety and Environmental Management.

#### 4.2 Finalisation of 3D Geological Model

[Year 4: 6 months]

All data acquired (historical data and ground magnetic data) and data obtained from re-logging and re-sampling of historic core, surface mapping and sampling as well as trenching will be integrated into the geological model and prepared for resource estimation purposes.

#### Phase 5

##### 5.1 Resource estimation

[Year 5: 6 months]

Utilising the geological database together with the sample data a resource estimate will be performed.

##### 5.2 Concept Study

[Year 5: 6 months]

In the case that the exploration activities yield promising results, a concept study will be conducted. During this investigation, resources will be converted to reserves and a conceptual mine plan and schedule shall be established. This will reveal whether the deposit is economically mineable.



Figure 2: Typical excavator utilised for excavation of a trench.

#### 2.1 Listed and Specified Activities

The need for Environmental Authorisation for prospecting came into effect after the promulgation of the NEMA 2014 EIA Regulations (as amended) on the 8<sup>th</sup> December 2014. Prior to this, Prospecting Rights were subjected to the provisions of the MPRDA (2002, amended). In this regard, a Prospecting Right and Environmental Authorisation are required in terms of the MPRDA and NEMA Regulations respectively. The applicable NEMA listed activities anticipated to be triggered by this project are outlined in Table 2.

Table 2: Listed and specified activities.

Name of activity	Aerial extent of the activity (ha or m <sup>2</sup> )	Listed Activity	Applicable Listing Notice (GN 324, GN 325 or GN 327)
Any activity including the operation of that activity which requires a prospecting right in terms of Section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), including (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral or (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining, or gasification of the mineral resource	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Trenching (2 trenches 10 m long, 1.5 m wide, 3 m deep each)	30 m <sup>2</sup> (0.03 ha)	X	Activity 20 of GNR 327 of 2017
Location and acquisition of historical data	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Data capture, QA/QC and database establishment	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Desktop studies	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Field visit	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Data synthesis	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Generation of geological models	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Geophysical survey (if required)	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Location of historical borehole core (if available)	18 623.73 ha	X	Activity 20 of GN 327 of 2017
Re-logging and re-sampling of historical core (if available)	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Surface mapping and sampling	~10 000 ha	X	Activity 20 of GNR 327 of 2017
Resource estimation	18 623.73 ha	X	Activity 20 of GNR 327 of 2017
Concept study	18 623.73 ha	X	Activity 20 of GNR 327 of 2017

## 2.2 Description of Activities to be Undertaken

This section presents a detailed description of all the activities associated with the proposed prospecting application. It is anticipated that invasive and non-invasive activities will be performed during prospecting, based on the information presented in the Prospecting Work Programme over a five year period (Table 3). Due to the nature of the Prospecting Work Programme, and the fact that the specific prospecting activities required are dependent on the preceding phase, assumptions are presented where required. These assumptions are based on similar projects undertaken by the Applicant and are therefore regarded as indicative of what will be undertaken. Should the proposed prospecting activities change, this will be indicated in the form of a Section 102 Amendment Application (of the MPRDA) together with the proposed revised prospecting programme.

Table 3: Planned invasive and non-invasive activities.

Year	Activity	Timeframe	Outcome	Timeframe for outcome
1	<b>Non-Invasive Prospecting</b>	12 months	Establishment of databases	Month 12
	Locate and acquire all available gold (and gold by-products) and coal, geological and geophysical data relevant to prospect			
	Inventorise, capture and QA/QC data			
	Desktop studies		Characterisation of geological features on the project area and surrounds	
	Field visit		Familiarity with the prospecting area and meeting with landowners	
2	<b>Non-Invasive Prospecting</b>	12 months	Initial geological model and refinement of exploration programme for the target area	Month 24
	Data synthesis and generation of initial geological model		Magnetic maps, magnetic profiles, magnetic sections	
3	<b>Non-Invasive Prospecting</b>	12 months	Report detailing the availability of the historical borehole core	Month 36
	Location of key historical borehole core, if available		Resampled core for QA/QC and confidence for resource estimation	
	Re-logging and re-sampling of historical core		Thorough understanding of geology of area of interest and analytical results	
4	<b>Invasive Prospecting</b>	6 months	Analytical results and refinement of geological model	Month 48
	Excavation of 2 trenches to a depth of 3 m, mapping and sampling			
	<b>Non-Invasive Prospecting</b>	6 months	Final geological model	
	Finalisation of 3D geological model			
5	<b>Non-Invasive Prospecting</b>	12 months	Resource estimate	Month 60
	Resource estimation			
	Concept study		Evaluation of the prospect's feasibility	

### 2.3 Activities Associated With Planned Prospecting

The activities associated with each phase of prospecting operations are described in Table 4.

Table 4: Activities associated with planned prospecting.

Main activity/action/process	Ancillary activity
<b>Planning</b>	
Site visit	Vehicle and foot traffic on site
<b>Construction</b>	
General management	Human resource management Employment Interaction with local community
Site preparation and site establishment	Vehicle and foot traffic on site Clearance and preparation of soil stockpile areas Dust suppression Employment Fencing Hazardous substances management Site security Soil management Utilisation of portable toilets and generation of sewage Vegetation clearance Waste management
<b>Operation</b>	
General management	Employment Human resource management Interaction with local community
Excavation of four (4) trenches	Site security Employment Soil management Noise management Dust management Vegetation clearance Waste management Vehicle and foot traffic on site Hazardous substances management Interaction with local community
<b>Decommissioning</b>	
General management	Employment Human resource management Interaction with local community
General decommissioning activities	Dust suppression Removal of waste
Infrastructure removal	Dismantling, removal and rehabilitation of unnecessary infrastructure Removal of fencing

Main activity/action/process	Ancillary activity
<b>Rehabilitation and Closure</b>	
General surface rehabilitation	Profiling of area Replacement of subsoil and topsoil Ripping of roads and other compacted areas Managing the site for all post prospecting impacts to prevent any further pollution Vehicle and foot traffic on site
Re-vegetation	Dust suppression Fertilisation Seeding with local indigenous species
Post closure monitoring and maintenance	Alien vegetation management Environmental monitoring of rehabilitated areas Erosion control measures

## 2.4 Description of Site Activities

### 2.4.1 Access Roads

Access to the site will be required during excavation of the two proposed trenches. A number of existing roads and farm tracks already traverse the proposed prospecting site, and where practicable, these roads will be used.

### 2.4.2 Water Supply

It is unknown if there are any water boreholes located on site and if access and supply will be granted by landowners. It is anticipated that water brought onto site will be sourced from the Local Municipality. Water will be trucked from these sources to the identified trench sites. The required water includes service water (for operating machinery and dust suppression), and potable water (for domestic use within the trench sites). A water tank will be utilised for the storage of water on site.

### 2.4.3 Ablution

Ablution facilities on-site will be required and may involve the installation of drum or tank type portable toilets. The toilets should be emptied through the services of a registered sewage waste service provider. The ablution facilities must be provided at a ratio of 15: 1 (15 people per 1 toilet).

### 2.4.4 Temporary Office Area

A temporary shaded site office area may be erected on site. The office must be established away from the water drainage lines. A shaded eating area may be provided.

### 2.4.5 Accommodation

No accommodation for staff and workers will be provided on site unless permission is granted by the landowner. Should the landowner not grant permission, all persons will be accommodated in nearby towns (i.e. Vredefort) and workers will be transported to and from the prospecting site on a daily basis. Night security staff may be employed once equipment is stationed on site. No fires will be allowed on site.

## **2.4.6 Waste Management**

### **2.4.6.1 Hazardous Waste**

Hazardous waste to be generated includes mineral residue and hydrocarbon wastes (oil and liquid fuel wastes). Hydrocarbon waste will be collected in drums for storage. The removal of the drums or any other appropriate receptacle will be undertaken by a registered waste disposal company, for disposal at a registered licensed waste disposal site. The drums will be placed on protected ground. Mineral residue will be removed from the site and disposed of at a registered waste disposal site.

### **2.4.6.2 General Waste**

General waste to be generated from the proposed project area will include domestic waste and will be collected in drums and disposed of at a registered domestic waste disposal site.

### **2.4.6.3 Storage of Dangerous Goods (Hydrocarbons)**

Limited quantities of diesel fuel, oil and lubricants may be stored on site. A maximum amount of 60 m<sup>3</sup> of diesel fuel may be stored in above ground diesel storage tanks with elevated bunded walls.

## **2.4.7 Equipment and/or Technology That May Be Used**

- Excavator or an impactor.
- Bakkie/s.
- Geological modelling software.
- A water tank.

## **2.5 Geological Formation and Prospecting Targets**

The surface geology of the proposed application area consists of rocks of the Karoo Supergroup overlying those of the Central Rand and West Rand groups of the Witwatersrand Supergroup (Figure 3). The primary targets for prospecting are the conglomerate layers (reefs) of the Central Rand Group. The Witwatersrand rocks are thought to occur at relatively shallow depths (0-500 m) in the current target area as it occurs on the south-western portion of the Vredefort Dome.

Reimold and Gibson (1996) describe the Vredefort Dome as a major meteorite impact that struck the Witwatersrand Basin 2 023 million years ago. The impact severely shattered, fractured, and in places, overturned the Witwatersrand strata in the collar of the dome and, during elastic rebound, also exhumed a portion of the granite crust from beneath the basin in the centre of the structure (Wilson and Anhaeusser, 1998). The result is that the central, most deeply buried portion of the Witwatersrand Basin is extremely well exposed in an arcuate belt of steeply dipping to overturned strata that preserves, in addition, Dominion Group, Ventersdorp and Transvaal supergroups.



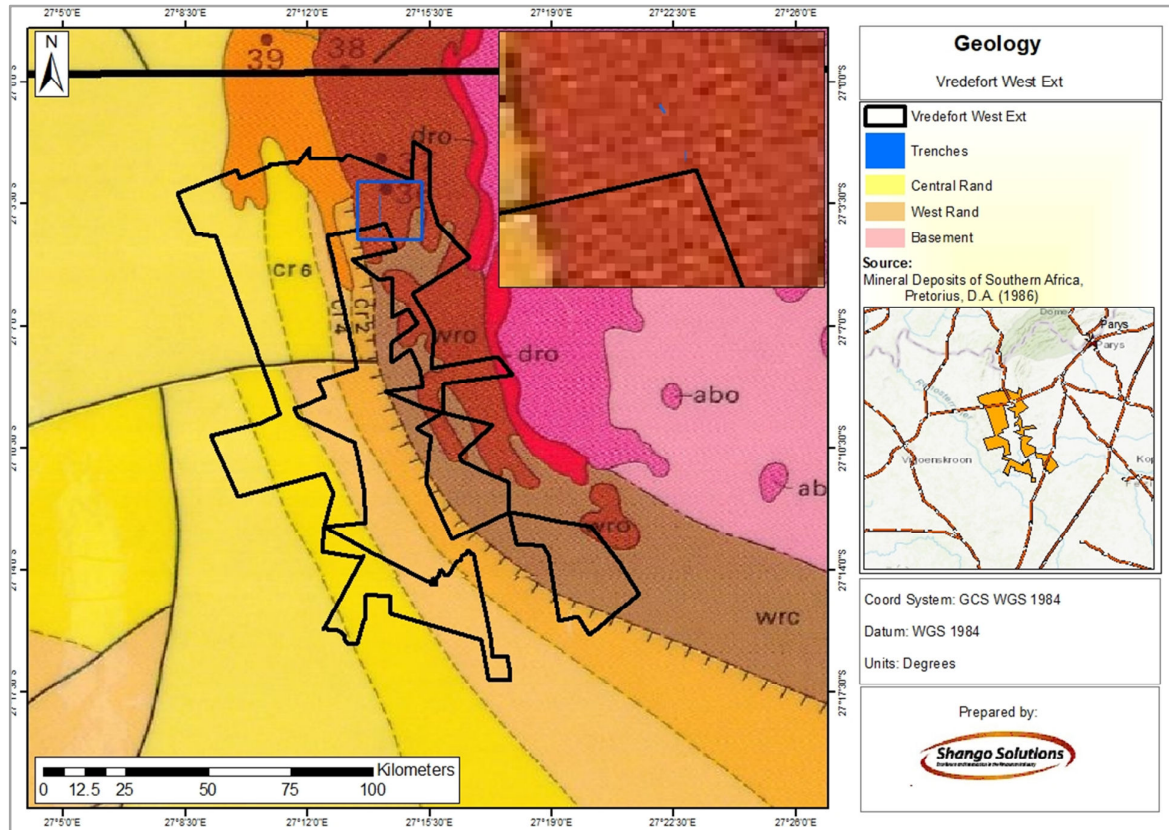


Figure 3: Pretorius (1986) map of the Witwatersrand Basin, together with depths to the Central Rand Group (refer to Appendix D for an enlarged map).

### 3. POLICY AND LEGISLATIVE CONTEXT

The Vredefort West Extension Prospecting Right application requires authorisation in terms of the following interlinked pieces of legislation:

- The Mineral and Petroleum Resources Development Act, 2002 (MPRDA, Act 28 of 2002 - amended).
- The National Environmental Management Act, 1998 (NEMA, Act 107 of 1998 – as amended).

These pieces of core legislation stipulate the required studies, reports and legal processes to be conducted and the results thereof submitted to the relevant authorities for approval prior to commencement.

In addition to the above, there are various pieces of legislation which govern certain aspects of the prospecting operations and these are summarised in Table 5, together with the main legislative requirements mentioned above.

Table 5: Policy and legislative context.

Applicable legislation and guidelines	Reference where applied	How does this development comply with and respond to the legislation and policy context
National Environmental Management Act, 1998 (Act 107 of 1998)	This entire report is prepared as part of the Application for Environmental Authorisation under the NEMA.	In terms of the National Environmental Management Act an Application for Environmental Authorisation subject to a Basic Assessment Process has been applied for.
Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002)	This entire report is prepared as part of the Prospecting Right Application under the MPRDA.	In terms of the Mineral and Petroleum Resources Development Act a Prospecting Right Application has been applied for.
National Environmental Management Waste Act, 2004 (Act 26 of 2014)	A framework for management of waste is presented in this report.	This report has been drafted in with due consideration to this Act.
National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004)	A framework for management of alien invasive species is presented in this report.	The management of alien invasive species is governed under the NEMBA. This report includes a framework for the management of alien and invasive species. The holder of a right will be required to develop a detailed alien invasive species management plan.
National Water Act, 1998 (Act 36 of 1998) Section 21	Due to the nature of the proposed prospecting activities, it is not anticipated that Section 21 water uses will be triggered. Therefore, there is no requirement to apply for Water Use Authorisation in terms of the NWA.	In terms of the National Water Act, no Water Use License has been applied for.
National Heritage Resources Act, 1999 (Act 25 of 1999)	The framework for a Heritage Management Plan is provided in this EMPR.	A specialist heritage impact study has been undertaken in support of this Prospecting Right application.

### 3.1 Environmental Authorisation Process

#### 3.1.1 Mineral and Petroleum Development Act

In terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), a Prospecting Right must be issued prior to the commencement of any prospecting activities. As per Section 16 of the MPRDA, the Applicant is required to conduct a Basic Assessment and submit an EMPR for approval as well as to notify in writing and consult with Interested and Affected Parties (I&APs) within 90 days of acceptance of the application. The MPRDA also requires adherence with related legislation, chief amongst them is the National Environmental Management Act, 1998 (Act 107 of 1998, NEMA) and the National Water Act, 1998 (Act 36 of 1998, NWA).

Several amendments have been made to the MPRDA. These include, but are not limited to, the amendment of Section 102, concerning amendment of rights, permits, programmes and plans, to requiring the written permission of the Minister for any amendment or alteration; and the section 5A(c) requirement that landowners or land occupiers receive twenty-one (21) days' written notice prior to any activities taking place on their properties. One of the most recent amendments requires all mining related activities to follow the full NEMA process as per the 2014 EIA Regulations, which came into effect on 8 December 2014.

A Prospecting Right is exclusive, transferable, valid for 5 years, and renewable for a maximum of 3 years. Prospecting allows the holder of the right to conduct activities as per the Prospecting Works Programme to establish the presence of economically viable mineral resources. A Prospecting Right does not grant the holder the right to conduct any mining related activities.

### **3.1.2 National Environmental Management Act**

The main aim of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) is to provide for co-operative governance by establishing decision-making principles on matters affecting the environment. In terms of the NEMA Environmental Impact Assessment (EIA) Regulations, the proponent is required to appoint an Environmental Assessment Practitioner (EAP) to undertake the EIA as well as the public participation process. In South Africa, EIA became a legal requirement in 1997 with the promulgation of Regulations under the Environmental Conservation Act (ECA). Subsequently, NEMA was passed in 1998. Section 24(2) of NEMA empowers the Minister and any MEC, with the concurrence of the Minister, to identify activities which must be considered, investigated, assessed and reported on to the competent authority responsible for granting the relevant Environmental Authorisation. On 21 April 2006 the Minister of Environmental Affairs and Tourism promulgated Regulations in terms of Chapter 5 of the NEMA.

The objective of the Regulations is to establish the procedures that must be followed in the consideration, investigation, assessment and reporting of the activities that have been identified. The purpose of these procedures is to provide the Competent Authority with adequate information to make decisions which ensure that activities which may impact negatively on the environment to an unacceptable degree are not authorised, and that activities which are authorised are undertaken in such a manner that the environmental impacts are managed to acceptable levels.

The aim of the EIA process is to identify and assess the potential impacts associated with the proposed project and to develop measures through which potential negative biophysical and socio-economic impacts can be mitigated and positive benefits can be enhanced. The EIA will ensure that all issues are integrated into the lifecycle of the mining operation and its infrastructure. This will occur during the planning, construction, operation and decommissioning and site closure phases.

The Basic Assessment Report (BAR) and the associated Environmental Management Programme Report (EMPR) will indicate how the identified impacts will be avoided, mitigated and/or managed by setting environmental objectives and goals. The EMPR will further outline the implementation programme for the environmental objectives and goals. The EMPR is a legal requirement of the MPRDA and all mines, existing or new, are required to possess an approved EMPR prior to initiating any prospecting operations. The EMPR is legally binding and the proponent is required to meet the requirements specified in the document.

### **3.1.3 National Environmental Management: Waste Amendment Act**

On the 2<sup>nd</sup> June 2014 the National Environmental Management: Waste Amendment Act, 2014 (Act 26 of 2014) came into force. Waste is accordingly no longer governed by the MPRDA, but is subject to all the provisions of

the National Environmental Management: Waste Act, 2008 (NEMWA). Section 16 of the NEMWA must also be considered which states as follows:

1. "A holder of waste must, within the holders power, take all reasonable measures to:
  - a) Avoid the generation of waste and where such generation cannot be avoided, to minimise the toxicity and amounts of waste that are generated.
  - b) Reduce, re-use, recycle and recover waste.
  - c) Where waste must be disposed of, ensure that the waste is treated and disposed of in an environmentally sound manner.
  - d) Manage the waste in such a manner that it does not endanger health or the environment or cause a nuisance through noise, odour, or visual impacts.
  - e) Prevent any employee or any person under his or her supervision from contravening the Act.
  - f) Prevent the waste from being used for unauthorised purposes.

These general principles of responsible waste management are incorporated into the requirements in the EMPR to be implemented for this project.

Schedule 3: Defined Wastes have been broken down into two categories: Category A being hazardous wastes and category B being general wastes. Under Category A (hazardous wastes) the act makes allowance for "wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals".

In order to attempt to understand the implications of this it is important to ensure that the definitions of all the relevant terminologies are defined:

- Hazardous waste: means "any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristic of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue deposits and residue stockpiles."
- Residue deposits: means "any residue stockpile remaining at the termination, cancellation or expiry of a prospecting right, mining right, mining permit, exploration right or production right."
- Residue stockpile: means "any debris, discard, tailings, slimes, screening, slurry, waste rock, foundry sand, mineral processing plant waste, ash or any other product derived from or incidental to a mining operation and which is stockpiled, stored or accumulated within the mining area for potential re-use, or which is disposed of, by the holder of a mining right, mining permit or, production right or an old order right, including historic mines and dumps created before the implementation of this Act."

Various regulations have been drafted in support of the NEMWA, as discussed below:

- Proposed Regulations regarding the planning and management of waste from a prospecting, mining, exploration or production operations (2014):
  - Chapter 2, Section 3 states the identification and assessment of any environmental impacts, including those on groundwater, arising from waste must be done as part of the Environmental Impact Assessment (EIA) conducted in terms of the National Environmental Management Act, 1998 (Act No.107 of 1998) (hereafter referred to as the NEMA). The pollution control barrier system shall be defined by the (a) Waste Classification and Management Regulations (2013); (b)

National Norms and Standards for the Assessment of Wastes for Landfill Disposal (2013); and (c) National Norms and Standards for Disposal of Waste to Landfill (2013).

- Waste Characterisation must be done in terms of physical and chemical composition as well as content. The classification must be done in terms of the health and safety classification and the environmental classification.
- Proposed Regulations to exclude a waste stream or a portion of a waste stream from the definition of a waste (2014);
  - This regulation will give the holder of the right the opportunity to exclude a waste stream, or a portion of a waste stream from the definition of a waste. Chapter 2, Section 4 of this Regulation, Sub-section (1) states that any portion of a waste generated from a source listed in Category A of Schedule 2 of the NEMWA, may be excluded from being defined as hazardous on demonstration that such portion of waste is non-hazardous in accordance with the Waste Management and Classification Regulations of 2013.
  - The application process will be in the form of a prescribed process and application must be made to the Minister.
  - This Regulation is however not yet in force.
- National Norms and Standards for the assessment of waste for landfill disposal (23 August 2013):
  - These norms and standards prescribe the requirements for the assessment of waste prior to disposal to landfill.
  - The aim of the waste classification tests is to characterise the material to be deposited or stored in terms of the above-mentioned waste classification guidelines set by the Department of Environmental Affairs (DEA).
- The outcomes of the tests provide the necessary information in terms of:
  - Identification of chemical substances present in the waste.
  - Determination of the total concentrations (TC) and leachable concentrations (LC) of the elements and chemical substances that have been identified in the waste and that are specified in Section 6 of the above-mentioned Regulations. The obtained TC and LC values of the waste material will be compared to the threshold limits for total concentrations (TCT limits) and leachable concentrations (LCT limits) specified in Section 6 of the above-mentioned Regulations. Based on the TC and LC values of the elements and chemical substances in the waste exceeding the corresponding TCT and LCT limits respectively, the specific type of waste for disposal to landfill will be determined in terms of Section 7 of the Regulations.

#### **3.1.4 The National Environmental Management: Biodiversity Act**

The National Environmental Management: Biodiversity Act, 2004 (NEMBA - Act 10 of 2004), "provides for: the management and conservation of South Africa's biodiversity within the framework of the NEMA; the protection of species and ecosystems that warrant national protection; the sustainable use of indigenous biological resources; the fair and equitable sharing of benefits arising from bio-prospecting involving indigenous biological resources; the establishment and functions of a South African National Biodiversity Institute (SANBI); and for matters conducted therewith".

- In terms of the Biodiversity Act, the applicant has a responsibility for: The conservation of endangered ecosystems and restriction of activities according to categorization of the area (not just by listed activity as specified in the EIA regulations):
  - Promote the application of appropriate environmental management tools in order to ensure integrated environmental management of activities thereby ensuring that all developments within the area are in line with ecological sustainable development and protection of biodiversity.
  - Limit further loss of biodiversity and conserve endangered ecosystems.

Regulations published under the NEMBA also provide a list of protected species, according to the Act (GN R151 dated 23 February 2007, as amended in GN R1187 dated 14 December 2007). Section 57 of NEMBA identifies restricted activities involving threatened or protected species. Restricted activities include the gathering, collecting, cutting, uprooting, damaging or destroy a listed species.

### **3.1.5 The National Environmental Management: Protected Areas Act**

The National Environmental Management: Protected Areas Act, 2003 (NEMPAA - Act 57 of 2003) observes to: “provide for the protection and conservation of ecologically viable areas representative of South Africa’s biological biodiversity and its natural landscapes and seascape; for the establishment of a national register of all national, provincial and local protected areas; for the management of those areas in accordance with national norms and standards; for intergovernmental co-operation and public consultation in matters concerning protected areas; for the continued existence, governance and functions of South African National Parks; and for matters in connection therewith.

- The objectives of this Act are:
  - a) To provide, within the framework of the national legislation, including the National Environmental Management Act, for the declaration and management of protected areas.
  - b) To provide for co-operation governance in the declaration and management of protected areas.
  - c) To effect a national system of protected areas in South Africa as part of a strategy to manage and conserve its biodiversity.
  - d) To provide for a diverse and representative network of protected areas on state land, private land, communal land and marine water.
  - e) To promote sustainable utilisation of protected areas for the benefit of people, in a manner that would preserve the ecological character of such areas.
  - f) To promote participation of local communities in the management of protected areas, when appropriate.
  - g) To provide for the continued existence of South African National Parks.

### **3.1.6 National Water Act**

The National Water Act, 1998 (NWA - Act 36 of 1998) makes provision for two types of application for water use licences, namely individual applications and compulsory applications. The NWA also provides that the responsible authority may require an assessment by the Applicant of the likely effect of the proposed licence on the resource quality, and that such assessment be subject to the EIA regulations. A person may use water, if the use is-

- Permissible as a continuation of an Existing Lawful Water Use (ELWU).
- Permissible in terms of a General Authorisation (GA).
- Permissible under Schedule 1.
- Authorised by a License.

The NWA defines 11 water uses. A water use may only be undertaken if authorised. Water users are required to register certain water uses that actually took place on the date of registration, irrespective of whether the use was lawful or not.

Section 21 of the National Water Act 1998 lists the following 11 water uses which can only be legally undertaken through the water use authorisation issued by the Department of Water and Sanitation (DWS):

- (a) Taking water from a water resource.
- (b) Storing water.
- (c) Impeding or diverting the flow of water in a watercourse.
- (d) Engaging in a stream flow reduction activity contemplated in Section 36.
- (e) Engaging in a controlled activity identified as such in section 37(1) or declared under section 38(1).
- (f) Discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduits.
- (g) Disposing of waste in a manner which may detrimentally impact on a water resource.
- (h) Disposing in any manner of water which contains waste from, or which has been heated in, any industrial or power generation process.
- (i) Altering the bed, banks, course or characteristics of a watercourse.
- (j) Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people.
- (k) Using water for recreational purposes.

In terms of the National Water Act, no Water Use License has been applied for this project.

### 3.1.7 National Heritage Resources Act

The National Heritage Resources Act, 1999 (NHRA - Act 25 of 1999) stipulates that cultural heritage resources may not be disturbed without authorisation from the relevant heritage authority. Section 34(1) of the NHRA states that, "no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority..." The NHRA is utilised as the basis for the identification, evaluation and management of heritage resources and specifically, those resources impacted on by development as stipulated in Section 38 of NHRA, and those developments administered through NEMA and MPRDA legislation. In the latter cases the feedback from the relevant heritage resources authority is required by the State and Provincial Departments managing these Acts before any authorisations are granted for development.

The last few years have seen a significant change towards the inclusion of heritage assessments as a major component of Environmental Impacts Processes required by NEMA and MPRDA. This change requires us to evaluate the Section of these Acts relevant to heritage (Fourie, 2008b). The NEMA 23(2)(b) states that an integrated environmental management plan should, "...identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage".

A study of subsections (23)(2)(d), (29)(1)(d), (32)(2)(d) and (34)(b) and their requirements reveals the compulsory inclusion of the identification of cultural resources, the evaluation of the impacts of the proposed

activity on these resources, the identification of alternatives and the management procedures for such cultural resources for each of the documents noted in the Environmental Regulations. A further important aspect to be taken account of in the Regulations under NEMA is the Specialist Report requirements laid down in Section 33 (Fourie, 2008b).

MPRDA defines 'environment' as it is in the NEMA and therefore acknowledges cultural resources as part of the environment. Section 39(3)(b) of this Act specifically refers to the evaluation, assessment and identification of impacts on all heritage resources as identified in Section 3(2) of the National Heritage Resources Act that are to be impacted on by activities governed by the MPRDA. Section 40 of the same Act requires the consultation with any State Department administering any law that has relevance on such an application through Section 39 of the MPRDA. This implies the evaluation of Heritage Assessment Reports in Environmental Management Plans or Programmes by the relevant heritage authorities (Fourie, 2008b).

In accordance with the legislative requirements and EIA rating criteria, the regulations of the South African Heritage Resources Agency (SAHRA) and Association of Southern African Professional Archaeologists (ASAPA) have also been incorporated to ensure that a comprehensive and legally compatible Heritage Impact Assessment Report is compiled.

#### **4. NEED AND DESIRABILITY OF THE PROPOSED ACTIVITY**

In terms of the EIA (2014) Regulations the need and desirability of any development must be considered by the relevant competent authority when reviewing an application. The need and desirability must be included in the reports to be submitted during the Environmental Authorisation application process. This section of the BAR and EMPR indicates the need and desirability for the proposed Vredefort West Extension Prospecting Right project.

Assessment of geological data available has determined that the proposed application area may have gold, silver, coal, cobalt, copper, diamond (alluvial), iron, manganese, molybdenum, nickel, lead, platinum group metals, rare earths, sulphur, uranium, tungsten and zinc. In order to ascertain the above and determine the nature, location and extent of the resources within the proposed area, it will be necessary that prospecting activities be undertaken.

The data obtained from the prospecting of the above mentioned commodities (if discovered) will be necessary to determine how and where these minerals will be extracted and how much economically viable mineral resources are available within the proposed prospecting area. Should prospecting prove successful and a resource quantified, the Applicant will be able to use the available resources to apply for a Mining Right should they prefer to continue with the project. Mining will contribute greatly to the socio-economic status quo in the form of increased income, employment and other benefits that would cascade through the local, regional and national levels.

#### **5. MOTIVATION FOR THE OVERALL PREFERRED DEVELOPMENT FOOTPRINT**

The trench sites have been selected based on their potential geological features. Assessment of the geological maps available for the area has shown that the target reefs only outcrop at the locations where the two (2) trenches are proposed to be excavated. The proposed trenches are situated in an area which is regarded as degraded according to the Free State Terrestrial Critical Biodiversity Areas Plan. Furthermore, no burial grounds, graves and archaeological sites occur within 20 m of the proposed trench locations. Although



the overall application area falls within areas indicated as low sensitivity and highly sensitive in terms of palaeosensitivity, the trenches are specifically situated in the area indicated as a low sensitivity area. As such, no alternative trench sites are assessed as the preliminary trench locations are based on expected mineral resources and do not occur within or in close proximity to any sensitive features.

## **6. FULL DESCRIPTION OF THE PROCESS FOLLOWED TO REACH THE PROPOSED PREFERRED ALTERNATIVES WITHIN THE SITE**

The NEMA (2014) EIA Regulations require a BAR and EMPR to identify alternatives for projects applied for. In terms of the above-mentioned regulations an alternative in relation to a proposed activity means different means of meeting the general purpose and requirements of the activity, which may include alternatives to (i) the property on which or location where it is proposed to undertake the activity, (ii) the type of activity to be undertaken, (iii) the design or layout of the activity, (iv) the technology to be used in the activity, (v) the operation aspects of the activity and (vi) the option of not implementing the activity.

White Rivers Exploration proposes to undertake prospecting within the application area in order to determine if an economically viable mineral resource exists within the area. The proposed prospecting programme will include the excavation of two (2) trenches. The development footprint is expected to be a fraction (up to 0.03 ha) of the application area size, which is estimated to be 18 623.73 ha.

### **6.1.1 Property**

The proposed application area has been selected based on a number of criteria, which include the environmental considerations (how sensitive the area is in terms of flora, fauna etc.) and historic and current data available for the region, which indicates the potential for economically viable mineral deposits to occur. Due to the geological features (in terms of mineralisation) present within the proposed application area and the low sensitivity of the receiving socio-economic and biophysical environment, no property alternatives are suggested.

### **6.1.2 Type of Activity**

The prospecting activities proposed in the Prospecting Work Programme follow a phased approach, whereby the preceding phase determines if further work is warranted. As such, no alternatives are indicated, but rather a phased approach of trusted prospecting techniques/activities.

### **6.1.3 Design or Layout**

Specific areas within the application area have been identified for trenching in order to minimise land destruction during invasive prospecting activities. Prospecting is temporary in nature; consequently no permanent or complicated surface infrastructure will be constructed on site. Therefore, no design and layout alternatives have been proposed for this project.

### **6.1.4 Technology Alternatives**

In terms of technologies proposed, these have been selected as they have proven effective in the determination of resource viability. The prospecting activities proposed in the Prospecting Work Programme are dependent on the preceding phase. Therefore, no alternatives are indicated, but rather a phased approach of trusted prospecting techniques.

### **6.1.5 Operational Aspects**

Operational aspects that have been considered for the effective implementation of the Prospecting Work Programme include financial arrangements, and the availability of appropriate equipment and the technical

skills. An amount of ZAR 1 451 237 will be required to finance the Prospecting Work Programme. The cost estimate depicts a prospecting budget planned in phases that naturally follow each other assuming the success of the previous phase. At any one point in time the scope and money allocated to a follow-up phase could be affected by success or failure to delineate the mineralisation in the previous stage. The above exploration budget could therefore change dramatically during the exploration process.

The Creasy Group of companies has committed to finance the prospecting costs for White Rivers Exploration. This group is a long standing investor into the South African minerals industry.

#### **6.1.6 Option of Not Implementing (“No-Go”)**

The “No-Go” alternative is the option of not undertaking prospecting activities in the proposed application area. The “No-Go” option assumes that the site remains in its current state. This alternative would result in no impacts on the social and biophysical environment. White Rivers Exploration intends on undertaking prospecting activities in the proposed application area to determine the availability of economically viable mineral resources. Should prospecting prove successful and an economically viable mineral resource quantified, it would indicate a potential viable economic activity in the form of mining. In addition to the above, the proposed prospecting project will on its own result in the creation of employment opportunities and will also result in the support of local businesses.

If the Prospecting Right is not granted, the potential to identify economically viable mineral resources could be lost. Historical prospecting and mining activities have taken place in the vicinity of the proposed Prospecting Right area and as such the proposed prospecting activities would represent a continuation of a historic land use. Additionally, it allows for marginal land impacted on by historical prospecting and mining activities to be re-introduced into the economy.

The consequences of not proceeding with the proposed project will have a detrimental impact on the potential positive impact this project may have on the current and future labour force and the labour to be used for the prospecting project. As such, the “No-Go” alternative is not considered desirable at a local, regional and national scale.

## **7. PUBLIC PARTICIPATION PROCESS**

### **7.1 Public Participation Methodology**

South Africa, being one of the countries with the most progressive constitutions, enshrined the public’s right to be involved in decisions. Section 57(1) of the new Constitution that provides: “The National Assembly may (b) make rules and orders concerning its business, with due regard to representative and participatory democracy, accountability, transparency and public involvement”. This provision, along with several others gave rise to many new trends in South African legislation. In environmental legislation, the idea of public participation (or stakeholder engagement) features strongly and especially the National Environmental Management Act, 1998 (Act 107 of 1998, NEMA – as amended) and the recent regulations passed under the auspices of this Act makes very strict provisions for public participation in environmental decision-making.

Public participation can be defined as "a process leading to a joint effort by stakeholders, technical specialists, the authorities and the proponent who work together to produce better decisions than if they had acted independently" (Greyling, 1999). From this definition, it can be seen that the input of the public is regarded as very important indeed.

The Public Participation Process (PPP) is designed to provide sufficient and accessible information to Interested and Affected Parties (I&APs) in an objective manner to assist them to:

1. Raise issues of concern and suggestions for enhanced benefits.
2. Verify that their issues have been recorded.
3. Assist in identifying reasonable alternatives.
4. Contribute relevant local information and knowledge to the environmental assessment.
5. Comment on the findings of the environmental assessments.
6. Obtain information on the outcome, i.e. the competent authority's decision, and how and by when the decision can be appealed.

Refer to Appendix E for proof of PPP undertaken to date.

#### **7.1.1 Identification of I&APs**

The first phase of the PPP includes the identification of I&APs. An initial I&AP database was compiled using WinDeed searches, internet searches and previous BA projects in the vicinity of the study area. The I&AP database was compiled containing the following categories of stakeholders:

1. National, provincial and local government.
2. Agricultural sector.
3. Organised business.
4. Host and adjacent communities.
5. Land claimants.
6. Other organisations, clubs, communities, and unions.
7. Various Non-Government Organisations (NGOs).

#### **7.1.2 List of Authorities Identified and Notified**

The following authorities have been identified and notified of the proposed Vredefort West Extension Prospecting Right:

1. Moqhaka Local Municipality.
2. Fezile Dabi District Municipality.
3. Free State Department of Agriculture and Rural Development.
4. Free State Department of Agriculture, Rural Development, Land and Environmental Affairs.
5. Free State Department of Mineral Resources.
6. Free State Department of Co-operative Governance and Traditional Affairs.
7. Free State Department of Human Settlements.
8. Free State Department of Public Works.
9. Free State Tourism Authority.
10. Free State Department of Water and Sanitation.
11. Free State Department of Economic Development, Tourism, Environmental Affairs and Small Business.
12. Free State Department of Police, Roads and Transport.
13. Free State Heritage Resources Authority.
14. National Department of Mineral Resources.

15. National Department of Agriculture, Forestry and Fisheries.
16. National Department of Rural Development and Land Reform.
17. The Council for Scientific and Industrial Research – CSIR.
18. South African Heritage Resources Agency – SAHRA.
19. South African National Roads Agency SOC Ltd – SANRAL.
20. South African National Parks – SANParks.
21. Transnet SOC Ltd.
22. Eskom.

### 7.1.3 List of Key Stakeholders Identified and Notified

The following key stakeholders have been identified and notified of the proposed Vredefort West Extension Prospecting Right:

1. Wildlife and Environment Society of South Africa – WESSA.
2. BirdLife South Africa.
3. Endangered Wildlife Trust – EWT.
4. Centre for Environmental Rights.
5. Free State Agriculture.
6. Agri SA.
7. Agricultural Research Council.
8. Federation for a Sustainable Development.
9. Sasol Mining (Pty) Ltd.

### 7.1.4 List of Surface Rights/Land Owners Identified and Notified

The following surface rights/landowners of the area under application have been identified and notified of the proposed Vredefort West Extension Prospecting Right:

1. Adriaan De Klerk.
2. K F W Properties/Keth F Ward.
3. David Hermanus Lukas Gunter/Testamentere Trust Ook Bekend As D P Gunte.
4. Susara Johanna Joubert.
5. Witrand Trust.
6. Heinrich Johann Brussow.
7. Burgert Smith Coetzee.
8. Rooiwal Trust/A I Dannhauser.
9. Rhebokfontein Wildlife.
10. Enslin Susara Johanna-Administrators.
11. Paul Le Roux Trust.
12. David Hercules Marx Familietrust/Van Wyk Annica/David Steenkamp.
13. Van Enslin Broers Trust/Hugh Enslin/DH Enslin/Rethan Enslin.
14. J E Grobler Erasmus.
15. Petrus Johannes Marx.
16. Expectra 594 (Pty) Ltd/Nicolaas P Uys.
17. Cfa Air Charters.
18. Lwlu Boerdery.

19. Beyers Bosman Nel.
20. Rautenbach Familie Trust/Ignatius Cornelius Rautenbach.
21. Brussow Family Trust.
22. Ethan Warren Boerdery Cc.
23. Groenpan Trust/ D H Enslin.
24. Jacoba Johanna Du Plessis.
25. Proud Heritage Properties 5 (Pty) Ltd/Pieter Jacobus Rademan.
26. Jurgens Enslin.
27. Marx Susara Johanna-Administrators/ Hugh Enslin Trust.
28. T & C Trust.
29. Gideon Coetzee/Alida Coetzee/Bokka Trust.
30. J A P Mocke Trust/ Petri Mocke/Kareedrie Boerdery (Pty) Ltd.
31. Rademan Johanna Susanna Florentina.
32. Hannie Le Roux Trust.
33. Daniel Francois Lamprecht.
34. Jaco Cronje Familie Trust.
35. Jomarla Familie Trust.
36. Christoffel Carolus Bergh.
37. Andries Jacobus Roets Coetzee.
38. Maria Louisa Van Wyk.
39. Straightprops 18 (Pty) Ltd/Dawid Senekal Inc/D J Senekal (representative).
40. Bar Trust/Barrie and Letitie Coetzee.
41. Advidata Trading 140 Cc.
42. Pieter Willem Hattingh.
43. Abilia Trading 58.
44. Allem Brothers (Pty) Ltd/Cedarland Farms (Pty) Ltd/The Miracle Farms (Pty) Ltd/Laurence Allem.
45. Chris Reinecke/Chris Reinecke Trust.
46. Johannes Willem/Christiaan Venter.

## **7.2 Notification of I&APs**

This section provides details on the notification that was distributed as part of the BA process to date.

### **7.2.1 Initial Notification**

The PPP commenced on the 27<sup>th</sup> July 2018 with an initial notification and call to register period ending on the 31<sup>st</sup> August 2018. Initial notification was given in the following manner:

### **7.2.2 Registered Letters, Faxes and E-mails**

Notification letters, faxes and e-mails were distributed to all pre-identified I&APs including affected and adjacent surface landowners, government organisations, NGOs, relevant municipalities, ward councillors and other organisations that might be affected. The notification letters included the following information:

1. List of anticipated activities to be authorised.
2. Scale and extent of activities to be authorised.
3. Sufficient detail of the intended operation (to enable I&APs to assess/surmise what impact the activities will have on them or on the use of their land).

4. The purpose of the proposed project.
5. Details of the affected properties (including a locality map).
6. Details of the MPRDA and NEMA Regulations that must be adhered to.
7. Date by which any request to register as an I&AP must be forwarded through to Shango Solutions.
8. Contact details of the EAP.

In addition, a questionnaire was included in the registered letters, e-mails and facsimiles sent which requested the following information from I&APs:

1. Information on any potential impacts from the proposed project.
2. Suggestions on potential mitigation measures for their anticipated impacts.
3. Information on current land uses and their location within the area.
4. Information on the location of any environmental features of note within and in the vicinity of the study area.
5. Details of the landowner and information (contact details) of lawful property occupiers, if any.
6. Details of any other I&APs that should be notified.
7. Details on any land developments proposed in the near future.
8. Any specific comments or concerns regarding the application.

### **7.2.3 Background Information Document (BID)**

A Background Information Document (BID) was prepared. The BID includes the following information:

1. Project name.
2. Applicant name.
3. Project location.
4. Map of affected project area.
5. Description of the application process.
6. Information on document review.
7. Relevant Shango Solutions contact person for the project.

### **7.2.4 Newspaper Advertisement**

Three newspaper advertisements describing the proposed project and BA process were placed in two local newspapers with adequate circulation in the area. The advertisements were placed in the Free State Weekly (in English and Afrikaans) and Dumelang News (in Sesotho) newspapers on the 27<sup>th</sup> July 2018. The newspaper adverts included the following information:

1. Project name.
2. Applicant name.
3. Project location.
4. Nature of the activity.
5. Relevant Shango Solutions contact person for the project.

### **7.2.5 Site Notice Placement**

30 A1 correx site notices (in English, Afrikaans and Sesotho) were placed along and within the perimeter of the proposed project area on the 30<sup>th</sup> and 31<sup>st</sup> July 2018. The on site notices included the following information:

1. Project name.
2. Applicant name.
3. Project location.
4. Map of proposed project area.
5. Project description.
6. Legislative requirements.
7. Relevant Shango Solutions contact person for the project.

#### **7.2.6 Poster Placement**

A3 posters (in English, Afrikaans and Sesotho) were placed at 5 local public gathering places (Mzala Ricky's Fruit and Veg supermarket, Vredefort Mini-Market, Vredefort post office, Vredefort library, Ngwathe Local Municipality) within and around the application area. The notices and written notification afforded all pre-identified I&APs the opportunity to register for the project as well as to submit their issues/queries/concerns and indicate the contact details of any other potential I&APs that should be contacted. The contact person at Shango Solutions, contact number, e-mail and fax were clearly stated on the notification. Comments/concerns and queries were encouraged to be submitted in either of the following manners:

1. Electronically (fax, e-mail).
2. Telephonically.
3. Written letters.

#### **7.2.7 Availability of Draft Bar and EMPR Notification**

The draft BAR and EMPR were made available for public review and comment for a period of 30 days, from the 18<sup>th</sup> September 2018 to the 19<sup>th</sup> October 2018. All registered I&APs were notified of the availability of the draft BAR and EMPR and where to locate it. I&APs were informed to provide comment, either in writing or telephonically, to Shango Solutions by no later than the 19<sup>th</sup> October 2018.

Notification regarding the availability of the Draft BAR and EMPR was given in the following manner:

1. Notification letters, faxes and/or e-mails will be distributed to all pre-identified I&APs, I&APs registered during the initial notification period, as well as affected and adjacent surface landowners.

The draft BAR and EMPR has been placed at the Parys Golf and Country Estate Restaurant for perusal and comment by all I&APs. Furthermore, the report has been uploaded onto the Shango Solutions website for download.

#### **7.2.8 Public Meeting/Open Day Notification**

An Open Day session was held on the 10<sup>th</sup> October 2018 as described in Section 7.2.9. Notification regarding the session was given in the following manner:

1. Notification letters (in English, Afrikaans and Sesotho) faxes and/or e-mails were distributed to all pre-identified I&APs, I&APs registered during the initial notification period and the BA notification period, as well as affected and adjacent surface landowners.

Notification documents included details on the venue, date as well as the duration of the Open Day. A hard copy of the draft BAR and EMPR was made available at the Open Day venue.

### **7.2.9 Public Meeting/Open Day**

During the draft BAR and EMPR review period, an Open Day was held to present findings of the Basic Assessment process. The Open Day took place on the 10<sup>th</sup> October 2018 at the Parys Golf and Country Estate Restaurant from 09H00 to 17H00. During the Open Day session, informative A2 posters were displayed on the walls by Shango Solutions (the EAP).. English and Afrikaans A4 versions of the Open Day posters were provided to I&APs. The EAP was available during the public Open Day for one-on-one discussions and questions from the public.

### **7.3 Issues and Responses**

The Public Participation Process was initiated on 27<sup>th</sup> July 2018. I&APs were given until the 31<sup>st</sup> August 2018, a period of 30 days, to register for this project. The draft BAR and EMPR was made available on the 18<sup>th</sup> September 2018 until the 19<sup>th</sup> October 2018 and I&APs were provided the opportunity to comment on the draft BAR and EMPR. All comments or issues received from I&APs during the project registration and draft BAR and EMPR review period have been included in this Basic Assessment Report.

#### **7.3.1 How Issues Raised Were Addressed**

Comments raised were addressed in a transparent manner and included in the compilation of the BAR and EMPR in the following manner:

1. Issues raised were used quantitatively to calculate the significance of impacts both real and perceived.
2. Issues raised were used to provide further suggestions and recommendations with regard to technical management options for impacts.

#### **7.3.2 Summary of Issues Raised by I&APs**

Comments received by Shango Solutions to date have been included in the Comments and Responses Report (Appendix E) as part of the report submission to the DMR (the competent authority).



Table 6: Summary of issues raised by I&amp;APs (comments were edited for typing or grammatical errors).

I&AP	Consulted	Date comments received	Comment received	Response issued
<b>Key Stakeholders</b>				
<b>Landowner/s</b>				
Adriaan De Klerk	X		No comment received to date.	
K F W Properties/Keith F Ward	X	27 August 2018	<ul style="list-style-type: none"> <li>• Ja, boerderye wat kos voorsien bv. Mielies, soya.</li> <li>• Mr Mike Valente (076 883 2689) is huidiglik 'n huurder van die huis op Charles Rust as ook n gedeelte van die plaas.</li> <li>• Dit is ook 'n boerderygemeenskap wat landbou aktiwiteite bedryf, hoofsaaklik om kos vir die omliggende gemeenskappe en dorpe te voorsien. Die grond word gebruik om te plant as ook om beweiding aan plaasdiere te gee.</li> <li>• Die grond het hoe potensiaal landerye en soet weiding bestaande uit die bedreigde grasveld bioom. Die grasveld bioom is krities vir die langtermyn voorsiening van ekosisteem dienste. Een van die primêre bedreigings vir die grasveld bioom is prospektering en mynbou.  Die volgende bedreigde spesies kom ook voor op die plaas:               <ul style="list-style-type: none"> <li>○ Endemiese ouvilk.</li> <li>○ Vaal lewerik.</li> <li>○ Swartvoet kat (miershooptier): felis nigripes.</li> <li>○ Aardwolf.</li> <li>○ Blou Kraanvoël.</li> </ul> </li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<ul style="list-style-type: none"> <li>Ja, die plaas grens aan die Vredefort Koepel Wêrelderfenisgebied.</li> <li>Die integriteit van die watertafel en akwifer moet ten alle koste beskerm word. Kontaminasie van die waterbron is ononderhandelbaar, besoedeling van die bron sal katastrofaal wees.</li> </ul> <p>Mynbou aktiwiteite het die potensiaal om 'n vernietigende effek op die gebied te he b.v stof, geraas. Die veiligheid van die gemeenskap en ons werkers sal in gevaar wees.</p> <ul style="list-style-type: none"> <li>Absoluut geen prospekter- of mynbedrywighede mag toegelaat word nie.</li> <li>Ja, skade/kontaminasie aan die watertafel, akwifer, fauna en flora as ook aan die nuwe pad wat gehou is. Die pad sal beskadig word deur swaar voertuie.</li> <li>Grondeienaars is heeltemal te min tyd gegee om te reageer. Vorms is nie by boere se huise afgelewer nie, en die kennisgewing wat ingeslaan is langs die pad is klein en on leesbaar.</li> </ul> <p>Ek behou die reg voor om meer volledige insette te lewer nadat ek meer tyd gehad het om die saak deeglik te deurdink.</p> <p>Die databasis van die grondeienaar is onvoledig.</p> <p>Die plaas het 3 x gaste huise op die perseel wat gebruik word vir toeriste. Die gaste huise verwys</p>	<p>BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waarvoor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>Availability of the draft Basic Assessment Report</li> </ul>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>hul gaste na die gemeenskap se winkels b.v OK Bazaar, Cornerstone Pub wat help met die gemeenskap se bemagtiging.</p> <p>ENGLISH TRANSLATION</p> <ul style="list-style-type: none"> <li>• Yes, farming that supplies mielies and soya.</li> <li>• Mr Mike Valente currently rents the farm house and also a portion of the farm.</li> <li>• It is a farming community which runs an agricultural business that mainly supplies food to the surrounding towns. The property is used for planting and grazing for livestock. The lands have high potential cultivation and sweet pasture from the endangered grass biome.</li> </ul> <p>The grass biome is critical for longterm supply to the ecosystem services. One of the primary dangers to grass biome is prospecting mine operations.</p> <p>The following endangered species are also found on the farm:</p> <ul style="list-style-type: none"> <li>o Endemic ouvolk</li> <li>o Vaal lark</li> <li>o Black-footed cat</li> <li>o Nature Wolf</li> <li>o Blue Crane</li> </ul> <ul style="list-style-type: none"> <li>• Yes, the farm neighbours the Vredefort Dome Heritage site.</li> <li>• Integrity of the waterfall and aquifer must be protected at all costs. Contamination of the</li> </ul>	<p>(BAR) and Environmental Management Programme (EMPR).</p> <ul style="list-style-type: none"> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>water source is negotiable. Pollution of the source would be catastrophic. Mining has the potential to destroy the area eg. Dust and noise. Safety in the community could be compromised.</p> <ul style="list-style-type: none"> <li>• Absolutely no prospecting or mine operations should be allowed.</li> <li>• Yes, damage or contamination to waterfalls, acquifer, fauna and flora as well as the new roads. The roads will be damaged by heavier vehicles.</li> <li>• Landowners, was given too little time to react. The forms (Background Information Document) were not delivered to the farmers houses. Furthermore, the site notices were too small and illegible. I reserve the right to give my inputs after I had more time to scrutinise and think about this matter. The landowner database is also incomplete.</li> </ul>	
David Hermanus Lukas Gunter Testamentere Trust Ook Bekend As D P Gunte	X		Contact details of this landowner could not be sourced.	
Susara Johanna Joubert	X		No comment received to date.	
Witrans Trust	X		No comment received to date.	

I&AP	Consulted	Date comments received	Comment received	Response issued
Heinrich Johann Brussow	X		No comment received to date.	
Burgert Smith Coetzee	X		No comment received to date.	
Rooiwal Trust/A I Dannhauser	X	27 August 2018	<ul style="list-style-type: none"> <li>Dit is 'n boerderygemeenskap wat kos en werk aan omliggende gebiede verskaf.</li> <li>Ja, daar is grafte van my voorvaders.</li> <li>Mynaktiwiteite het die potensiaal an 'n vernietigend effek op die gebied te he vernietiging van flora en fauna.</li> <li>Geen mynaktiwiteite of prospektering moet plaasvind nie.</li> <li>Verskeie bedreigde diere kan voor soos bv. Aardwolf.</li> <li>Die plase is al meer as 100 jaar in die familie en daar is 'n huis gebou in 1885.</li> </ul> <p>Skaars wildsoete soos die aardwolf en bloukraanvoël, sekretarievogel kan voor</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>It is a farming community that supplies food and employment to the surrounding area.</li> <li>Yes, there are graves of my fore fathers.</li> <li>Mining activities have the potential to destroy the area and the flora and fauna.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>Datum en plek van die openbare vergadering.</li> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<ul style="list-style-type: none"> <li>• No mining activities or prospecting should occur.</li> <li>• There are various endangered species eg. Aardwolf.</li> <li>• The farms have been in the family for more than 100 years and the farm house was built in 1885.</li> </ul> <p>Rare wildlife like aardwolf, blue crane fever, secretary bird exists and could potentially be threatened.</p>	<p>word om potensiele impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> </ul>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<ul style="list-style-type: none"> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Rhebokfontein Wildlife	X		Contact details of this landowner could not be sourced.	

I&AP	Consulted	Date comments received	Comment received	Response issued
Enslin Susara Johanna-Administrators	X		Contact details of this landowner could not be sourced.	
Paul Le Roux Trust	X		Contact details of this landowner could not be sourced.	
David Hercules Marx Familietrust/ Van Wyk Annica/ David Steenkamp	X	31 August 2018	<ul style="list-style-type: none"> <li>Die kennishewings wat op gesit word is swak en het of weggewaai of om geval.</li> <li>Landbou produksie in die omgewing is belangrik tot die betaan van mense in die omgewing.</li> </ul> <p>Werks geleentheid word in gedrang geplaas met die aansoek</p> <p>2 groot riviere loop deur die gebied wat die gemeenskap negatief sal afekteer indien hier gemyn word.</p> <p>Die stoele wat gegrou wil word kan 'n groot negatiewe impak in die area se natuurlike plante groei he.</p> <ul style="list-style-type: none"> <li>Die koepel erfine gebied is aangrensend teen die area van die aansoek</li> <li>Werks geleentheid wat verlore sal gaan</li> </ul> <p>Landbou produksie en voedsel sekuriteit sal negatief geraak word</p> <p>Agri-toerisme sal afneem</p> <p>Veiligheid op please is n groot risiko</p> <p>Ondergrondse water wat besoedel word</p>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>Datum en plek van die openbare vergadering.</li> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreeëls</p>



I&AP	Consulted	Date comments received	Comment received	Response issued
			<ul style="list-style-type: none"> <li>• Geen myn prospektering nie!</li> <li>• Ja, al die bogenoemde punte.</li> <li>• Geen prospektering nie asb. Die kennisgewings was swak en het weggewaai of omgeval. Die lyste van plase wat julle die prospektering wil doen is onvolledig.</li> </ul> <p>ENGLISH TRANSLATION</p> <ul style="list-style-type: none"> <li>• The notices were of poor quality and blew away or fell over.</li> <li>• Agricultural production is vital to the community's survival. The mining operations will affect agricultural production and place farmers' job opportunities in jeopardy.</li> </ul> <p>Two large rivers run through the area. Mining operations can potentially pollute the river systems, which happen to be a major water supply in the area. Therefore, the community will be affected in a negative manner should mining commence.</p> <p>The trenches that will be dug could have a huge impact on the areas natural vegetation.</p> <ul style="list-style-type: none"> <li>• The dome heritage area is a neighbour to the application area.</li> <li>• Job opportunities will be lost. Agricultural production surely will be affected negatively. Agri-tourism will decline. Safety in the farms will be reduced and underground water will be polluted.</li> </ul>	<p>sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiele impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p>ENGLISH TRANSLATION</p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management</li> </ul>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<ul style="list-style-type: none"> <li>• No mine prospecting.</li> <li>• Yes, all the above mentioned.</li> <li>• No prospecting please. Notices were of poor quality and blew away or fell over. List of farms detailing the area where the applicant wants to prospect were incomplete</li> </ul>	<p>Programme (EMPR).</p> <ul style="list-style-type: none"> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
Van Enslin Broers Trust	X	29 August 2018	<p>Dankie</p> <p>Retha Enslin nms REHU Bdy BK Posbus 1885 KROONSTAD 9500</p> <ul style="list-style-type: none"> <li>• Saai en veegrond vir boedery.</li> <li>• Definitief nie geïnteresend – maar word geforseer om betrokke te raak agu. My grond wat ter sake is.</li> <li>• Ja. Eiendomme ter sake: Hugh Enslin Trust: Knapdaar 619 Enslin Broers Trust: Freda 1108 :Deput 289</li> <li>• Bure. Togeangs paaie en ondergrondwater en arbeid kan vir almal in 'n omgewing 'n problem raak agu, Myn bedrywig hede.</li> <li>• Hoë potensiaal saagrond en goeie weiding.</li> <li>• Lê op die rand van die vredefort koepel bewarea. Ons woon in 'n rustige omgewing en myne sal alles verander.</li> <li>• Omgewaings versteuring verander mense se</li> </ul>	<p>Goeie dag,</p> <p>Dankie dat u die Registrasievorm van Belangstellende en Geaffekteerde Party voltooi het.</p> <p>U kommentaar is opgemerk. Let asseblief daarop dat dit 'n aansoek om te prospekter en nie mynbou is nie. Indien die aansoek deur die Departement van Minerale Hulpbronne toegestaan word, sal die area wat versteur word, ongeveer 0,03 hektaar wees. Die versteurde gebiede sal gerehabiliteer word tot hul oorspronklike toestand en tot bevrediging van die geaffekteerde grondeienaar. Een eiendom is geïdentifiseer vir die uitgraving van twee loopgrawe (Gedeelte 1 van die plaas Mimosa Grove 491). Ons is deur wetgewing verplig om 'n 5 km-buffer van werelderfenisgebiede in stand te hou. As sodanig val die plaas eiendomme waarvoor ons kliënt aansoek doen vir 'n Prospekter Reg, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat 'n toegestaande Prospekter Reg aan die aplikant nie die nodige magtiging vir mynaktiwiteit sal verskaf nie. As sulks, sou daar enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, 'n verdere aansoek-, ondersoek- en openbare deelnameproses vereis.</p> <p>Spesialisstudies (Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie) is 'n opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal ingesluit word in die Basiese Asseseringsverslag en Omgewingsbestuursprogram. Verder sal toepaslike versagtingsmaatreëls voorgestel word om moontlike</p>

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			<p>gemoed. Baie ou en onlangse grafte op plase.</p> <ul style="list-style-type: none"> <li>• Moet nie prospekteer of myn nie.</li> <li>• Ja. Wil graag die omgewing in sy huidige vorm bewaar. Hier kom heel wat steen bakkies, duikers en ander klein soogdiertjies voor-selfs ook tierboskatie en baie voëlsoorte.</li> <li>• Ek hoop ons kan 'm landbou omgewing bly sonder myn.</li> </ul> <p>ENGLISH TRANSLATION</p> <p>Thank you.</p> <p>Retha Enslin nms REHU Bdy BK Posbus 1885 KROONSTAD 9500</p> <ul style="list-style-type: none"> <li>• Crop and grazing farm.</li> <li>• Definitely not interested but forced to be involved. My farm properties are affected.</li> <li>• Affected property: Hugh Enslin Trust: Knapdaar 619 Enslin Broers Trust: Freda 1108</li> </ul>	<p>impakte op die geïdentifiseerde sensitiviteit te verminder.</p> <p>ENGLISH TRANSLATION</p> <p>Good day,</p> <p>Thank you for completing the Interested and Affected Party registration form.</p> <p>Your comments are noted. Kindly note that this is an application for prospecting and not mining. Should the application be granted by the Department of Mineral Resources, the area to be disturbed will be approximately 0.03 hectares in aerial extent. The disturbed areas will be rehabilitated to their original state and to the satisfaction of the affected landowner. One property has been identified for the excavation of two trenches (Portion 1 of the farm Mimosa Grove 491) which are located more than 5 kilometres away from the Vredefort Dome.</p> <p>Kindly note that a granted Prospecting Right will not provide the Applicant the required authorisation for mining activities. As such, any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the Basic Assessment Report and Environmental Management Programme. Furthermore, appropriate mitigation measures will be proposed in order to minimise potential impacts on the identified sensitivities.</p>

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			<p style="text-align: right;">:Deput 289</p> <ul style="list-style-type: none"> <li>• Neighbours should be notified of this project. Access roads, underground water and workers in the area and surrounds will be affected by mining activities.</li> <li>• High potential field and good pasture.</li> <li>• The project area lies on the edge of the Vredefort Dome Protected Area. We live in a peaceful environment and a mine will change that.</li> <li>• Environmental disturbances change people's minds/mood. There are many old and recent graves on the farm.</li> <li>• Do not prospect for mine.</li> <li>• I would like to protect the environment so that it can remain in its current form. There are many steenbokkie, duiker and other small mammals, also tierboskat and a lot of bird species.</li> <li>• I hope we can have an agricultural environment that is mine free.</li> </ul>	
J E Grobler Erasmus	X		No comment received to date.	
Petrus Johannes Marx	X		No comment received to date.	

I&AP	Consulted	Date comments received	Comment received	Response issued
Expectra 594 (Pty) Ltd/Nicolaas P Uys	X	31 August 2018	<ul style="list-style-type: none"> <li>• Grond wat aan my behoort word uitsluitlik gebruik vir beweiding en ons be plan om in die naybe toekoms te diversifiseer na wildboerdery.</li> <li>• Die Vredefort Koepel Wereldfenisgebied is aangrensend aan die voorgestelde prospekter gebied en die potensiele impakop die erfenis gebied moet ondersoek work.</li> <li>• Die projek sal inbreuk maak op landbouberywighede in die omgewing en sal lei tot verhoogte veiligheid en sekuriteit risiko's van individuele grondeienaars en die wyer gemeenskap as gevolg van toegang verlang tot persele. Die negatiewe impak vanverhoogde veldbrand risiko, geraas en stof generasie, bogrond en ondergrondse water besoedeling en ander omgewings (flora) besoedeling as gevolg van prospekterbedrywighede, potensiele skade en ontwrigting van bestande infrastruktuur, Rommel en n gebrek aan afval verwerdingspraktyke moet ook in ag gennem word.</li> <li>• Indien n prospekterpermit wel toegestaan word stele k voor dat n grondeienaarsforum gestig word wat verteenwoordigers kan aanstel om prospekterbedrywighede te monitor en om op n gereelde basis met die propektermaatskappy se verteenwoordigers te te vergader.</li> <li>• Geen prospektering nie asseblief. Die verwagte duur (5-6 jaar) van die projek en die potensiele</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Beskikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde</p>

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			<p>lang termyn ontwrigtende impak wat die projek sal he op die omgewing, infrastruktuur en die landbou bedrywighede van geaffekteerde grondeienaars wek kommer. Aan die positiewe kant is potensiele werkskepping en hopelik verhoogde omgewingsbewarings bewustheid van die prospektermaatskappy se werksmag d.m.v aktiewe omgewingsbewustheids opleidings programme. Die rehabilitasie program van die are wat versteur is as gevolg van prospekter bedrywighede mowt spesiale aandag geniet.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• The land that belongs to me is used exclusively for grazing and we are planning on diversifying and moving towards game farming in the near future.</li> <li>• The Vredefort dome heritage area borders the suggested prospecting area and the potential impact to the area needs to be investigated.</li> <li>• The project will intrude on agricultural businesses in the area and will lead to more safety and security risks of the individual landowners and broader community as a result of additional access to properties. The negative impact of a larger risk of veld fires, noise and dust generation, surface and underground water pollution and other areas (flora) being polluted as a result of prospecting activities, potential damage and disruption of the existing infrastructure, rubbish/litter and a lack of waste removal</li> </ul>	<p>Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora,</p>

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			<p>practices should also be taken into consideration.</p> <ul style="list-style-type: none"> <li>Should the prospecting right be awarded, I propose that a landowner's forum/council be established who can appoint representatives to monitor prospecting activities and have regular meetings with the prospecting/exploration company.</li> <li>No prospecting please. The expected duration (5-6 years) of the project and potential long term disruption impact that the project will have on the area, infrastructure and agricultural businesses of the affected landowners causes concern. On a positive note, potential for job creation and hopefully increased environmental conservation awareness form the prospecting/Exploration Company's workforce by means of active environmental conservation awareness training program. The rehabilitation program of the affected/disturbed area due to the prospecting should be awarded special attention.</li> </ul>	<p>fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Cfa Air Charters	X		No comment received to date.	
Lwlu Boerdery	X		No comment received to date.	
Beyers Bosman Nel	X		No comment received to date.	



I&AP	Consulted	Date comments received	Comment received	Response issued
Rautenbach Familie Trust/Ignatius Cornelius Rautenbach	X	28 August 2018	<ul style="list-style-type: none"> <li>• Grondeienaar.</li> <li>• Ja, plaaswerkers (7 gesinne).</li> <li>• Wees nie wat is B&amp;GPs nie.</li> <li>• Cyferkuik: Grazing Windhoek: Saai, Weiding, Arbeiders behuising.</li> <li>• Natuur lewe moet beskerm word.</li> <li>• Geen myn bedrywighede nie.</li> <li>• Ja, beskadiging, omgewing wat aan bewarings gebied grens 'n vredefort koepel.</li> <li>• Wilde diere soos tierboskat, koedoes, en verskeie wildspesies wat in en om oosk teen aansensende grond voorkom sal verawyn of uitsterf indien die ekologie versteur word.</li> </ul> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Landowner.</li> <li>• Yes, farm workers (7 families).</li> <li>• Do not know what are I &amp; APs.</li> <li>• Cyferkuik: Grazing. Windhoek: Sowing/Planting, Grazing, Farm Workers and Housing.</li> <li>• Natural environment needs to be protected.</li> <li>• No mining operations.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Beskikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde</p>

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			<ul style="list-style-type: none"> <li>• Yes, damaging the area neighbouring the Vredefort Dome.</li> <li>• Wilde animals such as tierboskat, Kudus and various game species that live in and around the area will disappear and become extinct if ecology is disturbed.</li> </ul>	<p>Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora,</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Jacoba Johanna Du Plessis	X		No comment received to date.	
Brussow Family Trust	X		Contact details could not be sourced.	
Ethan Warren Boerdery Cc	X		Contact details could not be sourced.	

I&AP	Consulted	Date comments received	Comment received	Response issued
Groenpan Trust/D H Enslin	X	31 August 2018	Mr Enslin completed the I&AP registration form. Please refer to Appendix E6 for his comments and concerns regarding the proposed Vredefort West Extension project.	Refer to Appendix E6.
Proud Heritage Properties 5 (PTY) LTD/ Pieter Jacobus Rademan	X		<ul style="list-style-type: none"> <li>• Ondergrondse water word aangewend vir botteling van minerale water. Dit is die hoof-en primêre inkomstebron.</li> </ul> <p><u>Infrastruktuur:</u></p> <p>Bottelingsaanleg, store, woonhuis, arbeidershuise.</p> <p><u>Fauna en Flora:</u></p> <p>Die grond het hoe potensiaal landerye en soet weiding bestaande uit die bedreigde grasveld bioom. Die grasveld bioom is krities vir die langtermyn voorsiening van ekosisteem dienste. Een van die primêre bedreigings vir die grasveld bioom is prospektering en mynbou.</p> <p>Die volgende bedreigde spesies kom ook voor op die plaas:</p> <ul style="list-style-type: none"> <li>○ Endemiese ouvilk.</li> <li>○ Vaal lewerik.</li> <li>○ Swartvoet kat (miershooptier): felis nigripes.</li> <li>○ Aardwolf.</li> <li>○ Blou Kraanvoël.</li> </ul> <ul style="list-style-type: none"> <li>• Ja, die plaas grens aan die Vredefort Koepel Wêrelderfenisgebied</li> <li>• Vyftig gesinne is afhanklik van die</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit</p>

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			<p>botteleeraanleg op die plaas. Die integriteit van die watertafel en akwifer moet ten alle koste beskerm word. Kontaminasie van die waterbron is ononderhandelbaar, besoedeling van die bron sal katastrofaal wees.</p> <ul style="list-style-type: none"> <li>Absoluut geen prospekter- of mynbedrywighede mag toegelaat word nie.</li> <li>Skade aan die watertafel en akwifer Kontaminasie van die waterbron Indien enige van bg. Gebeur, verloor 50 gesinne hul werk en inkomste.</li> <li>Grondeienaars is heeltemal te min tyd gegee om te reageer. Vorms is nie by boere se huise afgelewer nie – dit is bloot in die draad langs die plaashek ingedruk.</li> </ul> <p>Ek behou die reg voor om meer volledige insette te lewer nadat ek meer tyd gehad het om die saak deeglik te deurdink.</p> <p>Die boerdery berus volledig op gesonde grondwater, watertafel en akwifer. Enige mynboubedrywighede, selfs op die buurplase, het die potensiaal om die plaas se totale inkomstepotensiaal onherroeplik te vernietig.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>It is a farming community which runs an agricultural business that mainly supplies food to the surrounding towns. The property is used for planting and grazing for livestock.</li> </ul>	<p>word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waarvoor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> </ul>

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			<p>The lands have high potential cultivation and sweet pasture from the endangered grass biome.</p> <p>The grass biome is critical for longterm supply to the ecosystem services. One of the primary dangers to grass biome is prospecting mine operations.</p> <p>The following endangered species are also found on the farm:</p> <ul style="list-style-type: none"> <li>○ Endemic ouvolk.</li> <li>○ Vaal lark.</li> <li>○ Black-footed cat.</li> <li>○ Nature Wolf.</li> <li>○ Blue Crane.</li> </ul> <ul style="list-style-type: none"> <li>● Yes, the farm neighbours the Vredefort Dome Heritage site.</li> <li>● Integrity of the waterfall and aquifer must be protected at all costs. Contamination of the water source is negotiable. Pollution of the source would be catastrophic. Mining has the potential to destroy the area eg. Dust and noise. Safety in the community could be compromised.</li> <li>● Absolutely no prospecting or mine operations should be allowed.</li> <li>● Damage to the water table and aquifer.</li> <li>● Contamination of the water source.</li> <li>● Landowners, were given too little time to</li> </ul>	<ul style="list-style-type: none"> <li>● Date and venue of the public meeting.</li> <li>● Availability of the final BAR and EMPR.</li> <li>● Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

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			<p>react. The forms (Background Information Document) were not delivered to the farmer's houses. Furthermore, the site notices were too small and illegible. I reserve the right to give my inputs after I have had more time to scrutinise and think about this matter. The landowner database is also incomplete.</p> <p>The farm is based entirely on healthy groundwater, water table and aquifer. Any mining activity, even on the neighboring farms, has the potential to irrevocably destroy the farm's total income potential.</p>	
Jurgens Enslin	X		No comment received to date.	
Marx Susara Johanna-Administrators/ Hugh Enslin Trust	X	29 August 2018	<p>Dankie Retha Enslin nms REHU Bdy BK Posbus 1885 KROONSTAD 9500</p> <ul style="list-style-type: none"> <li>• Saai en veegrond vir boedery.</li> <li>• Definitief nie geïnteresend – maar word geforseer om betrokke te raak agu. My grond wat ter sake is.</li> </ul>	<p>Goeie dag,</p> <p>Dankie dat u die Registrasievorm van Belangstellende en Geaffekteerde Party voltooi het.</p> <p>U kommentaar is opgemerk. Let asseblief daarop dat dit 'n aansoek om te prospekter en nie mynbou is nie. Indien die aansoek deur die Departement van Minerale Hulpbronne toegestaan word, sal die area wat versteur word, ongeveer 0,03 hektaar wees. Die versteurde gebiede sal gerehabiliteer word tot hul oorspronklike toestand en tot bevrediging van die geaffekteerde grondeienaar. Een eiendom is geïdentifiseer vir die uitgraving van twee loopgrawe (Gedeelte 1 van die plaas Mimosa Grove 491). Ons is deur wetgewing verplig om 'n 5 km-buffer van werelderfenisgebiede in stand te hou. As sodanig val die</p>

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			<ul style="list-style-type: none"> <li>Ja. Eiendomme ter sake: Hugh Enslin Trust: Knapdaar 619 Enslin Broers Trust: Freda 1108 :Deput 289</li> <li>Bure. Togeangs paaie en ondergrondwater en arbeid kan vir almal in 'n omgewing 'n problem raak agu, Myn bedrywig hede.</li> <li>Hoë potensiaal saagrond en goeie weiding.</li> <li>Lê op die rand van die vredefort koepel bewarea. Ons woon in 'n rustige omgewing en myne sal alles verander.</li> <li>Omgewaings versteuring verander mense se gemoed. Baie ou en onlangse grafte op plase.</li> <li>Moet nie prospekter of myn nie.</li> <li>Ja. Wil graag die omgewing in sy huidige vorm bewaar. Hier kom heel wat steen bakkies, duikers en ander klein soogdiertjies voor-selfs ook tierboskatie en baie voëlsoorte.</li> <li>Ek hoop ons kan 'm landbou omgewing bly sonder myn.</li> </ul> <p>ENGLISH TRANSLATION</p> <p>Thank you.</p> <p>Retha Enslin nms</p>	<p>plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospekter Reg, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat 'n toegestaande Prospekter Reg aan die aplikant nie die nodige magtiging vir mynaktiwiteite sal verskaf nie. As sulks, sou daar enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, 'n verdere aansoek-, ondersoek- en openbare deelnameproses vereis.</p> <p>Spesialisstudies (Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie) is 'n opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal ingesluit word in die Basiese Asseseringsverslag en Omgewingsbestuursprogram. Verder sal toepaslike versagtingsmaatreëls voorgestel word om moontlike impakte op die geïdentifiseerde sensitiwiteit te verminder.</p> <p>ENGLISH TRANSLATION</p> <p>Good day,</p> <p>Thank you for completing the Interested and Affected Party registration form.</p> <p>Your comments are noted. Kindly note that this is an application for prospecting and not mining. Should the application be granted by the Department of Mineral Resources, the area to be disturbed will be approximately 0.03 hectares in aerial extent. The disturbed areas will be rehabilitated to their original state and to the satisfaction of the affected landowner. One property has been identified for the excavation of two trenches (Portion 1 of the farm Mimoso Grove 491) which are located more than 5</p>



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			<p>REHU Bdy BK Posbus 1885 KROONSTAD 9500</p> <ul style="list-style-type: none"> <li>• Crop and grazing farm.</li> <li>• Definitely not interested but forced to be involved. My farm properties are affected.</li> <li>• Affected property: Hugh Enslin Trust: Knapdaar 619 Enslin Broers Trust: Freda 1108 :Deput 289</li> <li>• Neighbours should be notified of this project. Access roads, underground water and workers in the area and surrounds will be affected by mining activities.</li> <li>• High potential field and good pasture.</li> <li>• The project area lies on the edge of the Vredefort Dome Protected Area. We live in a peaceful environment and a mine will change that.</li> <li>• Environmental disturbances change people's minds/mood. There are many old and recent graves on the farm.</li> <li>• Do not prospect for mine.</li> <li>• I would like to protect the environment so that it</li> </ul>	<p>kilometres away from the Vredefort Dome.</p> <p>Kindly note that a granted Prospecting Right will not provide the Applicant the required authorisation for mining activities. As such, any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology)have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the Basic Assessment Report and Environmental Management Programme. Furthermore, appropriate mitigation measures will be proposed in order to minimise potential impacts on the identified sensitivities.</p>

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			<p>can remain in its current form. There are many steenbokkie, duiker and other small mammals, also tierboskat and a lot of bird species.</p> <ul style="list-style-type: none"> <li>I hope we can have an agricultural environment that is mine free.</li> </ul>	
T & C Trust	X		Contact details could not be sourced.	
Gideon Coetzee	X	29 August 2018	<ul style="list-style-type: none"> <li>Damplaats is n hoepotensiele saaigrond vir voedselsekureit ook n weidingsplaas vir beeste ew skape. Die ouvolk (giant girdled lizard, smaug giganteus, syn, cordylus giganteus) kom hier op damplaats voor dan is dft ook die broeiplek van die vlei oil en blou korhaan asook die natuurlike habitat van die steenbokkie wat ook bedreig is.</li> <li>Damplaats is n hoe potensieaal saaiplaas wat voedsel verseker vir die land en is ook n hoe potensiele weidingsplaas wat ook beesvleis asook skaapvleis voorsien vir voedselsekureit. dit is ook n werkskeppende plaas.</li> <li>Die volgende maatreels moet in peek vi/ees: Die volgende verwante infrastruktuur gaan nodig wees: opgradering van bestaande interne plaaspaai en die bou van nuwe paaie vir konstruksievgrtuie en toegang na die terrein. Eleiariese omheining om te voorkom dat lewende hawe toegang tot die terein het. Daar moet n span</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>Datum en plek van die openbare vergadering.</li> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en</p>

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			<p>aangestel word wat beskikoor die nodige kennis en opleiding om n ondersoek te doen oor wat gaan gebeur as daar gemyn word met die fauna en flora van hierdie gebied. Veral n persoon met kennis van voels want hier is baie bedreigde spesies</p> <ul style="list-style-type: none"> <li>• Ons groot kommer is, is veiligheid. daar is reeds soveel plaasaanvalle en plaasmoorde en as hier gemyn gaan word gaan daar soveel onbeheerde toegang wees, dat dit n groot kommer vir ons is, daar ivloet n duidelike plan opgestel word wat die sekuriteit vfr ons en die gemeenskap gaan verduidelik asook wat hul gaan doen as diefstal en plaasaanvalle gaan toeneem omdat hierdie n gebied is wat min geraak word deur diefstal.</li> </ul> <p>Water en die vernietiging van flora en fauna is die grootste bekommernis. Water is min so as die bogrante besoedel word is hier geen skoon drink water vir enige mens en dier nie wat n groot gesondheidsrisiko in hou.</p> <p>Daar moet n duidelike plan opgetrek word waar daar aan ons en die gemeenskap die versekering gegee kan word dat hi er geen waterbesoedeling gaan plaasvind nie want ons is totaal afhanklik van die water en waiter maatreels gebruik gaan word en waiter regstappe geneem kan word as hier besoedeling gaan plaasvind .</p> <p>Indien vlei en grasveld besoedel of baie beweging gaan plaasvind of voertuie die gebied gaan plattrap gaan dit n bedreiging vir die voellewe</p>	<p>enige sensitiviteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any</p>

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			<p>asook die kleinwild wees, amfibiee en die insekte asook die slange wees. daar was soveel naguile getrap deur die kole lorries wat op n stadium die grondpad gebruik het dat ons gevrees het hul gaan uitgewis word in ons gebied. Met die dat die grondpad nie meer deur die kole lorries gebruik word nie, word die naguile se getalle ook stadig maar seker meer en ons kannie dat dit weer gebeur nie.</p> <p>Weiding bestaan ook uitvlei en grasveld gebied wat baie verskillende voels huisves bv. soos in punt a genoem is is dit die broeiplek vir die blou korhaan</p> <p>wat ook bedreig is asook die vlei ull wat baie skaars is broei hier op damplaats.</p> <p>Dan kom hier voor die krans aasvoels, klomp endemiese spesies, spot lewerik, pienk bek lewerik, uile, sekretarisvoel internasionale voels wat hierna toe kom, swartvlerk sprinkaanvoels, oostelike rooipootvalk hierdie en die bogenoemde voels is besig om bedreig te raak. Hier is n magdom voellewe soos bv. kroon kiewiet, bont kiewiet, pieke, suikerbekkies, houtkappers (bonthoutkapper, rooikophoutkapper, kuifkophoutkapper), draaihals, kortsterflap, laksmanne, bleeksingvalk, blouvalk, breekoparend, dwergarend, lepelaar, skoorsteenbeer, glansibisse, bruinjakkalsvoel, witborsvleivalk, vlei uile, gevleiae ooruil, nonnetjie-uil, afrikaanse naguil,</p>	<p>developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p>

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			<p>             rooiwangnaguil tarentale, afrikaanse kwartel, boskorhaan, witvlerkkorhaan, gewone dikkop, piet my-vrou, dfederikkie, meitjie, gewone vleiloerie, oostelike rooipootvalk en die kleinrooivalk kom besoek ons gereeld. dan die kransvalk, grootrooivalk, afrikaanse kwartels, wildemakou, kolgans, bruineend, geelbekeend, bleshoenders, namakwaduffies, witpenswindswael, kleinwindswael, rooiwangmuisvoels, gevlekte muisvoels, swaelstertbyvreter, roobekkakelaar, swartbekkelaar, hoep-hoep, roolneklewerik, rooiruglewerik, witborskraai, swartkraai, witkatlagters, rooiogtiptol, gevlekte lysters, gewone bontrokkies, swartpiek, oassievoels, gewone janfrederiks, bosveldstompstertjies, gewonespekvreters, bergwagters, fisikaal vlieevanger, kaapse glasogies, bont kwikkies, gewone kwikkies^ gewone koesters, fisikaallaksman, bokmakierie, bontroklaksman, kleinglans spreeu, witgatspreeu, rooivlerkspreeu, lelspreeu, huismossies, gewone mossies, gryskopmossie, koringvoel, swartkeelgeelvink, goudgeelvink, rooivink, langsterflap, rooikeelflap, koniwgrootroibekkfe, pylstertrooibekkie, swartwangsysie, gewone blousysie, gewone kwartevinkie, rooikopvinke, geelkanaries, bergkanaries, swartkopkanaries, klipstreepkoppie kom ook hier voor net om n paar te noem . Europese byvreter, Europese windswael, europesetrou pant, rooiborsswael, gryslaksman, kom besoek ons ook gereeld.           </p>	<p style="color: red;">             If you have any questions in this regard, please do not hesitate to contact me.           </p>

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			<p>Dan as dit in die reenseisoen is, is damplaats n water vo el paradys met die volgende voels: kempgaan, ringnekstrandkiewiet, rooipootelsie, bontelsie, rietduikers, kleindobbertyes, swartnek dobbertyes, reuserier, rooireier, bloureier, swartkopreier, geelbekwitreier, grootwttreier, klein wit reier, grootwartooievaar, kleinswartooievaar, witoeievaar, oopbekooievaar, hamerkoppe, lepelaars, kopereend, rooibekeend, grootwaterhoender, ringnekstrandkiewiet, krombekstrandloper, kleinstrandloper, moerasruiter, witblerksterretjies, netom n paarte noem.</p> <p>Asook verskeie kleinwild soos die steenbok, duiker, koedoes, erdvark, rooimeerkat, stokstertmeerkat, witstertmuishond, muskeuaatkat, tierboskat, rooikat, vaalboskat, maawhaarjakkals, stvet, krimpvarkies, stinkmuishond, gebande muishond, rooijakkals, bakoorejakkals, ystervark, vlakhaas, kolhaas, blou ape, dassies, dit is alles wat ons al hier gesien het.</p> <p>Daar is rot en muis spesies en vlermuis spesies wat net in die aand uitkom.</p> <p>Die vlei is ook broeiplek vir gewone platannas, borrelvlei paddas, groot brulpaddas, trillersand padda, gorrel skurwepadda, lawaaipadda, kaapse rivierpadda asook die gewone rivierpadda, gewone blikslanertjies en die snorkpaddas.</p> <p>Hier is ook n goeie verskeidenheid van slange</p>	

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			<p>soos die poffadder, swart rinkhals, groen boomslang, koperkapel of geelslang, skaapstekertjies, oeters se erdslangetjie, gewone eivreter, gewone wolfslang, gewone slakvreter, molslang, rooilipslang en hier kom ook nou al swart mambas voor om net n paar te noem.</p> <p>Dan het ons nog nie eers by die verskillende akkedisse, spinnekoppe, insekte, skoelappers spesies gekom nie. Dan is dit die natuurlike habitat van magdom verskillende some, plante, grasse.</p> <p>Ons bekommernis is dat as hier gemyn gaan word maak nie saak watter erts nie dat hierdie diere se natuurlike habitat verwoes en vernietig gaan word.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Damplaats is a high-potential arable land farm providing food security, as well as a grazing land for cattle and sheep.</li> <li>• Damplaats is a high potential arable land farm which provides food security for the country, as well as a high potential grazing farm which provides beef as well as mutton for food security. It also provides work to the community</li> <li>• The following material should be in place:</li> <li>• The following related infrastructure would be required: <ul style="list-style-type: none"> <li>○ Upgrading of existing internal farm roads and building of new roads for construction vehicles and access to terrain.</li> </ul> </li> </ul>	

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			<ul style="list-style-type: none"> <li>○ Electric fencing to prevent access to the terrain by livestock.</li> <li>○ A team needs to be appointed which has access to the required knowledge and training to investigate the impact of mining on local fauna and flora, particularly the impact on birds, as there are many endangered bird species.</li> <li>● A large concern for us is safety. There are already so many farm attacks and farm murders, and if mining was to take place here, there would be a large increase in uncontrolled access to the area. This is a great concern to us. There needs to be a clear plan set up which would explain the security to us and our community, as well as what would be done if theft and farm attacks were to increase, as this is a region which is currently safer than most. Water and the destruction of fauna and flora is our largest concern. Water is scarce, so if the boreholes would be polluted, there would be no clean drinking water for man or beast, which would be a large health risk. There needs to be a clear plan set up which would provide certainty to us and the community that no water pollution would take place, as we are totally dependent on the water, and which procedures would be applied, and which legal steps could be taken if pollution takes place here. If the vleis and Grasslands were to be polluted, or if a lot of movement</li> </ul>	



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			<p>were to take place, or vehicles would be trampling over everything, it would be an endangerment to the bird life, small wild animals, frogs, insects and snakes. There were so many owls hit by coal trucks which used the ground roads at one point, that we feared they would be completely exterminated in the area. Now that the coal trucks no longer use the ground roads, the owl numbers are slowly increasing again, and we cannot allow this to happen again.</p> <p>Grazing is also made up of vlei and grassland areas, which houses many different bird species, as mentioned in point A. The area is breeding ground for the Blue Korhaan, which is endangered, as well as the Vlei Owl, which is very rare. The region is also home to Cape Vultures, many endemic species, Spot Lewerik, Pienk Bek Lewerik, Owls and Secretary Birds.</p> <p>International birds which come here, including the black-winged pratincole and Amur falcon, as well as the above mentioned birds is becoming endangered. The region has a very large quantity of bird life, such as the crowned plover, blacksmith plover, pieks, sunbirds, cape robin (acacia pied barbet, black-collared barbet, crested barbet), Eurasian wryneck, Yellow Bishop, Souza's shrike, pale chanting goshawk, black-winged kite, martial eagle, booted eagle, Eurasian spoonbill, African sacred ibis, glossy ibis, common buzzard, pallid harrier, Marsh owl, spotted eagle-owl, barn owl, fiery-necked</p>	

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			<p>nightjar, Rufous-cheeked Nightjar, common quail or European quail, red-crested korhaan or red-crested bustard, white-quilled bustard, spotted thick-knee, red-chested cuckoo, dideric cuckoo, Klaas's cuckoo, lark-heeled cuckoo, Amur falcon and lesser kestrel, Rock Kestrel , greater kestrel, common quail, spur-winged goose, Egyptian goose, southern pochard, yellow-billed duck, crested coot, Namaqua Dove, Alpine swift, little swift, red-faced mousebird, speckled mousebird, swallow-tailed bee-eater, Red-billed Wood-hoopoe, Scimitar-Billed Wood Hoopoe, African hoopoe, rufous-naped lark, chestnut-backed sparrow-lark, pied crow, Cape crow, Pied Babblers, African red-eyed bulbul, groundscraper thrush, African stonechat, ant-eating chat, mocking cliff chat, Cape robin-chat, Bushveld Stumps, familiar chat, mountain wheatear, fiscal flycatcher, Cape white-eye, Pied Wagtail, Cape wagtail, African pipit, southern fiscal, bushshrike, brubru, Cape starling, pied starling, red-winged starling, wattled starling, house sparrow, Cape sparrow, southern grey-headed sparrow, white-browed sparrow-weaver, southern masked weaver, yellow-crowned bishop, southern red bishop, long-tailed widowbird, red-collared widowbird, pin-tailed whydah, shaft-tailed whydah, black-faced waxbill, blue waxbill, gewone kwartevinkie, red-headed finch, yellow canary, Mountain Canaries, black-headed canary, cinnamon-breasted bunting,</p>	

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			<p>European bee-eater, common swift, European roller, red-breasted swallow, lesser grey shrike. Ruff, common ringed plover, black-winged stilt, pied avocet, reed cormorant, little grebe, black-necked grebe, Goliath heron, purple heron, grey heron, black-headed heron, intermediate egret, great egret, cattle egret, black stork, Abdim's stork, white stork, African openbill, hamerkop, Eurasian spoonbill, South African shelduck, red-billed teal, common moorhen, common ringed plover, curlew sandpiper, little stint, marsh sandpiper, Witblerksterretjies.</p> <p>Steinbuck, duiker, kudus, aardvark, yellow mongoose, meerkat, white-tailed mongoose, cape genet, serval, caracal, African wildcat, aardwolf, sivet, Southern African hedgehog, striped polecat, banded mongoose, black-backed jackal, bat-eared fox, Cape porcupine, Cape hare, Kolhaas, marmoset, rock hyrax.</p> <p>Pentholaea arnotti, Myrmecocichla formicivora), hummingbirds, woodpeckers (Tricholaema leucomelas, Lybius torquatus, Trachyphonus vaillantii), Jynx ruficollis, Euplectes axillaris, butcher birds, Melierax canorus, &lt;AND MANY OTHER BIRDS AND SNAKES AND RATS AND THINGS&gt;</p> <p>African Clawed Frog, Bubbling Kassina, Giant Bullfrog, Tremelo Sand Frog, gorrel skurwepadda, Raucouc Toad, Cape River Frog, Common River Frog, Common Dainty Frog, Snorkpaddas.</p>	

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			<p>Viper Snake, Ring-necked Spitting Cobra, Tree Snake, Cape Cobra, Skaapstekertjies, Peter's worm Snake, Common egg eater, Common Wolf Snake, Common Slug-eater, Mole Snake, Red lipped snake.</p> <p>Our concern is that if mining was to take place here, regardless of what kind of mining was to take place, these animal's natural habitats would be destroyed.</p>	
Bokka Trust /Gideon and Alida Coetzee	X	29 August 2018	<ul style="list-style-type: none"> <li>Plaas Palestina word bewoon deur my seun en sy gesin asook die plaas werkers en hul gesinne. Palestina is 'n hoe potensiele saagrond vir voedselsekureit ook 'n weidingsplaas vir beeste en skape. Nege maande intensiewe lamstelsel vind ook hier plaas.</li> </ul> <p>Daar is vier werkershuise wat bewoon word deur werkers en hul gesinne. Daar is ook 'n hoofstal wat bewoon word deur my seun en sy gesin. Daar is drie store en 'n voerkraal en 'n intensiewe lamkraallstelsel.</p> <p>Dit is ook die broeiplek en weidingsveld vir die bloukraanvoels wat 'n bedreigde spesie is, asook die steenbokkie wat ook bedreigde spesie is en die ouvolk (Giant girdled lizard, smaug giganteus, syn. cordylus giganteus).</p> <ul style="list-style-type: none"> <li>Palestina is 'n hoe potensieaal saaiplaas wat voedsel verseker vir die land en is ook 'n hoe potensiele weidingsplaas wat ook beesvleis asook</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>Datum en plek van die openbare vergadering.</li> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk.</p>

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			<p>skaapvleis voorsien vir voedselsekureit. Dit is ook 'n werkskeppende plaas.</p> <ul style="list-style-type: none"> <li>Die volgende maatreels moet in plek wees:           <p>Die volgende verwante infrastruktuur gaan nodig wees: opgradering van bestaande interne plaaspaai en die bou van nuwe paai vir konstruksievoertuie en toegang na die terrein.</p> <p>Elektriese omheining om te voorkom dat kinders en lewende hawe toegang tot die terein het.</p> <p>Daar moet 'n span aangestel word wat beskik oor die nodige kennis en opleiding om 'n ondersoek te doen oor wat gaan gebeur as daar gemyn word met die fauna en flora van hierdie gebied. Veral 'n persoon met kennis van voels want hier is baie bedreigde spesies.</p> </li> <li>Ons groot kommer is, is veiligheid.           <p>Daar is reeds soveel plaasaanvalle en plaasmoorde en as hier gemyn gaan word gaan daar soveel onbeheerde toegang wees, dat dit 'n groot kommer vir ons sekuriteit is. Daar moet 'n duidelike plan opgestel word wat die sekuriteit vir ons, my seun en sy gesin, die werkers en hul gesinne en die gemeenskap gaan verduidelik asook wat hul gaan doen as diefstal en plaasaanvalle gaan toeneem omdat hierdie 'n gebied is wat min geraak word deur diefstal.</p> <p>Water en die vernietiging van flora en fauna is ook 'n groot bekommernis.</p> </li> </ul>	<p>Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waarvoor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been</p>

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			<p>Water is min so as die boorgate besoedel word is hier geen skoon drink water vir enige mens en dier nie wat groot gesondheidsrisiko in hou. Daar moet 'n duidelike plan opgetrek word waar daar aan ons en die gemeenskap die versekering gegee kan word dat hier geen waterbesoedeling gaan plaasvind nie want ons is totaal afhanklik van die water en watter maatreels gebruik gaan word en watter regstappe geneem kan word as hier besoedeling gaan plaasvind.</p> <p>Die vlei loop ook in die renosterrivier wat beteken dat die renosterrivier ook besoedel gaan word en dit is een van die min skoonste tivière in die vrystaat.</p> <p>Indien vlei gebied besoedel of baie beweging gaan plaasvind of voertuie die gebied gaan plattrap gaan dit 'n bedreiging vir die voellewe asook die kleinwild wees, amfibiee en die insekte asook die slange wees.</p> <p>Daar was soveel naguië getrap deur die kole lorries wat op 'n stadium die grondpad gebruik het dat ons gevrees het hul gaan uitgewis word in ons gebied.</p> <p>Met die dat die grondpad nie meer deur die kole lorries gebruik word nie, word die naguië se getalle ook stadig maar seker meer en ons kannie dat dit weer gebeur nie.</p> <p>Weiding bestaan ook uit vlei gebied wat baie verskillende voels huisves bv. Soos in punt a genome is dit die broeiplek vir die blou kraanvoels</p>	<p>registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application,</p>

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			<p>wat bedreig is en vir die blou korhaan wat ook bedreig is asook die vlei uil wat baie skaars is broei hier op Palestina.</p> <p>Dan kom hier voor die krans aasvoels, klomp endemiese spesies, spot lewerik, pienk bek lewerik, uile, sekretarisvoel. Internasionale voels wat hierna toe kom, swartvlerk sprinkaanvoels, oostelike rooipootvalk hierdie en die bogenoemde voels is besig om bedreig te raak.</p> <p>Hier is 'n magdom voellewe soos bv. Kroon kiewiet, bont kiewiet, pieke, suikerbekkes, houtkappers (Bonthoutkapper, rooikophoutkapper, kuifkophoutkapper), draaihals, kortsterflap, laksmanne, bleeksingvalk, blouvalk, breekoparend, dwergarend, lepelaar, skoorsteenbeer, glansibisse, bruinjakalsvoel, witborsvleivalk, vlei uile, gevlekte ooruil, nonnetjie-uil, afrikaanse naguil, rooiwangnaguil tarentale, afrikaanse kwartel, boskorhaan, witvlerkkorhaan, gewone dikkop, piet-my-vrou, diederikkie, meitjie, gewone vleiloerie, oostelike rooipootvalk en die kleinrooivalk kom besoek ons gereeld. Dan die kransvalk grootrooivalk, afrikaanse kwartels, wildemakou, kolgans, bruineend, geelbekeend, bleshoenders, namakwaduifies, witpenswindswel, kleinwindswael, rooiwangmuisvoels, gevlekte, muisvoels, swaelsterktbyvreter, roobekkekelaar, swartbekkekelaar, hoep-hoep, rooineklewerik, rooiruglewerik, witborskraai, swartkraai, witkatlagters, rooiogtiptol, gevlekte lysters, gewone bontrokkies, swartiek, dassievoels,</p>	<p>investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

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			<p>gewone janfrederiks, bosveldstompstertjies, gewone spekvreters, bergwagters, fiskaal vlieevanger, kaapse glassogies, bont kwikkies, gewone kwikkies, gewone koesters, fiskaallaksmen, bokmakerie, bontkroklaksmen, kleinglans spreeu, witgatspreeu, rooivlerkspreeu, lelspreu, huismossies, gewone mossies, gryskopmossie, koringvoel, swartkeelgeelvink, goudgeelvink, rooivink, langsterflap, rooikeelflap, koninggrooibekkie, plystertrooibekkie, swartwangsysie, gewone blousysie, gewone kwartevinkie, rooikopvinkie, geelkanaries, bergkanaries, bergkanaries, swartkopkanaries, klipstreekoppies kom ook hier voor net om 'n paar te noem.</p> <p>Europese byvreter, europese windswael, europese trouphant, rooiborsswael, grootstreepswael, europese swael, europese wielewaal, gryslaksmen, kom besoek on sook gereeld.</p> <p>Dan as dit nie reenseisoen is, is die vlei 'n watervoel paradys met die volgende voels: kemphaan, ringnekstrandkiewiet, rooipootelsie, bontelsie, rietduikers, kleindobbertjies, swartnek dobbertjies, reusereier, rooireier, bloureier, swartkopreier, geelbekwitreier, grootwitreier, klein wit reier, grootswartooievaar, kleinswartooievaar, witoeivaar, oopbekooievaar, hamerkoppe, lepelaars, kopereend, rooibekeend, grootwaterhoender, ringnekstrandkiewiet, krombekstrandloper, kleinstrandloper,</p>	



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			<p>moerastruiter, witblerksterretjies, net om 'n paar te noem.</p> <p>Asook verskeie kleinwood soos die steenbok, duiker, edvark, rooimeerkat, stokstertmeerkat, witstertmuishond, muskeliaatkat, tierboskat, rooiakat, vaalbokskat, maanhaarjakkals, sivet, krimpvarkies, stinkmuishond, gebande muishond, rooikajjals, bakoorkajjals, ystervark, vlakhaas, kolhaas, blou ape, dit is alles wat ons al hier gesien het en daar is rot en muis spesies en vlermuis spesies wat net in die aand uitkom.</p> <p>Die vlei is ook broeiplek vir gewone platannas, borrelvlei paddas, groot brulpaddas, trillersand padda, gorrel skurwepadda, lawaaipadda, kaapse rivierpadda asook die gewone rivierpadda, gewone blikslanertjies en die snorkpaddas.</p> <p>Hier is ook n goeie verskeidenheid van slange soos die poffadder, swart rinhals, groen boomslang, koperkapel of geelslang, skaapstekertjies, oeters se erdslangetjie, gewone eiervreter, gewone wolfslang, gewone slakvreter, molslang, rooilipslang en hier kom ook nou al swart mambas voor om net n paar te noem.</p> <p>Dan het ons nog nie eers by die verskillende akkedisse, spinnekoppe, insekte, skoelappers spesies gekom nie. Dan is dit die natuurlike habitat van magdom verskillende some, plante, grasse.</p> <p>Ons bekommernis is dat as hier gemyn gaan word maak nie saak watter erts nie dat hierdie diere se</p>	

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			<p>natuurlike habitat verwoes en vernietig gaan word.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>The farm Palestina is inhabited by my son and his family, as well as the farm workers and their families.</li> </ul> <p>Palestina is a high-potential arable land farm which provides food security, as well as a grazing farm for cattle and sheep. A nine month intensive foaling system is applied for sheep on this farm.</p> <p>There are four workers' houses which are inhabited by workers and their families.</p> <p>There is also a farm house which is inhabited by my son and his family. There are three stores and a feeding kraal, and an intensive lambing system.</p> <p>It is also the breeding place and grazing veld for blue cranes, which is an endangered species, as well as steenbok which are also endangered species, as well as the Giant Girded Lizard (Cordylus Giganteus).</p> <ul style="list-style-type: none"> <li>No</li> <li>Palestina is a high potential arable land farm which provides food security for the country, and is also a high potential grazing farm which provides beef and mutton for food security. It is also an employer for the community.</li> <li>The following actions need to be taken: <ul style="list-style-type: none"> <li>Upgrading of infrastructure: Upgrading of internal</li> </ul> </li> </ul>	

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			<p>existing roads, and the building of new roads for construction equipment and access to terrain</p> <ul style="list-style-type: none"> <li>○ Electric fencing to prevent access to mining sites by children and livestock</li> <li>○ A tram needs to be appointed which has access to the required knowledge and skills to investigate the impact of mining on the local fauna and flora. Particularly birds are of concern, as the farm is home to many endangered species.</li> <li>● A major concern is safety. There is already so many farm attacks and murders. If mining was to take place here, there would be a large increase in uncontrolled access to the farm, which would be a great concern for our safety. There needs to be a clear plan set up which would explain the security to my son and his family, the workers and their families, and the community. We need clarity about what they would do if theft and farm attacks would increase, since this area is currently spared from large-scale theft.</li> </ul> <p>Water and the destruction of fauna and flora is also a great concern. Water is scarce, so if the boreholes were to be polluted, there would be no clean drinking water for man or beast, which would be a great risk.</p> <p>There needs to be a clear plan set up which would provide certainty to us and the community that there would be no water pollution taking place, since we are completely dependent on the water. We need clarity on what systems would be in</p>	

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			<p>place, and what legal avenues are available to us in the event of the water becoming polluted. The vlei decants in the Renoster river, which means that the Renoster river would also be polluted, and this is one of the few unpolluted rivers in the free state.</p> <p>If the vlei and Grasslands were to be polluted, or if a lot of movement were to take place, or vehicles would be trampling over everything, it would be an endangerment to the bird life, small wild animals, frogs, insects and snakes. There were so many owls hit by coal trucks which used the ground roads at one point, that we feared they would be completely exterminated in the area. Now that the coal trucks no longer use the ground roads, the owl numbers are slowly increasing again, and we cannot allow this to happen again.</p> <p>Grazing is also made up of vlei and grassland areas, which houses many different bird species, as mentioned in point A. The area is breeding ground for the Blue Cranes and Blue Korhaan, which are both endangered, as well as the Vlei Owl, which is very rare, and breed on Palestina. The region is also home to Cape Vultures, many endemic species, Spot Lewerik, Pienk Bek Lewerik, Owls and Secretary Birds</p> <p>The cape vulture, many endemic species, spot lark, pink mouth lark, owl, secretary bird. International birds that comes next, black winged pratincoles, amur falcon and the above birds are going to get threatened. Crown kiewiet, blacksmith</p>	

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			<p>lapwing, sunbird, woodpeckers (pied barbet, barbet, crested barbet), twist neck, fan tailed widowbird, kite; black-shouldered, martial eagle, dwarf arend, spoonbill, glossy ibis, buzzard, pallid, owl lake, spotted eagle owl, western barn owl, African nightjar, rufous-cheeked guinea fowl, African quail, red-crested korhaan, northern black korhaan, ordinary fathead, cuckoo, dideric cuckoo, klaas's cuckoo, burchell's coucal, kestrel; rock, greater kerstel, Muscovy duck, calderon, brown duck, yellowbilled, coot; moorcock, Namaqua doves, alpine swift, little swift, red-faced mousebird, speckled mousebird, swallow, red-billed wood-hoopoe, lapwing, rufous naped, chestnut-backed sparrowlark, pied crow, black crow, south pied babbler, African red-eyed bulbul, groundscraper thrush, African stonechat, black peak, mocking cliff-chat, passerine bird, familiar chat, mountain wheatear, fiscal flycatcher, cape white-eye, pipit; African, common fiscal, bush shrive, brubru, little glamor sparrow, starling, red winged-starling, wattled starling.</p> <p>Ordinary sparrows, Gray-headed sparrow, Wheat feel, Black throat yellow finch, golden yellow Finch, Redpoll, Long star flap, Redcollared widow, king red bekkie, Widowbird red –collared, Waxbill, Ordinary blousysie, Ordinary karteinkie, Red -headed finch, Yellow canary, black throat yellow finch, Bunting.</p> <p>European bee eater, European Windswael, European trou pant, Red breasted swallow,</p>	

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			<p>Greater striped swallow, European swallow, European oriole, Lesser gray shrike, visit us regularly.</p> <p>Ruff, Common ringed plover, Stilt, Avocet, long-tailed cormorant, Reuser egg, Purple heron, Gray heron, Black-headed heron, Yellow –billed, Great egret, small white heron, Large swart stock, Small swart stock, White Stock, Hammerkop, Spoonbills, Copper duck, Rooibek duck, Moorhen, Common ringed plover, Krombek Stint, swamp Rider.</p> <p>Capricorn, Diver, Earth pig, Yellow Mongoose, African mongoose, Black Brush Mongoose, Cat, Cat, caracal, Wildcat, aardwolf, Civet, hedgehogs, Skunk, Mongoose, Red jackal, bat-eared fox, hedgehogs, Cape rabbits, Vervet monkeys, clawed frogs, Bubble Marsh frogs, Big Roar Frogs, Trillersand toad, gargle toad, Frogs</p> <p>Snakes, snakes (cobra), Green tree snake, Cape cobra, Spotted Skaapsteker, ordinary wolfsnake, Ordinary snail eater, Mole snake, Herald snake, Spiders, Insects, butterflies species come and variety of grasses, plants and trees .</p> <p>Our concern is that if mining was to take place here, regardless of what kind of mining was to take place, these animal's natural habitats would be destroyed.</p>	

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Bokka Trust /Gideon and Alida Coetzee	X	29 August 2018	<ul style="list-style-type: none"> <li>• Smarag is 'n hoek weidingspotensiele plaas vir beeste en skape wat weer 'n voedselsekureit vir die omgewing en gemeenskap is. End it is 'n werkskeppende plaas. Dit is ook 'n seisoenale vakansie kamplek, en onspannings area.</li> <li>• Nee.</li> <li>• Smarag is 'n hoe potensiele weidingsplaas wat ook beesvlei asook skaapvleis voorsien vir voedselsekureit. Dit is ook 'n werkskeppende plaas.</li> <li>• Die volgende maatreels moet in plek wees: Die volgende verwante infrastruktuur gaan nodig wees: opgradering van bestaande interne plaaspaai en die bou van nuwe paai vir konstruksievoertuie en toegang na die terrein. Elektriese omheining om te voorkom dat kinders en lewende hawe toegang tot die terein het. Daar moet 'n span aangestel word wat beskik oor die nodige kennis en opleiding om 'n ondersoek te doen oor wat gaan gebeur as daar gemyn word met die fauna en flora van hierdie gebied. Veral 'n persoon met kennis van voels want hier is baie bedreigde spesies.</li> <li>• Ons groot kommer is, is veiligheid. Daar is reeds soveel plaasaanvalle en plaasmoorde en as hier gemyn gaan word gaan daar soveel onbeheerde toegang wees, dat dit 'n</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Beskikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde</p>

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			<p>groot kommer vir ons en die kampeerdere is. Daar moet 'n duidelike plan opgestel word wat die sekuriteit vir ons, my seun en sy gesin, die werkers en hul gesinne en die gemeenskap gaan verduidelik asook wat hul gaan doen as diefstal en plaasaanvalle gaan toeneem omdat hierdie 'n gebied is wat min geraak word deur diefstal.</p> <p>Water en die vernietiging van flora en fauna is die grootste bekommernis. Water is min so as die bogrante besoedel word is hier geen skoon drink water vir enige mens en dier nie wat 'n groot gesondheidsrisiko in hou.</p> <p>Daar moet 'n duidelike plan opgetrek word waar daar aan ons en die gemeenskap die versekering gegee kan word dat hi er geen waterbesoedeling gaan plaasvind nie, ook nie in die Renosterrivier nie want ons is total afhanklik van die water en watter maatreels gebruik gaan word en watter regstappe geneem kan word as hier besoedeling gaan plaasvind.</p> <p>Die waters loop direk 'n die Renosterrivier in en dit is ook ons hoof drinkwater vir die vee.</p> <p>Indien rivierkemp en graskampe besoedel of baie beweging gaan plaasvind of vertrap word deur voertjies en mens voete gaan dit 'n bedreiging vir die voellewe asook die kleinwild wees, amfibiee en die insekte asook die slange wees.</p> <p>Weiding bestaan ook uit grasveldgebied wat baie verkskillende voels huisves BV. Die blou korhaan wat ook bedreig is asook die vlei uil wat baie</p>	<p>Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waarvoor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora,</p>



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			<p>skaars is broei hier op Smarag.</p> <p>Dan kom hier voor die krans aasvoels, klomp endemiese spesies, spot lewerik,</p> <p>pienk bek lewerik, uile, sekretarisvoel internasionale voels wat hierna toe kom, swartvlerk sprinkaanvoels, oostelike rooipootvalk hierdie en die bogenoemde voels is besig om bedreig te</p> <p>raak. Hier is n magdom voellewe soos bv. kroon kiewiet, bont kiewiet, pieke, suikerbekkies, houtkappers (bonthoutkapper, rooikophoutkapper, kuifkophoutkapper), draaihals, kortsterflap, laksmanne, bleeksingvalk, blouvalk, breekoparend, dwergarend, lepelaar, skoorsteenbeer, glansibisse,</p> <p>bruinjakkalsvoel, witborsvleivalk, vlei uile, gevleiae ooruil, nonnetjie-uil, afrikaanse naguil, rooiwangnaguil tarentale, afrikaanse kwartel, boskorhaan, witvlerkkorhaan, gewone dikkop, piet my-vrou, dfederikkie, meitjie, gewone vleiloerie, oostelike rooipootvalk en die kleinrooivalk kom besoek ons gereeld. dan die kransvalk, grootrooivalk, afrikaanse kwartels, wildemakou, kolgans, bruineend, geelbekeend, bleshoenders, namakwaduffies, witpenswindswael, kleinwindswael, rooiwangmuisvoels, gevlekte muisvoels, swaelstertbyvreter, roobekkekelaar, swartbekkakelaar, hoep-hoep, roolneklewerik, rooiruglewerik, witborskraai, swartkraai, witkatlagters, rooiogtiptol, gevlekte lysters,</p>	<p>fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

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			<p>gewone bontrokkies,swartpiek, oassievoels,gewone janfrederiks, bosveldstompstertjies, gewonespekvreters, bergwagters, fisikaal vlieevanger, kaapse glasogies, bont kwikkies, gewone kwikkies^ gewone koesters, fisikaallaksman, bokmakierie, bontroklaksman, kleinglans spreeu, witgatspreeu, rooivlerkspreeu, lelspreeu, huismossies, gewone mossies, gryskopmossie, koringvoel, swartkeelgeelvink, goudgeelvink, rooivink,langsterflap, rooikeelflap, koniwgrootbekke, pylstertrooibekkie, swartwangsysie, gewone blousysie, gewone kwartevinkie, rooikopvinke, geelkanaries, bergkanaries, swartkopkanaries, klipstreepkoppie kom ook hier voor net om n paar te noem .</p> <p>Eurpese byvreter, europese windswael, europesetroupant, rooiborsswael, grootstreepswael, europese swael, europese wielewaal, gryslaksman, bont nuwejaarsvoel, gevlekte koekkoek en die paradysvlieevanger kom besoek ons ook gereeld.</p> <p>Dan by die Renosterrivier, is dit watervoel paradys met die volgende voels: kempaan, ringnekstrandkiewiet, rooipootelsie, bontelsie, rietduikers, kleindobbertjies, swartnek dobbertjies, reusereier, rooireier, bloureier, swartkopreier, geelbekwitreier, grootwttreier, klein wit reier, grootswartooievaar, kleinswartooievaar, witoeivaar, oopbekooievaar, hamerkoppe, lepelaars, kopereend, rooibekeend,</p>	

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			<p>grootwaterhoender, ringnekstrandkiewiet, krombekstrandloper, moerasruiter, groenpootruiter, bosruiter, gewone ruiters, witblerksterretjies, reusevisvangers, bontvisvanger, kuifkopvisvanger, bruinkopvisvanger, netom 'n paar te noem.</p> <p>Dit is ook verskeie kleinwild soos die steenbok, duiker, koedoes, erdvark, rooimeerkat, stokstertmeerkat, witstertmuishond, muskeuaatkat, tierboskat, rooikat, vaalboskat, maawhaarjakkals, stvet, krimpvarkies, stinkmuishond, gebande muishond, rooijakkals, bakoorjakkals, ystervark, vlakhaas, kolhaas, blou ape se natuurlike habitat.</p> <p>Het in 2017 vir die eerste keer meer as een en 'n halwe dekade die vaal ribokke weer gesien wat ons ongelooflik opgewonde maak, en as daar gemyn gaan word gaan hul weer net gejag word asook die trek wild soos die koedoes en waterbokke se syfers word ook al hoe minder end it is kommerwekkend soos dir reeds is hoe gan dit nie wees as daar gemyn gaan word nie. Die diere se natuurlike habitat word vernietig.</p> <p>Daar is rot en muis spesies en vlermuis spesies wat net in die aand uitkom. Die rivierkamp is ook broeiplek vir gewone platannas, borrelvlei paddas, groot brulpaddas, trillersand padda, gorrel skurwepadda, lawaaipadda, kaapse rivierpadda asook die gewone rivierpadda, gewone blikslanertjies en die snorkpaddas op 'n paar te</p>	

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			<p>noem.</p> <p>Hier is ook n goeie verskeidenheid van slange soos die poffadder, swart rinkhals, groen boomslang, koperkapel of geelslang, skaapstekertjies, oeters se erdslangetjie, gewone eiervreter, gewone wolfslang, gewone slakvreter, molslang, rooilipslang en hier kom ook nou al swart mambas voor om net n paar te noem.</p> <p>Dan het ons nog nie eers by die verskillende akkedisse, spinnekoppe, insekte, skoelappers spesies gekom nie e nook nie eers by die bome, verskillende grassoorte, plantsoorte daar is nie.</p> <p>Ons bekommernis is dat as hier gemyn gaan word maak nie saak watter erts nie dat hierdie diere se natuurlike habitat verwoes en vernietig gaan word.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Smarag is a high potential grazing farm for cattle and sheep that is a food security for the environment and community, and farm also creates employment.</li> </ul> <p>This is also a seasonal holiday camping, and recreational facility.</p> <ul style="list-style-type: none"> <li>• No.</li> <li>• Smarag is a high potential grazing farm which also supplies beef, lamb and mutton for nutrition for surrounding areas. This farm is also a job creation farm.</li> </ul>	

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			<ul style="list-style-type: none"> <li>• The following measures need to be implemented:            The following related infrastructure will be required:            Upgrading of existing farm roads and building of new roads for construction vehicles and access to the area.            Electric fencing to avoid that campers, children and livestock will not have access to the area.            A team should be established that has the relevant knowledge and training to investigate what would happen to fauna and flora in the area should mining occur, especially a person with knowledge of birds because there are many endangered species.</li> <li>• Our main concern is safety and security.            There are already so many farm attacks and farm murders and should mining occur, there is loss of access control that it will become a major concern for us and campers. A detailed plan should be implemented that would inform us, the campers and the local community should crime increase in the area considering that this area is not generally affected by theft.            Water and destruction of fauna and flora is a great concern. Water is scarce and should contamination of boreholes occur, there will be no clean drinking water for both human and animal consumption, which has health risk.</li> </ul>	

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			<p>A clear plan should be drawn up where we and the community are assured that no water pollution will occur, as well as the Renoster river as we are totally reliant on the water, and what measures will be implemented and what legal action could be taken in the case of contamination.</p> <p>The water flows directly into the Renoster river and is also the main source of water for livestock. Should river camps and grass camps be polluted or if a lot of activity occurs and trampled by vehicles and people it will be threatening to the bird-life and small game, amphibian, and insects as well as snakes .</p> <p>Grazing also consists of grasslands which also houses a variety of birds eg. Blue crane that is also endangered as well as the scarce mating of the marsh owl that occurs here on Smarag.</p> <p>Then there are also Cape Vultures, a variety of endemic species, spot lark, pink mouth lark, owl, secretary bird. International birds that comes next, black winged pratincoles, amur falcon and the above birds are going to get threatened. Crown kiewiet, blacksmith lapwing, sunbird, woodpeckers (pied barbet, barbet, crested barbet), twist neck, fan tailed widowbird, kite; black-shouldered, martial eagle, dwarf arend, spoonbill, glossy ibis, buzzard, pallid, owl lake, spotted eagle owl, western barn owl, African nightjar, rufous-cheeked guinea fowl, African quail, red-crested korhaan, northern black korhaan, ordinary fathead, cuckoo, dideric cuckoo, klaas's cuckoo, burchell's coucal,</p>	

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			<p>kestrel; rock, greater kerstel, Muscovy duck, calderon, brown duck, yellowbilled, coot; moorcock, Namaqua doves, alpine swift, little swift, red-faced mousebird, speckled mousebird, swallow, red-billed wood-hoopoe, lapwing, rufous naped, chestnut-backed sparrowlark, pied crow, black crow, south pied babbler, African red-eyed bulbul, groundscraper thrush, African stonechat, black peak, mocking cliff-chat, passerine bird, familiar chat, mountain wheatear, fiscal flycatcher, cape white-eye, pipit, African, common fiscal, bush shrive, brubru, little glamor sparrow, starling, red winged-starling, wattled starling.</p> <p>Ordinary sparrows, Gray-headed sparrow, Wheat feel, Black throat yellow finch, golden yellow Finch, Redpoll, Long star flap, Redcollared widow, king red bekkie, Widowbird red –collared, Waxbill, Ordinary blousysie, Ordinary kartevinkie, Red - headed finch, Yellow canary, black throat yellow finch, Bunting.</p> <p>European bee eater, European Windswael, European troupant, Red breasted swallow, Greater striped swallow, European swallow, European oriole, Lesser gray shrike, visit us regularly.</p> <p>Then at the Renoster Rivier it is a water bird paradise with the following birds: Ruff, common ringed plover, black-winged stilt, pied avocet, reed cormorant, little grebe, black-necked grebe, Goliath heron, purple heron, grey heron, black-headed heron, intermediate egret, great egret,</p>	

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			<p>cattle egret, black stork, Abdim's stork, white stork, African openbill, hamerkop, Eurasian spoonbill, South African shelduck, red-billed teal, common moorhen, common ringed plover, curlew sandpiper, little stint, marsh sandpiper, Witblerksterretjies, to name a few.</p> <p>There is also a variety of small game such as Steinbuck, duiker, kudus, aardvark, yellow mongoose, meerkat, white-tailed mongoose, cape genet, serval, caracal, African wildcat, aardwolf, sivet, Southern African hedgehog, striped polecat, banded mongoose, black-backed jackal, bat-eared fox, Cape porcupine, Cape hare, Kolhaas, marmoset, rock hyrax, Vervet's natural habitat.</p> <p>In 2017, for the first time in one and a half decade we saw a Grey Rhebok and this got us very excited and should mining happen, they will again be hunted, migrating game such as Kudus and Waterbuck numbers will decline and that is a major concern to us. The animal's natural habitat will be destroyed by mining.</p> <p>There are vermin and bat species that only come out at night. The river camp also is also a breeding ground for the normal Clawed Frog. Bubbling Kassina, Giant Bullfrog, Tremelo Sand Frog, gorrel skurwepadda, Raucous Toad, Cape River Frog, Common River Frog, Common Dainty Frog, Snorkpaddas, toname a few.</p> <p>Here are also a great variety of snake species such as the Puffadder, Viper Snake, Ring-necked</p>	



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			<p>Spitting Cobra, Tree Snake, Cape Cobra, Skaapstekertjies,</p> <p>Peter's worm Snake, Common egg eater, Common Wolf Snake, Common Slug-eater, Mole Snake, Red lipped snake, to name a few.</p> <p>Then we have not even touched on the variety of lizard, spider, insect, and butterfly species and the same with trees, grass types or plant types there are.</p> <p>Our concern is that should mining occur here, regardless of the commodity, it will destroy these animal's natural habitat.</p>	
<p>J A P Mocke Trust/Petri Mocke/Kareedrie Boerdery</p>	<p>X</p>	<p>30 August 2018</p>	<ul style="list-style-type: none"> <li>• Kareedrie Boerdery (Pty) Ltd – Aktiewe kommersieele boerdery.</li> <li>• Ons wil hiermee registreer as 'n geïnteresseerd party van hierdie projek omdat enige myn bedrywighede wat op, of rondom ons grond plaasvind, geweldige impakte gaan inhou vir ons huidige en toekomstige bedrywighede asook vir die langtermyn welvaart van die omgewig en die mense, diere en plante wat daarin woon.</li> </ul> <p>Ons vra dus om in kennis gestel te word van enige verwikkelinge wat plaasvind ten opsigte van die projek en op hoogte gehou te word van enige besluite wat geneem word.</p> <ul style="list-style-type: none"> <li>• Ons is die grondeienaars asook wettige bewoners van die grond in die gebied waarop die aansoek van toepassing is, asook van grond aangrensend</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> </ul>

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			<p>aan die gebied waarop die aansoek van toepassing is.</p> <ul style="list-style-type: none"> <li>Ja hier is 'n groot gemeenskap van belanghebbende partye in die gebied wat insluit boere en plaaswerkers asook hulle famailies.</li> </ul> <p>Kontak besonderhede van lede van die gemeenskap:</p> <p>Gideon Coetzee - 082 773 4714          Attie Danhauser - 082 5763 995          Jan van Vuuren – 082 457 2051          Jurie Enslin – 072 342 4546          Zacharia Koki – 072 272 5889</p> <ul style="list-style-type: none"> <li>Nie waarvan ons bewus is nie.</li> <li>Kontak besonderhede van ander B &amp; GP's wat in kennis gestel moet word:</li> </ul> <p>Gideon Coetzee - 082 773 4714          Attie Danhauser - 082 576 3995          Jan van Vuuren – 082 457 2051          Jurie Enslin – 072 342 4546</p> <ul style="list-style-type: none"> <li>Die grond word huldiglik gebruik vir die produksie van beeste, skape, boerbokke, donkies wild en aanplant gewasse. Dus word daar beide staat gemaak op die natuurlike omgewig vir beweiding, maar ook vir die gesondheid van die grond en water vir aanplant aktiwiteite.</li> </ul> <p>Daar word ook 'n wildslodge op die grond bestuur wat staat maak op die skoonheid van die natuur om mense te lok en sodoende inkomste genereer.</p>	<ul style="list-style-type: none"> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p><b>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners</b></p>

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			<p>Alle operasies wat op die grond plassvind maak ten volle staat op gesonde en skoon groundwater om voort te gaan.</p> <p>Die omgewing is habitat tot onder andere die volgende sensitiewe spesies:</p> <p>Bloukraanvoëls (<i>Grun paradise</i>)        sekretarisvoëls (<i>Sagittarius serpentarius</i>)        Muskeljaatkatte (<i>Genetta tigrina</i>)        “Black-footed cat” (<i>Felis nigripes</i>)</p> <p>Hierdie spesies sal direk beïnvloed word deur enige myn bedrywighede wat in die omgewing plaasvind.</p> <ul style="list-style-type: none"> <li>Die Vredefort Koepel is ‘n UNESCO wêreld erfenis gebied en is die grootste en oudste meteorite impak krater ter wêreld. Ons grond vorm deel van die krater en is aangrensend tot die deel van die krater wat beskerm word.  <a href="https://whc.unesco.org/en/list/1162/">https://whc.unesco.org/en/list/1162/</a></li> </ul> <p>Daar is ook klip sirkel structure op en rondom die grond wat deur ou inwoners van die land opgerig is, en al deur WITS bestudeer is vir hulle waarde en bydrae tot die prentjie van die geskiedenis van mense in Suid-Afrika. Hierdie structure kan onherroepbaar versteur of vernietig word deur enige myn bedrywighede in die omgewing.  <a href="https://www.ascieden.nl/Pdf/ArticleSadr.pdf">https://www.ascieden.nl/Pdf/ArticleSadr.pdf</a>  <a href="http://www.sahra.org.za/sahris/sites/default/files/additionaldocs/Permits%20report_sadr.pdf">http://www.sahra.org.za/sahris/sites/default/files/additionaldocs/Permits%20report_sadr.pdf</a></p>	<p>affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>Date and venue of the public meeting.</li> <li>Availability of the final BAR and EMPR.</li> <li>Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in</p>

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			<ul style="list-style-type: none"> <li>• Indien myn bedrywighede voortgaan in die gebied voel ons dit sal 'n negatiewe uitwerking hê in die volgende opsigte:               <ul style="list-style-type: none"> <li>○ Landbou bedrywighede sal seergemaak word deur besoedeling van die omgewing en vermindering van vrugbare produktiewe grond. Nie net die boere en hul families wat hierdie grond bewerk en onderhou sal daar onder lei nie, maar ook hulle werknemers en hul families wat afhanklik is van die landbou sector vir inkomste, akkomodasie en 'n toekoms.</li> <li>○ Die natuur sal beskadig word en talle plant en dier spesies se kans op oorlewing drasties minder maak as wat dit al klaar is.</li> <li>○ Besoedeling van die Renoster rivier wat sal bydrae tot die al reeds besoedelde Vaal rivier waarin dit uitloop.</li> </ul> </li> <li>• Om vas te stel wat die volle impak van myn bedrywighede in die omgewing gaan wees gaan daar, onder andere, na die volgende gekyk moet word:               <ul style="list-style-type: none"> <li>○ Hoeveel is die jaarlikse bydrae tot voedsel produksie van die boere in die omgewing.</li> <li>○ Wat is die bedrag belasting wat deur hierdie boere gegenireer word.</li> <li>○ Hoeveel werknemers gaan afgedank moet word.</li> <li>○ Hoeveel habitat gaan verloor word.</li> <li>○ Hoeveel spesies gaan hierdeur beïnvloed word.</li> </ul> </li> </ul>	<p>the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

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			<ul style="list-style-type: none"> <li>○ Wat is die langtermyn effek op die omliggende grond en water.</li> <li>○ Wie word aanspreeklik gehou indien hervestiging van die omgewing nie plaasvind nie.</li> <li>• As geskiedenis van die afgelope 20 jaar enige aanduiding is, is daar geen twyfel by ons nie dat myn bedrywighede in die omgewing tot gevolg sal hê dat eerlike, hardwerkende burgers van die land sonder heenkome gelaat gaan word, die natuurlike omgewing onherstelbaar beskadig gaan word en moontlik sal bydrae tot die uitsterwing van talle spesies, alles net om 'n paar amptenare se sakke vol te maak. Hier volg 'n lys van artikels om ons stelling te ondersteun:               <ul style="list-style-type: none"> <li>○ <a href="http://jamaica-gleaner.com/gleaner/20101129/int/int3.html">http://jamaica-gleaner.com/gleaner/20101129/int/int3.html</a></li> <li>○ <a href="https://www.news24.com/SouthAfrica/News/Khulubuse-Zuma-unaware-of-Aurora-mismanagement-20150917">https://www.news24.com/SouthAfrica/News/Khulubuse-Zuma-unaware-of-Aurora-mismanagement-20150917</a></li> <li>○ <a href="https://www.groundup.org.za/article/are-mining-companies-repairing-damage-they-cause/">https://www.groundup.org.za/article/are-mining-companies-repairing-damage-they-cause/</a></li> <li>○ <a href="http://www.corruptionwatch.org.za/sa-mining-at-high-risk-for-corruption/">http://www.corruptionwatch.org.za/sa-mining-at-high-risk-for-corruption/</a></li> </ul> </li> <li>• Ons algemene gevoel oor hierdie projek is dat dit meer skade gaan aarig as wat dit gaan bydra tot die ekonomie. In 'n tyd waar ons nie eens kan seker wees oor die sekuriteit van ons grond of lewens nie, dra hierdie projek by tot baie stress en onsekerheid in die gemeenskap oor die welvaart van ons land, die natuur en ons toekoms. Die feit</li> </ul>	

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			<p>dat daar soveel gevalle van wanbestuur in die myn sektor voorkom, sonder dat enige iemand verantwoordelik gehou word is voldoende rede om bekommerd te wees dat hierdie net nog so'n geval sal wees.</p> <p>ENGLISH TRANSLATION</p> <ul style="list-style-type: none"> <li>• Kareedrie Boedery (Pty) Ltd – Active Commercial Agency/Farming.</li> <li>• We would like to register as an I&amp;AP for the following project as the mining operations are taking place on or around our property, and will have great impacts on our present and future operations as well as the long-term prosperity of the environment and the human beings and plants therein.</li> </ul> <p>We would therefore like to ask to be informed of any major developments regarding this project and to be kept informed of any decisions taken.</p> <ul style="list-style-type: none"> <li>• We are the landowners as well as the legal occupants of the property in the area to the application and the neighbouring area of the application</li> <li>• Yes, we have a large community of interested parties in the area. They include farmers, farm workers and their families. Contact details of members of the community:  Gideon Coetzee - 082 773 4714</li> </ul>	

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			<p>Attie Danhauser - 082 5763 995            Jan van Vuuren – 082 457 2051            Jurie Enslin – 072 342 4546            Zacharia Koki – 072 272 5889</p> <ul style="list-style-type: none"> <li>• The land is currently used for the production of cattle, sheep, boerbokke, donkeys (wild and cultivation assistance). Therefore, we rely on them for both natural environment, for grazing and benefit of land and water production.</li> <li>• We also have a game lodge on the property that relies on the wellbeing of the environment to lure or entice guests to come to the loge and create revenue. All operations on the land rely on fresh and clear water. The environment includes or inhabits sensitive species such as:               <ul style="list-style-type: none"> <li>○ Bloukraanvoels (<i>Grun paradise</i>)</li> <li>○ Sekretarisvoels (<i>Sagittarius serpentarius</i>)</li> <li>○ Muskeljaatkatte (<i>Genetta tigrina</i>)</li> <li>○ “Black-footed cat” (<i>Felis nigripes</i>)</li> </ul> </li> </ul> <p>These species will be directly influenced or affected by mine activities.</p> <ul style="list-style-type: none"> <li>• The Vredefort Dome is a UNESCO world heritage site and is the largest meteorite impact crater in the world. Our land forms part of the crater and is neighbouring a section of the crater, which is protected.</li> </ul> <p>There are also rock structure formation on and around the property that were erected by the native occupants of the property and was inspected by WITS for the value and contribution to the heritage of the people of South Africa.</p>	

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			<p>These structures will irreparably be affected by mine activity in the area.</p> <ul style="list-style-type: none"> <li>• We are of the opinion that, should mine activity commence in the area, it will have a negative impact in regard of the following:               <ul style="list-style-type: none"> <li>○ Agricultural operations will be endangered by the pollution from mining operations. As a result, the fruitful production of the area will be reduced.</li> </ul> </li> </ul> <p>It is not only the farmers and their families who will be suffer but also the farmworkers and their families who are dependent on the agricultural sector, the income, housing and future.</p> <ul style="list-style-type: none"> <li>○ The environment as well as copious plants and wildlife species will be affected and their chances of survival will be drastically reduced.</li> <li>○ The pollution of the Renoster River (which feeds into the Vaal River) will contribute to the already polluted Vaal River.</li> </ul> <li>• To establish the full impact of mine operations the area amongst others, the following will have to be considered:       <ul style="list-style-type: none"> <li>○ The annual contribution of the food production of farmers in the area.</li> <li>○ The amount of VAT that the farmers generate.</li> <li>○ The amount of farmworkers that will be retrenched.</li> <li>○ How much of the habitat will be lost.</li> <li>○ How many species will be affected.</li> <li>○ What are the long-term effects for ground and water in the surrounding areas.</li> </ul> </li>	



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			<ul style="list-style-type: none"> <li>○ Who will be liable should the rehabilitation of the area not happen.</li> <li>● If the last 20 years shows anything, you will see that mine operations will have the implications that honest, hardworking, citizens of the country will be destitute, the area will be damaged beyond repair and will possibly contribute to the extinction copious species all to line the pockets of a few ministers. Here follows a list of articles to support our claims:               <ul style="list-style-type: none"> <li>○ <a href="http://jamaica-gleaner.com/gleaner/20101129/int/int3.html">http://jamaica-gleaner.com/gleaner/20101129/int/int3.html</a></li> <li>○ <a href="https://www.news24.com/SouthAfrica/News/Khulubuse-Zuma-unaware-of-Aurora-mismanagement-20150917">https://www.news24.com/SouthAfrica/News/Khulubuse-Zuma-unaware-of-Aurora-mismanagement-20150917</a></li> <li>○ <a href="https://www.groundup.org.za/article/are-mining-companies-repairing-damage-they-cause/">https://www.groundup.org.za/article/are-mining-companies-repairing-damage-they-cause/</a></li> <li>○ <a href="http://www.corruptionwatch.org.za/sa-mining-at-high-risk-for-corruption/">http://www.corruptionwatch.org.za/sa-mining-at-high-risk-for-corruption/</a></li> </ul> </li> <li>● Our general feeling about this project is that it will do more harm than what it will contribute to economy. In a time where we have no surety of our land or lives, this project contributes a lot of stress and uncertainty in the community regarding the wellbeing of our country, environment and future. The fact that there are so many mismanaged mine operations in the mining sector, without anyone held responsible/accountable/liable is reason enough to be concerned that this will be just another one of those cases.</li> </ul>	

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Rademan Johanna Susanna Florentina	X	31 August 2018	<ul style="list-style-type: none"> <li>• Petri Mocke (072 368 0456) huur my grond vir produckie. Die kennishewings wat op gesit word is swak en ek kan dit glad nie lees nie.</li> <li>• Landbou produksie in die omgewing is belangrik tot die betaan van mense in die omgewing.</li> </ul> <p>Werks geleenthede word in gedrang geplaas met die aansoek 2 groot riviere loop deur die gebied wat die gemeenskap negatief sal afekteer indien hier gemyn word. Die stole wat gegrou wil word kan 'n groot negatiewe impak in die area se natuurlike plante groei he.</p> <ul style="list-style-type: none"> <li>• Die koepel erfines gebied is aangrensend teen die area van die aansoek.</li> <li>• Werks geleenthede wat verlore sal gaan</li> </ul> <p>Landbou produksie en voedsel sekuriteit sal negatief geraak word</p> <p>Agri-toerisme sal afneem</p> <p>Veiligheid op please is n groot risiko</p> <p>Ondergrondse water wat besoedel word</p> <ul style="list-style-type: none"> <li>• Geen myn prospektering ni.</li> <li>• Ja, al die bogenoemde punte.</li> <li>• Geen prospektering nie asb. Die kennisgewings was swak en het weggewaai of omgeval. Die lyste van plase wat julle die prospektering wil doen is onvolledig.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffecteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Beskikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde</p>

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			<p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Petri Mocke (072 368 0465) rents my property for production. The notices are poorly made and illegible.</li> <li>• Agricultural production is vital to the community's survival. The mining operations will affect agricultural production and place farmers' job opportunities in jeopardy.</li> </ul> <p>Two large rivers run through the area. Mining operations can potentially pollute the river systems, which happen to be a major water supply in the area. Therefore, the community will be affected in a negative manner should mining commence.</p> <p>The trenches that will be dug could have a huge impact on the areas natural vegetation.</p> <ul style="list-style-type: none"> <li>• The dome heritage area is a neighbour to the application area.</li> <li>• Job opportunities will be lost. Agricultural production surely will be affected negatively. Agri-tourism will decline. Safety in the farms will be reduced and underground water will be polluted.</li> <li>• No mine prospecting.</li> <li>• Yes, all the above mentioned.</li> <li>• No prospecting please. Notices were of poor quality and blew away or fell over. List of farms detailing the area where the applicant wants to</li> </ul>	<p>Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora,</p>

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			<p>prospect were incomplete.</p>	<p>fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Hannie Le Roux Trust	X		Contact details could not be sourced.	
Daniel Francois Lamprecht	X		Contact details could not be sourced.	
Jaco Cronje Familie Trust	X		Contact details could not be sourced.	

I&AP	Consulted	Date comments received	Comment received	Response issued
Jomarla Familie Trust	X		Contact details could not be sourced.	
Christoffel Carolus Bergh	X		No comment received to date.	
Andries Jacobus Roets Coetzee	X		No comment received to date.	
Maria Louisa Van Wyk	X		No comment received to date.	
Straightprops 18/Dawid Senekal Ing/D.J Senekal	X	23 August 2018 27 August 2018	<p>APPLICATION FOR PROSPECTING RIGHTS FOR GOLD, SILVER, COAL AND OTHER MINERALS ON VARIOUS FARMS WITHIN THE VREDEFORT MAGISTERIAL DISTRICT (VREDEFORT WEST EXT PROSPECTING RIGHT PROJECT) NEAR PARYS IN THE FREE STATE PROVINCE</p> <p>We refer to the above-mentioned matter in which we represent Straightprops 18 (Pty) Ltd the owner as well as the other occupiers of the Remainder and Portion 1 of the farm Baltespoort 998, district Vredefort , Free State Province.</p> <p>We address you on instructions of our clients and herewith inform you that the concept of consultation means at the very least:</p> <ol style="list-style-type: none"> <li>1. Firstly that interested and affected parties will be provided with efficient information in order to comment meaningfully and in an informed manner on the proposed activities; and</li> <li>2. Secondly, the deliberate getting together of more</li> </ol>	<p>Good day,</p> <p>Your correspondence on the 22nd and 27th August 2018 refers:</p> <p>As requested, please find herewith attached the following documents:</p> <ul style="list-style-type: none"> <li>• The full application as lodged by the Applicant to the Department of Mineral Resources.</li> <li>• Notification by the DMR to the Applicant of the acceptance of the application for a Prospecting Right.</li> <li>• Acknowledgement of the receipt of an application for Environmental Authorisation.</li> <li>• The written notification directed to the Applicant by the DMR, directing the Applicant to consult with landowners and lawful occupiers of the properties concerned and any other affected party.</li> <li>• A copy of the Applicant's Prospecting Work</li> </ul>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>than one person or party in a situation of conferring with each other, were minds are applied to way and consider together the pros and cons of a matter by discussion or debate.</p> <p>In order to allow our client an opportunity to comment meaningfully on the process that you have followed hereto, we require from you copies of all documents including, but not limited to the documents set out below which might support your client's application for a valid and enforceable prospecting right:</p> <ol style="list-style-type: none"> <li>1. The full application as lodged by White Rivers Exploration (Pty) Ltd ("the applicant") to the Department of Mineral Regulation.</li> <li>2. Notification by the DMR to the applicant of the acceptance of the application for prospecting rights as contemplated in Section 16(4)(a) and (b) of the MPRDA.</li> <li>3. The written notification directed to the applicant by the DMR, directing the applicant to consult with the land owners and lawful occupiers of the properties concerned and any other affected party as contemplated in Section 16(4)(b) of the MPRDA.</li> <li>4. All correspondence directed by the applicant to the Regional Manager of the DMR regarding the submission of the reports of the consultation process (if indeed at this stage correspondence of this nature exists).</li> <li>5. In terms of Section 16 as read with Section 17(1)</li> </ol>	<p>Programme.</p> <ul style="list-style-type: none"> <li>• Details of the minerals and quantities the Applicant intends to remove during prospecting operations.</li> <li>• Advertisements public in a Local Newspaper circulated in the relevant area.</li> <li>• Duly signed Shareholders Agreements.</li> <li>• Share Certificates and Shareholders Registers.</li> <li>• Memorandum of Association of the Applicant.</li> <li>• Invitation to I&amp;APs to participate in the Public Participation Process.</li> </ul> <p>The Public Participation Process commenced on the 27th July 2018 with an initial notification and call to register period ending on the 31st August 2018. Initial notification was given in the following manner:</p> <ul style="list-style-type: none"> <li>• Registered letters, faxes and e-mails.</li> <li>• Background Information Document.</li> <li>• Newspaper advertisements placed in The Free State Weekly and Dumelang News.</li> <li>• Placement of A3 posters at 5 local gathering places within and around the application area.</li> <li>• Placement of 30 correx board site notices along and within the perimeter of the application area.</li> </ul>

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			<p>of the MPRDA, our clients are entitled to be informed as to all or most of the following for the purposes of any meaningful comment or objection to the granting of the prospecting right:</p> <p>5.1 A copy of the applicant's prospecting work programme as should be presented to interested and affected parties during the consultation process;</p> <p>5.2 Details with documentary proof of the applicant's financial and technical competence to ensure that rehabilitation is affected;</p> <p>5.3 Details of the minerals and quantities the applicant intends to remove during the prospecting operations;</p> <p>5.4 All and any notices, publications or advertisements including those published in a Gazette, Local or National News Paper circulated in the relevant area or that was put on display any court.</p> <p>5.5 The draft basic assessment report that stands to be submitted by the applicant to the relevant Authorities;</p> <p>5.6 The invitation to our clients to participate in a public participation process as contemplated in Regulation 41 of the EIA Regulation, 2014;</p> <p>5.7 All documents submitted by the applicant to the DMR – Regional Manager regarding the applicants compliance with the object referred to in Section 2(d) of the MPRDA including but not</p>	<p>Your concerns regarding potential harm to the environment as a result of the proposed invasive prospecting activities (excavation of 2 trenches) are well noted. Appropriate mitigation measures for the identified impacts will be proposed and included in the Basic Assessment Report (BAR) and Environmental Management Programme (EMPR) for this project. The draft BAR and EMPR will be submitted to the DMR and other relevant Authorities on the 18th September 2018. I&amp;APs will be sent notification regarding the availability of this report and will be provided the opportunity to peruse and provide comment for a period of 30 days from the 18th September 2018 to the 18th October 2018. During this public review period, an Open Day will be held to present the findings of the Basic Assessment to the public. A report on the results of consultation with Interested and Affected Parties (Comments and Responses Report) will be included as an appendix to the draft BAR and EMPR to be submitted to the DMR on the 18th September 2018. Correspondence will be sent to the Department notifying them of the availability of this report.</p> <p>Kindly note that this is an application for prospecting and not mining. If the Prospecting Right is granted, it will not provide the required authorisation for mining activities. As such, any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any further questions in this regard, please do not hesitate to contact me.</p>

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			<p>limited to:</p> <ul style="list-style-type: none"> <li>5.7.1 Duly signed Shareholders Agreements;</li> <li>5.7.2 Share Certificates and Shareholder Registers;</li> <li>5.7.3 Articles of Memorandum of Association of the applicant;</li> <li>5.7.4 Details relating to funding and</li> <li>5.7.5 Any other agreements or documents relating to the agreement.</li> </ul> <p>We place on record that the potential harm to the environment manifests in the likely impact which the applicant's prospecting and future mining activities will have on:</p> <ul style="list-style-type: none"> <li>1. The reduction of historical and current economic activity and the inevitable loss of employment positions;</li> <li>2. Noise and dust pollution;</li> <li>3. The pollution of surface and ground water including irrigation and drinking water;</li> <li>4. The negative impact of property values;</li> <li>5. The potential reduction in Agricultural Crop Production which support foodstuff, provision for Local Communities.</li> </ul> <p>Under the circumstances, the Minister, based on current information, would be obliged to refuse the application for a prospecting right as it cannot be contended that the</p>	



I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>applicant meets all the requirements of Section 17(1) of the MPRDA.</p> <p>In order to give our client comfort that your client, the applicant, is in a position to comply with the provisions of Section 17(1)(a) of the MPRDA. We look forward to receiving your client's audit balance sheets for the period 2015 to date.</p> <p>We confirm that our client's rights are reserved.</p> <p>We are also sending a copy of this letters to the Regional Manager of the DMR (Welkom).</p>	
Bar Trust/Barrie and Letitie Coetzee	X	27 August 2018	<ul style="list-style-type: none"> <li>• Ja, ek is die grondeienaar.</li> <li>• Hoe potensiële lande mielies en sonneblom kweek, word voedselveiligheid.</li> <li>• Waterbesoedeling grond sputtering word benadeel veiligheid.</li> <li>• Geen mynbou en prospekteer mag en moet uitgestel word nie.</li> </ul> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Yes, I am the landowner.</li> <li>• This is a high potential land and mealies and sunflower arw grown here, and provide food safety.</li> <li>• No mining and prospecting may and must be done.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Beskikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna,</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>(I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application,</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Advidata Trading 140 Cc	X		No comment received to date.	
Pieter Willem Hattingh	X		Contact details could not be sourced.	
Abilia Trading 58	X		No comment received to date.	
Allem Brothers (Pty) Ltd/ Cedarland Farms (Pty) Ltd/ Miracle Farms (Pty) Ltd/	X	30 August 2018	To Whom It May Concern, Herewith for your information. Kind Regards Mr Laurence Allem completed the I&AP registration form	Good day, Thank you for completing the Interested and Affected Party registration form. Kindly note that at this stage it is not known if mining is in

I&AP	Consulted	Date comments received	Comment received	Response issued
Laurence Allem			<p>and provided the following comments:</p> <ul style="list-style-type: none"> <li>• Represent owner.</li> <li>• All other landowners/occupants in the designated should be notified of the project. Same applies to anyone in areas around the above area.</li> <li>• Description of receiving environment: Arable farming. Livestock farming. Game farming. Natural vegetation. Infrastructure. Sensitive fauna and flora.</li> <li>• Land developments within application area: Possible expansion and addition to current activities.</li> <li>• Cultural or heritage features: World Heritage Site "Vredefort Koepel".</li> <li>• Allow area to remain free if any form of mining.</li> <li>• Effect on current activities, employment, animal, bird and insect life.</li> <li>• More time if required to consider and understand the full impact of what is proposed. Reserve the right to appoint other or additional representative.</li> </ul>	<p>the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>Specialist studies (Ecology (flora and fauna), Wetlands, Palaeontology and Heritage) have been commissioned for this project in order to identify sensitivities within the application area. Any sensitive features identified will be included and assessed in the Basic Assessment Report and Environmental Management Programme, and appropriate mitigation measures will be proposed.</p> <p>Your comment that the Vredefort Dome World Heritage Site occurs within the surrounds of the proposed prospecting area is noted. We are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. The farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone. As such, the Vredefort Dome World Heritage Site will not be impacted upon by the proposed prospecting activities.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Chris Reinecke/ Chris Reinecke Trust	X	29 August 2018	<p>Dear Ms Siwendu,</p> <p>Please find attached the registration form to register Chris Reinecke Trust as an affected party</p> <p>Yours Sincerely</p> <p>Dr CF Reinecke</p>	<p>Good day,</p> <p>This correspondence bears reference to the registration forms you submitted as both the Chairperson of the Free State Dome Landowners Association and an owner of the farm Farm Maugwynheg 1136 Portion 0(RE) within the application area.</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<ul style="list-style-type: none"> <li>• Owner of the property Maugwynhec 1136.</li> <li>• Chris Reinecke Trust is an affected landowner and also own land adjacent to the proposed prospecting area. The farms adjacent to the area are Ypres, Lelieshoek and Leeuwkop.</li> <li>• A farming community exists within the application area.</li> <li>• There are two bodies that represent the Vredefort Dome World Heritage Site. Free State Dome Landowners Association and North West Dome Landowners Association.</li> <li>• The Department of Environmental Affairs should be notified of the application regarding the Vredefort Dome.</li> <li>• The proposed area is adjacent to the Vredefort Dome World Heritage Site and the Vaal River. Groundwater runoff from the proposed site is into the Dome and the Vaal River. Any mining activity would therefore severely affect the above in terms of associated pollutants such as acid mining water potential uranium contamination/heavy metals. It is suspected that aquifers currently utilised to supply water to humans and cattle will also be polluted. Dust pollution will also severely affect the adjacent areas.</li> <li>• The Vredefort Dome World Heritage Site is in the process of being developed.</li> <li>• The relatively unspoiled area hosts some very</li> </ul>	<p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application</li> </ul> <p>Please be advised that Mr Nigrini as well as the Department of Environmental Affairs have been registered as I&amp;APs and sent notification regarding this project.</p> <p>Your comment that groundwater runoff from the proposed site will decant into the Dome and Vaal River is noted. Prospecting will ascertain if economically viable mineral resources occur in the area and will include excavation of two trenches each to a depth of 3 m. It is anticipated that the risk of groundwater contamination as a result of the prospecting activities will be negligible as the proposed excavations are shallow. However, this potential impact on water resources will be assessed in the Basic Assessment Report (BAR) and Environmental Management Programme (EMPR) and appropriate mitigation measures will be proposed. Furthermore, a 100 m buffer has been delineated from all watercourses traversing and surrounding the application area. As with groundwater contamination, the possible emission of fugitive dust during the proposed invasive activities will also be assessed and</p>

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			<p>rare bird species such as Blue Crane birds, Secretary birds, White Storks and animals such as Brown Hyenas. Mining activities would unfortunately destroy these habitats.</p> <ul style="list-style-type: none"> <li>• No mining should be considered in the area as this area is still part of the Vredefort Dome and the latter should not be negatively impacted by mining.</li> <li>• Preservation of this area is of utmost importance as it is part of the Vredefort Dome and adjacent to the World Heritage Site. Any intrusive activities in the area would most definitely affect the region very negatively and could severely impact on this very unique geological marvel.</li> </ul>	<p>mitigation measures provided.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>Your comment that the Vredefort Dome World Heritage Site is in the process of being developed is well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone (map attached). It is further noted that the application area occurs on the south-western portion of the Vredefort Dome, which is in the process of being developed into a World Heritage Site.</p> <p>Specialist studies (Ecology (flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>If you have any questions in this regard, please do not hesitate to contact.</p>
Johannes Willem/Christiaan Venter	X		No comment received to date.	

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<b>Local Municipality – Moqhaka Local Municipality</b>				
Executive Mayor (Motshidisi Kolo)	X		No comment received to date.	
Municipal Manager (Mncedisi Simon Mqwathi)	X		No comment received to date.	
Speaker (Mpho Chakane)	X		No comment received to date.	
Ward 21 Councillor	X		No comment received to date.	
Ward 23 Councillor	X		No comment received to date.	
<b>District Municipality – Fezile Dabi District Municipality</b>				
Executive Mayor (Oumix Oliphant)	X		No comment received to date.	
Municipal Manager (Lindi Molibeli)	X		No comment received to date.	
Secretary to Municipal Manager (Rietie Grotsius)	X		No comment received to date.	
<b>Organs of State</b>				



I&AP	Consulted	Date comments received	Comment received	Response issued
Free State Department of Agriculture and Rural Development	X		No comment received to date.	
Free State Department of Agriculture, Rural Development, Land and Environmental Affairs	X		No comment received to date.	
Free State Department of Mineral Resources	X	02 August 2018	Thank you, I will go through the documents and revert back to you. Our server was not working and therefore could not receive emails. That is the reason I am only responding now.	This correspondence is acknowledged.
Free State Department of Mineral Resources	X	30 August 2018	<p>Good afternoon</p> <p>The below email is hereby acknowledged, the concerns outlined on the letter have been noted. I have also noted that some of the issues raised are related to the MPRDA, specifically the issue of the Department accepting the prospecting right. If you wish to get clarity on why the application was accepted you can lodge an appeal in terms of section 96 of the MPRDA, get in touch with Mathapelo Mosikidi on 057 391 1389/ Mathapelo.Mosikidi@dmr.gov.za for assistance with the process. If your client wishes to have a meeting with the Department and Shango solutions/ White Rivers they are welcome to make such arrangements. I believe most of the issues can be resolved effectively if both parties can meet and discuss the project in question.</p> <p>Attention Zizo</p>	<p>Dear Nkateko,</p> <p>Thank you for your mail.</p> <p>Please see attached our response to Coetzee and Kruger Inc.</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>Please read through the concerns raised on the letter and address all NEMA related issues taking into account the EIA Regulations, 2014 as amended and the public participation guidelines. All responses must be made available to the Department.</p>	
Free State Department of Mineral Resources	X	10 October 2018	<p>Good Morning</p> <p>Kindly receive the attached documents for your attention.</p> <p>N.B Zizo I have noticed that the documents are labelled as drafts, please contact me so we can discuss it.</p> <p>Dear Sir</p> <p>ACKNOWLEDGEMENT OF RECEIPT OF BASIC ASSESSMENT REPORT IN TERMS OF REGULATION 3(6) OF THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 AS AMENDED (HEREIN REFERRED TO AS THE EIA REGULATIONS) IN RESPECT OF VARIOUS PROPERTIES LISTED IN ANNEXURE "A", SITUATED IN THE MAGISTERIAL DISTRICT OF VREDEFORT, IN THE FREE STATE PROVINCE.</p> <p>APPLICANT: WHITE RIVERS EXPLORATION (PTY) LTD</p> <ol style="list-style-type: none"> <li>1. Receipt of the above mentioned basic assessment report uploaded on the SAMRAD system on the 18<sup>th</sup> of September 2018 and submitted to this Department on the 18<sup>th</sup> of September 2018 is hereby acknowledged.</li> <li>2. The Department hereby informs you that the basic assessment report will be evaluated and a decision will be communicated to you in writing in terms of</li> </ol>	<p>Dear Nkateko,</p> <p>Thank for our telecom.</p> <p>As discussed, please see below submission dates for the final reports:</p> <ul style="list-style-type: none"> <li>• Kroonstad North (FS/30/5/1/1/3/2/1/10520/EM): 19 October 2018</li> <li>• Kroonstad South (FS/30/5/1/1/3/2/1/10519/EM): 22 October 2018</li> <li>• Vredefort West Ext. (FS/30/5/1/1/3/2/1/10521/EM): 22 October 2018</li> </ul> <p>If you any further questions in this regard, please do not hesitate to contact me.</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>regulation 20 of the EIA Regulations.</p> <p>3. Kindly note that acknowledgement of the basic assessment report does not grant you a right to communicate with the listed activity/ies (propecting operation) applied for. You should also note that commencement with a listed activity without an environmental authorisation contravenes the provisons of section 24F (1) of the National Environmental Management Act , 1998 (Act 107 of 1998), as amended (NEMA) and constitutes an offence in terms of section 49A (1) (a) of NEMA.</p> <p>Should additional information be needed by the Department, a request for such information will be forwarded to you in writing.</p>	
Free State Department of Co-operative Governance and Traditional Affairs	X		No comment received to date.	
Free State Department of Human Settlements	X		No comment received to date.	
Free State Department of Public Works	X		No comment received to date.	
Free State Tourism Authority	X		No comment received to date.	
Free State Department of	X	24 August	Good day Zizo,	Good day,

I&AP	Consulted	Date comments received	Comment received	Response issued
Water and Sanitation		2018	<p>Hope this mail finds you well.</p> <p>This email serves to register the Department of Water and Sanitation as an interested and affected party for this project. The Department is interested in water (surface and groundwater) and waste management. Kindly send further communication regarding the project to the address below.</p> <p>Department of Water and Sanitation            PO Box 528            BLOEMFONTEIN            9300            For attention: Mr Willem Grobler</p>	<p>This e-mail serves to confirm that the Department of Water and Sanitation has been registered as an Interested and Affected Party for the Vredefort West Extension Prospecting Right project. All correspondence will be sent to the address provided.</p> <p>May you have a good day further.</p>
Free State Department of Economic Development, Tourism, Environmental Affairs and Small Business	X		No comment received to date.	

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Free State Department of Police, Roads and Transport	X	15 August 2018	<p>Good day</p> <p>Please find attached hereto a copy of this Department's letter dated 14 August 2018 for your attention.</p> <p>Dear Sir,</p> <p>RE: NOTIFICATION REGARDING AN APPLICATION FOR A PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORISATION ON VARIOUS FARMS WITHIN THE VREDEFORT MAGISTERIAL DISTRICT: PARYS: FREE STATE PROVINCE</p> <ol style="list-style-type: none"> <li>1. The application regarding the above with Project Number FS 30/5/1/1/3/2/1/10521 EM submitted on behalf of your client, White Rivers Exploration (Pty) Ltd refers.</li> <li>2. The provincial roads listed in the table below will be affected by the anticipated prospecting sites in respect to access and building lines imposed in terms of the Roads Ordinance 4 of 1968 and The Act Advertise on Roads and Ribbon Development Act 21 of 1940 respectively:</li> </ol>	<p>God day,</p> <p>Thank you very much for providing comment and for completing the I&amp;AP registration form.</p> <p>Your comment that the Department has no objection to this application is well noted.</p> <p>Shango Solutions will adhere to the conditions stated in your correspondence including maintaining a 95 m buffer from the centrelines of the roads listed in the correspondence.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

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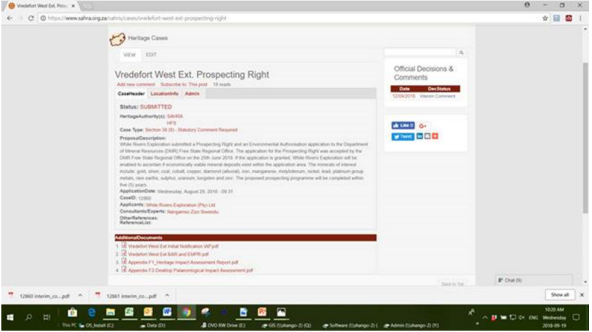
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			<p>3. Herewith please find the completed registration form supplied by you to confirm that the Department of Police, Rods and Transport is an interested and affected party.</p> <p>4. The Department have no objection against the application subject to the following conditions:</p> <p>4.1 The consent from the various property owners</p>																																																																																																																																																																																											



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			<p>must be obtained before any property is entered for prospecting activities.</p> <p>4.2 Access to the prospecting sites must be obtained through existing accesses in so far as possible. Topographic map numbers 16, 17, 30 and 31, showing the location of the affected provincial roads are attached for ease of reference.</p> <p>4.3 No road reserve fences might be removed to establish temporary accesses without the prior approval from the Department. If such accesses are required, an application on the attached way leave application form must be submitted to the Department at least 21 days in advance.</p> <p>4.4 Warning Road Signs TW 344 and TW 345 must be displayed should heavy vehicles enter- and exit the prospecting sites regularly. These road signs must be displayed in combination with speed restriction signs TR 201 (80) and TR 201 (60) at all the accesses utilised to gain access to the prospecting sites.</p> <p>4.5 Prospecting may not take place nearer than 95 m (ninety five metres) from the centrelines of any of the roads listed in the table above.</p> <p>4.6 Shango Solutions, the appointed prospecting contractors or their successors in title indemnifies the department of Police, Roads and Transport against any losses and damages suffered by any person or any claims including legal cost which may be instituted against the Department of Police, Roads and Transport as a result of the</p>	

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			<p>establishment of temporary accesses and/or the utilisation of existing accesses to enter the properties where prospecting activities are to be conducted without displaying the construction road signs referred to in paragraph 4.4 above.</p> <p>5. Approval to obtain access to the various farms from the listed provincial roads and support to conduct prospecting on these properties in terms of the Advertise and Ribbon Development Act, 1940 (Act 21 of 1940) and the Roads Ordinance, 1968 (Ordinance 4 of 1968). Such support does not exempt Shango Solutions and/or the appointed contractors from complying with any other legislation that might be applicable.</p>	
Free State Heritage Resources Authority	X		No comment received to date.	
National Department of Mineral Resources	X		No comment received to date.	
National Department of Agriculture, Forestry and Fisheries	X		No comment received to date.	
National Department of Rural Development and Land Reform	X		No comment received to date.	

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The Council for Scientific and Industrial Research - CSIR	X		No comment received to date.	
South African Heritage Resources Agency - SAHRA	X	12 September 2018	<p>White Rivers Exploration submitted a Prospecting Right and an Environmental Authorisation application to the Department of Mineral Resources (DMR) Free State Regional Office. The application for the Prospecting Right was accepted by the DMR Free State Regional Office on the 25th June 2018. If the application is granted, White Rivers Exploration will be enabled to ascertain if economically viable mineral deposits exist within the application area. The minerals of interest include: gold, silver, coal, cobalt, copper, diamond (alluvial), iron, manganese, molybdenum, nickel, lead, platinum group metals, rare earths, sulphur, uranium, tungsten and zinc. The proposed prospecting programme will be completed within five (5) years.</p> <p>Thank you for the BID regarding a prospecting right for gold, silver, coal, cobalt, copper, diamond (alluvial), iron, manganese, molybdenum, nickel, lead, platinum group metals, rare earths, sulphur, uranium, tungsten and zinc on 90 farm portions (18623.73 hectares) within the Vredefort Magisterial district, near parys, Free State Province. Proposed invasive activities will include vegetation clearing and trenching of two trenches (phase 4). The BID notes that a Basic Assessment Report (BAR), Environmental Management Programme (EMPr) will be submitted following the PPP.</p>	<p>In addition to the e-mail below, the relevant documents have also been uploaded for the Vredefort West Extension project.</p> 

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			<p style="text-align: center;"><b>Interim comment</b></p> <p>The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit requires a desktop Heritage Impact Assessment (HIA) including desktop Palaeontological Impact Assessment (PIA) to be done for the proposed area, which will indicate areas that should be excluded from the planned vegetation clearing trenching. The HIA must form part of the BAR.</p> <p>After the locations of trenches have been identified (after phase 3) and before trenching-related activities including vegetation clearing commences (before phase 4) a full field-based HIA and PIA must be conducted for the identified trenching and vegetation clearing locations by a professional archaeologist and palaeontologist and submitted to SAHRA for comment.</p> <p>The BAR and EMPr must also be submitted to the application.</p> <p>Should you have any further queries, please contact the designated official using the case number quoted above in the case header.</p>	

I&AP	Consulted	Date comments received	Comment received	Response issued
<p>South African Heritage Resources Agency - SAHRA</p>	<p>X</p>	<p>27 September 2018</p>	<p>Interim Comment</p> <p>In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)</p> <p>Attention: White Rivers Exploration (Pty) Ltd</p> <p>White Rivers Exploration submitted a Prospecting Right and an Environmental Authorisation application to the Department of Mineral Resources (DMR) Free State Regional Office. The application for the Prospecting Right was accepted by the DMR Free State Regional Office on the 25th June 2018.</p> <p>If the application is granted, White Rivers Exploration will be enabled to ascertain if economically viable mineral deposits exist within the application area. The minerals of interest include: gold, silver, coal, cobalt, copper, diamond (alluvial), iron, manganese, molybdenum, nickel, lead, platinum group metals, rare earths, sulphur, uranium, tungsten and zinc. The proposed prospecting programme will be completed within five (5) years.</p> <p>The proposed project entails a prospecting right application for gold, silver, coal, cobalt, copper, diamond (alluvial), iron, manganese, molybdenum, nickel, lead, platinum group metals, rare earths, sulphur, uranium, tungsten and zinc on 90 farm portions (18623.73 hectares) within the Vredefort Magisterial district, near Parys, Free State Province. Proposed invasive activities will include vegetation clearing and trenching of two trenches (phase 4). In an interim comment dated 12 September 2018 SAHRA requested a desktop Heritage Impact Assessment (HIA) and desktop Palaeontological Impact</p>	<p>This correspondence is acknowledged and the comments provided are well noted.</p>

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			<p>Assessment (PIA) to be submitted. After the locations of trenches have been identified (after phase 3) and before trenching-related activities including vegetation clearing commences (before phase 4) a full field-based HIA and PIA must be conducted for the identified trenching and vegetation clearing locations by a professional archaeologist and palaeontologist and submitted to SAHRA for comment. The submitted draft BAR and EMP states that only two trenches (3x10x1.5m) will be excavated, which will be located on the farm Mimosa grove 491. As two proposed trench sites have been identified at this stage, a full phase 1 HIA and desktop PIA were submitted.</p> <p>De Bruyn, C. 2018. Heritage Impact Assessment the Prospecting Right and Environmental Authorisation Application for Vredefort West situated in the Free State Province.</p> <p>The author identified the following sites within the proposed broader Vredefort West prospecting area:</p> <ul style="list-style-type: none"> <li>• Mim Gro Cem-01: small cemetery containing 33 graves on the farm Mimosa Grove 491 located approximately 700 m to the north-west of Trench 1 and falls just outside the 500 m zone of influence.</li> <li>• Lindek Cem-01: small cemetery containing 32 graves on the farm Lindekfeesfontein 73 located approximately 2.4 km to the north west of Trench 1 and falls just outside the 500 m zone of influence.</li> <li>• Rhebok Cem-01: 14 graves on the Rhebokfontein West 117 located approximately 21 km to the south of Trench 1.</li> </ul>	

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			<ul style="list-style-type: none"> <li>• Site complex 01: Several collapsed Late Iron Age stone walls on the farm Rhebokfontein West 117 located approximately 19 km to the south of Trench 1.</li> <li>• The following identified sites fall outside the proposed broader Vredefort West prospecting area but within a 500 m of influence:</li> <li>• Onreg Cem-01: 11 graves on the farm Onreg 1032 located approximately 21 km to the south of Trench 1.</li> </ul> <p>Recommendations include:</p> <ul style="list-style-type: none"> <li>• The cemeteries (Mim Gro Cem-01 and Lindek Cem-01) identified near the location of Trench 1 and 2 on the farms Mimosa Groove 491 and Lindekfeesfontein 73 should be fenced off from prospecting activities and a 10m buffer be established from each of the cemeteries. These areas should be considered as No-Go-Areas.</li> <li>• Should the prospecting activities expand in the near future to include the farm Rhebokfontein West 117, the cemetery (Rhebok Cem-01) should also be fenced off from prospecting activities and a 10m buffer zone be established. This area will become a No-Go-Area, and mining and prospecting machinery and vehicles should avoid the area.</li> <li>• Should the prospecting activities expand in the near future to include the farm Rhebokfontein West 117, a Phase II investigation of the</li> </ul>	

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			<p>stonewalls (Site Complex 01) on the Rhebokfontein West 117 should be conducted, where it is mapped, recorded and permit for alterations and demolition should be applied for in terms of Section 34 of the NHRA, No. 25 of 1999 with the provincial heritage authority i.e. Free State Provincial Heritage Authority (FSPHRA).</p> <ul style="list-style-type: none"> <li>• Should the prospecting activities expand in the near future a buffer zone should be established around Onreg.</li> <li>• Cem-01 on the farm Onreg 1032 and it should be marled as a No-Go-Area.</li> </ul> <p>The historical graves identified are rated as high/medium significance and are protected as a in terms of Section 36) of the NHRA, No. 25 of 1999. As such it is recommended that no machinery or site office associated with the proposed prospecting activities should be established near the graves.</p> <ul style="list-style-type: none"> <li>• Some archaeological material, including artefacts and graves can be buried underground and as such, may not have been identified during the initial survey and site visits. In the case where the proposed development activities bring these materials to the surface, they should be treated as Chance Finds. Should such resources be unearthed it is recommended that, the prospecting activities be stopped immediately, and an archaeologist be contacted to conduct a site visits and make recommendations on the mitigation of the finds. SAHRA and NW-PHRA should also be</li> </ul>	



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			<p>informed immediately on such finds.</p> <ul style="list-style-type: none"> <li>The proposed development will not have impact on the heritage and archaeological resources in the broader Vredefort area.</li> </ul> <p>Bamford, M. 2018. Palaeontological Impact Assessment for the Proposed Kroonstad South PWP, Free State Province, South Africa.</p> <p>The Farm Mimosa Grove 491 falls on ancient non-fossiliferous rocks of the Witwatersrand Group (Government and Jeppestown Subgroups) in the central and east parts. A narrow section in the west occurs on sandstones and shales of the Vryheid Formation that could preserve fossil plants of the Glossopteris flora (early Permian).</p> <p>Consists of rocks of the Karoo Supergroup overlying those of the Central Rand and West Rand groups of the Witwatersrand Supergroup</p> <p>Recommendations include:</p> <ul style="list-style-type: none"> <li>A Fossil Chance Find Protocol should be followed once drilling and coring commences as there is a small chance that fossil plants could occur in the small footprint of the coring site. If fossils are found by the responsible person a palaeontologist should be called to assess them.</li> </ul> <p style="text-align: center;"><b>Interim comment</b></p> <p>Please note that the title of the PIA should be changed to Vredefort West. It must also be noted that the PIA conducted is for a mining right application for sand mining as opposed to prospection right application for a variety of</p>	

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			<p>minerals; this should also be corrected. There is an inconsistency as the general arrow in the current 1:1 000 000 map (Figure 2) appears to indicate an area within the Vryheid Formation while the text describes the presence of Vryheid Formation and Witwatersrand Group. For clarity, the proposed area with the two trenches must be indicated in a geological map of a scale of at least 1:250 000 other than the SAHRIS PalaeoSensitivity map.</p> <p>The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit requires an amended PIA to be submitted in accordance with the above mentioned requirements and will comment on the HIA and amended PIA once the document is submitted.</p> <p>Should you have any further queries, please contact the designated official using the case number quoted above in the case header.</p>	
South African National Roads Agency SOC Ltd – SANRAL	X		No comment received to date.	
South African National Parks - SANParks	X		No comment received to date.	
Transnet SOC Ltd	X	25 September 2018	<p>Good afternoon all</p> <p>Our Ref No: LS.BFX.25/1/31</p> <p>Please be advised that this application will NOT affect Transnet at all as there are no Transnet Properties within or closer to the area of interest. Therefore this office have no</p>	<p>Good morning,</p> <p>Thank you for your mail.</p> <p>Your comment that Transnet Properties has no objection to the proposed project is well noted.</p>

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			objection to the proposal. See attached Locality Map.	
Eskom	X		No comment received to date.	
<b>Other Affected Parties</b>				
Wildlife and Environment Society of South Africa - WESSA	X		No comment received to date.	
BirdLife South Africa	X		No comment received to date.	
Endangered Wildlife Trust - EWT	X		No comment received to date.	
Centre for Environmental Rights	X		No comment received to date.	
Free State Agriculture	X		No comment received to date.	
Agri SA	X		No comment received to date.	
Agricultural Research Council	X		No comment received to date.	
Federation for a Sustainable Development	X		No comment received to date.	

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Sasol Mining (Pty) Ltd	X		No comment received to date.	
<b>Registered Interested and Affected Parties</b>				
Burt Coetzee/ Coetzee and Kruger Attorneys	X	31 July 2018	<p>AANDAG / ATTENTION</p> <p>INSAKE / RE: PROSPECTING IN THE VREDEFORT DISTRICT</p> <p>Good day,</p> <p>We are acting on behalf of numerous farmers in the Vredefort district.</p> <p>It has come to our clients' attention that your company started to engage with the process of prospecting in the western area of the Vredefort district.</p> <p>Kindly furnish us with a schedule of all dates and notices issued to the relevant owners that you followed in terms of the relevant acts to get permission to prospect in the area.</p> <p>Your urgent reply is awaited as my firm needs to give feedback to our clients' over the coming weekend.</p> <p>Kind regards / Vriendelike groete</p> <p>Leendert Stoop</p>	<p>Dear Leendert,</p> <p>Thank you for your mail.</p> <p>In order to undertake prospecting activities, the Applicant requires a granted Prospecting Right (PR) in terms of the Mineral and Petroleum Resources Development Act, 2002 (MPRDA, Act 28 of 2002). The Applicant is also required to obtain an Environmental Authorisation (EA) in terms of the National Environmental Management Act, 1998 (NEMA, Act 107 of 1998) which involves the submission of a Basic Assessment Report (BAR) and Environmental Management Programme Report (EMPR) as well as undertaking the Public Participation Process (PPP).</p> <p>The PPP follows the requirements of Chapter 6 Regulation 41 of GN 326 of the EIA 2014 Regulations, (as amended on 7th April 2017), promulgated under Section 24 (5) of the National Environmental Management Act, 1998 (Act 107 of 1998), as amended.</p> <p>Prior to commencement of the PPP, Interested and Affected Parties (I&amp;APs) (National, provincial and local government, agricultural sector, organised business, host and adjacent communities, land claimants, other organisations, clubs, communities and unions, various Non-Government Organisations) were identified and an I&amp;AP database was established. Contact information for landowners was sourced from WinDeed. Furthermore,</p>

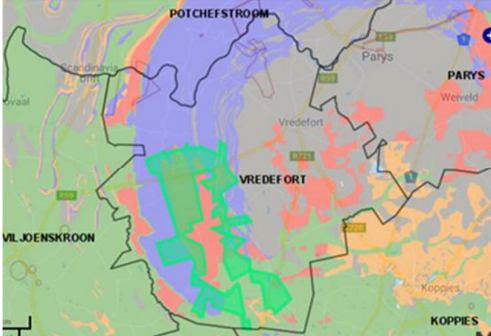
I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>landowners whose telephone and/or cell phone number appeared on WinDeed were contacted , notified of this application and additional contact information such as fax numbers and/or e-mail addresses was requested.</p> <p>Notification documents to I&amp;APs were prepared in the three dominant languages within the application area (English, Afrikaans, and Sesotho). The PPP commenced on the 27th July 2018. I&amp;APs have been provided a period of 30 days (ending on the 31st August 2018) to register and comment on this application. Initial notification was given in the following manner:</p> <ul style="list-style-type: none"> <li>• Registered Letters, Faxes and E-mails</li> <li>• Background Information Document (BID)</li> <li>• Newspaper Advertisement</li> <li>• Site Notice Placement</li> <li>• Placement of BIDs on farmer's gates</li> <li>• A3 posters were placed at key public places in the town of Vredefort (Vredefort Post Office, Vredefort Library, Ngwathe Local Municipality, Ricky's Fruit and Veg Supermarket, Vredefort Mini-Market)</li> </ul> <p>In addition, notification documents have been uploaded on our website for download and I&amp;APs have been notified of their availability.</p> <p>The table below details the public notification process undertaken to date:</p> <div style="background-color: #002060; color: white; text-align: center; padding: 2px;">Public Participation Phase</div>

I&AP	Consulted	Date comments received	Comment received	Response issued																														
				<table border="1"> <thead> <tr> <th>Action</th> <th>Description</th> <th>Publication/Place</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td></td> <td>Newspaper advertisement</td> <td>Newspaper</td> <td>27/07/2018</td> </tr> <tr> <td rowspan="3">Initial public notification (announcement of project)</td> <td>Placement of site notices</td> <td>30 A2 site notices within and around the site area (30 locations)</td> <td>30/07/2018 31/07/2018</td> </tr> <tr> <td>Placement of posters</td> <td>A3 posters were placed at key public places in the town of Vredefort</td> <td>31/07/2018</td> </tr> <tr> <td>Notification of landowners and key I&amp;APs</td> <td>I&amp;APs were notified e-mail, fax, and/or post</td> <td>27/07/2018</td> </tr> <tr> <td>Announcement for public review of draft BAR and EMPR</td> <td>Notification of landowners and key I&amp;APs</td> <td>I&amp;APs were notified via e-mail, fax, and/or post</td> <td>TBD</td> </tr> <tr> <td>Announcement of Public Meeting</td> <td>Notification of landowners and key I&amp;APs</td> <td>I&amp;APs were notified via e-mail, fax, and/or post</td> <td>TBD</td> </tr> <tr> <td>Announcement of public review of final BAR and EMPR</td> <td>Notification of landowners and key I&amp;APs</td> <td>I&amp;APs were notified via e-mail, fax, and/or post</td> <td>TBD</td> </tr> </tbody> </table> <p>The PPP is on-going and I&amp;APs will continue to be given an opportunity to comment on this project. An additional 30 days will be given to I&amp;APs to comment on the BAR and EMPR when it is made available to I&amp;APs for comment. Upon submission of the Final BAR and EMPR, the Competent Authority, the Department of Mineral Resources, must within 107 days of receipt of the BAR and EMPR, in writing (a) grant environmental authorisation in respect of all or part of the activity applied for; or (b) refuse environmental authorisation.</p>	Action	Description	Publication/Place	Date		Newspaper advertisement	Newspaper	27/07/2018	Initial public notification (announcement of project)	Placement of site notices	30 A2 site notices within and around the site area (30 locations)	30/07/2018 31/07/2018	Placement of posters	A3 posters were placed at key public places in the town of Vredefort	31/07/2018	Notification of landowners and key I&APs	I&APs were notified e-mail, fax, and/or post	27/07/2018	Announcement for public review of draft BAR and EMPR	Notification of landowners and key I&APs	I&APs were notified via e-mail, fax, and/or post	TBD	Announcement of Public Meeting	Notification of landowners and key I&APs	I&APs were notified via e-mail, fax, and/or post	TBD	Announcement of public review of final BAR and EMPR	Notification of landowners and key I&APs	I&APs were notified via e-mail, fax, and/or post	TBD
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I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>I&amp;APs will be notified of the decision and provided an opportunity to appeal the decision if they wish to.</p> <p>We hope that we have addressed your questions. If you have an further comments in this regard, please do not hesitate to contact us.</p>
Burt Coetzee/ Coetzee and Kruger Attorneys	X	29 August 2018	<p>AANDAG / ATTENTION            INSAKE / RE: VREDEFORT WEST PROSPECTING</p> <p>Good day Sir / Madam,</p> <p>Kindly take note that we are acting on behalf of two farmers associations in the Vredefort West district.</p> <p>Please find enclosed herewith the following:</p> <ol style="list-style-type: none"> <li>1. Urgent letter for your attention</li> <li>2. Attachments to letter</li> </ol> <p>We await your urgent reply at your earliest convenience.</p> <p>Attention representative of Shango Solutions; Kindly also register the Wonderheuwel Boerevereniging and the Koepel Boerevereniging as interested parties.</p> <p>Kind regards / Vriendelike groete</p> <p>Burt Coetzee</p> <p>Attention: Ms Nkateko Mhlari Email: Nkateko.Mhlari@dmr.gov.za</p> <p>Dear Sir/Madam</p> <p>OPPOSITION TO ACCEPTANCE OF APPLICATION FOR PROSPECTING RIGHTS AND OPPOSITION TO</p>	<p>Good day,</p> <p>Your correspondence on the 29th August 2018 refers:</p> <ol style="list-style-type: none"> <li>1. Noted.</li> <li>2. White Rivers Exploration (Pty) Ltd (the Applicant) appointed Shango Solutions as the Environmental Assessment Practitioner (EAP) to undertake the required environmental process (Basic Assessment) for the Prospecting Right (PR) and Environment Authorisation (EA) Application. Any Interested and Affected Party (I&amp;AP) who wants further information about the Applicant can request it from the EAP.</li> <li>3. As per your request, Wonderheuwel Boerevereniging and the Koepel Boerevereniging have been registered as I&amp;APs for this Application.</li> <li>4. Details of the Public Participation Process (PPP) that was initiated (including future PPP to be undertaken) were explained on the e-mail attached. According to Chapter 2 (8) of NEMA EIA Regulation (GNR 326) "Any public participation process must be conducted for a period of at least 30 days". The 31st August 2018</li> </ol>

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			<p>APPLICATION FOR PROSPECTING RIGHTS REF: FS30/5/1/1/3/2/1/10521 EM</p> <ol style="list-style-type: none"> <li>1. We act on behalf of the following organizations representing landowners and other occupiers of such land in the Vredefort Magisterial District:               <ol style="list-style-type: none"> <li>1.1 Koepel Boerevereniging; and</li> <li>1.2 Wonderheuwel Boerevereniging.</li> </ol> </li> <li>2. It has come to our notice that an entity calling itself Shango Solutions (Pty) Ltd is circulating notices to the effect that an application for a Prospecting Right to the Department of Mineral Resources Free State Regional Office was submitted by White Rivers Exploration (Pty) Ltd. Shango Solutions (Pty) Ltd has indicated that such application was allegedly accepted on 25 June 2018. Pursuant thereto Shango Solutions (Pty) Ltd commenced distributing notices advising Interested and Affected Parties of their right to register by no later than 31 August 2018. Shango Solutions (Pty) Ltd purports to act on behalf of White Rivers Exploration (Pty) Ltd and no details of the latter entity had been provided.</li> <li>3. Kindly register our clients as Interested and Affected Parties.</li> <li>4. The public participation process has been wholly inadequate and our clients have only learnt of the application for prospecting rights, and apparent acceptance thereof, some days ago. Some of the notifications reflect that an area very close to the</li> </ol>	<p>date, as indicated in the initial notification, marks the end of the initial 30 days PPP period. However, the PPP for this Application is on-going and I&amp;APs are encouraged to submit comments during the course of the Basic Assessment Process. Kindly note that this Application is for prospecting and not mining. A granted Prospecting Right will not provide the Applicant the required authorisation for mining activities. As such, any future intention to undertake mining in the application area would require a further application, investigation and PPP. A Heritage and Palaeontology Specialist has been commissioned to undertake a Heritage Impact Assessment in support of this application. Appropriate mitigation measures will be proposed and included in the Basic Assessment Report (BAR) and Environmental Management Programme (EMPR) in order to minimise potential heritage impacts. With regards to your comment about the Renoster and Vaal rivers, kindly be advised that a 100 m buffer has been delineated from all watercourses. Therefore, all watercourses traversing the application area will not be impacted upon by the proposed invasive prospecting activities. The proposed invasive prospecting activities for this project include excavation of 2 trenches each to a depth of 3 m. It is anticipated that the risk of groundwater contamination as a result of the prospecting activities will be negligible as the proposed excavations are shallow. Furthermore, this</p>



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			<p>Vredefort Dome World Heritage Site (“WHS”) stands to be affected. No prospecting or mining should be allowed close to the WHS, as it could jeopardise its status. It appears that the prospecting application include farms adjacent to the Renoster River and in the catchment area of the Vaal River. These rivers, but particularly the latter, will not be able to sustain mining activity, which will add to the already severely contaminated status of the Vaal River. The Renoster River and groundwater will also be contaminated.</p> <p>5. Confusing, contradictory and plain incorrect information has been circulated by Shango Solutions (Pty) Ltd in the affected community. This is very prejudicial to our clients and the affected community, as it appears that legislation has been found. To mention a few:</p> <p>5.1 there is seemingly no private company such as Shango Solutions (Pty) Ltd, yet such registration is claimed in a notice to unspecified Interested and Affected Persons. Please see “<b>A</b>” hereto;</p> <p>5.2 the same notice reflects an application to the Department of Mineral Resources (DMR) Free State Regional Office, not to the Regional Manager, as is required by the provisions of the Minerals and Petroleum Resources Development Act, 28 of 2002 (“<b>the Act</b>”);</p> <p>5.3 the same notice indicates that the application covers some 18 thousand hectares over 90 farms</p>	<p>potential impact on water resources will be assessed in the BAR and EMPR and appropriate mitigation measures will be proposed.</p> <p>5.1 Please find attached our latest updated Tax Clearance Certificate indicating (i) the registered (Dunrose Trading 186 (Pty) Ltd) and (ii) trading name (Shango Solutions (Pty) Ltd), together with the company registration number.</p> <p>5.2 The Application was lodged at the Free State Regional Office for the attention of the Regional Manager.</p> <p>5.3 Please see map below indicating the boundary of the application area. Written notification was sent to affected surface landowners utilising the various methods as detailed in the attached mail previously sent to you.</p>  <p>5.4 See 5.3 above.</p> <p>5.5 Noted. Kindly be advised that this was purely a</p>

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			<p>situated in the Vredefort Magisterial District, but the map provided indicates farms situated in other magisterial districts;</p> <p>5.4 persons and land in magisterial districts other than the Vredefort Magisterial District are affected by the application;</p> <p>5.5 in the Afrikaans version of “<b>A</b>”, Interested and Affected Parties are invited to address concerns to Shango Solutions (Pty) Ltd, not to the Department of Mineral Resources. Please see “<b>B</b>” hereto;</p> <p>5.6 in at least some of the Afrikaans notices the project is referred to as “Kroonstad-Suid Prospekterregprojek”, thereby potential deflecting attention from the true area that stands to be affected by the prospecting activities. Please see “<b>C</b>” hereto.</p> <p>6. In the circumstances we question the adequacy of the application for a prospecting right allegedly submitted in terms of the Act. It appears to us that the provisions of Section 16(1) and (2) could not have been met and the application for a prospecting right should have been refused in terms of Section 16(3).</p> <p>7. If the application was indeed accepted by the Regional Manager, we request you to provide us with a copy of the application together with the full record and such reasons as may be relevant to the decision to accept the application. We record that we have not seen any notices from the Regional Manager in terms of Section 10(1) advising the</p>	<p>typing error and the correct information (stating that I&amp;APs are invited to address their concerns to Shango Solutions and the Department of Mineral Resources) is indicated in the English version of the notification which was sent to I&amp;APs. Furthermore, please find attached the corrected Afrikaans version of the notification.</p> <p>5.6 Noted. As with 5.5, this was purely a typing error. Furthermore, the English version (and other sections of the Afrikaans version) indicate that the project name is Vredefort West Extension.</p> <p>6. It is to the best of our knowledge that the provisions of Section 16(1) were met, hence the Application was accepted.</p> <p>7. This information was sent to you as per e-mail attached. Proof of Section 10(1) notice is obtainable from the DMR upon request.</p> <p>8. Your objection is noted.</p> <p>Should you have any further questions in this regard, please do not hesitate to contact me</p>

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			<p>acceptance of an application for a prospecting right. If such is available, please provide us with a copy as well as any notification in terms of Section 16(4) of the Act.</p> <p>8. Our clients are opposed to the above application for prospecting rights by White Rivers Exploration (Pty) Ltd being granted and we accordingly give notice of such opposition in terms of Section 10(2) of the Act. Due to the paucity of information available, it is not possible for our clients to provide full reasons. Issues that must also be addressed include the safety of landowners and farm workers, food security, heritage matters, road infrastructure and the effect of possible pollution of underground water resources currently being utilised through boreholes.</p> <p>9. We await to hear from you at your earliest convenience.</p>	
Burt Coetzee/ Coetzee and Kruger Attorneys	X	06 September 2018	<p><b>AANDAG / ATTENTION</b></p> <p><b>INSAKE / RE: VREDEFORT WEST PROSPECTING</b></p> <p>Good day Ms Mhlarhi,</p> <p>Please find enclosed herewith a letter for your urgent attention.</p> <p>We await your reply at your earliest convenience.</p> <p>Dear Madam</p> <p>VREDEFORT WEST PROSPECTING</p> <p>OPPOSITION TO ACCEPTANCE OF APPLICATION FOR</p>	<p>Good Morning</p> <p>In order to obtain information you must apply for access to information, kindly contact Mathapelo Mosikidi on 057 391 1389 for assistance.</p>

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			<p>PROSPECTING RIGHTS AAND OPPOSITION TO APPLICATION FOR PROSPECTING RIGHTS REF: FS 30/5/1/1/3/2/1/10521 EM</p> <ol style="list-style-type: none"> <li>1. Thank you for your email of 30 August 2018 in which you advise that our clients may lodge an appeal in terms of section 96 of the MPRDA.</li> <li>2. Before we can decide whether it is appropriate to do so, we repeat our request that your provide us with any notices that the Regional Manager may have sent in terms of section 10(1) or any notification in terms of Section 16(4) of such Act. Although Shango Solutions have provided us with a number of documents, they have expressly indicated that the section 10(1) notice must be obtained from the DMR.</li> <li>3. In addition, we note that you have not provided us with a copy of the application together with the full record and such reasons as may be relevant to the decision to accept the application.</li> <li>4. We shall appreciate it to receive the documentation as a metter of urgency.</li> </ol>	
Burt Coetzee/ Coetzee and Kruger Attorneys	X	19 September 2018	<p><b><u>ATTENTION: SHANGO SOLUTIONS</u></b>  <b><u>INSAKE / RE: PROSPECTING – VREDEFORT WEST</u></b></p> <p>Dear Mmakoenana</p> <p>Your email dated 18 September 2018 bears reference.</p> <p>Kindly furnish us with the agenda for the meeting on 10 October 2018.</p>	<p>Dear Leendert,</p> <p>Thank you for your mail.</p> <p>There is no agenda as it is not a Public Meeting. It is an Open Day to be conducted on a one-on-one session (or in small groups) between the EAP and any member of the public who wishes to discuss the findings of the Basic Assessment process, based on the Draft Basic</p>

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			Kind regards / Vriendelike groete	<p>Assessment Report (BAR) and Environmental Management Programme (EMPR) for this project. An Attendance Register will be circulated and it will be signed by the attendees of the Open Day. Posters will be displayed on the walls of the venue and A4 versions of the posters will be made available to the public during the Open Day session. In addition, electronic (CD) copies of the BAR and (EMPR) will be made available at the Open Day venue on the 10 October 2018 between 09H00 and 17H00.</p> <p>Should you require further information in this regard, please do not hesitate to contact me.</p>						
Burt Coetzee/ Coetzee and Kruger Attorneys	X	12 October 2018	<p>Dear Zizo,</p> <p>The open day held at Parys on 10 October 2018 refers.</p> <p>Thank you for furnishing me with a hardcopy of the draft report, but I shall appreciate it if you can also furnish our senior counsel, Adv. Herman van Eeden, with a hardcopy. You are welcome to contact him directly by email as soon as the copy is available for upliftment. The email address of our Counsel: vaneeden@law.co.za</p> <p>At the meeting referred to here-above , it became abundantly clear that the majority of interested and affected parties did not receive proper notice or notice at all of the proposed open day.</p> <p>As you know we act on behalf of 2 agricultural organisations in the Vredefort district and we shall appreciate it if you can furnish us with a list of names, telephone numbers and addresses of all the parties that are registered as interested and affected parties. We need the information in order for</p>	<p>Good day,</p> <p>As requested, a hardcopy of the draft Basic Assessment Report and Environmental Management Programme Report has been printed out for Adv. Herman van Eeden. I will send him an e-mail notifying him of its availability.</p> <p>Please find attached the database containing the names, telephone numbers and addresses of all the parties affected by the above mentioned project.</p> <p>Kindly note that the appointed specialists conducted desktop studies on the overall site. Furthermore, they undertook a field survey which focused on the farm where the two proposed trenches will be excavated (Portions 1 and 2 of the farm Mimosa Grove 491). Listed in the table below are the dates and name or names of the person or persons who visited the two farm portions:</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Company</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Name	Company	Date			
Name	Company	Date								

I&AP	Consulted	Date comments received	Comment received	Response issued												
			<p>us to contact and consult with the interested and affected parties in order to compile the comments and objections of our clients.</p> <p>We shall also appreciate it if you can indicate the names of the farms that your consultants visited in order to compile your draft report. Kindly indicate the date and name or names of the person or persons who visited the farms.</p> <p>I can further just mention that we are in the process to apply for an extension of time to file our comments and objections, but that the information that we requested here-above must be furnished to us on an urgent basis.</p> <p>Kind regards / Vriendelike groete Burt Coetzee</p>	<table border="1"> <tr> <td>Ms Cherene de Bruyn</td> <td>NGT Holdings</td> <td>21 August 2018</td> </tr> <tr> <td>Mr Michael Adams</td> <td>The Biodiversity Company</td> <td>Towards end of August 2018</td> </tr> <tr> <td>Mr Martinus Erasmus</td> <td>The Biodiversity Company</td> <td>Towards end of August 2018</td> </tr> <tr> <td>Mr Ivan Baker</td> <td>The Biodiversity Company</td> <td>Towards end of August 2018</td> </tr> </table> <p>Should you have any further questions in this regard, please do not hesitate to contact me.</p>	Ms Cherene de Bruyn	NGT Holdings	21 August 2018	Mr Michael Adams	The Biodiversity Company	Towards end of August 2018	Mr Martinus Erasmus	The Biodiversity Company	Towards end of August 2018	Mr Ivan Baker	The Biodiversity Company	Towards end of August 2018
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Burt Coetzee/ Coetzee and Kruger Attorneys	X	15 October 2018	<p>Telephonic discussion:</p> <p>Wanted clarity on the timelines of the Basic Assessment process.</p>	<p>Dear Burt,</p> <p>Your telephonic discussion with Ms Zizo Siwendu refers.</p> <p>Please find below a screenshot of Section 19(1) and (2) of the National Environmental Management Act, 1998 (Act 107 of 1998) detailing the timeline the Environmental Assessment Practitioner has to adhere to during the Basic Assessment process.</p>												

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				<p><i>Part 2: Basic assessment</i></p> <p><b>Submission of basic assessment report and environmental management programme, and where applicable closure plan, to competent authority</b></p> <p>19. (1) Where basic assessment must be applied to an application, the applicant must, within 90 days of receipt of the application by the competent authority, submit to the competent authority—</p> <ul style="list-style-type: none"> <li>(a) a basic assessment report, inclusive of specialist reports, an EMPr and where applicable a closure plan, which have been subjected to a public participation process of at least 30 days and which reflects the incorporation of comments received, including any comments of the competent authority; or</li> <li>(b) a notification in writing that the basic assessment report, inclusive of specialist reports, an EMPr, and where applicable, a closure plan, will be submitted within 140 days of receipt of the application by the competent authority, as significant changes have been made or significant new information has been added to the basic assessment report or EMPr or, where applicable, a closure plan, which changes or information was not contained in the reports or plans consulted on during the initial public participation process contemplated in subregulation (1)(a) and that the revised reports or EMPr or, where applicable, a closure plan will be subjected to another public participation process of at least 30 days.</li> </ul> <p>(2) In the event where subregulation (1)(b) applies, the basic assessment report inclusive of specialist reports, an EMPr and where applicable, the closure plan, which reflects the incorporation of comments received, including any comments of the competent authority, must be submitted to the competent authority within 140 days of receipt of the application by the competent authority.</p> <p>Should you have any further questions in this regard, please do not hesitate to contact me.</p>
Burt Coetzee/ Coetzee and Kruger Attorneys	X	15 October 2018	<p>Good day</p> <p>Thank you for your emails of earlier today.</p> <p>Enclosed herewith for your information a letter addressed to the Regional Manager, Environmental Management, Welkom.</p> <p>Kind regards / Vriendelike groete</p> <p>Burt Coetzee</p> <p>THE REGIONAL MANAGER ENVIRONMENTAL MANAGEMENT DIRECTORATE Department of Mineral Resources Free State Regional Office Private Bag X333 Welkom 9460</p>	

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			<p>Attention: MS Nkateko Mhlarhi Email: Nkateko.Mhlarhi@dmr.gov.za/hod@fscogta.gov.za Dear Madam RE: REQUEST FOR EXTENSION TO FILE OBJECTIONS - VREDEFORT WEST PROSPECTING</p> <p>As previously indicated my office are acting on behalf of the "Wonderheuwel Boerevereniging and the Koepel Boerevereniging " both situated in the area of Vredefort West and where Shango Solutions applied for prospecting rights on behalf of White Rivers Exploration (Pty) Ltd.</p> <p>On 10 October 2018 Shango Solutions held an open day at Parys where the Draft Basic Assessment Report and Environmental Management Program Report were tabled. At the meeting it became clear that most of the interested and affected parties did not receive proper notice or notice at all of the proposed meeting and it can be gathered from that, that the parties also did not receive the documentation.</p> <p>I requested Shango Solutions that in the circumstances that they must apply for an extension of time for filing of comments and objections to the Draft Basic Assessment Report, which report consists of two volumes and although there is an index to the report (281 pages) the appendixes are not numbered and the appendixes made out a substantial part of the report.</p> <p>The meeting was informed by the representatives of Shango Solutions that it is not their duty to apply for an extension and that the affected parties must attend to it.</p> <p>We submit that the following factors must be taken into account:</p> <p>1. The report is of a highly technical nature, compiled by</p>	



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			<p>experts</p> <p>2. The report contains several graphs maps and data which needs to be scrutinized by an expert</p> <p>3. There are several other interested and affected parties that we need to consult to properly prepare objections</p> <p>4. Shango Solutions who is well equipped with qualified personnel started already in July 2018 to gather information to compile the draft report</p> <p>5. My clients deem it necessary to obtain expert opinion on the report</p> <p>It will not be possible to obtain an expert report within the 30 days that expire on 19 October 2018.</p> <p>We submit that it will only be fair and reasonable to allow my clients at least 90 days from 10 October 2018 (when the hard copy of the report was furnished to us) to file their comments and objections to the report and application for prospecting rights.</p> <p>Moreover, we refer to our previous correspondences in which we expressed the view that the acceptance of the application for a prospecting right was irregular and our requests for documentation from you in this regard. We record that we are still awaiting such documents. Shango Solutions has held the open day in pursuance of its quest to be awarded the prospecting rights, notwithstanding its knowledge of our objection to the acceptance of the application itself. Shango Solutions is persisting at its own peril.</p> <p>We also record our opposition to the granting of the</p>	

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			<p>application for prospecting rights. At the so-called open day meeting, we requested information from Shango Solutions as to why the affected area amounts to 18 000 hectares, whereas it is clear that the application proposed only two small trenches as part of the prospecting process. It is proposed that the two trenches will only be proceeded with in year 4 and that they will be to depth of 3 m, a length of 10 m and a width of 1,5 m.</p> <p>Shango Solutions could not provide a feasible answer. It contended that it has historical information and that it is consequently unnecessary for more active prospecting. This answer contradicts its own application, which is to the effect that the first three years of the prospecting programme will be limited to the collection of data and non-invasive activities. If the first three years are to be spent as suggested in the application, then the application for prospecting rights should be renewed at that stage. This is irrational to grant the prospecting rights at this stage.</p> <p>It is also irrational to include the enormous tract of land in the application for a prospecting right. The application for a prospecting right seeks to subject a very large piece of environmentally sensitive agricultural land to a five year prospecting process, where the proposed two trenches can never yield a representative result.</p> <p>The application has all the hallmarks of being brought for an ulterior purpose, namely to secure rights over property, without a feasible prospecting plan in place.</p> <p>I can just mention that we have requested the notice in terms of section 10(1) of the Act as well as the notification in terms of section 16(4) of the Act and a copy of the</p>	

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			<p>application that was lodged by the applicant with the full record and reasons as may be relevant to the decision to accept the application. These documents were already requested on 28 September 2018 and we paid the required fee on 04 October 2018 and lodged the notice of payment and application form on the same date. Up till now we have not received any response from your department and we are also struggling to get hold telephonically of Mathapelo Mosikidi to enquire when we can expect the requested documents.</p> <p>Your urgent reply is awaited.</p> <p>Yours faithfully, Burt Coetzee</p>	
Jack Armour	X	01 August 2018	<p>Hi Zizo</p> <p>Kindly send me all the documents electronically (and not by faks – as sent addressed to our president Francois Wilken but faxed to our offices?) for the following:</p> <ul style="list-style-type: none"> <li>• WRE Ventersburg Consolidated Prospecting Right Project (received 07 March 2018).</li> <li>• Vredefort West Ext. Prospecting Right Project (Received yesterday electronically and by fax 28 July).</li> <li>• Kroonstad South Prospecting Right Project (received yesterday by Fax – nothing electronically).</li> <li>• Kroonstad North Prospecting Right Project</li> </ul>	<p>Good day Jack</p> <p>As per your request, please find the attached documents for the following projects:</p> <ul style="list-style-type: none"> <li>• Vredefort West Ext. Prospecting Right Project</li> <li>• Kroonstad South Prospecting Right Project</li> <li>• Kroonstad North Prospecting Right Project</li> </ul> <p>The final BAR and EMPR for the Ventersburg Consolidated Prospecting Right Project has already been submitted. May you please specify which documents you require?</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>

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Jack Armour	X	29 August 2018	<p>Hi Zizo</p> <p>RE the recent EA granted, I just want to please confirm where they are with the EIA process?</p> <table border="1"> <thead> <tr> <th>Basic Assessment timeframes</th> <th>Progressive day number</th> <th>Number of days allowed</th> </tr> </thead> <tbody> <tr><td>Submit Environmental Authorisation application</td><td>1</td><td></td></tr> <tr><td>Submit Draft Basic Assessment Report</td><td></td><td></td></tr> <tr><td>Public Participation Process</td><td></td><td>30</td></tr> <tr><td>Submit Final Basic Assessment Report</td><td>30</td><td>30</td></tr> <tr><td>Decide on outcome of Environmental Authorisation application</td><td>197</td><td>107</td></tr> <tr><td>Applicant receives outcome of Environmental Authorisation application</td><td>202</td><td>5</td></tr> <tr><td>Applicant notifies all registered I &amp; AP's and relevant organs of state of the outcome</td><td>218</td><td>14</td></tr> <tr><td>Registered I &amp; AP's and relevant organs of state must submit an intention to appeal</td><td>236</td><td>20</td></tr> </tbody> </table> <p>Full Scoping and Environmental Impact Assessment timeframes</p> <table border="1"> <thead> <tr> <th>Progressive day number</th> <th>Number of days allowed</th> </tr> </thead> <tbody> <tr><td>Submit Environmental Authorisation application</td><td>1</td></tr> <tr><td>Submit a Draft Scoping Report</td><td></td></tr> <tr><td>Public Participation Process</td><td>30</td></tr> <tr><td>Submit Final Scoping Report</td><td>44</td></tr> <tr><td>Acceptance or rejection of Final Scoping Report by Competent Authority</td><td>87</td></tr> <tr><td>Submit Draft Environmental Impact Report</td><td></td></tr> <tr><td>Public Participation Process</td><td>30</td></tr> <tr><td>Submit Final Environmental Impact Report</td><td>193</td></tr> <tr><td>Decide on outcome of Environmental Authorisation application</td><td>300</td></tr> <tr><td>Applicant receives outcome of Environmental Authorisation application</td><td>305</td></tr> <tr><td>Applicant notifies all registered I &amp; 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Jack Armour	X	30 August 2018	<p>Excellent!</p> <p>Thanks very much for this feedback.</p> <p>Regards,</p> <p>Jack</p>	<p>This correspondence is acknowledged.</p>
Cobus Botha	X	07 August 2018	<p>Mr Botha telephoned the office and requested to be furnished with the initial notification letter and Background Information Document for the Vredefort West Extension Prospecting Right project.</p>	<p>NOTIFICATION REGARDING AN APPLICATION FOR A PROSPECTING RIGHT AND ENVIRONMENTAL AUTHORISATION ON VARIOUS FARMS WITHIN THE VREDEFORT MAGISTERIAL DISTRICT, FREE STATE PROVINCE (VREDEFORT WEST EXTENSION PROSPECTING RIGHT PROJECT - FS 30/5/1/1/3/2/1/10521 EM)</p> <p>Dear Interested and Affected Party/Landowner/Legal Occupier;</p> <p>Please receive herewith attached notification (provided in English, Afrikaans and Sesotho) regarding an application for a Prospecting Right and Environmental Authorisation for the Vredefort West Extension Prospecting Right project.</p> <p>If you have any questions in this regard, please do not hesitate to contact the undersigned.</p>
H & O Eiendomsbeleggings (Pty) Ltd	X	23 August 2018 (10:58 AM)	<p>Good day Mr Shango</p> <p>Please forward me the Interested and Affected Party Registration Form in Word Format for me to complete.</p> <p>Kind regards</p>	<p>Dear Karen,</p> <p>Please find attached a word format of the Interested and Affected Party Registration form for the Vredefort West Extension Prospecting Right Project.</p> <p>Regards,</p>

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				Mmakoena Mmola
H & O Eiendomsbeleggings (Pty) Ltd	X	23 August 2018 (1:00 PM)	<p>Good day</p> <p>Please find attached hereto Interested and Affected Party Registration Forms. Please acknowledge receipt of same.</p> <p>Kind regards</p> <p>The I&amp;AP completed the registration form and provided the following comments:</p> <ul style="list-style-type: none"> <li>• Landowner adjacent to affected area.</li> <li>• Municipalities, all landowners in the Vredefort Dome World Heritage Site and all farm owners, other occupiers and farm workers in the affected and adjacent area need to be notified of this project.</li> <li>• There are many graves and other heritage sites in the area.</li> <li>• Impacts such as contamination of underground water resources and the impact on farming operations, including loss of jobs should be considered during the study.</li> <li>• Full public participation is necessary.</li> <li>• Specific concern or comment: prospecting starting before public participation is concluded.</li> </ul>	<p>Good day,</p> <p>Thank you for completing the Interested and Affected Party Registration Forms and for providing comment.</p> <p>Your comments and concerns regarding the above mentioned project are well noted.</p>



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Eagle Greek Investments 660 (Pty) Ltd	X	23 August 2018 (10:58 AM)	<p>Good day Mr Shango</p> <p>Please forward me the Interested and Affected Party Registration Form in Word Format for me to complete.</p> <p>Kind regards</p>	<p>Dear Karen,</p> <p>Please find attached a word format of the Interested and Affected Party Registration form for the Vredefort West Extension Prospecting Right Project.</p> <p>Regards,</p> <p>Mmakoena Mmola</p>
Eagle Greek Investments 660 (Pty) Ltd	X	23 August 2018 (1:00 PM)	<p>Good day</p> <p>Please find attached hereto Interested and Affected Party Registration Forms. Please acknowledge receipt of same.</p> <p>Kind regards</p> <p>The I&amp;AP completed the registration form and provided the following comments:</p> <ul style="list-style-type: none"> <li>• Landowner adjacent to affected area.</li> <li>• Municipalities, all landowners in the Vredefort Dome World Heritage Site and all farm owners, other occupiers and farm workers in the affected and adjacent area need to be notified of this project.</li> <li>• There are many graves and other heritage sites in the area.</li> <li>• Impacts such as contamination of underground water resources and the impact on farming operations, including loss of jobs should be considered during the study.</li> </ul>	<p>Good day,</p> <p>Thank you for completing the Interested and Affected Party Registration Forms and for providing comment.</p> <p>Your comments and concerns regarding the above mentioned project are well noted.</p>

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Derek Bam	X	23 August 2018 (10:58 AM)	<p>Good day Mr Shango</p> <p>Please forward me the Interested and Affected Party Registration Form in Word Format for me to complete.</p> <p>Kind regards</p>	<p>Dear Karen,</p> <p>Please find attached a word format of the Interested and Affected Party Registration form for the Vredefort West Extension Prospecting Right Project.</p> <p>Regards,</p> <p>Mmakoena Mmola</p>
Derek Bam	X	23 August 2018 (1:00 PM)	<p>Good day</p> <p>Please find attached hereto Interested and Affected Party Registration Forms. Please acknowledge receipt of same.</p> <p>Kind regards</p> <p>The I&amp;AP completed the registration form and provided the following comments:</p> <ul style="list-style-type: none"> <li>• Landowner adjacent to affected area.</li> <li>• Municipalities, all landowners in the Vredefort Dome World Heritage Site and all farm owners, other occupiers and farm workers in the affected and adjacent area need to be notified of this project.</li> <li>• There are many graves and other heritage sites in the area.</li> <li>• Impacts such as contamination of underground</li> </ul>	<p>Good day,</p> <p>Thank you for completing the Interested and Affected Party Registration Forms and for providing comment.</p> <p>Your comments and concerns regarding the above mentioned project are well noted.</p>

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			<p>water resources and the impact on farming operations, including loss of jobs should be considered during the study.</p> <ul style="list-style-type: none"> <li>• Full public participation is necessary.</li> <li>• Specific concern or comment: prospecting starting before public participation is concluded.</li> </ul>	
Save the Vaal Environment	X	<p>26 August 2018 27 August 2018</p>	<p>Attached is the completed form to register as an Interested and Affected Party in regard to the above proposed prospecting right.</p> <p>Please keep us informed so that we may participate in the process.</p> <p>Yours sincerely, Mauren Stewart Vice Chairperson SAVE the VASAL</p> <p>Hi All</p> <p>I think it does fall out of mandated area will need to get lotter input on this in terms of the constitution</p> <p>Thanking You Kindly The Save Committee</p> <p>The Save Committee completed the I&amp;AP registration form and provided the following comments:</p> <ul style="list-style-type: none"> <li>• SAVE the Vaal has been in operation for 18 years. We aim to prevent pollution of the Vaal River.</li> </ul>	<p>Good day,</p> <p>This e-mail serves to inform you that you have been registered as an I&amp;AP for the Vredefort West Extension Prospecting Right project and will be sent notification regarding any developments on this project such as:</p> <ol style="list-style-type: none"> <li>1. Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>2. Date and venue for the public meeting where findings of the Basic Assessment process will be presented.</li> <li>3. Availability of the final BAR and EMPR.</li> <li>4. Outcome of this application.</li> </ol> <p>Your comments are noted. Kindly note that this is an application for prospecting and not mining. Should the application be granted by the Department of Mineral Resources, the area to be disturbed will be approximately 0.03 hectares in aerial extent. The disturbed areas will be rehabilitated to their original state and to the satisfaction of the affected landowner. One property has been identified for trenching (Portion 1 of the farm Mimosa Grove 491). A</p>

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			<ul style="list-style-type: none"> <li>SAVE the VAAL is concerned about the impact of the proposed mining (which covers a wide area and a wide range of minerals). SAVE the VAAL needs to assess the impact of such mining on the Vaal River.</li> <li>Friends of Vredefort Dome and Federation for a sustainable development should be notified of this project.</li> <li>SAVE will deals with any biophysical and/or socio-economic impacts that should be considered during the study any objection/appeal that it may lodge.</li> <li>SAVE is concerned about pollution of the Vaal River.</li> </ul>	<p>granted Prospecting Right will not provide the Applicant the required authorisation for mining activities. As such, any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>Specialist studies (Ecology (flora and fauna), Wetlands and Heritage and Palaeontology) will be conducted to identify sensitivities within the application area. Furthermore, appropriate mitigation measures will be proposed and will be included in the Basic Assessment Report and Environmental Management Programme in order to minimise potential impacts. Please be advised that a 100 m buffer has been delineated from all water courses. As such, the Vaal River will not be impacted upon as a result of the proposed prospecting activities.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
<p>Free State Dome Landowners Association/Vredefort Dome Landowners Association</p>	<p>X</p>	<p>30 August 2018</p>	<p>Dear Ms Siwendu,</p> <p>Please find attached a completed registration form to register the Free State Dome Landowners Association as an affected party.</p> <p>Yours sincerely</p> <p>Dr CF Reinecke</p> <ul style="list-style-type: none"> <li>The Free State Dome Landowners Association is an Interested and Affected Party which represents 200 landowners in the Vredefort Dome.</li> <li>I am a Chairperson of FDLA and the proposed</li> </ul>	<p>Good day,</p> <p>This correspondence bears reference to the registration forms you submitted as both the Chairperson of the Free State Dome Landowners Association and an owner of the farm Farm Maugwynheg 1136 Portion 0(RE) within the application area.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>Availability of the draft Basic Assessment Report (BAR) and Environmental Management</li> </ul>

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			<p>project might influence the World Heritage Site to the extent that this geological marvel could be delisted by UNESCO as a World Heritage Site and could subsequently be lost for future generations.</p> <ul style="list-style-type: none"> <li>• There is a World Heritage Site adjacent to the application area.</li> <li>• FDLA and North West Dome Landowners Association should be notified of this application.</li> <li>• The groundwater runoff from the proposed area decant into the Vredefort Dome World Heritage Site as well as into the already polluted Vaal River system. Furthermore, the area is part of the greater Vredefort Dome and intrusive activities will very negatively impact on the very unique meteorite crater which is one of its kind in the world. The latter is evident from remnant outcrops to the west of the proposed area.</li> <li>• The Vredefort Dome is in the process of being developed as a WORLD HERITAGE SITE in order to preserve it for future generations to come.</li> <li>• If the adjacent World Heritage site is negatively impacted by the proposed activities there is no doubt that it would be delisted by UNESCO as a World Heritage Site. This will inevitably lead to the destruction of the very unique geological marvel.</li> <li>• This area should not be considered for mining given its close proximity to the Vredefort Dome Heritage Site.</li> </ul>	<p>Programme (EMPR).</p> <ul style="list-style-type: none"> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application</li> </ul> <p>Please be advised that Mr Nigrini as well as the Department of Environmental Affairs have been registered as I&amp;APs and sent notification regarding this project.</p> <p>Your comment that groundwater runoff from the proposed site will decant into the Dome and Vaal River is noted. Prospecting will ascertain if economically viable mineral resources occur in the area and will include excavation of two trenches each to a depth of 3 m. It is anticipated that the risk of groundwater contamination as a result of the prospecting activities will be negligible as the proposed excavations are shallow. However, this potential impact on water resources will be assessed in the Basic Assessment Report (BAR) and Environmental Management Programme(EMPR) and appropriate mitigation measures will be proposed. Furthermore, a 100 m buffer has been delineated from all watercourses traversing and surrounding the application area. As with groundwater contamination, the possible emission of fugitive dust during the proposed invasive activities will also be assessed and mitigation measures provided.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application,</p>

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			<ul style="list-style-type: none"> <li>During a visit by UNESCO to the Vredefort Dome the area was described by UNESCO as being in a pristine condition leading to the area being listed as a World Heritage site.</li> </ul>	<p>investigation and public participation process.</p> <p>Your comment that the Vredefort Dome World Heritage Site is in the process of being developed is well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone (map attached). It is further noted that the application area occurs on the southwestern portion of the Vredefort Dome, which is in the process of being developed into a World Heritage Site.</p> <p>Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>If you have any questions in this regard, please do not hesitate to contact.</p>
Dome Meteorite Park Conservancy	X	31 August 2018	<p>Dear Sir,</p> <p>Attached, please find letter for your attention.</p> <p>Regards,</p> <p>Jeanne-Marie Van den Berg</p> <p>pp. Mr. Mike Erasmus</p> <p>Chairman</p>	<p>Good day,</p> <p>This correspondence serves to notify you that the Dome Meteorite Park Conservancy has been registered as an Interested and Affected Party and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> </ul>

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			<p>Dome Meteorite Conservancy</p> <p>Opposition to application for prospecting rights Ref: (FS) 30/5/ 1/ 1/ 3/2/1/10521 EM VREDEFORT WEST Extension: White Rivers Explorations (Pty) Ltd</p> <p>Kindly register the Dome Meteorite Park Conservancy as an interested and affected party in the above application. Most of the conservancy's members are landowners within the WHS.</p> <p>The Dome Meteorite Park Conservancy is opposed to the above application for prospecting rights by White Rivers Explorations (Pty) Ltd being granted.</p> <ol style="list-style-type: none"> <li>1. The farms which form part of the application are situated close to the Vredefort Dome World Heritage Sites (WHS) and will any prospecting and future mining have a direct influence on the WHS.</li> <li>2. In terms of the IUCN guidelines for protected sites, such as World Heritage Sites, the site itself should be surrounded by a transition zone to enable the proper protection thereof. It is submitted that in such a transition zone activities such as mining should not be allowed. The IUCN is the official advisor to UNESCO on matters of conservation. No prospecting or future mining should therefore be allowed close to the World Heritage Site outside its buffer zone. If it is allowed it could jeopardize the status of the World Heritage Site.</li> <li>3. The prospecting applications include farms in the catchment area of the Vaal River. It is totally unacceptable that any prospecting or future mining</li> </ol>	<ul style="list-style-type: none"> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application</li> </ul> <ol style="list-style-type: none"> <li>1. Your comment that the Vredefort Dome World Heritage Site is situated in close proximity to the proposed application area is well noted. We are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. The farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone. As such, the Vredefort Dome World Heritage Site will not be impacted upon by the proposed prospecting activities. Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</li> <li>2. See 1. above.</li> <li>3. A 100 m buffer has been delineated from all watercourses traversing and surrounding the application area. As such, It is anticipated that the risk of surface water contamination as a result of the proposed prospecting activities will be negligible.</li> <li>4. The Public Participation Process commenced on the 27th July 2018 with an initial notification and call to register period ending on the 31st August</li> </ol>

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			<p>be allowed close to the Vaal River. The Vaal River is the main artery of the economic activities in the area and downstream and is already over utilized, over polluted and over developed. It will not be able to sustain mining close by.</p> <p>4. The public participation process is inadequate. All the landowners should be individually contacted and informed of the application. Obvious stakeholders and interested and affected parties should be identified and contacted. These include, but are not limited to, Save the Vaal, the geology departments of the Northwest and Free State Universities, the departments of Environmental Affairs responsible for the Vredefort Dome World Heritage Site, the Council for Geo Science, UNESCO, adjacent landowners, tourism associations at Parys, Vredefort, Kroonstad and several others. Registered letters ought to be sent to such interested and affected parties.</p> <p>5. All stakeholders should be provided with full and detailed information of the application, proposed activities, duration and the nature thereof. Without such information it is not possible to provide informed inputs. Interested and Affected parties should be consulted before the studies are done and an EMP developed.</p> <p>6. Without limiting it thereto issues like the safety of landowners and farm workers, HIV Aids, social impacts, access to the farms, the effect on the underground water if water is sourced by means of boreholes, accommodation, offices, sites on farms,</p>	<p>2018. Initial notification was given in the following manner:</p> <ul style="list-style-type: none"> <li>• Registered letters, faxes and e-mails.</li> <li>• Background Information Document.</li> <li>• Newspaper advertisements placed in The Free State Weekly and Dumelang News.</li> <li>• Placement of A3 posters at local gathering places within and around the application area.</li> <li>• Placement of correx board site notices along and within the perimeter of the application area.</li> </ul> <p>All landowners and stakeholders whose contact details could be sourced were sent notification regarding this project.</p> <p>5. Kindly note that the notification that was sent to landowners and stakeholders included the following information:</p> <ul style="list-style-type: none"> <li>• List of anticipated activities to be authorised.</li> <li>• Scale and extent of activities to be authorised.</li> <li>• Sufficient detail of the intended operation (to enable I&amp;APs to assess/surmise what impact the activities will have on them or on the use of their land).</li> <li>• The purpose of the proposed project.</li> <li>• Details of the affected properties (including a locality map).</li> </ul>



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			<p>pollution, what so called non-invasive means entails, measures to prevent veld fires, agreements with landowners with regard to all aspects of the prospecting etc. must be addressed.</p> <p>7. The fact that the proposed prospecting is to be done in the oldest and largest meteorite impact site in the world (part of which is a World Heritage Site) and the geological implications thereof should be addressed in detail.</p> <p>8. Should prospecting rights be awarded, which it is submitted should not be done, agreements need to be reached with all landowners individually as to how, when and where and under what conditions the prospecting will be done in order to ensure that their rights are not infringed. This should form part of the EMP.</p> <p>In conclusion it is submitted that full written information as to the nature, methods and scope and duration of the prospecting rights applied for should be provided to all possible interested and effected parties to enable them to make informed objections and inputs.</p>	<ul style="list-style-type: none"> <li>• Details of the MPRDA and NEMA Regulations that must be adhered to.</li> <li>• Date by which any request to register as an I&amp;AP must be forwarded through to Shango Solutions.</li> <li>• Contact details of the EAP.</li> </ul> <p>6. Noted. Any potential impacts associated with the proposed prospecting activities will be included and assessed in the Basic Assessment Report and Environmental Management Programme. Furthermore, appropriate mitigation measures will be proposed order to minimise the potential impacts.</p> <p>7. Noted.</p> <p>8. Noted.</p> <p>Thank you very much for your input.</p>
Bam D-LaChandau	X	30 August 2018	<ul style="list-style-type: none"> <li>• Grondeienaar.</li> <li>• Landbou en weiding, besproeiende vleilande.</li> <li>• Koepel en erfenis gebied.</li> <li>• Toerisme aantreklikheid wêreld wyd bekend.</li> <li>• Water besoedeling vir besproeiing en bottelering</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis</p>

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			<p>van water. Toerisme van jag en visiang word bedreig.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Landowner.</li> <li>• Agriculture, grazing and irrigation.</li> <li>• Dome heritage area, tourism attraction and world known.</li> <li>• Water pollution for irrigation and bottling of water. Tourism, hunting and fishing will also be threatened.</li> </ul>	<p>dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied</p>

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				<p>te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and</p>

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				<p>EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Dawie Marx	X	30 August 2018	<ul style="list-style-type: none"> <li>• Ja, Graspan val onder die Vredefort West gebied</li> <li>• Ja, ek woon, my famielie, bure en al ons werkers. Dawie Marx 082 547 7450 Francois Marx 082 5708 128</li> <li>• Dit grooteendeels landbou gronde waarvan baie lande (gesodidesl weiding) is. Hier is baie vlei gebiede en bedreigde spesies wat hier voorkom soos, ousid, erdvorste setsetaris voël ens. Wat alles negatief gaan beïnvloed word deur die omgewing te steur. ons het ook nie scorls water en beeste, stape hoeders en ons self is afhanklik aan</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en</li> </ul>

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			<p>ondergronde water</p> <ul style="list-style-type: none"> <li>• Ja, Koepel wêreld erfenis gebied</li> <li>• Dit 'n landbou gebied met 'n klein gemeenskap wat erg gaan beïnvloed word as hulle 'n myn hier gaan opsit. Heir gaan meer voertule op die paaie wees wat die paaie gaan verswats. Meer diefskat. Die omgewing gaan besig wees en beïnvloed word.</li> <li>• Inpak studies op amal se beresye moet gedoen word. Om geen bebreigde of normale efosisteme te beïnvloed word nie. Veligheid studies, water besafeling studies moet gedoen word</li> <li>• Ja, die projets gaan my en my bure se besighede belemener of in risiko stel. My vriend naby koppies het baie giet geword as gevolg van 'n my wat naby hulle die water besoedel het. Die myn kan meer diefskal na die omgewing lots, natuur bestudig, water besoedel of van ons boorgat lees pomp</li> </ul> <p>ENGLISH TRANSLATION</p> <ul style="list-style-type: none"> <li>• Yes, Graspan falls within the heritage area.</li> <li>• Yes, me, my family, neighbours and all our workers live in the area. Dawie Marx 082 547 7450 Francois Marx 082 5708 128</li> <li>• It is mostly agricultural lands that will be affect, of which most of is used for grazing. There are a lot of endangered species including aardvarks, secretary birds etc. These species will be</li> </ul>	<p>Omgewingsbestuursprogram (OBP).</p> <ul style="list-style-type: none"> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiele impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie</p>

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			<p>negatively impacted if the area is disturbed. We also do not have adequate water and are thus highly dependent on underground water. Furthermore, we do not have cattle, sheep and chickens.</p> <ul style="list-style-type: none"> <li>• Yes, Dome world heritage area</li> <li>• It is a small agricultural community that will be greatly affected if mining operations commence. There will be more vehicles on the roads; this will deteriorate the roads even further. The area will be busier and highly influenced by mining activities.</li> <li>• Impact studies should be conducted to ensure the species are not endangered and that the ecosystem is not disturbed. Safety studies and water pollution studies should also be carried out.</li> <li>• Yes, this project will put my business and that of my neighbours at risk. A friend of mine in Koppies became very ill due to water contamination from a mine in the area. Furthermore, a mine can increase the crime/theft in an area, cause environmental damage and pollute the water system or drain the water table.</li> </ul>	<p>huiwer om te kontak nie.</p> <p>ENGLISH TRANSLATION</p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p>

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				<p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
AHS Beleggings (Pty) Ltd	X	27 August 2018	<ul style="list-style-type: none"> <li>• Ja, teen die prospekteer.</li> <li>• Beesboerdery - verkoop van Speenkalwers Wildboerdery.</li> <li>• Familie grafte van Coetzee familie.</li> <li>• Deeglike en eerlike gesprek voering met belanghebbende persone moet gevoer en gekorrespondensie word.</li> <li>• Familie grafte moet beskerm word.</li> </ul> <p>Besoedeling van gebied, lug en water.</p> <p>Groot mynvoertuie wal paaie vernietig.</p> <p>Vliegtuie wat vir ungewingstiche, gebruik word sal</p>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> </ul>

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			<p>wild varwilder wat tot beserings en dood sal ly.</p> <ul style="list-style-type: none"> <li>Ons maak ook beswaar vir die kort. Kennisgewing wat ons het tot 31 on teen die prospekterig beswaar te maak Augustus 2018.</li> </ul> <p>Kennisgewing is ook nie gesien en direk onder ons aandag gebring nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>Yes, I am against the prospecting.</li> <li>Cattle farming - sales of weaners/calf, Game farming.</li> <li>Family graves of coetzee family.</li> <li>Thorough and honest discussion with interested persons must be conducted and communicated.</li> <li>Family graves have to be protected</li> <li>Pollution of area, air and water.</li> <li>Heavy mine vehicles will destroy the roads.</li> <li>Planes used for aerial survey will scare away game leading to injury and death.</li> <li>We object to the short notice time that we received on 31 August 2018 and object to the prospecting.</li> </ul> <p>Notices were not seen and were not brought directly to our attention.</p>	<ul style="list-style-type: none"> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p>



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A L de Bruyn	X	30 August 2018	<ul style="list-style-type: none"> <li>• Daar word intensief met vrugte en groente geboer. Die boorde is totaal afhandlik van die ondergrondse water wat dmv boorgate en pompe aan hulle gelewer word. Daar is twee gesinne en talle vee wat ook afluandlik is van die boorgate vir drinkwater.</li> <li>Species wat voorkom in ons is:               <ul style="list-style-type: none"> <li>○ Aurora-nagslang (Lamprophis aurora).</li> <li>○ Black-footed cat (Felis nigripes).</li> </ul> </li> <li>• My plaas grens aan die Vredefort Werelderfenisgebied.</li> <li>• Twee gesinne en talle werkers se gesinne se lewenshoubaarheid maak staat op die suksesvolle produksie van vrugte en groente op die plaas. Enige steuring aan water toegang of kwaliteit plaas die mense se toekoms in gevaar.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul>

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			<p>Lug kwaliteit het ook 'n drastiese impak op die produksie van vrugte en groente</p> <ul style="list-style-type: none"> <li>• Enige bo of ondergrondse myn aktiwiteite moet minstens 40km soos die kraai vlieg vanaf die plaas plaasvind om te verhoed dat dit enige impak het.</li> <li>• Ek is geheel gekant teen die projet omdat dit my en ook ander se lewensvatbaarheid totaal in gevaar stel.</li> <li>• Die kennisgewingtyd vir hierdie dokument en informasie was heeltemal te kort en onredelik.</li> </ul> <p>Daar moet 'n uitstel gedoen word.</p> <p><b>ENGLISH TRANSLATION</b></p> <ul style="list-style-type: none"> <li>• Intensive farming of fruit and vegetables. The orchards are completely dependent on underground water which is supplied through boreholes and pumps. There are two families and copious livestock which are also dependent on borehole water for consumption.</li> </ul> <p>Species in our area are:</p> <ul style="list-style-type: none"> <li>○ Aurora-night hose (<i>Lamprophis aurora</i>).</li> <li>○ Black-footed cat (<i>Felis nigripes</i>).</li> </ul> <ul style="list-style-type: none"> <li>• My farm borders the Vredefort Heritage area.</li> <li>• Two families and many of the farm workers' families' livelihoods depend on the successful production of fruits and vegetable farming on the farm. Any disturbances to the water access or</li> </ul>	<p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiviteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<p>quality and the farm will jeopardise the future of the people. Air pollution will have a drastic impact on the production of fruits and vegetable.</p> <ul style="list-style-type: none"> <li>• Any above or underground mining activity has to be at least 40 km away from the farm to avoid any impact.</li> <li>• I am completelt opposed to the project as it can jeopardise mine and other people’s livelihood.</li> <li>• Notice for this document and information was too short and unreasonable. There should be an extension.</li> </ul>	<p>affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer</p>

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				<p>zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
G A Justus	X	27 August 2018	<ul style="list-style-type: none"> <li>• Ja, Maar nie vir ontwikkeling nie.</li> <li>• Ja ek is die grondeienaar.</li> <li>• Landbou en beweiding. Daar is klip randte en lande sowel as aardvarke. Wat beskerm moet word boorgate, huis en dam</li> <li>• Die omgewing en skaars ondergrondse water wat skaars is gaan vernietig word.</li> <li>• Geen prospektering moet toegelaat word nie.</li> <li>• Ja, dit gaan n groot impak op die be beperre.</li> <li>• water hê en die omgewing gaan vernietig en besoedel word. Onderground water is reeds skaars.</li> </ul> <p>ENGLISH TRANSLATION</p> <ul style="list-style-type: none"> <li>• Yes, but not for development.</li> <li>• Yes, I'm the landowner.</li> <li>• Agriculture and grazing.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>• Datum en plek van die openbare vergadering.</li> <li>• Besikbaarheid van die finale BAV en OBP.</li> <li>• Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
			<ul style="list-style-type: none"> <li>• The environment and rare underground water that are barely destroyed will be destroyed.</li> <li>• No prospecting must be allowed</li> <li>• Yes, it will have a big impact on the limited water and the environment will be destroyed and polluted. Underground water is already rare.</li> </ul>	<p>Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiviteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party</p>

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				<p>(I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology (flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<p>application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Koepel Boerevereniging	X	27 August 2018	<ul style="list-style-type: none"> <li>We want to oppose prospecting and mining activities in the area.</li> <li>We are a union representing land owners and occupants in the area.</li> <li>Yes, the Koepel Boerevereniging is representative of a community of 105 land owners in the area.</li> <li>Farming, grazing, endangered plant and fish species, UNESCO world heritage site.</li> <li>Yes, world heritage site</li> <li>Mining activities will do irreparable damage to the geological world heritage site of the Vredefort Dome and we stand opposed to any such activities.</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>Beskikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> <li>Datum en plek van die openbare vergadering.</li> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV</p>



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				<p>en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekter en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p> <p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report</li> </ul>

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				<p>(BAR) and Environmental Management Programme (EMPR).</p> <ul style="list-style-type: none"> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted. Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not</p>

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				hesitate to contact me.
Martan Boerdery	X	27 August 2018	<ul style="list-style-type: none"> <li>• Ja, ek is die grondeienaar.</li> <li>• Word intensiel met skaap geboer. Goeie weiding en baie Fauna en flora.</li> <li>• Fauna en flora gaan besuadzi word water besoedelzing.</li> <li>• Geen mynbou of prospekteer mag en moet gedoen word nie.</li> </ul> <p>ENGLISH TRANSLATION</p> <ul style="list-style-type: none"> <li>• Yes, I am the landowner.</li> <li>• Intensive sheep farming, grazing, fauna and flora.</li> <li>• Fauna and flora will be destroyed and the water will</li> </ul>	<p>Goeie dag,</p> <p>Hierdie korrespondensie verwys na die registrasievorms wat deur Shani Ward ingedien is namens alle grondeienaars wat geraak word deur die voorgestelde Vredefort Wes-uitbreidingsprojek.</p> <p>Dankie dat u die Registrasievorm van die Belanghebbende en Geaffekteerde Party voltooi het. Neem asseblief kennis dat u as 'n B &amp; GP geregistreer is en sal ingelig word oor enige ontwikkelinge rakende hierdie projek soos:</p> <ul style="list-style-type: none"> <li>• Besikbaarheid van die konsep basiese assesseringsverslag (BAV) en Omgewingsbestuursprogram (OBP).</li> </ul>

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			<p>be polluted.</p> <ul style="list-style-type: none"> <li>No mining or prospecting should occur.</li> </ul>	<ul style="list-style-type: none"> <li>Datum en plek van die openbare vergadering.</li> <li>Beskikbaarheid van die finale BAV en OBP.</li> <li>Uitkoms van die aansoek.</li> </ul> <p>U kommentaar en kommer oor die impak op flora, fauna, waterbronne en die algehele omgewing word opgemerk. Spesialisstudies Ekologie (flora en fauna), Vleilande en Erfenis en Paleontologie is in opdrag vir hierdie projek en enige sensitiwiteit (ekologiese, erfenis of paleontologiese) wat binne die aansoekarea geïdentifiseer word, sal by die BAV en OBP ingesluit word. Toepaslike mitigasiemaatreëls sal voorgestel word en sal by die BAV en OBP ingesluit word om potensiële impakte te verminder.</p> <p>U besorgdheid oor moontlike skade aan die Wêrelderfenisgebied van die Vredefortkoepel is goed bekend. Let asseblief daarop dat ons deur wetgewing verplig word om 'n 5 km buffer van geproklameerde Wêrelderfenisgebiede te handhaaf. As sodanig val die plaas eiendomme waaroor ons kliënt aansoek doen vir 'n Prospecting Right, nie binne die 5 km buffersone nie.</p> <p>Let asseblief daarop dat dit in hierdie stadium nie bekend is of mynbou in die pyplyn is nie aangesien hierdie aansoek vir prospekteer en nie mynbou is nie. Enige toekomstige voorneme om mynbou in die aansoekgebied te onderneem, sal 'n verdere aansoek, ondersoek en openbare deelnameproses vereis.</p> <p>As u enige vrae in hierdie verband het, moet asseblief nie huiwer om te kontak nie.</p>

I&AP	Consulted	Date comments received	Comment received	Response issued
				<p><b>ENGLISH TRANSLATION</b></p> <p>Good day,</p> <p>This correspondence bears reference to the registration forms submitted by Shani Ward on behalf of all landowners affected by the proposed Vredefort West Extension project.</p> <p>Thank you for completing the Interested and Affected Party (I&amp;AP) registration form. Please note that you have been registered as an I&amp;AP and will be informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application.</li> </ul> <p>Your comments and concerns regarding impacts on flora, fauna, water resources and the overall environment are noted. Specialist studies (Ecology(flora and fauna), Wetlands and Heritage and Palaeontology) have been commissioned for this project and any sensitivities (ecological, heritage or paleontological) identified within the application area will be included in the BAR and EMPR. Appropriate mitigation measures will be proposed and will be included in the BAR and EMPR in order to minimise potential impacts.</p> <p>Furthermore, your concerns regarding potential harm to the Vredefort Dome World Heritage Site are well noted.</p>

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				<p>Kindly note that we are required by legislation to maintain a 5 km buffer from proclaimed World Heritage Sites. As such, the farm properties over which our client has applied for a Prospecting Right do not fall within the 5 km buffer zone.</p> <p>Kindly note that at this stage it is not known if mining is in the pipeline as this application is for prospecting and not mining. Any future intention to undertake mining in the application area would require a further application, investigation and public participation process.</p> <p>If you have any questions in this regard, please do not hesitate to contact me.</p>
Jabu Tjeko	X	11 September 2018	<p>Good day Zizo</p> <p>I am a resident and a Property consultant in around Parys and Vredefort and i have been recently been made aware of the Vredefort West Ext Prospecting Rights.</p> <p>I wish to be register as an I&amp;AP and kept informed regarding this project, if is not possible to be register due to the cut out date, i will appreciate been kept informed regarding the development of the project.</p> <p>Will appreciate your respond.</p>	<p>Good morning,</p> <p>This e-mail serves to inform you that you have been registered as an Interested and Affected Party and will informed of any developments regarding this project such as:</p> <ul style="list-style-type: none"> <li>• Availability of the draft Basic Assessment Report (BAR) and Environmental Management Programme (EMPR).</li> <li>• Date and venue of the public meeting.</li> <li>• Availability of the final BAR and EMPR.</li> <li>• Outcome of the application</li> </ul>

## 8. ENVIRONMENTAL ATTRIBUTES AND ASSOCIATED ALTERNATIVES

### 8.1 Baseline Receiving Environment

This section describes the baseline receiving environment of the prospecting area. Information in this section is based on desktop studies by the EAP, a site visit, input from the public through the I&AP questionnaire and specialist studies undertaken in support of this application. As such, the descriptions below of environmental features represent a consolidation of relevant information to the application area.

#### 8.1.1 Socio-Economic

The application area is situated in the Free State Province of South Africa, approximately 20.3 km west of the town of Parys. It can be found in Wards 21 and 23 of the Moqhaka Local Municipality within the jurisdiction of the Fezile Dabi District Municipality (Figure 4).

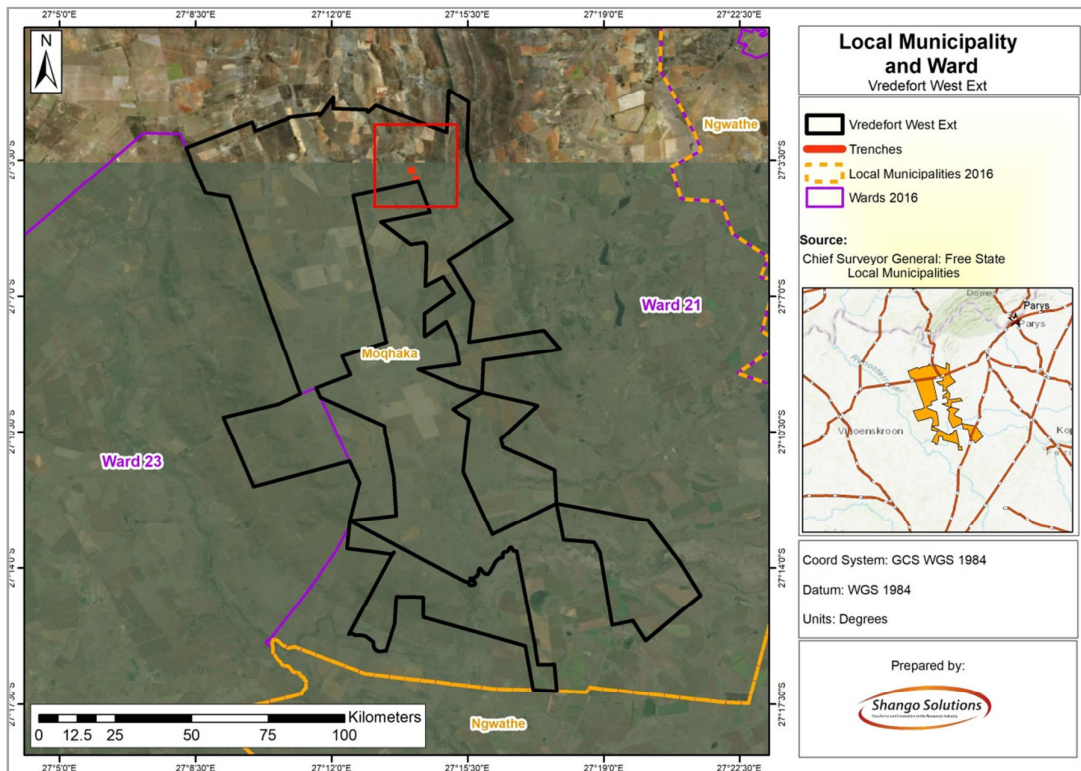


Figure 4: The affected local municipality and wards (refer to Appendix D for an enlarged map).

According to the Moqhaka Local Municipality Integrated Development Plan (IDP) 2017/2018, the Moqhaka region is located within a significant agricultural region. The town of Kroonstad is the centre of a large agricultural community that plays a crucial role in the economy of the region. In addition to agriculture, mining remains one of the primary economic sectors within the Moqhaka Local Municipality through the De Beers and Lace diamond mines situated approximately 15 km from Kroonstad CBD. The Anglo Gold Ashanti Kopanong Mine and the possible re-opening of Vierfontein Collieries in the area of Viljoenskroon also play the same important economic role (Moqhaka Local Municipality IDP, 2017/2018).

There is a general tendency of migration from rural to urban areas occurring in the area, as is the case in the rest of the Free State Province. The majority of the rural population is active within the agricultural sector. Regarding the population distribution, the area is largely urbanised (78% urban and 22% rural). According to the 2011 census data, Moqhaka Local Municipality has a population of 160 532.

**8.1.2 Geology**

The surface geology of the application area is dominated by rocks of the Karoo Supergroup overlying those of the Central Rand and West Rand groups of the Witwatersrand Supergroup. The Karoo Supergroup strata within the application area are predominately horizontally bedded sandstones and shales of the Eccca Group. The Eccca Group contains coal at shallow depths which might be exploitable.

The Witwatersrand Supergroup represents a period of major sedimentation within an inland sea which commenced 2 970 million years ago. Certain conglomerate layers within the Witwatersrand rocks known as reefs host the world’s most prolific accumulation of gold. These reefs are the primary targets for prospecting. In addition to gold, the primary prospecting targets, silver, uranium, sulphur, diamonds, rare earths and platinum group metals are currently and have been historically, extracted as by-products of gold. The Witwatersrand rocks are thought to occur at relatively shallow depths (0 – 500 m) within the application area as it occurs on the south-western portion of the Vredefort Dome.

The major meteorite impact which resulted in the formation of the Vredefort Dome caused the central, most deeply buried portion of the Witwatersrand Basin to be extremely exposed in an arcuate belt of steeply dipping to overturned strata that preserves, in addition, Dominion Group, Ventersdorp and Transvaal Supergroups. Base metals (cobalt, copper, manganese, molybdenum, nickel, lead, tungsten and zinc) could potentially be present in mafic intrusives. The distribution of the above mentioned rocks is shown in Figure 5.

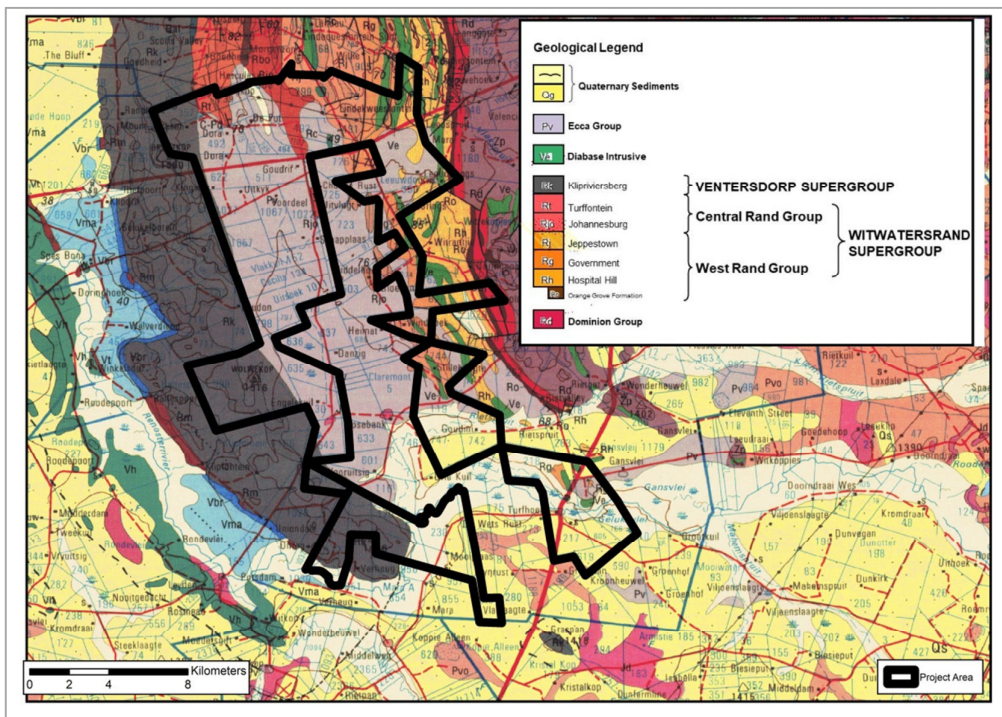


Figure 5: Distribution of rocks types within the application area (refer to Appendix D for an enlarged map).

**8.1.3 Topography**

The topography of the application area is characterised by ridges and valleys varying in altitude between 1 274 and 1 611 metres above mean sea level (MAMSL) (Moqhaka Local Municipality Environmental Management Framework, 2013).



**8.1.4 Climate**

The application area is characterised by summer rainfall and warm-temperate conditions with a mean annual precipitation of approximately 594 mm (Mucina and Rutherford, 2006) (Figure 6). Frost occurs regularly within winter months (approximately 38 days per year on average).

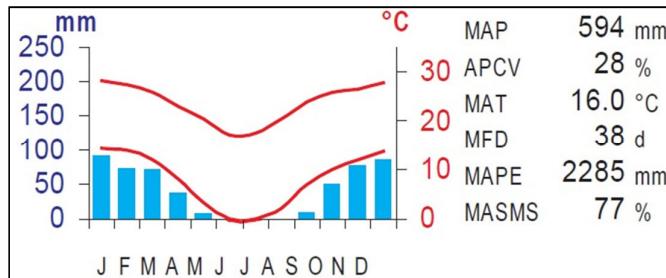


Figure 6: Climate diagram for the application area (Mucina and Rutherford, 2006).

**8.1.5 Land Type and Soils**

According to the land type database (Land Type Survey Staff, 1972 - 2006), the application area consists of the Bc26 land type which is characterised by plinthic catena. Upland duplex and marginalitic soils are rare within this land type and eutrophic red soils are wide spread across the region. According to Mucina and Rutherford (2006), soil types that can be expected within this region include Mispah, Hutton and Avalon soil forms which represent plinthic soils. These soil types could either be eutrophic (Bc land type) or dystrophic/mesotrophic (Ba land type).

**8.1.6 Land Uses and Land Capability**

The land in the application area is predominantly utilised for commercial farming. Other land uses surrounding the application area include existing historical mining operations, livestock and game farming. Infrastructure such as secondary tar roads, gravel roads and homesteads, occur within the proximity of the application area. The application areas is covered by wetlands, permanent water, cultivated fields (medium and high use), grassland, woodland/open bush, urban townships, low shrub land, mine buildings and urban built-up areas (Figure 7).

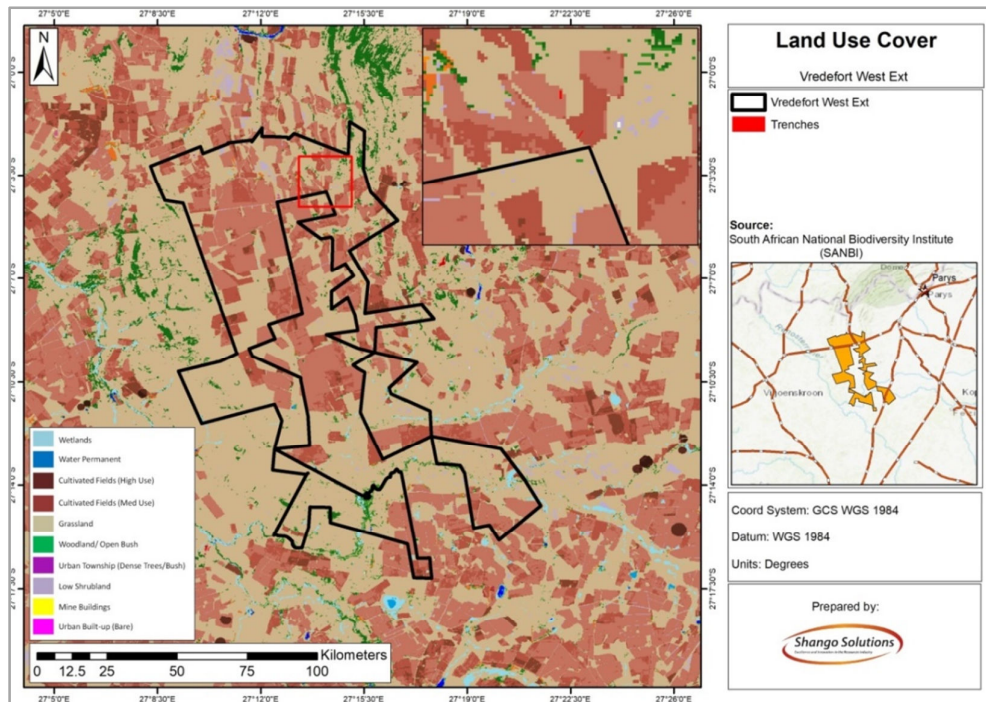


Figure 7: Land cover within and around the application area (refer to Appendix D for an enlarged map).

**8.1.7 Wetland Impact Assessment**

A Wetland Impact Assessment (Appendix F3) was undertaken by The Biodiversity Company. The assessment focused on the locations of the proposed trenches and the 500 m assessment boundary, and was conducted only on a desktop level as a field survey could not be undertaken given the limitation regarding access to site. Therefore, assumptions have been made that possible wetland areas identified by means of desktop data in fact represent wetland areas. Below is a summary of the specialist findings.

**8.1.7.1 Desktop Assessment**

**Surface Hydrology**

The application area falls within the Vaal Water Management Area (Figure 8), which includes rivers such as the Wilge, Liebenbergsvlei, Mooi, Renoster, Vals, Sand, Vet, Harts, Molopo and Vaal rivers (Figure 9).

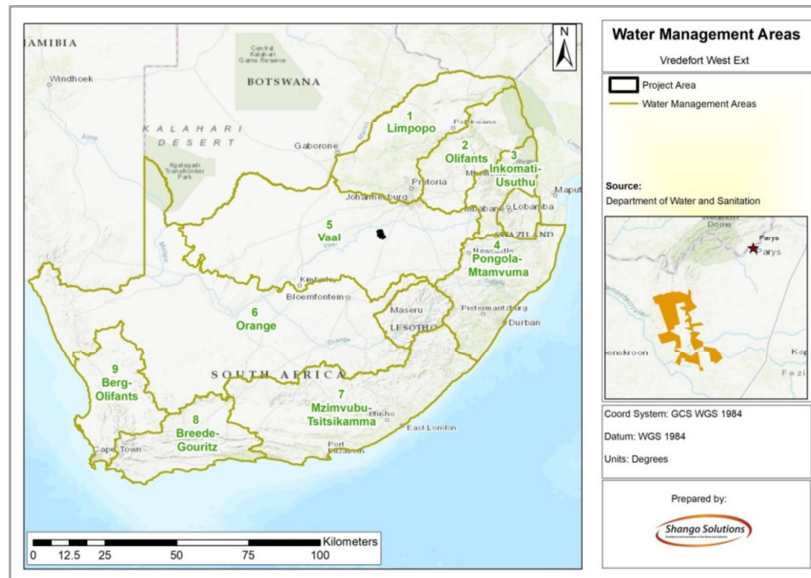


Figure 8: Water Management Areas of South Africa (refer to Appendix D for an enlarged map).

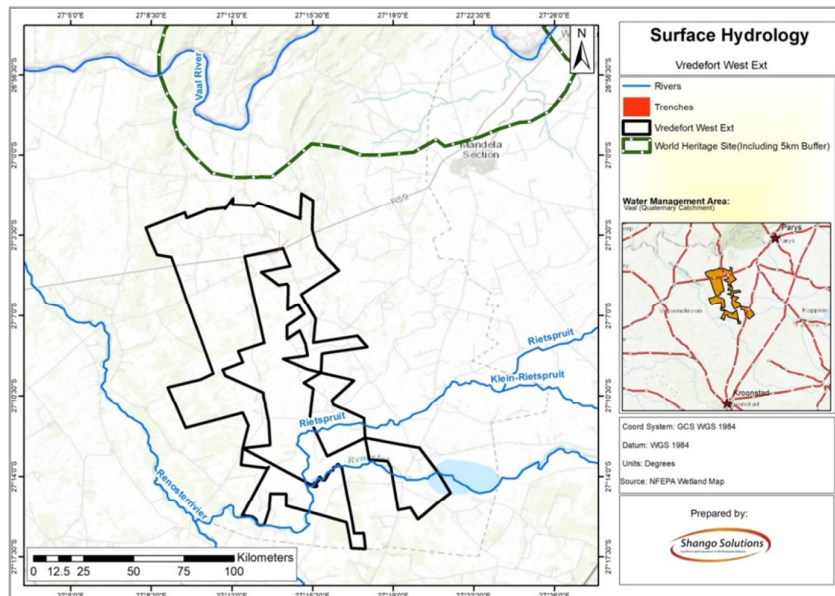


Figure 9: Rivers traversing the application area (refer to Appendix D for an enlarged map).

The Vaal Water Management Area comprises 12 tertiary catchment areas, and the application area is specifically situated in the C70J, C23L, C70F and C70E Quaternary Catchments (Figure 10).

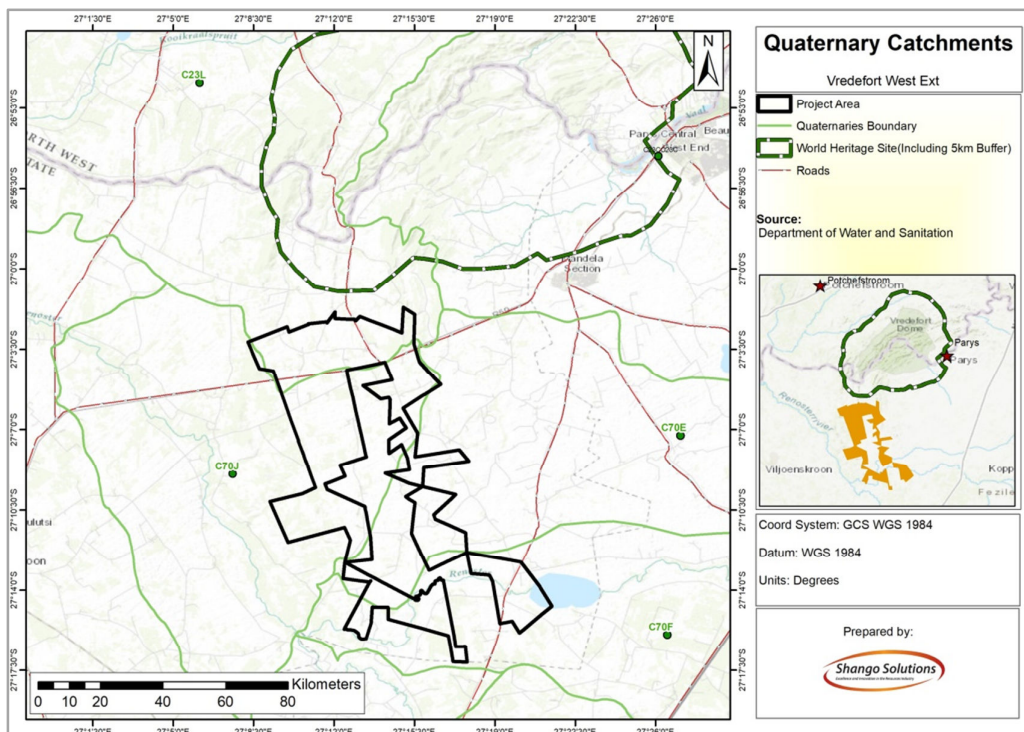


Figure 10: Quaternary Catchment Areas of the study area and surrounds (refer to Appendix D for an enlarged map).

Three (3) wetland National Freshwater Ecosystem Priority Area (NFEPA) types have been identified within the application area, namely (i) seeps, (ii) a wetland flat and (iii) a channelled valley bottom. All these NFEPA wetlands are located outside of the 500 m assessment boundary. In addition to the NFEPA wetlands, three dam areas were identified as well as possible drainage lines feeding into the dams by means of overland flow.

Concave topographical areas have been identified within the application area. These features are indicative of areas eroded by overland flow and therefore indicate possible drainage lines which, depending on the type of soil, slope and geology, might be wetland areas or might feed wetland areas. Five potential drainage lines which feed into the NFEPA wetlands have been identified. This emphasises the possibility of these drainage lines being characterised by wetland conditions.

### 8.1.7.2 Field Survey

#### Wetland Description

Wetland areas are normally characterised by leached conditions, which ultimately produce a soil with a grey matrix instead of a red colouration. Figure 11 illustrates the colour of the top soils within potential wetland “A”. Although this area could not be ground truthed due to access limitations, the red colour of the top soil is evidence of iron rich soil. Leached conditions were not identified within potential wetland “A’s” boundaries and it has therefore been deemed not to be a wetland area.



Figure 11: Illustration of potential wetland “A” (source: The Biodiversity Company, 2018).

However, it is worth noting that a dam and a channelled valley bottom wetland is located down-slope of the application area, within potential wetland “A”. The latter mentioned area and the other potential wetland areas have been classified as wetland areas given the evidence from desktop data.

**Wetland Delineation and Buffer Zone**

The potential wetland areas discussed above were delineated utilising contour data (drainage lines), inland water areas and the NFEPA wetlands.

In accordance with the buffer zone guidelines for wetlands, rivers and estuaries (Macfarlane and Bredin, 2017), a minimum buffer width of 15 m and 10 m is recommended for invasive prospecting activities. This is based on the assumption that there will be a commitment to rehabilitate and manage buffer zones to ensure that these areas function optimally. Additional mitigation measures would also need to be implemented to reduce some of the key threats that pose a risk to water resources.

The “Preliminary Guideline for the Determination of Buffer Zones for Rivers, Wetlands and Estuaries” (Macfarlane et al. 2014) was utilised to determine the appropriate buffer zone for the proposed invasive prospecting activity. The threats calculated by means of the above mentioned tool are illustrated in Table 7.

Table 7: Buffer determination – Threats posed by the proposed prospecting activities.

Threat Posed by the proposed land use / activity		Specialist Rating	Refined Class
Construction Phase	Alteration to surface runoff flow volumes	Very Low	Very Low
	Alteration of patterns of flows (increased flood peaks)	Very Low	Very Low
	Increase in sediment inputs & turbidity	Low	Low
	Increased nutrient inputs	Very Low	Very Low
	Inputs of toxic organic contaminants	Very Low	Very Low
	Inputs of toxic heavy metal contaminants	Low	Low
	Alteration of acidity (pH)	Very Low	Very Low

Operational Phase	Increased inputs of salts (salinisation)	N/A	N/A
	Change (elevation) of water temperature	Low	Low
	Pathogen inputs (i.e. disease-causing organisms)	Very Low	Very Low
	Alteration to flow volumes	Low	Low
	Alteration of patterns of flows (increased flood peaks)	Low	Low
	Increase in sediment inputs & turbidity	Low	Low
	Increased nutrient inputs	Very Low	Very Low
	Inputs of toxic organic contaminants	Low	Low
	Inputs of toxic heavy metal contaminants	Low	Low
	Alteration of acidity (pH)	Low	Low
	Increased inputs of salts (salinisation)	Low	Low
	Change (elevation) of water temperature	Low	Low
Pathogen inputs (i.e. disease-causing organisms)	Very Low	Very Low	

None of the threats posed by the proposed invasive prospecting activity are expected to exceed “Low” significance, which has therefore ensured a conservative buffer of 15 m for the proposed prospecting activities (Figure 12).

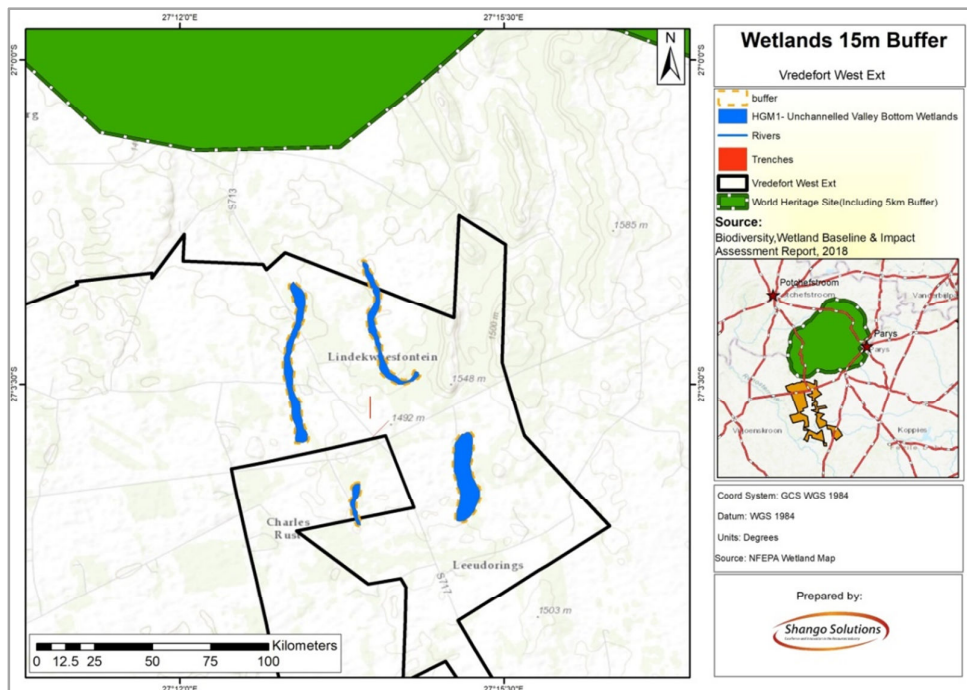


Figure 12: Wetland 15 m buffer zones in relation to the proposed trench sites (refer to Appendix D for an enlarged map).

### 8.1.8 Biodiversity Impact Assessment

Biodiversity refers to the variety of different species in a region and the variety of ecosystems and functions such as energy flow and matter cycling needed for the survival of species (Miller and Spoolman, 2012). A Biodiversity Impact Assessment was undertaken by The Biodiversity Company. The assessment was conducted on a desktop level and a field survey, which included spot checks in pre-selected areas, was undertaken in order to validate the desktop data.

The Biodiversity Impact Assessment discusses the following components:

- Vegetation Assessment.
- Faunal Assessment.
- Critical Biodiversity Areas and Ecological Support Areas.
- Ecological Threat Status and Ecosystem Protection Level.
- Project area in relation to protected areas.

#### 8.1.8.1 Desktop Assessment

##### Vegetation Assessment

The application area is situated within the Grassland and Savanna biomes, which comprise many different vegetation types. According to Mucina and Rutherford (2006), the entire application area is situated across five vegetation types, namely (i) Vredefort Dome Granite Grassland, (ii) Andesite Mountain Bushveld, (iii) Gold Reef Mountain Bushveld, (iv) Vaal Vet Sandy Grassland and (v) Central Free State Grassland (Figure 13). The development footprint is specifically situated within only one vegetation type, namely the Vredefort Dome Granite Grassland.

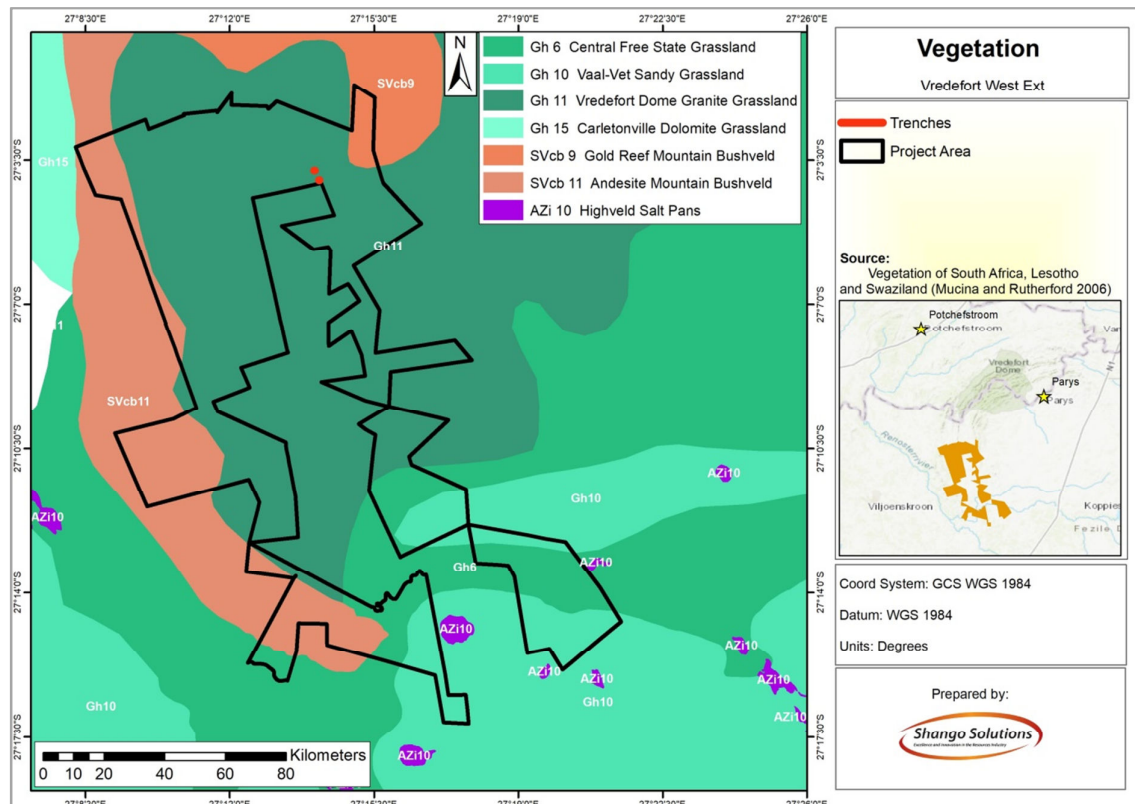


Figure 13: Vegetation of the project area (refer to Appendix for an enlarged map).

### Vredefort Dome Granite Grassland (Gh11)

Vredefort Dome Granite Grassland can be found in the Free State and North-West Provinces with the central portion of the Vredefort Dome around Parys and Vredefort. This vegetation type comprises slightly undulating plains with mainly short, *Themeda triandra*-dominated grassland, though mostly grazed and often degraded.

Important plant taxa are those species that have a high abundance, a frequent occurrence or are prominent in the landscape within a particular vegetation type (Mucina and Rutherford, 2006). The following species are important in the Vredefort Dome Granite Grassland:

- Graminoids: *Aristida congesta* (d), *Chloris virgata* (d), *Cynodon dactylon* (d), *Digitaria eriantha* (d), *Elionurus muticus* (d), *Eragrostis biflora* (d), *E. lehmanniana* (d), *E. trichophora* (d), *Setaria sphacelata* (d), *Themeda triandra* (d), *Tragus berteronianus* (d), *Aristida diffusa*, *Brachiaria serrata*, *Cymbopogon pospischilii*, *Eragrostis chloromelas*, *E. gummiflua*, *E. racemosa*, *E. superba*, *Heteropogon contortus*, *Hyparrhenia hirta*, *Trichoneura grandiglumis*, *Triraphis andropogonoides* (Mucina & Rutherford, 2006).
- Herbs: *Barleria macrostegia*, *Berkheya setifera*, *Chamaesyce inaequilatera*, *Crabbea acaulis*, *Helichrysum rugulosum*, *Hermannia depressa*, *Ipomoea oblongata*, *I. obscura*, *Lepidium capense*, *Lotononis listii*, *Selago densiflora*, *Vernonia oligocephala* (Mucina and Rutherford, 2006).
- Herbaceous Climber: *Rhynchosia totta* (Mucina and Rutherford, 2006).
- Low Shrubs: *Felicia muricata* (d), *Anthospermum rigidum* subsp. *pumilum*, *Deverra burchellii*, *Polygala hottentotta* (Mucina and Rutherford, 2006).

The Vredefort Dome Granite Grassland vegetation type is classified as Endangered according to Mucina and Rutherford (2006), and Vulnerable according to the National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004). The national target for conservation protection for this vegetation types is 24%. None of the area is conserved in statutory conservation areas and almost half is already transformed by cultivation (maize fields), urban development or road-building.

### Andesite Mountain Bushveld (SVcb 11)

Andesite Mountain Bushveld comprises dense, medium-tall thorny bushveld with a well-developed grass layer on hills and some valleys with an undulating landscape. It can be found in the Gauteng, North-West, Mpumalanga and Free State Provinces at altitudes between 1 350 and 1 800 MAMSL and is characterised by summer rainfall with very dry winters.

The following species are important in the Andesite Mountain Bushveld:

- Small Trees: *Acacia caffra* (d), *A. karroo* (d), *Celtis africana*, *Protea caffra*, *Zanthoxylum capense*, *Ziziphus mucronata* (Mucina and Rutherford, 2006).
- Tall Shrubs: *Asparagus laricinus* (d), *Euclea crispa* subsp. *crispa* (d), *Rhus pyroides* var. *pyroides* (d), *Diospyros lycioides* subsp. *lycioides*, *Gymnosporia polyacantha*, *Lippia javanica*, *Rhamnus prinoides* (Mucina and Rutherford, 2006).
- Low Shrubs: *Asparagus suaveolens* (d), *Rhus rigida* var. *margaretae*, *Teucrium trifidum* (Mucina and Rutherford, 2006).
- Soft Shrub: *Isoglossa grantii* (Mucina and Rutherford, 2006).
- Woody Climber: *Rhoicissus tridentata* (Mucina and Rutherford, 2006).
- Graminoids: *Eragrostis curvula* (d), *Hyparrhenia hirta* (d), *Setaria sphacelata* (d), *Themeda triandra* (d), *Cymbopogon pospischilii*, *Digitaria eriantha* subsp. *eriantha*, *Elionurus muticus*, *Eragrostis racemosa*, *E. superba*, *Panicum maximum* (Mucina and Rutherford, 2006).
- Herbs: *Commelina africana*, *Vernonia galpinii*, *V. oligocephala* (Mucina and Rutherford, 2006).

- Succulent Herb: *Aloe greatheadii* var. *davyana* (Mucina and Rutherford, 2006).

According to Mucina and Rutherford (2006), Andesite Mountain Bushveld is considered Least Threatened. Of the national conservation status of 24%, about 7% is statutorily conserved in the Suikerbosrand Nature Reserve and the Magaliesberg Nature Area. Approximately 15% has been transformed, mainly cultivated and some urban and built-up areas.

#### **Gold Reef Mountain Bushveld (SVcb 9)**

Gold Reef Mountain Bushveld is described by Mucina and Rutherford (2006) as being characterised by rocky hills and ridges, often west-east trending with more dense woody vegetation on the south-facing slopes. It can be found in the North-West, Gauteng, Free State and Mpumalanga Provinces at altitudes between 1 200 and 1 750 MAMSL. Soils within this vegetation type are shallow, gravel lithosols of the Mispah and Glenrosa forms.

The following species are important in the Gold Reef Mountain Bushveld:

- Small Trees: *Acacia caffra* (d), *Combretum molle* (d), *Protea caffra* (d), *Celtis africana*, *Dombeya rotundifolia*, *Englerophytum magaliesmontanum*, *Ochna pretoriensis*, *Rhus leptodictya*, *Vangueria infausta*, *V. parvifolia*, *Ziziphus mucronata* (Mucina and Rutherford, 2006).
- Tall Shrubs: *Canthium gilfillanii*, *Ehretia rigida* subsp. *rigida*, *Grewia occidentalis*, *Gymnosporia buxifolia*, *Mystroxydon aethiopicum* subsp. *Burkeanum* (Mucina and Rutherford, 2006).
- Low Shrubs: *Athrixia elata*, *Pearsonia cajanifolia*, *Rhus magaliesmontana* subsp. *magaliesmontana*, *R. rigida* var. *rigida* (Mucina and Rutherford, 2006).
- Woody Climber: *Ancylobotrys capensis*. Graminoids: *Loudetia simplex* (d), *Panicum natalense* (d), *Schizachyrium sanguineum* (d), *Trachypogon spicatus* (d), *Alloteropsis semialata* subsp. *eckloniana*, *Bewisia biflora*, *Digitaria tricholaenoides*, *Diheteropogon amplectens*, *Sporobolus pectinatus*, *Tristachya biseriata*, *T. leucothrix* (Mucina and Rutherford, 2006).
- Herbs: *Helichrysum nudifolium*, *H. rugulosum*, *Pentanisia angustifolia*, *Senecio venosus*, *Xerophyta retinervis* (Mucina and Rutherford, 2006).
- Geophytic Herbs: *Cheilanthes hirta*, *Hypoxis hemerocallidea*, *Pellaea calomelanos* (Mucina and Rutherford, 2006).

According to Mucina and Rutherford (2006) Gold Reef Mountain Bushveld is classified as Least Threatened. The national target for conservation for this vegetation type is 24%. About 15% has been transformed by cultivation and urban built-up areas. Erosion is very low to low.

#### **Vaal Vet Sandy Grassland (Gh 10)**

Vaal Vet Sandy Grassland can be found in the North-West and Free State provinces at altitudes between 1 220 and 1 560 MAMSL. This vegetation type is characterised by a landscape with some scattered, slightly irregular undulating plains and hills. The dominance of *Themeda triandra* is an important feature of this vegetation type. Soil forms are mostly Avalon, Westleigh and Clovelly.

The following species are important in the Vaal Vet Sandy Grassland:

- Graminoids: *Antheophora pubescens* (d), *Aristida congesta* (d), *Chloris virgata* (d), *Cymbopogon caesius* (d), *Cynodon dactylon* (d), *Digitaria argyrograpta* (d), *Elionurus muticus* (d), *Eragrostis chloromelas* (d), *E. lehmanniana* (d), *E. plana* (d), *E. trichophora* (d), *Heteropogon contortus* (d), *Panicum gilvum* (d), *Setaria sphacelata* (d), *Themeda triandra* (d), *Tragus berteronianus* (d), *Brachiaria serrata*, *Cymbopogon pospischilii*, *Digitaria eriantha*, *Eragrostis curvula*, *E. obtusa*, *E. superba*, *Panicum*



*coloratum*, *Pogonarthria squarrosa*, *Trichoneura grandiglumis*, *Triraphis andropogonoides* (Mucina and Rutherford, 2006).

- Herbs: *Stachys spathulata* (d), *Barleria macrostegia*, *Berkheya onopordifolia* var. *onopordifolia*, *Chamaesyce inaequilatera*, *Geigeria aspera* var. *aspera*, *Helichrysum caespitium*, *Hermannia depressa*, *Hibiscus pusillus*, *Monsonia burkeana*, *Rhynchosia adenodes*, *Selago densiflora*, *Vernonia oligocephala* (Mucina and Rutherford, 2006).
- Geophytic Herbs: *Bulbine narcissifolia*, *Ledebouria marginata* (Mucina and Rutherford, 2006).
- Succulent Herb: *Tripteris aghillana* var. *integrifolia* (Mucina and Rutherford, 2006).
- Low Shrubs: *Felicia muricata* (d), *Pentzia globosa* (d), *Anthospermum rigidum* subsp. *pumilum*, *Helichrysum dregeanum*, *H. paronychioides*, *Ziziphus zeyheriana* (Mucina and Rutherford, 2006).

According to Mucina and Rutherford (2006), Vaal Vet Sandy Grassland is classified as Endangered. The national target for conservation for this vegetation type is 24%. More than 63% of this vegetation type has been transformed for cultivation and the rest under strong grazing pressure for cattle and sheep.

### Central Free State Grassland (Gh 6)

Central Free State Grassland can be found in the Free State Province and marginally in the Gauteng Province at altitudes between 1 300 to 1 640 MAMSL, with most of the distribution area occurring between 1 400 and 1 460 MAMSL. This vegetation type is characterised by undulating plains supporting short grassland, in a natural condition dominated by *Themeda triandra*.

The following species are important in the Central Free State Grassland:

- Graminoids: *Aristida adscensionis* (d), *A. congesta* (d), *Cynodon dactylon* (d), *Eragrostis chloromelas* (d), *E. curvula* (d), *E. plana* (d), *Panicum coloratum* (d), *Setaria sphacelata* (d), *Themeda triandra* (d), *Tragus koelerioides* (d), *Agrostis lachnantha*, *Andropogon appendiculatus*, *Aristida bipartita*, *A. canescens*, *Cymbopogon pospischilii*, *Cynodon transvaalensis*, *Digitaria argyrograpta*, *Elionurus muticus*, *Eragrostis lehmanniana*, *E. micrantha*, *E. obtusa*, *E. racemosa*, *E. trichophora*, *Heteropogon contortus*, *Microchloa caffra*, *Setaria incrassata*, *Sporobolus discosporus* (Mucina and Rutherford, 2006).
- Herbs: *Berkheya onopordifolia* var. *onopordifolia*, *Chamaesyce inaequilatera*, *Conyza pinnata*, *Crabbea acaulis*, *Geigeria aspera* var. *aspera*, *Hermannia depressa*, *Hibiscus pusillus*, *Pseudognaphalium luteoalbum*, *Salvia stenophylla*, *Selago densiflora*, *Sonchus dregeanus* (Mucina and Rutherford, 2006).
- Geophytic Herbs: *Oxalis depressa*, *Raphionacme dyeri* (Mucina and Rutherford, 2006).
- Succulent Herb: *Tripteris aghillana* var. *integrifolia* (Mucina and Rutherford, 2006).
- Low Shrubs: *Felicia muricata* (d), *Anthospermum rigidum* subsp. *pumilum*, *Helichrysum dregeanum*, *Melolobium candicans*, *Pentzia globosa* (Mucina and Rutherford, 2006).

### Plant Species of Conservation Concern

Based on the Plants of Southern Africa (BODATSA-POSA, 2016) database, 544 plant species are expected to occur in the application area. Of the 544 plant species, one (1) species is listed as being a Species of Conservation Concern (Table 8).

Table 8: Plant Species of Conservation Concern expected to occur in the application area (BODATSA-POSA, 2016).

Family	Taxon	Author	IUCN	Ecology
Asphodelaceae	<i>Kniphofia typhoides</i>	Codd	NT	Indigenous; Endemic

## Faunal Assessment

The faunal desktop assessment included the compilation of expected species lists, identified species lists and identification of any Red Data or Species of Conservation Concern (SCC) present or potentially occurring in the area. Emphasis was placed on the probability of occurrence of species of provincial, national and international conservation importance. Table 9 summarises the diversity of fauna that is expected to occur in the study area.

Table 9: Animal groups considered in this study along with the total species possibly occurring in or near the study area and how many of these species are Species of Conservation Concern.

Animal Group	Total Species	Species of Conservation Concern
Avifauna	354	25
Mammals	123	20
Reptiles	53	1
Amphibians	26	1

### Avifauna

Based on the South African Bird Atlas Project, Version 2 (SABAP2) database, 354 bird species are expected to occur in the vicinity of the application area (pentads 2650\_2705; 2650\_2710; 2650\_2715; 2655\_2705; 2655\_2710; 2655\_2715; 2700\_2705; 2700\_2710; 2700\_2715). Of the expected bird species, twenty-five (25) species are listed as SCC either on a regional scale or international scale. The SCC include the following:

- One (1) species is listed as Critically Endangered (CR) on a regional scale.
- Five (5) species that are listed as Endangered (EN) on a regional basis.
- Seven (7) species that are listed as Vulnerable (VU) on a regional basis.
- Eleven (11) species that are listed as Near Threatened (NT) on a regional basis.

### Important Bird Areas

Important Bird Areas (IBAs) are sites of international significance for the conservation of the world's birds and other conservation significant species as identified by BirdLife International. These sites are also Key Biodiversity Areas which contribute significantly to the global persistence of biodiversity (Birdlife, 2017).

According to BirdLife International (2017), the selection of IBAs is achieved through the application of quantitative ornithological criteria, grounded in up-to-date knowledge of the sizes and trends of bird populations. The criteria ensure that the sites selected as IBAs have true significance for the international conservation of bird populations and provide a common currency that all IBAs adhere to, thus creating consistency among, and enabling comparability between, sites at national, continental and global levels.

No IBAs occur within the proximity of the application area. The nearest IBA to the application area is the Suikerbosrand Nature Reserve which is situated approximately 121 km north-east of the application area.

### Mammals

The International Union for Conservation of Nature (IUCN) Red List Spatial Data (IUCN, 2017) lists 123 mammal species that could be expected to occur within the vicinity of the application area. Of these species, 11 are medium to large conservation dependant species, such as *Ceratotherium simum* (Southern White Rhinoceros) and *Equus quagga* (Plains Zebra). These species are generally restricted to protected areas such as game reserves in South Africa and are not expected to occur in the application area and are removed from the expected SCC list. Of the remaining 112 small to medium sized mammal species, twelve (20) are listed as being of conservation concern on a regional or global basis.

The list of potential species includes:

- Two (2) that is listed as Endangered (EN) on a regional basis.
- Eight (8) that are listed as Vulnerable (VU) on a regional basis.
- Ten (10) that are listed as Near Threatened (NT) on a regional scale.

### **Reptiles**

Based on the IUCN Red List Spatial Data (IUCN, 2017) and the Reptile Map database provided by the Animal Demography Unit (ADU, 2017), 53 reptile species are expected to occur in the application area. One reptile Species of Conservation Concern is expected to be present in the application area.

### **Amphibians**

Based on the IUCN Red List Spatial Data (IUCN, 2017) and the Amphibian Map database provided by the Animal Demography Unit (ADU, 2017), twenty-six (26) amphibian species are expected to occur in the application area. One amphibian Species of Conservation Concern could be present in the project area according to the above-mentioned sources.

#### **8.1.8.2 Field Survey**

##### **Vegetation Assessment**

The vegetation assessment was conducted throughout the extent of the project prospecting footprint. A total of twenty-two tree, shrub and herbaceous plant species were recorded in the application area during the field survey. Due to the timing of the survey, many morphological features used to identify plant species were absent, thus limiting recorded species.

##### **Alien and Invasive Plants**

Declared weeds and invader plant species have the tendency to dominate or replace the canopy or herbaceous layer of natural ecosystems, thereby transforming the structure, composition and function of these systems. Therefore, it is important that these plants are controlled and eradicated by means of an eradication and monitoring programme. Some invader plants may also degrade ecosystems through superior competitive capabilities to exclude native plant species.

Four Category 1b invasive plant species were recorded within the application area and must therefore be removed by implementing an alien invasive plant management programme in compliance of section 75 of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004) (NEMBA).

Below is a brief description of Category 1b invasive species in terms of the NEMBA, 2004 (Act 10 of 2004):

- Category 1b: Invasive species requiring compulsory control as part of an invasive species control programme. Remove and destroy. These plants are deemed to have such a high invasive potential that infestations can qualify to be placed under a government sponsored invasive species management programme. No permits will be issued.

##### **Faunal Assessment**

The field survey component of the Faunal Assessment utilised a variety of sampling techniques including, but not limited to visual observations, camera trapping, identification of tracks and signs as well as utilisation of local knowledge and results from previous assessments carried out within the application area. Habitat types sampled included pristine, disturbed and semi-disturbed zones, rocky ridges, drainage lines, wetlands and river habitats. Table 10 summarises the diversity of fauna that was identified in the application area during the field survey.

Table 10: Animal groups identified in the application area during the field survey.

Animal Group	Total Species	Species of Conservation Concern
Avifauna	63	0
Mammals	11	0
Reptiles	6	0
Amphibians	0	0

#### Avifauna

Forty-Two (42) bird species were recorded in the application area during the field survey based on either direct observations, vocalisations, or the presence of visual tracks and signs. No avifaunal Species of Conservation Concern were recorded. However, based on the presence of suitable habitat, there is a high probability that many other bird Species of Conservation Concern occur within the general area.

#### Mammals

Overall, mammal diversity in the project area was moderate, with eleven (11) mammal species being recorded during the field survey based on direct observations, camera trap photographs and/or the presence of visual tracks and signs.

#### Herpetofauna (Reptiles and Amphibians)

Herpetofauna diversity was considered to be high with six (6) reptile species and zero amphibian species being observed or recorded in the application area during the field survey.

#### 8.1.8.3 Mining and Biodiversity Guidelines

The Mining and Biodiversity Guidelines (2013) were developed by the Department of Mineral Resources, the Chamber of Mines, the South African National Biodiversity Institute and the South African Mining and Biodiversity Forum, with the intention to find a balance between economic growth and environmental sustainability. The Guidelines are envisioned as a tool to “foster a strong relationship between biodiversity and mining which will eventually translate into best practice within the mining sector. In identifying biodiversity priority areas which have different levels of risk against mining, the Guideline categorises biodiversity priority areas into four categories of biodiversity priority areas in relation to their importance from a biodiversity and ecosystem service point of view as well as the implications for mining in these areas:

- Legally protected areas, where mining is prohibited.
- Areas of highest biodiversity importance, which are at the highest risk for mining.
- Areas of high biodiversity importance, which are at a high risk for mining.
- Areas of moderate biodiversity importance, which are at a moderate risk for mining.

According to the guidelines, the application area is predominantly classed as having a ‘Moderate Biodiversity Importance’ and represents a ‘Moderate Risk for Mining’.

#### 8.1.8.4 Critical Biodiversity Areas and Ecological Support Areas

A Critical Biodiversity Area (CBA) is considered a significant and ecologically sensitive area and needs to be kept in a pristine or near-natural state to ensure the continued functioning of ecosystems (SANBI, 2017). A CBA represents the best choice for achieving biodiversity targets. Ecological Support Areas (ESAs) are not essential for achieving targets, but they play a vital role in the continued functioning of ecosystems and often are essential for proper functioning of adjacent CBAs.

Based on this assessment, the development footprint within the application area is situated in an area which is regarded as Degraded (Figure 14). Within a few hundred metres of the development footprint, there are ecosystems which are listed as CBA1, Other and ESAs. The CBA1 and ESAs will have a high or moderately-high biodiversity value.

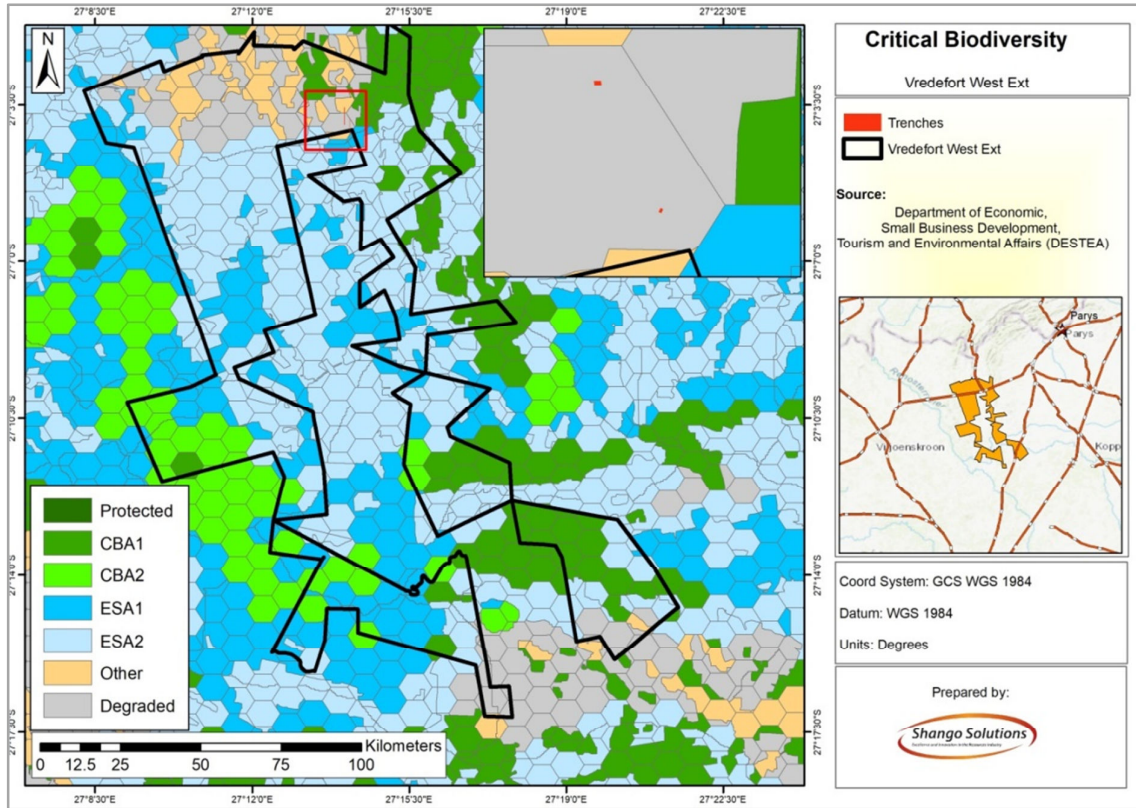


Figure 14: Critical Biodiversity Areas and Ecological Support Areas within the application area (refer to Appendix D for an enlarged map).

### 8.1.8.5 Ecosystem Threat Status

Ecosystem threat status outlines the degree to which ecosystems are still intact or alternatively losing vital aspects of their structure, function and composition, on which their ability to provide ecosystem services ultimately depends (Driver et al., 2011). Ecosystem types are categorised as Critically Endangered (CR), Endangered (EN), Vulnerable (VU) or Least Threatened (LT), based on the proportion of each ecosystem type that remains in good ecological condition (Driver et al., 2011).

The proposed application area was superimposed on the terrestrial ecosystem threat status map (Figure 15). As seen in Figure 15 the application area, according to the NBA (2011), falls entirely within two ecosystems, which are listed as a Vulnerable (VU) and Least Threatened.

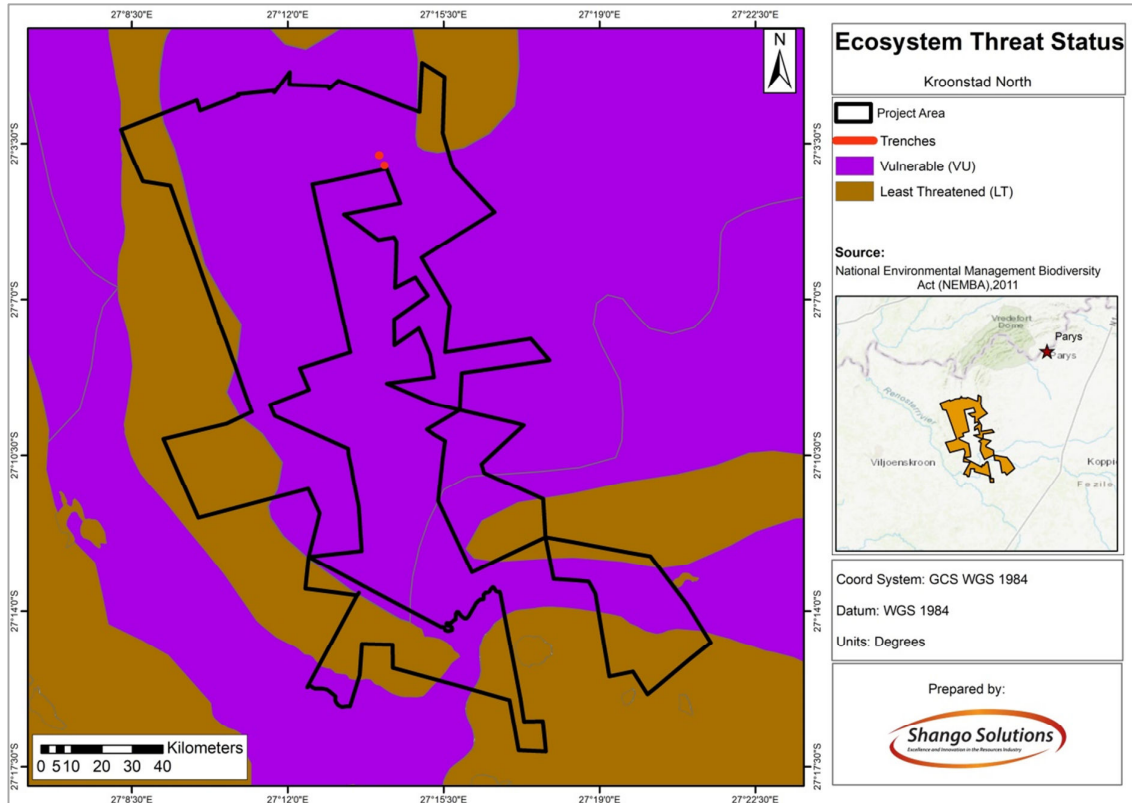


Figure 15: The application area showing the ecosystem threat status of the associated terrestrial ecosystems (refer to Appendix D for an enlarged map).

**8.1.8.6 Ecosystem Protection Level**

Ecosystem protection levels indicate whether ecosystems are adequately protected or under-protected. Ecosystem types are categorised as not protected, poorly protected, moderately protected or well protected, based on the proportion of each ecosystem type that occurs within a protected area recognised in the National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) (Driver et al., 2011).

The application area was superimposed on the ecosystem protection level map to assess the protection status of terrestrial ecosystems associated with the development (Figure 16). Based on Figure 16 the terrestrial ecosystems associated with the proposed application area are rated as not protected. This means that this ecosystem type (and associated habitats) are not well protected anywhere in the country (such as in nationally protected areas).

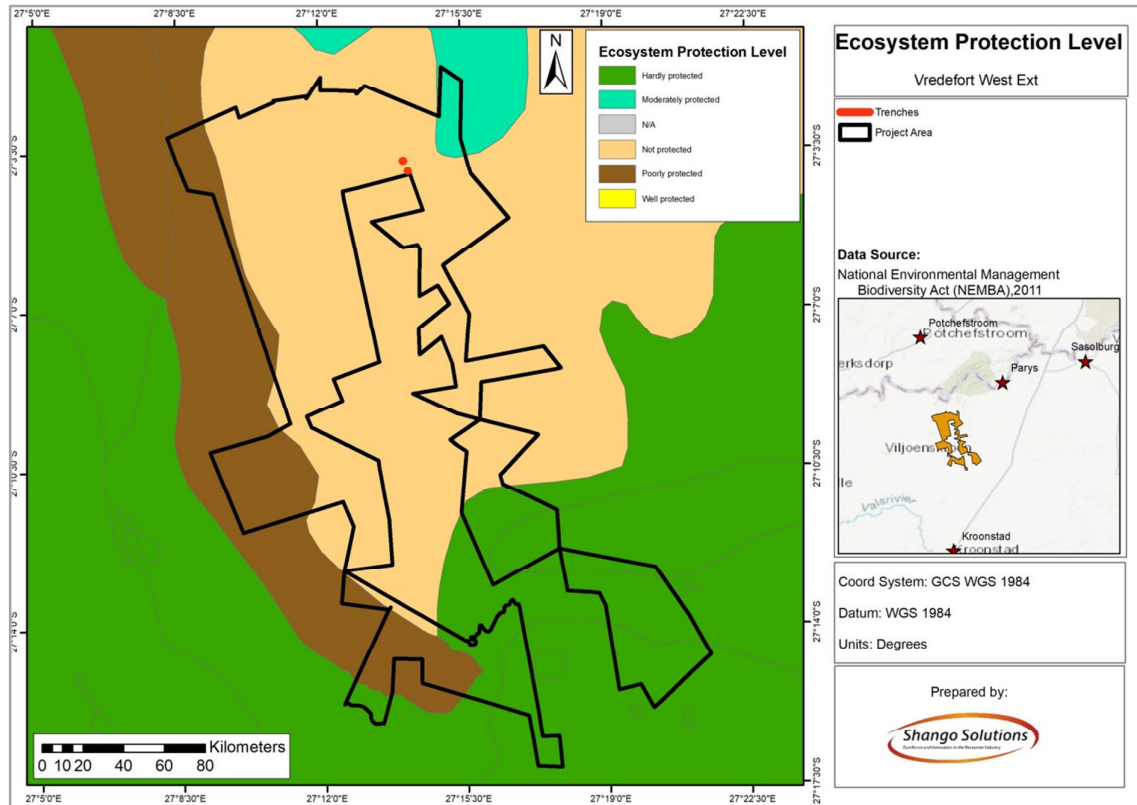


Figure 16: The project area showing the level of protection of terrestrial ecosystems (refer to Appendix D for an enlarged map).

**8.1.8.7 Project Area in relation to Protected Areas**

Formally protected areas refer to areas protected either by national or provincial legislation. Based on the South African National Biodiversity Institute (SANBI, 2010) Protected Areas Map and the National Protected Areas Expansion Strategy (NPAES,) the project area does not overlap with, nor will it impact upon, any formally protected area.

The central core of the Vredefort Dome World Heritage Site is situated approximately 11 km north of the application area. However, the collar of the outer dome is within 2 km of the proposed application area, which falls outside of the official boundary of the World Heritage Site (Figure 17). As such, the application area is not expected to have an impact on the World Heritage Site or the 5 km buffer around this area.

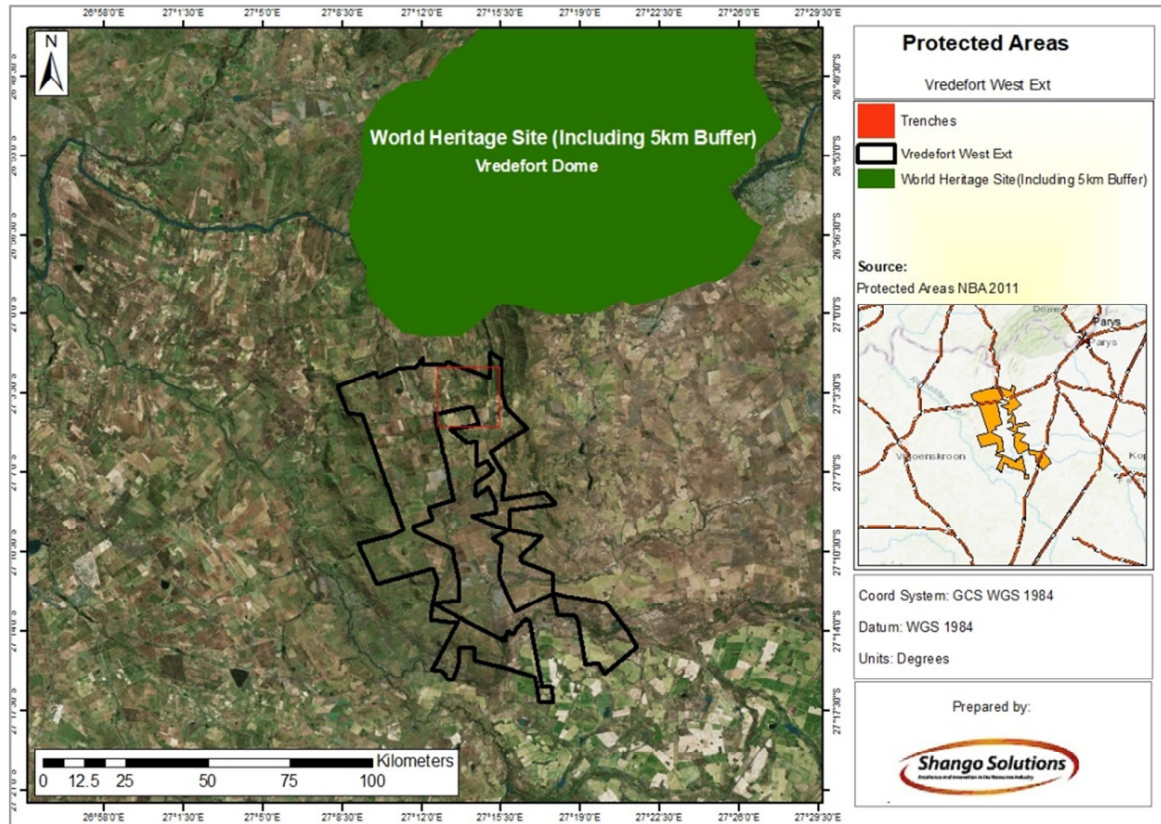


Figure 17: The project area in relation to the Vredefort Dome World Heritage Site (refer to Appendix D for an enlarged map).

### 8.1.9 Heritage Impact Assessment

A Heritage Impact Assessment was undertaken over the application area (Appendix F1). The study was conducted on a desktop level and a field survey was undertaken in order to identify archaeological resources and heritage sites at the locations of the proposed trenches and within the 500 m assessment boundary. The survey was conducted on foot and the site was accessed utilising a vehicle.

According to the literature review compiled by NGT Holdings (2018), the archaeology of the project area is divided into three periods, namely the Stone Age, Iron Age and the Historical Period. It is during these periods that diverse groups of people settled on the southern African landscape.

The Stone Age is divided into three periods, namely the Early Stone Age (ESA) (2 million to 250 000 years ago), the Middle Stone Age (MSA) (250 000 – 22 000 years ago) and the Later Stone Age (LSA) (25 000 to 200 years ago). The ESA is characterised by the use of the Oldowan stone tool which is the earliest widespread stone tool in the archaeological industry. The transition from the Early to Middle Stone Age includes a change in technology from large stone tools to smaller blades and flakes. Approximately 2 000 million years ago, a meteorite collided with the Earth, resulting in the formation of an impact crater which is today known as the Vredefort Dome, situated in the Free State Province of South Africa. The Vredefort Dome was declared as a World Heritage Site by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) in 2005.

The Iron Age is typically referred to as the period during which the first Bantu speakers migrated south from western Africa (Coplan, 2000). According to Huffman (2007), the Iron Age can be divided into three periods, namely the Early Iron Age (EIA) (AD 200 – 900), the Middle Iron Age (MIA) (AD 900 – 1 300) and the Late Iron



Age (LIA) (AD 1 300 – 1 840). The Iron Age is characterised by farming communities who domesticated animals, produced various ceramic vessels, smelted iron for weapons and manufactured tools. The EIA communities throughout eastern and southern Africa share a similar Iron Age culture known as the Chifumbaze complex (Phillipson, 1994; Huffman, 2007) which contains evidence of the first farmers who cultivated crops, herded domestic animals, used iron and made pots (Phillipson, 1994).

The Historical Period dates from AD 1 600 and it is generally the period related to colonial settlement in South Africa. Mzilikazi, a Zulu who departed from Shaka Zulu, migrated with his followers north and invaded the interior of South Africa during 1815 to 1840. This led to a series of battles and wars between the Zulus, Voortrekkers and Sotho-Tswana communities in the Free State and North West (Gutteridge 2008). Following disputes with the British, the Dutch-speaking Voortrekkers migrated north into the interior of southern Africa from the Cape Colony in 1836 in search of creating a homeland, independent of British rule. This migration of approximately 12 000 – 140 000 Voortrekkers is referred to as the Great Trek. Under the leadership of Andries Hendrik Potgieter, the Voortrekkers settled near the Vet River, located south-east of the Vredefort Dome (Naude, 2005; Byrne, 2012). Several battles were fought between the Voortrekkers, the Bantu speaking groups and the British in the region. In 1836, the Voortrekkers engaged in a battle with 3 000 of Mzilikazi's warriors on Vegkop hill (Zvobgo, 2009). The Voortrekkers, who were assisted by the Sotho-Tswana and Griqua groups, defeated Mzilikazi's Matebele. Following this dispute, the region between the Orange and Vaal Rivers was proclaimed as British Possession by Sir Harry Smith in 1848 (Scott-Keltie and Epstein, 1925).

In 1876, the town of Vredefort was established and was laid out on the farm Vischgat, which belonged to Jacobus Johannes Scheepers (Van Eeden and Motumi, 1998). Vredfort received municipal status in 1890 (Van Eeden and Motumi, 1998).

Based on the above, it is evident that the application area is located in a region rich in archaeology, history and heritage in terms of the Iron Age and the Historical Period.

#### **8.1.9.1 Heritage Study**

The desktop component of the Heritage Impact Assessment yielded information about known archaeological and heritage resources located in the Free State Province, and particularly the Vredefort region. The foot survey that was undertaken specifically focused on the areas proposed for the two trenches on Portion 1 of the Farm Mimosa Grove 491 and the 500 m assessment boundary. The survey established that no built environment heritage resources occur where the proposed trenches are located. However, the survey identified a number of graves, cemeteries and archaeological resources within the application area (Figure 18) which are described in detail in Table 11.

- Mim Gro Cem-01: A small cemetery containing 33 graves on the borders of the farms Mimosa Groove 491 and Lindekfeesfontein 73.
- Lindek Cem-01: A small cemetery containing 32 graves on the farm Lindekfeesfontein 73.
- Rhebok Cem-01: A small cemetery containing 14 graves on the Rhebokfontein West 117.
- Onreg Cem-01: A small cemetery containing 11 graves on the farm Onreg 1032.
- Site complex-01: Contains several collapsed stone walls on the farm Rhebokfontein West 117.

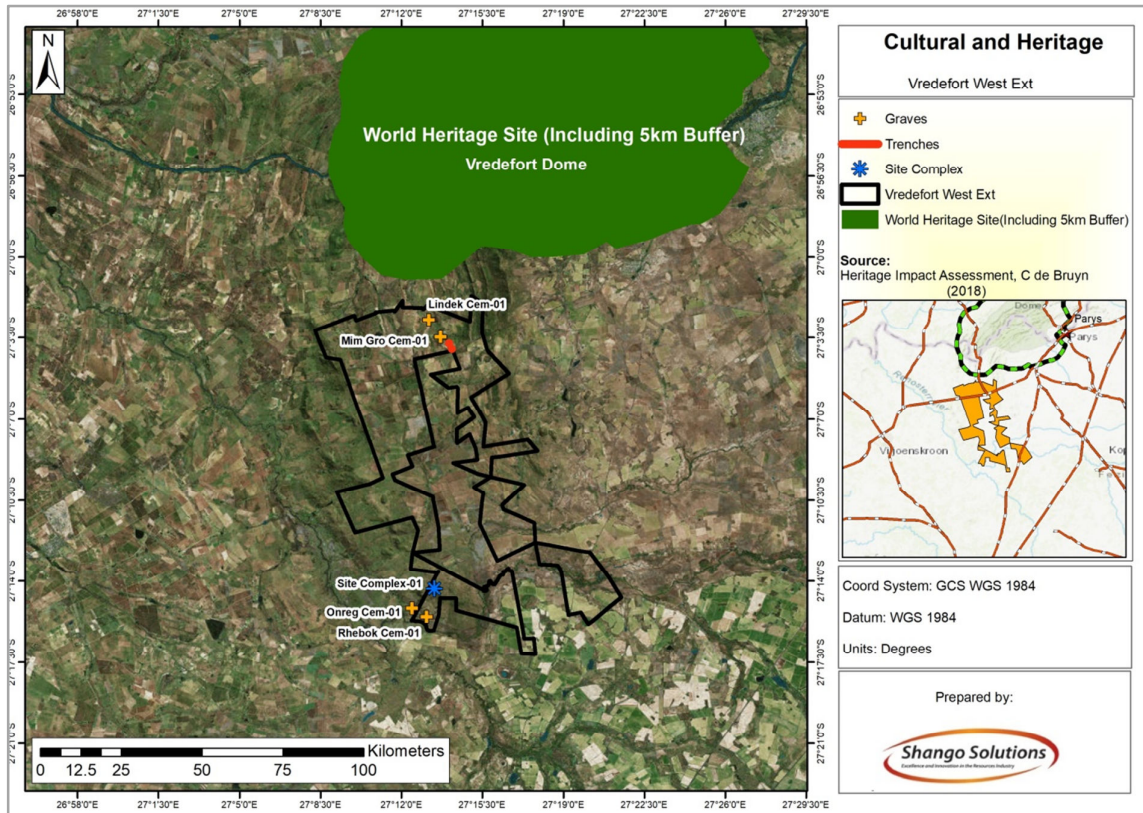







Figure 18: Cultural, heritage and archaeological sites within the application area (refer to Appendix D for an enlarged map).

Table 11: Cemeteries and archaeological sites identified within the application area (source: NGT Holdings, 2018).

Site Name	Type of Site	Description	Approximate Age	Location	Coordinates	Image
Site Complex- 01	Archaeological Site	Shallow and collapsed stone walling were recorded on-site. The stone walled structures are clustered together to form a settlement. There is evidence of damage at several places, which is most likely due to natural processes and vegetation.	Late Iron Age	Rhebokfontein West 117	27°14'20.46"S 27°13'26.15"E	
Mim Gro Cem-01	Burial Grounds and Graves	Thirty-three graves were identified in this cemetery. In addition, a small stone wall that once surrounded the cemetery was also observed, which has since collapsed. Of the thirty-three graves, three have a cement dressing, seven have headstones and twenty-three graves of unknown individuals are covered in packed stones.	Historical and Contemporary	Border of the farms Mimosa Groove 491 and Lindekfeesfontein 73	27° 3'28.94"S 27°13'41.86"E	
Lindek Cem 01	Burial Grounds and Graves	Thirty-two graves were identified in this cemetery and eight of these have headstones and cement dressing. The twenty-four graves of unknown individuals are covered in packed stones.	Historical and Contemporary	Lindekfeesfontein 73	27° 2'43.47"S 27°13'11.52"E	
Rhebok Cem-01	Burial Grounds and Graves	A total of fourteen graves were identified in this cemetery. Of these graves two have headstones and one have cement dressing. Eleven graves were of unknown individuals and are covered in packed stones. Furthermore, the locality of the graves appears to be poorly maintained and some graves are found with vegetation, bush and tree overgrowth.	Historical	Rhebokfontein West 117	27°15'33.38"S 27°13'5.47"E	
Onreg Cem-01	Burial Grounds and Graves	Twelve graves were identified in this cemetery, five of which have headstones. The six graves of unknown individuals are covered in packed stones. However, the locality of the graves appears to be poorly maintained and some graves are found with vegetation, bush and tree coverage.	Historical	Onreg 1032	27°15'11.69"S 27°12'27.91"E	

The two proposed trenches are situated on transformed land (agricultural fields) with very little possibility of the presence of archaeological finds or heritage resources (Figure 19).



Figure 19: General view of the location for (A) Trench 1 and (B) Trench 2.

### 8.1.9.2 Heritage Sensitivity

The four cemeteries and the several collapsed stone walls identified within the application area are considered as highly sensitive heritage features. Table 12 details the distance of the identified heritage resources from the two proposed trench sites.

Table 12: Distance between the identified heritage resources and the proposed trenches.

Site Name	Distance
Mim Gro Cem-01	Situated approximately 700 m north-west of Trench 1 and 1.2 km north-west of Trench 2
Lindek Cem-01	Situated approximately 2.4 km north-west of Trench 1 and 2.8 km north-west of Trench 2
Rhebok Cem-01	Situated approximately 21 km south of Trench 1 and 22 km south of Trench 2.
Onreg Cem-01	Situated approximately 21 km south of Trench 1 and 22 km south of Trench 2
Site complex-01	Situated approximately 19.1 km south of Trench 1 and 19.5 km south of Trench 2

### 8.1.10 Palaeontological Impact Assessment

The surface geology of the application area comprises rocks of the Ecca Group, mostly Vryheid and Volksrust formations, with outcrops of the older Chuniesport Group and some Quaternary sand cover underlain by rocks of the Witwatersrand Supergroup. According to McCarthy (2006), rocks of the Witwatersrand Supergroup were deposited approximately 3 076 to 2 714 million years ago. The bolide impact that formed the Vredefort Dome occurred approximately 2 017 Ma (Reimold, 2006), resulting in the preservation of gold within rocks of the Witwatersrand Supergroup as well as emplacement of other minerals. The more recent uplift of southern Africa

and subsequent erosion resulted in these deposits being closer to earth's surface (Robb and Meyer, 1995; McCarthy, 2006).

The palaeontological sensitivity of the area under consideration is presented in Figure 20. The proposed trenches are located on the farm Mimosa Grove 491 and the surface geology of the farm comprises rocks of the Government (eastern half of Mimosa Grove 491) and the Jeppetown (central portion of Mimosa Grove 491) subgroups of the Witwatersrand Supergroup. These rocks are nonfossiliferous and will not be considered further. The western portion of Mimosa Grove 491 comprises sandstones and shales of the early Permian Vryheid Formation which have a patchy but significant fossil record with a variety of plant impressions from the *Glossopteris* flora (Plumstead, 1969; Anderson and Anderson, 1985). According to the Palaeosensitivity Map developed by the South African Heritage Resources Agency (SAHRA), the area of the proposed trenches is within a low sensitivity (blue) to highly sensitive (red) area. Vertebrate fossils seldom occur with fossil plants. However, the plants that could occur in this area are leaves and fructifications of the glossopterids, ferns, sphenophytes, lycopods and some early gymnosperms – all in the form of impressions. As such, a field assessment and protocol for finds will be required.

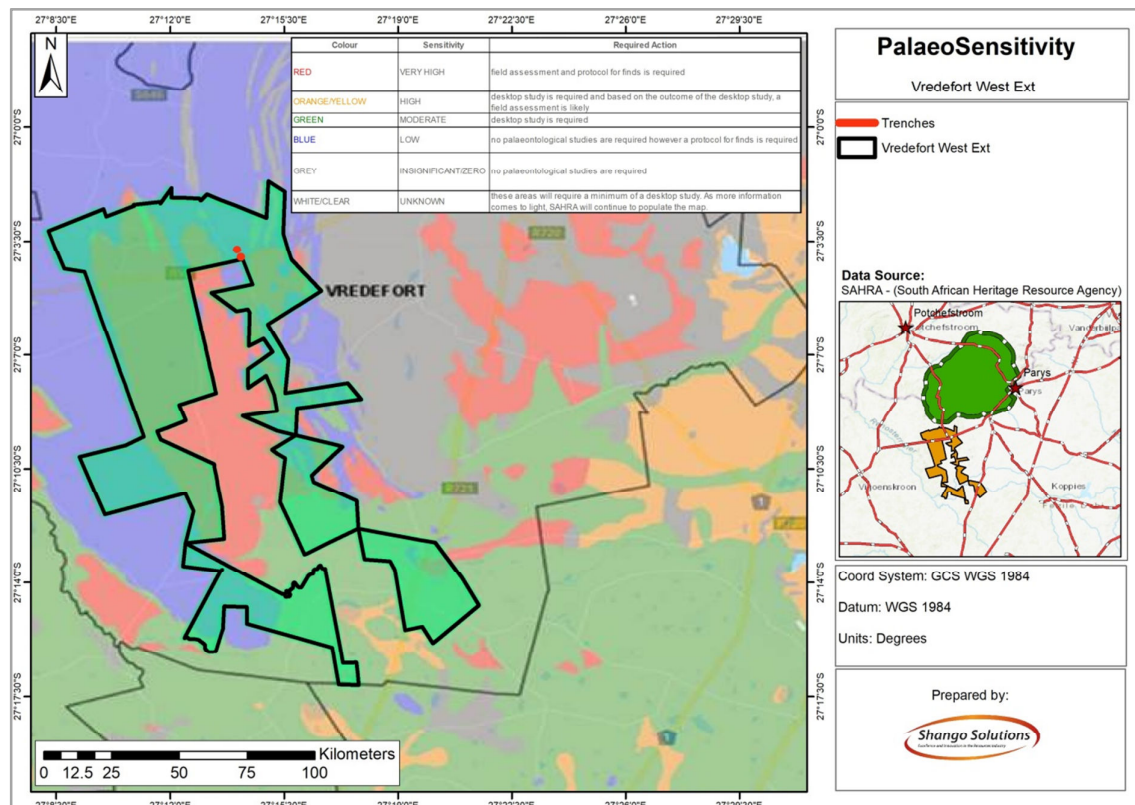


Figure 20: Map depicting the sensitivity of the underlying geology in relation to the occurrence of fossils (refer to Appendix D for an enlarged map).

## 8.2 Environmental Aspects Which May Require Protection and/or Remediation

Environmental aspects, both within the application and surrounding area, which may require protection or remediation, are listed in Table 13. The identified aspects are based on the information contained in the description of the baseline receiving environment as well as the impact assessment. These environmental aspects have been included in the action plan and technical management measures contained in this report.

Table 13: List of potential impacts per activity.

Aspect	Feature
Groundwater	Groundwater resources
	Groundwater quality and quantity
Surface Water	Surface water resources (such as streams and pans)
	Surface water quality and quantity
	Wetlands and pans
Biodiversity (Flora and Fauna)	Primary vegetation units
	Species of concern (flora and fauna)
Air Quality	Ambient air quality
Noise	Ambient noise levels
Soil, Land Use and Land Capability	Stockpiled soils
	Soils of moderate to high agricultural potential
	Livestock grazing
	Cultivation
	Homesteads
	Agricultural potential
	Grazing potential
Heritage and Cultural	Heritage resources (cemeteries, graves, structures older than 60 years)
	Palaeontological features
Socio-Economic	Livelihoods
	Employment

## 8.3 Description of Specific Environmental Features and Infrastructure On site

Specific environmental features and infrastructure on site include rivers, wetlands, houses, homesteads, secondary tar roads, gravel roads, Eskom servitudes and telephone lines. These features have been verified and updated during the Public Participation Process and should be avoided during invasive prospecting activities, and where avoidance is not possible, impacts must be appropriately managed and remedied.

## 9. IMPACTS AND RISKS IDENTIFIED

Impacts and risks were identified based on the proposed prospecting activities to take place on site. Table 13 lists the potential impacts related to each of the significant activities related to the prospecting operation. No wetland areas have been identified within the 500 m assessment boundary. As such, wetlands have been excluded from Table 14 given the lack of risks associated with the proposed activity.

Table 14: List of potential impacts per activity.

Aspect	Potential Impacts
<b>Planning Phase</b>	
Socio-Economic	Safety and security risks to landowners and lawful occupiers
	Interference with existing land uses
<b>Construction Phase</b>	
Socio-Economic	Safety and security risks to landowners and lawful occupiers
	Interference with existing land uses
	Ineffective communication channels leading to community unrest
	Friction between local residents/landowners and prospecting personnel
	Possible boost in short-term local small business opportunities
	Perceptions and expectations
	Job creation
	Training of unskilled labourers
Groundwater	Localised spillages of oils from machinery leading to groundwater contamination
Surface Water	Potential deterioration in water quality due to the potential accidental spillages of hazardous substances
Heritage Resources	Damage/destruction to local graves in the area
	Damage/destruction of sites of archaeological importance
Palaeontological Resources	Damage/destruction of sites with palaeontological resources
Biodiversity (Flora and Fauna)	Further loss and fragmentation of the vegetation community (including portions of a Vulnerable vegetation type)
	Displacement of faunal community (including threatened or protected species) due to habitat loss, disturbance, poaching (due to increased human presence) and/or direct mortalities
Air Quality	Possible increase in dust generation as a result of trench excavation and operation of heavy machinery
	Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment
Visual	Scaring of the landscape as a result of the clearance of vegetation
	Visual intrusion as a result of the movement of heavy machinery and the establishment of the required infrastructure
Noise	The use of vehicles and machinery may generate noise in the immediate vicinity
	Localised chemical pollution of soils as a result of vehicle hydrocarbon spillages

Soil, Land Use and Land Capability	Localised clearing of vegetation and compaction of the construction footprint will result in the soils being particularly more vulnerable to soil erosion
Traffic	Increase in traffic volumes as a result of pre-construction activities which may lead to an increase in traffic congestion along the provincial roads and farm tracks around the prospecting area
Waste Management	Potential water and soil pollution as a result of inappropriate waste management practices
<b>Operational Phase: Excavation of 2 trenches (10 m long 1.5 m wide and 3 m deep each)</b>	
Socio-Economic	Safety and security risks to landowners and lawful occupiers
	Interference with existing land uses
	Perceptions and expectations
	Job creation
	Discovery of economically viable mineral resources
Groundwater	Training of unskilled labourers
	Pollution of groundwater due to spillage of hydrocarbons from vehicles and machinery during excavation of trenches
Surface water	Storage of hydrocarbons and chemicals may impact on groundwater as a result of spillages and uncontrolled release
	Contamination of surface water due to spillage of oils, fuels and chemicals
Biodiversity (fauna and flora)	Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species
	Potential leaks, discharges, litter, pollutant from development into the surrounding environment. Thus harming fauna and flora species
	Continued displacement and fragmentation of the faunal community (including threatened or protected species) due to ongoing anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching)
Soil, Land Use and Land Capability	Soil contamination due to spillage of hydrocarbons
	Top soils removal, storage and replacement during trench excavation will result in the disruption of the soil profile
Air quality	The prospecting operation will require vehicular movement which may result in possible increase in dust generation
	Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment
Visual	The excavators used during the trenching operations will be visible to the nearby residents and properties
Heritage Resources	Damage/destruction to local graves in the area
Palaeontological Resources	Damage/destruction of sites of archaeological importance
Noise	Damage/destruction of sites with palaeontological resources
	The use of vehicles and machinery may generate noise in the immediate vicinity
<b>Decommissioning Phase</b>	
Air Quality	Removal of equipment from the prospecting sites will require vehicular movement. This will result in the generation of dust. In addition, dust will be generated



	by wind blowing.
Noise	Noise will be generated during the removal of equipment on site. This noise is not expected to exceed occupational noise limits and will be short lived
Biodiversity (fauna and flora)	Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species
	Continued displacement of the faunal community (including threatened or protected species) due to ongoing anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching)
<b>Rehabilitation and Closure Phases</b>	
Soil, Land Use and Land Capability	The rehabilitation of the trench sites will result in the affected soil and land use being restored. This will also result in the resumption of the use of the land since the infrastructure would have been removed
	Compaction of soil due to vehicles/machinery utilised during site rehabilitation
Air Quality	Rehabilitation the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and due to blowing winds. Vehicles and machinery will also generate diesel or petrol fumes. Generated dust will migrate towards the predominant wind direction and may settle on surrounding properties including nearby vegetation
Noise	Noise will be generated during the rehabilitation of the sites. This noise is not expected to exceed occupational noise limits and will be short lived
Biodiversity (fauna and flora)	Encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species and potential re-establishment of natural species that were removed. The nature of the erosion will depend on the amount of successful vegetation establishment
	Displacement of the faunal community (including threatened or protected species) due to rehabilitation of the anthropogenic disturbances and habitat degradation, rehabilitation resulting in the faunal species potentially re-establishing within the area
Heritage Resources	Damage/destruction to local graves in the area
	Damage/destruction of sites of archaeological importance
Palaeontological Resources	Damage/destruction of sites with palaeontological resources
Environmental Pollution	Generation and disposal of waste

Each of the identified risks and impacts for these phases was assessed utilising the assessment methodology described in Section 9.1. The assessment criteria include the nature, extent, duration, magnitude/intensity, reversibility, probability, public response, cumulative impact and irreplaceable loss of resources. The full scoring of each impact is provided in the impact assessment table provided in Appendix G.

A summary of the impacts and their significance before and after mitigation is provided in Section 13 of this report (Table 27).

In order to calculate the significance of an impact, probability, duration, extent and magnitude will be used. The pre and post mitigation scores will provide an indication of the extent to which an impact can be mitigated.

## 9.1 The Impact Assessment Methodology

The subsections below present the approach to assessing the identified potential environmental impacts with the aim of determining the relevant environmental significance.

### 9.1.1 Method of Assessing Impacts

The impact assessment methodology is guided by the requirements of the NEMA 2014 EIA Regulations (as amended). The broad approach to the significance rating methodology is to determine the Environmental Risk (ER) by considering the Consequence (C) of each impact (comprising Nature, Extent, Duration, Magnitude, and Reversibility) and relate this to the Probability/likelihood (P) of the impact occurring. This determines the Environmental Risk. In addition, other factors, including cumulative impacts, public concern, and potential for irreplaceable loss of resources, are used to determine a Prioritisation Factor (PF) which is applied to the ER to determine the overall Significance (S).

### 9.1.2 Determination of Environmental Risk

The Significance (S) of an impact is determined by applying a Prioritisation Factor (PF) to the Environmental Risk (ER).

The environmental risk is dependent on the Consequence (C) of the particular impact and the Probability (P) of the impact occurring. Consequence is determined through the consideration of the Nature (N), Extent (E), Duration (D), Magnitude (M), and Reversibility (R) applicable to the specific impact.

For the purpose of this methodology the consequence of the impact is represented by:

$$C = \frac{(E+D+M+R) \times N}{4}$$

Each individual aspect in the determination of the consequence is represented by a rating scale as defined in Table 15.

Table 15: Criteria for determination of impact consequence.

Aspect	Score	Definition
Nature	- 1	Likely to result in a negative/ detrimental impact
	+1	Likely to result in a positive/ beneficial impact
Extent	1	Activity (i.e. limited to the area applicable to the specific activity)
	2	Site (i.e. within the development property boundary),
	3	Local (i.e. the area within 5 km of the site),
	4	Regional (i.e. extends between 5 and 50 km from the site)
	5	Provincial / National (i.e. extends beyond 50 km from the site)
Duration	1	Immediate (<1 year)
	2	Short term (1-5 years)
	3	Medium term (6-15 years)
	4	Long term (the impact will cease after the operational life span of the project),
	5	Permanent (no mitigation measure of natural process will reduce the impact after construction).
Magnitude/ Intensity	1	Minor (where the impact affects the environment in such a way that natural, cultural and social functions and processes are not affected)

Aspect	Score	Definition
	2	Low (where the impact affects the environment in such a way that natural, cultural and social functions and processes are slightly affected)
	3	Moderate (where the affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way)
	4	High (where natural, cultural or social functions or processes are altered to the extent that it will temporarily cease) or
	5	Very high / do not know (where natural, cultural or social functions or processes are altered to the extent that it will permanently cease)
Reversibility	1	Impact is reversible without any time and cost
	2	Impact is reversible without incurring significant time and cost
	3	Impact is reversible only by incurring significant time and cost
	4	Impact is reversible only by incurring prohibitively high time and cost
	5	Irreversible Impact

Once the C has been determined the ER is determined in accordance with the standard risk assessment relationship by multiplying the C and the P. Probability is rated/scored as per Table 16.

Table 16: Probability scoring.

Probability	1	Improbable (the possibility of the impact materialising is very low as a result of design, historic experience, or implementation of adequate corrective actions; <25%)
	2	Low probability (there is a possibility that the impact will occur; >25% and <50%)
	3	Medium probability (the impact may occur; >50% and <75%)
	4	High probability (it is most likely that the impact will occur- > 75% probability) or
	5	Definite (the impact will occur)

The result is a qualitative representation of relative ER associated with the impact. ER is therefore calculated as follows (Table 17):

$$ER = C \times P$$

Table 17: Determination of environmental risk.

Consequence	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
<b>Probability</b>						

The outcome of the environmental risk assessment will result in a range of scores, ranging from 1 through to 25. These ER scores are then grouped into respective classes as described in Table 18.

Table 18: Significance classes.

Environmental Risk Score	
Value	Description

< 10	Low (i.e. where this impact is unlikely to be a significant environmental risk)
≥ 10; < 20	Medium (i.e. where the impact could have a significant environmental risk)
≥ 20	High (i.e. where the impact will have a significant environmental risk)

The impact ER will be determined for each impact without relevant management and mitigation measures (pre-mitigation), as well as post implementation of relevant management and mitigation measures (post-mitigation). This allows for a prediction in the degree to which the impact can be managed/ mitigated.

**9.1.3 Impact Prioritisation**

In accordance with the requirements of Appendix 3(1)(j) of the NEMA 2014 EIA Regulations (GNR 326, as amended), and further to the assessment criteria presented in the Section above it is necessary to assess

- Each potentially significant impact in terms of: cumulative impacts.
- The degree to which the impact may cause irreplaceable loss of resources.

In addition, it is important that the public opinion, sentiment regarding a prospective development and consequent potential impacts is considered in the decision making process.

In an effort to ensure that these factors are considered, an impact prioritisation factor (PF) will be applied to each impact ER (post-mitigation). This prioritisation factor does not aim to detract from the risk ratings but rather to focus the attention of the decision-making authority on the higher priority/ significance issues and impacts. The PF will be applied to the ER score based on the assumption that relevant suggested management/ mitigation impacts are implemented (Table 19).

Table 19: Criteria for the determination of prioritisation.

<b>Public Response (PR)</b>	Low (1)	Issue not raised in public response.
	Medium (2)	Issue has received a meaningful and justifiable public response.
	High (3)	Issue has received an intense meaningful and justifiable public response.
<b>Cumulative Impact (CI)</b>	Low (1)	Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change.
	Medium (2)	Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is probable that the impact will result in spatial and temporal cumulative change.
	High (3)	Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is highly probable/definite that the impact will result in spatial and temporal cumulative change.
<b>Irreplaceable loss of resources (LR)</b>	Low (1)	Where the impact is unlikely to result in irreplaceable loss of resources.
	Medium (2)	Where the impact may result in the irreplaceable loss (cannot be replaced or substituted) of resources but the value (services and/or functions) of these resources is limited.
	High (3)	Where the impact may result in the irreplaceable loss of resources of high value (services and/or functions).

The value for the final impact priority is represented as a single consolidated priority, determined as the sum of each individual criterion. The impact priority is therefore determined as follows:

**Priority = PR + CI + LR**

The result is a priority score which ranges from 3 to 9 and a consequent PF ranging from 1 to 2 (Table 20).

Table 20: Determination of prioritisation factor.

Priority	Ranking	Prioritisation Factor
3	Low	1.00
4	Medium	1.17
5	Medium	1.33
6	Medium	1.50
7	Medium	1.67
8	Medium	1.83
9	High	2.00

In order to determine the final impact significance the PF is multiplied by the ER of the post mitigation scoring. The ultimate aim of the PF is to be able to increase the post mitigation environmental risk rating by a full ranking class, if all the priority attributes are high (i.e. if an impact comes out with a medium environmental risk after the conventional impact rating, but there is significant cumulative impact potential, significant public response, and significant potential for irreplaceable loss of resources, then the net result would be to upscale the impact to a high significance (Table 21).

Table 21: Environmental significance rating.

Environmental Significance Rating	
Value	Description
< -10	Low negative (i.e. where this impact would not have a direct influence on the decision to develop in the area).
≥ -10 < -20	Medium negative (i.e. where the impact could influence the decision to develop in the area).
≥ -20	High negative (i.e. where the impact must have an influence on the decision process to develop in the area).
0	No impact
< 10	Low positive (i.e. where this impact would not have a direct influence on the decision to develop in the area).
≥ 10 < 20	Medium positive (i.e. where the impact could influence the decision to develop in the area).
≥ 20	High positive (i.e. where the impact must have an influence on the decision process to develop in the area)

## 9.2 Assessment and Evaluation of Potential Project Impacts

The following potential impacts were identified during the Basic Assessment and are for the prospecting layout as well as activities proposed.

It should be noted that this report will be made available to I&APs for review and comment and their comments and concerns will be addressed in the final report to be submitted to the DMR for adjudication. Furthermore it should be noted that the impact scores themselves will include the results of the public response and comment. The results of the public consultation will be used to update the impact scores upon completion of the public review period.

Table 22: Impact Assessment Table for the Planning Phase.

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	Final Significance
Socio-Economic	Safety and security risks to landowners and lawful occupiers	-1	3	2	3	4	2	-6.00	<ul style="list-style-type: none"> <li>Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowner. This formal agreement should additionally stipulate the landowner's special conditions which would form the legally binding agreement</li> <li>All homestead gates must be closed immediately upon entry/exit</li> <li>Vehicles used must be in a roadworthy condition. Speed limits must be adhered to and all local, provincial and national regulations with regards to road safety and transport</li> </ul>	-1	2	1	2	2	1	-1.75	-2.33
	Interference with existing land uses	-1	2	1	2	2	3	-5.25	<ul style="list-style-type: none"> <li>The Applicant must enter into formal written agreements with the affected landowners and provide compensation for any loss of revenue due to the prospecting activities</li> </ul>	-1	1	1	1	1	2	-2.00	-2.33

Table 23: Impact Assessment Table for the Construction Phase.

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation						Mitigation Measures	Environmental Impact Significance Post-mitigation						Final Significance		
		Nature	Extent	Duration	Magnitude	Reversibility	Probability		Environmental Risk (Pre-Mitigation)	Nature	Extent	Duration	Magnitude	Reversibility		Probability	Environmental Risk (Post-Mitigation)
Socio-Economic	Safety and security risks to landowners and lawful occupiers	-1	2	2	3	5	2	-6.00	<ul style="list-style-type: none"> <li>Ensure construction activities are consistent with occupational health and safety requirements</li> <li>Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowner. This formal agreement should additionally stipulate the landowner's special conditions which would form the legally binding agreement</li> <li>All homestead gates must be closed immediately upon entry/exit</li> <li>Vehicles used must be in a roadworthy condition and their loads secured. Speed limits must be adhered to and all local, provincial and national regulations with regards to road safety and transport</li> </ul>	-1	1	1	2	3	1	-1.75	-2.63
	Interference with existing land uses	-1	2	2	4	3	3	-8.25	<ul style="list-style-type: none"> <li>The Applicant must enter into formal written agreements with the affected landowners and provide compensation for any loss of revenue due to the prospecting activities</li> </ul>	-1	1	1	3	2	2	-3.50	-4.67
	Ineffective communication channels leading to community unrest	-1	3	2	1	1	2	-3.50	<ul style="list-style-type: none"> <li>Ensure that information is communicated in a manner which is understandable and accessible to I&amp;APs</li> </ul>	-1	2	1	1	1	1	-1.25	-1.67

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
	Friction between local residents/landowners and prospecting personnel	-1	3	2	2	2	3	-6.75	<ul style="list-style-type: none"> <li>All operations will be carried out under the guidance of an experienced manager with proven skills in public consultation and conflict resolution</li> <li>All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and the fact that some of the local residents may not welcome the prospecting activities in the area</li> <li>There will be a strict requirement to treat local residents with respect and courtesy at all times</li> </ul>	-1	2	1	1	1	2	-2.50	-2.50
	Possible boost in short-term local small business opportunities	1	4	1	2	2	2	4.50	<ul style="list-style-type: none"> <li>Contractors will utilise accommodation in nearby towns instead of staying on site</li> </ul>	1	5	2	3	3	3	9.75	11.38
	Perceptions and expectations	-1	3	2	2	1	4	-8.00	<ul style="list-style-type: none"> <li>Adhere to an open and transparent communication procedure with stakeholders at all times</li> <li>Ensure that accurate and regular information is communicated to I&amp;APs</li> <li>Enhance project benefits and minimise negative impacts through intensive consultation with stakeholders</li> </ul>	-1	2	1	1	1	2	-2.50	-3.33
	Job creation	1	3	1	2	3	3	6.75	<ul style="list-style-type: none"> <li>Where possible, the Applicant and contractors will source local labour. However, the number of jobs would not be substantial and duration thereof would be short lived</li> </ul>	1	4	2	3	3	4	12.00	14.00
	Training of unskilled labourers	1	3	1	2	3	3	6.75	<ul style="list-style-type: none"> <li>Where possible, the Applicant will source local unskilled labourers to train</li> </ul>	1	4	2	3	3	4	12.00	12.00



Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
Groundwater	Localised spillages of oils from machinery leading to groundwater contamination	-1	2	2	3	4	3	-8.25	<ul style="list-style-type: none"> <li>All construction equipment shall be parked in a demarcated area. Drip trays shall be used when equipment is not used for some time</li> <li>All preventative servicing of earth moving equipment and construction vehicles shall be undertaken off site</li> <li>Refuelling of vehicles will only be allowed in designated areas</li> <li>Spill kits shall be made available and all personnel shall be trained on how to use the kits and training records shall be made available on request</li> </ul>	-1	1	1	2	3	2	-3.50	-4.67
Surface Water	Potential deterioration in water quality due to the potential accidental spillages of hazardous substances	-1	3	2	3	4	2	-6.00	<ul style="list-style-type: none"> <li>No construction activities will be undertaken within 100 metres of nearby streams without consent from the DWS</li> <li>Adequate stormwater management must be incorporated into the design of the project in order to prevent contamination of water courses from dirty water</li> </ul>	-1	2	1	2	3	2	-4.00	-6.00
Heritage Resources	Damage /destruction to local graves in the area	-1	3	3	3	3	3	-9.00	<ul style="list-style-type: none"> <li>It is proposed that a 20 m buffer be maintained around cemeteries and that no construction material be placed near the cemeteries</li> </ul>	-1	2	3	1	1	2	-3.50	-4.67
	Damage/destruction of sites of archaeological importance	-1	2	3	4	3	3	-9.00	<ul style="list-style-type: none"> <li>No machinery or construction material should be placed near the stonewalls as this is a "No-Go" Area</li> </ul>	-1	2	3	2	2	2	-4.50	-6.00
Palaeontological Resources	Damage/destruction of sites with palaeontological resources	-1	2	1	2	3	2	-4.00	<ul style="list-style-type: none"> <li>Conduct a field assessment and protocol for finds prior to commencement of the construction phase</li> </ul>	-1	1	1	2	2	2	-3.00	-5.00

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	Final Significance
Biodiversity (Flora and Fauna)	Further loss and fragmentation of the vegetation community (including portions of a Vulnerable vegetation type)	-1	2	2	2	2	4	-8.00	<ul style="list-style-type: none"> <li>It is recommended that the trench areas be specifically demarcated</li> <li>Any areas of natural, indigenous vegetation should be declared as "No-Go" areas during the construction phase and all efforts must be made to prevent access to this area from construction workers, machinery, domestic animals and the general public</li> <li>A qualified Ecology Specialist must be on site when construction begins to identify species that will be directly disturbed and to relocate fauna/flora that is found during construction (including all reptiles and amphibians)</li> <li>If any faunal species are recorded during construction, activities should temporarily cease, and an appropriate specialist should be consulted to identify the correct course of action</li> <li>During vegetation clearance, methods should be employed to minimise potential harm to fauna species.</li> <li>All vehicles and equipment must be maintained, and all refuelling of vehicles will only be allowed in designated areas and servicing of equipment is to take place in demarcated areas outside of the application area</li> <li>Prior and during vegetation clearance any larger fauna species noted should be given the opportunity to move away</li> <li>Fauna species such as frogs and reptiles that have not moved away should be carefully and safely removed to a suitable location beyond the extent of the development footprint by a suitably qualified specialist trained in the handling and relocation of animals</li> </ul>	-1	1	1	2	2	2	-3.00	-4.00
	Displacement of faunal community (including threatened or protected species) due to habitat loss, disturbance, poaching (due to increased human presence) and/or direct mortalities	-1	2	2	2	2	4	-8.00		-1	1	1	2	2	2	-3.00	-4.00

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
Air Quality	Possible increase in dust generation as a result of trench excavation and operation of heavy machinery	-1	4	1	3	2	4	-10.00	<ul style="list-style-type: none"> <li>Dust suppression measures shall be implemented on dry weather days and periods of high wind velocities</li> <li>A speed limit of 40 km/hr shall apply to limit vehicle entrained dust from the unpaved road</li> </ul>	-1	2	1	2	2	3	-5.25	-7.00
	Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment	-1	5	3	3	3	4	-14.00	<ul style="list-style-type: none"> <li>All construction equipment must be scheduled for preventative maintenance to ensure the functioning of the exhaust systems to reduce excessive emissions and limit air pollution</li> </ul>	-1	4	2	2	2	3	-7.50	-8.75
Visual	Scaring of the landscape as a result of the clearance of vegetation	-1	1	2	2	3	3	-6.00	<ul style="list-style-type: none"> <li>Ensure that areas stripped of vegetation are kept to a minimum</li> </ul>	-1	1	2	2	2	2	-3.50	-4.08
	Visual intrusion as a result of the movement of heavy machinery and the establishment of the required infrastructure	-1	2	1	2	1	3	-4.50	<ul style="list-style-type: none"> <li>Movement of vehicles shall be kept to outside busy hours to minimise the visual impacts on the residents</li> <li>Materials transported on public roads must be covered</li> </ul>	-1	2	1	1	1	2	-2.50	-2.50
Noise	The use of vehicles and machinery may generate noise in the immediate vicinity	-1	2	1	2	1	3	-4.50	<ul style="list-style-type: none"> <li>All construction vehicles and machinery must be maintained in good working order</li> <li>When working or travelling past noise sensitive receptors, no unnecessary hooting or noise should occur</li> </ul>	-1	1	1	1	1	2	-2.00	-2.33
Soil, Land Use and Land Capability	Localised chemical pollution of soils as a result of vehicle hydrocarbon spillages	-1	2	3	3	4	3	-9.00	<ul style="list-style-type: none"> <li>Any spills or leaks must immediately be cleaned up and the contaminated soil suitably disposed of</li> <li>Machinery to be used for the operation will be of good working condition</li> </ul>	-1	1	2	2	3	2	-4.00	-4.67

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	Final Significance
	Localised clearing of vegetation and compaction of the construction footprint will result in the soils being particularly more vulnerable to soil erosion	-1	1	2	3	3	4	-9.00	<ul style="list-style-type: none"> <li>The time in which soils are exposed during construction activities should remain as short as possible</li> <li>Due to the sensitivity of the soil layer and the associated risk of erosion, construction should occur only in the dry season in order to prevent run-off and erosion</li> </ul>	-1	1	1	2	2	3	-4.50	-5.25
Traffic	Increase in traffic volumes as a result of pre-construction activities which may lead to an increase in traffic congestion along the provincial roads and farm tracks around the prospecting area	-1	2	1	2	1	3	-4.50	<ul style="list-style-type: none"> <li>Local speed limits and traffic laws shall apply at all times to minimise the occurrences of accidents on public roads</li> <li>The number of construction vehicles and trips shall be kept to a minimum</li> </ul>	-1	2	1	1	1	2	-2.50	-2.92
Waste Management	Potential water and soil pollution as a result of inappropriate waste management practices	-1	1	2	3	4	3	-7.50	<ul style="list-style-type: none"> <li>Waste shall not be buried or burned on site</li> <li>No dumping shall be allowed near or on site</li> <li>All general waste shall be disposed of at the nearest licensed landfill site</li> </ul>	-1	1	1	2	3	2	-3.50	-4.67

Table 24: Impact Assessment Table for the Operational Phase.

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	Final Significance
Socio-Economic	Safety and security risks to landowners and lawful occupiers	-1	2	1	3	4	3	-7.50	<ul style="list-style-type: none"> <li>Ensure invasive prospecting activities are consistent with occupational health and safety requirements</li> <li>Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowners. This formal agreement should additionally stipulate landowner's special conditions which should form a legally binding agreement</li> <li>All homestead gates must be closed immediately upon entry/exit</li> <li>Vehicles used must be in a roadworthy condition and their loads secured. Speed limits must be adhered to and all local, provincial and national regulations with regards to road safety and transport</li> </ul>	-1	1	1	2	3	1	-1.75	-2.63
	Interference with existing land uses	-1	1	1	3	4	4	-9.00	<ul style="list-style-type: none"> <li>Avoid farm lands actively used for farming</li> <li>Ensure that negotiations on compensation are undertaken before invasive activities can commence. This will include any other conditions that the landowner may deem necessary for the prospecting operation</li> <li>Use sites that are unused and that are in a degraded state</li> </ul>	-1	1	1	3	3	3	-6.00	-7.00
	Perceptions and expectations	-1	4	2	1	1	4	-8.00	<ul style="list-style-type: none"> <li>Adhere to an open and transparent communication procedure with stakeholders at all times</li> <li>Ensure that accurate and regular information is communicated to I&amp;APs</li> <li>Enhance project benefits and minimise negative impacts through intensive consultation with stakeholders</li> </ul>	-1	3	1	1	1	2	-3.00	-4.00

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
	Job creation	1	4	1	2	2	4	9.00	<ul style="list-style-type: none"> <li>Where possible, the Applicant and contractors will source local labour. However, the number of jobs would not be substantial and duration thereof would be short lived</li> </ul>	1	5	1	3	2	5	13.75	16.04
	Discovery of economically viable mineral resources	1	1	2	5	5	4	13.00	<ul style="list-style-type: none"> <li>No mitigation measures are proposed for this impact</li> </ul>	1	3	4	5	5	5	21.25	24.79
	Training of unskilled labourers	1	4	1	3	3	4	11.00	<ul style="list-style-type: none"> <li>Where possible, the Applicant will source local unskilled labourers to train</li> </ul>	1	5	1	3	3	5	15.00	17.50
Groundwater	Pollution of groundwater due to spillage of hydrocarbons from vehicles and machinery during excavation of trenches	-1	3	3	3	4	3	-9.75	<ul style="list-style-type: none"> <li>Ensure that detailed baseline water quality and quantity samples are obtained and analysed for reference purposes</li> <li>Drip trays must be placed under vehicles</li> <li>During refuelling of vehicles or equipment, drip trays must be utilised to prevent spills or leaks</li> </ul>	-1	2	2	2	3	2	-4.50	-5.25
	Storage of hydrocarbons and chemicals may impact on groundwater as a result of spillages and uncontrolled release	-1	3	3	3	4	3	-9.75	<ul style="list-style-type: none"> <li>Drip trays must be placed under vehicles and machinery</li> </ul>	-1	2	2	2	3	2	-4.50	-5.25
Surface Water	Contamination of surface water due to spillage of oils, fuels and chemicals	-1	4	3	3	4	2	-7.00	<ul style="list-style-type: none"> <li>It is proposed that the following condition for Environmental Authorisation be set from a groundwater perspective: <ul style="list-style-type: none"> <li>No development should take place within 100 m of the rivers and streams</li> </ul> </li> </ul>	-1	3	2	2	3	1	-2.50	-3.75
	Damage /destruction to local graves in the area	-1	2	2	2	3	2	-4.50	<ul style="list-style-type: none"> <li>It is proposed that a 20 m buffer be maintained around cemeteries during prospecting operations</li> </ul>	-1	1	1	2	3	1	-1.75	-2.33

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
Heritage Resources	Damage/destruction of sites of archaeological importance	-1	2	2	2	3	2	-4.50	<ul style="list-style-type: none"> <li>No prospecting activities should take place near the stonewalls as this is a "No-Go" Area</li> </ul>	-1	1	1	2	2	1	-1.50	-2.25
Palaeontological Resources	Damage/destruction of sites with palaeontological resources	-1	2	2	2	3	2	-4.50	<ul style="list-style-type: none"> <li>Conduct a field assessment and protocol for finds prior to commencement of prospecting activities</li> </ul>	-1	1	1	2	2	1	-1.50	-2.00
Biodiversity (Flora and Fauna)	Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species	-1	3	3	4	2	4	-12.00	<ul style="list-style-type: none"> <li>As far as possible, the proposed prospecting (including access routes) should be placed in areas that have already been disturbed, and no further loss of primary or secondary vegetation should be permitted</li> <li>The duration of the prospecting should be minimised to as short term as possible, in order to reduce the period of disturbance on flora</li> <li>Areas of indigenous vegetation, even secondary communities, should under no circumstances be fragmented or disturbed further or used as an area for dumping of waste</li> <li>Trench areas should completely avoid any trees, where possible (especially any protected tree species)</li> <li>Any areas of natural, indigenous vegetation should be declared as "No-Go" areas during the operational phase and all efforts must be made to prevent access to these areas from workers, machinery, livestock and the general public</li> </ul>	-1	1	2	2	2	2	-3.50	-3.50
	Continued displacement and fragmentation of the faunal community (including threatened or protected species) due to on-going anthropogenic disturbances and habitat degradation (litter, road	-1	2	2	2	2	4	-8.00	<ul style="list-style-type: none"> <li>All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint (trenches) at all times</li> <li>Fauna species such as frogs and reptiles that have not moved</li> </ul>	-1	1	2	2	2	2	-3.50	-4.08

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
	mortalities and/or poaching)								away should be carefully and safely removed to a suitable location beyond the extent of the prospecting footprint by a suitably qualified specialist trained in the handling and relocation of animals <ul style="list-style-type: none"> <li>No trapping, killing, poaching, snaring or poisoning of any wildlife is to be allowed on site, including snakes, birds, lizards, frogs, insects or mammals</li> <li>The duration of the prospecting should be minimised to as short term as possible, in order to reduce the period of disturbance on fauna</li> </ul>								
	Potential leaks, discharges, litter, pollutant from development into the surrounding environment. Thus harming fauna and flora species	-1	2	3	2	4	4	-11.00	<ul style="list-style-type: none"> <li>Vehicles could cause spillages of lubricants and fuels. All vehicles and equipment must be maintained, and all re-fuelling and servicing of equipment is to take place in demarcated areas outside of the prospecting footprint (trench areas)</li> </ul>	-1	1	1	2	2	2	-3.00	-3.00
Air Quality	The prospecting operation will require vehicular movement which may result in possible increase in dust generation	-1	4	1	3	3	3	-8.25	<ul style="list-style-type: none"> <li>Dust suppression must be conducted during the operational phase of the project</li> <li>Correct speed will be maintained at the proposed project site</li> <li>A speed limit of 40 km/hr shall apply to limit vehicle entrained dust from the unpaved road</li> </ul>	-1	2	1	2	2	2	-3.50	-4.08
	Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment	-1	5	3	3	3	4	-14.00	<ul style="list-style-type: none"> <li>Vehicle maintenance must be conducted regularly to avoid excessive diesel fumes</li> </ul>	-1	4	2	2	2	3	-7.50	-8.75
Visual	The excavators used during the trenching operations will be visible from the nearby residents	-1	2	1	2	1	5	-7.50	<ul style="list-style-type: none"> <li>Movement of vehicles shall be kept to outside busy hours to minimise the visual impacts on the residents</li> </ul>	-1	1	1	1	1	5	-5.00	-5.00



Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-)	
	and properties								<ul style="list-style-type: none"> <li>Materials transported on public roads must be covered</li> </ul>								
Noise	The use of vehicles and machinery may generate noise in the immediate vicinity	-1	2	1	3	2	4	-8.00	<ul style="list-style-type: none"> <li>All vehicles and machinery must be maintained in good working order</li> <li>When working or travelling past noise sensitive receptors, no unnecessary hooting or noise should occur</li> </ul>	-1	1	1	2	2	3	-4.50	-5.25
Soil, Land Use and Land Capability	Top soils removal, storage and replacement during trench excavation will result in the disruption of the soil profile	-1	1	2	3	3	5	-11.25	<ul style="list-style-type: none"> <li>Ensure that topsoil is properly stored, away from the streams and drainage areas</li> </ul>	-1	1	1	2	2	5	-7.50	-7.50
	Soil contamination due to spillage of hydrocarbons	-1	1	2	3	4	4	-10.00	<ul style="list-style-type: none"> <li>Drip trays must be placed under vehicles</li> <li>Any spills or leaks must immediately be cleaned up and the contaminated soil suitably disposed of</li> </ul>	-1	1	1	2	3	3	-5.25	-5.25

Table 25: Impact Assessment Table for the Decommissioning Phase.

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	Final Significance
Biodiversity (Flora and Fauna)	Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species	-1	3	2	4	2	4	-11.00	<ul style="list-style-type: none"> <li>It is recommended that the development footprint be demarcated during the decommissioning phase so that only the demarcated areas are impacted upon. Demarcation will also prevent movement of workers into surrounding natural areas</li> <li>Areas of indigenous vegetation, even secondary communities, should under no circumstances be fragmented or disturbed further or used as an area for dumping of waste</li> <li>Any areas of natural, indigenous vegetation should be declared as "No-Go" areas during the decommissioning phase</li> </ul>	-1	1	1	2	2	2	-3.00	-3.50
	Continued displacement of the faunal community (including threatened or protected species) due to on-going anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching)	-1	2	1	2	2	4	-7.00	<ul style="list-style-type: none"> <li>All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times</li> <li>The duration of the decommissioning phase should be minimised to as short term as possible, in order to reduce the period of disturbance on fauna and flora</li> </ul>	-1	1	1	1	2	2	-2.50	-2.92
Air Quality	Removal of equipment from the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and	-1	3	1	2	2	3	-6.00	<ul style="list-style-type: none"> <li>Dust suppression must be conducted during the decommissioning phase of the project whenever excessive dust is generated dust from the unpaved road</li> </ul>	-1	2	1	2	2	2	-3.50	-4.08

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation						Mitigation Measures	Environmental Impact Significance Post-mitigation								
		Nature	Extent	Duration	Magnitude	Reversibility	Probability		Environmental Risk (Pre-Mitigation)	Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	Final Significance
	due to blowing winds																
Noise	Noise will be generated during the removal of equipment on site. This noise is not expected to exceed occupational noise limits and will be short lived	-1	1	1	2	2	4	-6.00	<ul style="list-style-type: none"> <li>Where necessary, provide employees with ear plugs and employees must be instructed to use the ear plugs</li> <li>Ensure that equipment is well maintained and fitted with the correct and appropriate noise abatement measures</li> </ul>	-1	1	1	2	2	2	-3.00	-3.50

Table 26: Impact Assessment Table for the Rehabilitation and Closure Phases.

Environmental Aspect	Potential impacts	Environmental Impact Significance Pre-mitigation							Mitigation Measures	Environmental Impact Significance Post-mitigation							Final Significance
		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Pre-Mitigation)		Nature	Extent	Duration	Magnitude	Reversibility	Probability	Environmental Risk (Post-Mitigation)	
Heritage Resources	Damage /destruction to local graves in the area	-1	2	2	2	4	2	-5.00	<ul style="list-style-type: none"> <li>It is proposed that a 20 m buffer be maintained around cemeteries during rehabilitation and closure</li> </ul>	-1	1	1	2	2	1	-1.50	-2.00
	Damage/destruction of sites of archaeological importance	-1	2	3	2	4	2	-5.50	<ul style="list-style-type: none"> <li>No activities should take place near the stonewalls as this is a "No-Go" Area</li> </ul>	-1	1	2	2	3	1	-2.00	-2.33
Palaeontological Resources	Damage/destruction of sites with palaeontological resources	-1	2	3	2	4	2	-5.50	<ul style="list-style-type: none"> <li>Conduct a field assessment and protocol for finds prior to rehabilitating the site</li> </ul>	-1	1	2	2	3	1	-2.00	-2.00
Biodiversity (Flora and Fauna)	Encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species and potential re-establishment of natural species that were removed. The nature of the erosion will depend on the amount of successful vegetation establishment	-1	4	3	3	3	4	-13.00	<ul style="list-style-type: none"> <li>Areas that are denuded during construction need to be re-vegetated with indigenous vegetation to prevent erosion during flood events. This will also reduce the likelihood of encroachment by alien invasive plant species</li> <li>Rehabilitation of the trenches must be made a priority. Rehabilitation must include re-filling of the open trenches with appropriate rock and soils and suitably compacted. Top soils must also be utilised, and the area must be re-vegetated with plant and grass species which are endemic to this vegetation type</li> </ul>	-1	1	1	2	2	2	-3.00	-3.00

	Displacement of the faunal community (including threatened or protected species) due to rehabilitation of the anthropogenic disturbances and habitat degradation, rehabilitation resulting in the faunal species potentially re-establishing within the area	-1	2	3	2	2	4	-9.00	<ul style="list-style-type: none"> <li>All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times</li> <li>Any larger fauna species noted during rehabilitation should be given the opportunity to move away</li> </ul>	-1	1	2	1	2	2	-3.00	-3.00
Air Quality	Rehabilitation of the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and due to blowing winds. Vehicles and machinery will also generate diesel or petrol fumes. Generated dust will migrate towards the predominant wind direction and may settle on surrounding properties including nearby vegetation	-1	4	2	3	3	3	-9.00	<ul style="list-style-type: none"> <li>All vehicles utilising public gravel roads must adhere to the speed</li> <li>Vehicle maintenance must be conducted regularly to avoid excessive diesel fumes</li> <li>Dust suppression must be conducted during the rehabilitation and closure phases of the project whenever excessive dust is generated</li> </ul>	-1	2	1	2	2	2	-3.50	-4.08
Noise	Noise will be generated during the rehabilitation of the sites. This noise is not expected to exceed occupational noise limits and will be short lived	-1	2	1	2	2	3	-5.25	<ul style="list-style-type: none"> <li>Where necessary, provide employees with ear plugs and employees must be instructed to use the ear plugs</li> <li>Ensure that equipment is well maintained and fitted with the correct and appropriate noise abatement measures</li> </ul>	-1	1	1	2	2	2	-3.00	-3.00
Soil, Land Use and Land Capability	The rehabilitation of the trench sites will result in the affected soil and land use being restored. This will also result in the resumption of the use of the land since the infrastructure would have been removed	1	1	5	4	4	3	10.50	<ul style="list-style-type: none"> <li>Ensure that the rehabilitation work is done in such a manner that the soil is protected from probable spillages</li> <li>All oil spills will be remedied using approved methodologies. The contaminated soils will be removed and disposed of at a licensed waste disposal facility.</li> </ul>	1	1	5	5	4	4	15.00	17.50
	Compaction of soil due to vehicles/machinery utilised during site rehabilitation	-1	2	2	2	2	3	-6.00	<ul style="list-style-type: none"> <li>Avoid having vehicles repeatedly travel on the same tracks</li> <li>Reduce traffic</li> </ul>	-1	2	1	2	2	2	-3.50	-3.50
Environmental Pollution	Generation and disposal of waste	-1	1	1	2	4	4	-8.00	<ul style="list-style-type: none"> <li>All waste generated from the rehabilitation sites will be collected in proper receptacles and removed to registered disposal facilities e.g., sewage treatment plant or solid waste disposal site</li> </ul>	-1	1	1	2	3	3	-5.25	-7.00

Refer to Appendix G for a summary of the full scoring for each of the assessed impact.

## **10. MOTIVATION WHERE NO ALTERNATIVE SITES WERE CONSIDERED**

The proposed Prospecting Right area holds potential for economically viable mineral resources to occur as the surface geology of the application area comprises rocks of the Central Rand Group of the Witwatersrand Supergroup, which contain conglomerate layers known as reefs. These reefs host the world's most prolific accumulation of gold. According to the mining and biodiversity guidelines, the application area is predominantly classified as having a moderate biodiversity importance and represents a moderate risk for mining. The application area does not overlap with, nor will it impact any formally protected areas. Furthermore, no Species of Conservation Concern were identified in the application area during the field survey undertaken as part of the Biodiversity Impact Assessment. As such, the overall site is regarded as the preferred site and alternative sites are not considered.

No alternative trench sites are assessed as the trench locations were selected based on the fact that the target reef outcrops at these two locations. According to the Free State Terrestrial Critical Biodiversity Areas Plan, the proposed trenches are situated in an area which is regarded as degraded. Furthermore, no burial grounds, graves and archaeological sites occur within 100 m of the proposed trench locations. Although the overall application area falls within areas indicated as low sensitivity and highly sensitive in terms of palaeosensitivity, the trenches are specifically situated in the area indicated as a low sensitivity area.

## **11. STATEMENT MOTIVATING THE ALTERNATIVE DEVELOPMENT LOCATION WITHIN THE OVERALL SITE**

The trench locations are not in close proximity to any communities or residences, therefore, limiting the potential negative social impacts. The proposed trench locations are also not in close proximity to any sensitive environmental features, therefore, limiting the potential negative environmental impacts. Nor do they occur in close proximity to any burial grounds and archaeological resources. In terms of palaeosensitivity, the trenches are specifically situated in an area regarded as a low sensitivity area. As such, the proposed trench locations do not require alternative development locations within the overall site.

Consultation with all I&APs is on-going and concerns have been raised regarding the occurrence of faunal species within the overall site and the close proximity of the application area to the Vredefort Dome World Heritage Site. All concerns raised have been included and evaluated in this BAR and EMPR.

The identified negative impacts associated with the proposed invasive prospecting activities range from Low to Medium significance and would be reduced to Low should the proposed mitigation measures be implemented accordingly (Table 27).

## **12. 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 PLAN) THROUGH THE LIFE OF THE ACTIVITY**

The impact assessment process may be summarised as follows:

- Identification of proposed prospecting activities including their nature and duration.
- Screening of activities likely to result in impacts or risks.
- Utilisation of the above mentioned methodology to assess and score preliminary impacts and risks identified.

- Inclusion of I&AP comments regarding impact identification and assessment.
- Finalisation of impact identification and scoring.

### 13. IMPACT ASSESSMENT OF EACH IDENTIFIED POTENTIALLY SIGNIFICANT IMPACT AND RISK

Table 27: Impact significance table.

Impact	Pre-Mitigation ER	Post-Mitigation ER	Final Score
<b>Planning Phase</b>			
Safety and security risks to landowners and lawful occupiers	-6.00	-1.75	-2.33
Interference with existing land uses	-5.25	-2.00	-2.33
<b>Construction Phase</b>			
Safety and security risks to landowners and lawful occupiers	-6.00	-1.75	-2.63
Interference with existing land uses	-8.25	-3.50	-4.67
Ineffective communication channels leading to community unrest	-3.50	-1.25	-1.67
Friction between local residents/landowners and prospecting personnel	-6.75	-2.50	-2.50
Possible boost in short-term local small business opportunities	4.50	9.75	11.38
Perceptions and expectations	-8.00	-2.50	-3.33
Job creation	6.75	12.00	14.00
Training of unskilled labourers	6.75	12.00	12.00
Localised spillages of oils from machinery leading to groundwater contamination	-8.25	-3.50	-4.67
Potential deterioration in water quality due to the potential accidental spillages of hazardous substances	-6.00	-4.00	-6.00
Damage /destruction to local graves in the area	-9.00	-3.50	-4.67
Damage/destruction of sites of archaeological importance	-9.00	-4.50	-6.00
Damage/destruction of sites with palaeontological resources	-4.00	-3.00	-5.00
Further loss and fragmentation of the vegetation community (including portions of a Vulnerable vegetation type)	-8.00	-3.00	-4.00
Displacement of faunal community (including threatened or protected species) due to habitat loss, disturbance, poaching (due to increased human presence) and/or direct mortalities	-8.00	-3.00	-4.00
Possible increase in dust generation as a result of trench excavation and operation of heavy machinery	-10.00	-5.25	-7.00

Impact	Pre-Mitigation ER	Post-Mitigation ER	Final Score
Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment	-14.00	-7.50	-8.75
Scaring of the landscape as a result of the clearance of vegetation	-6.00	-3.50	-4.08
Visual intrusion as a result of the movement of heavy machinery and the establishment of the required infrastructure	-4.50	-2.50	-2.50
The use of vehicles and machinery may generate noise in the immediate vicinity	-4.50	-2.00	-2.33
Localised chemical pollution of soils as a result of vehicle hydrocarbon spillages	-9.00	-4.00	-4.67
Localised clearing of vegetation and compaction of the construction footprint will result in the soils being particularly more vulnerable to soil erosion	-9.00	-4.50	-5.25
Increase in traffic volumes as a result of pre-construction activities which may lead to an increase in traffic congestion along the provincial roads and farm tracks around the prospecting area	-4.50	-2.50	-2.92
Potential water and soil pollution as a result of inappropriate waste management practices	-7.50	-3.50	-4.67
<b>Operational Phase</b>			
Safety and security risks to landowners and lawful occupiers	-7.50	-1.75	-2.63
Interference with existing land uses	-9.00	-6.00	-7.00
Perceptions and expectations	-8.00	-3.00	-4.00
Job creation	9.00	13.75	16.04
Discovery of economically viable mineral resources	13.00	21.25	24.79
Training of unskilled labourers	11.00	15.00	17.50
Pollution of groundwater due to spillage of hydrocarbons from vehicles and machinery during excavation of trenches	-9.75	-4.50	-5.25
Storage of hydrocarbons and chemicals may impact on groundwater as a result of spillages and uncontrolled release	-9.75	-4.50	-5.25
Contamination of surface water due to spillage of oils, fuels and chemicals	-7.00	-2.50	-3.75
Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species	-12.00	-3.50	-3.50
Potential leaks, discharges, litter, pollutant from development into the surrounding environment. Thus harming flora and fauna species	-11.00	-3.00	-3.00
Continued displacement and fragmentation of the faunal community (including threatened or protected species) due to ongoing anthropogenic disturbances and habitat	-8.00	-3.50	-4.08



Impact	Pre-Mitigation ER	Post-Mitigation ER	Final Score
degradation (litter, road mortalities and/or poaching)			
Soil contamination due to spillage of hydrocarbons	-10.00	-5.25	-5.25
Top soils removal, storage and replacement during trench excavation will result in the disruption of the soil profile	-11.25	-7.50	-7.50
The prospecting operation will require vehicular movement which may result in possible increase in dust generation	-8.25	-3.50	-4.08
Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment	-14.00	-7.50	-8.75
The excavators used during the trenching operations will be visible from the nearby residents and properties	-7.50	-5.00	-5.00
Damage/destruction to local graves in the area	-4.50	-1.75	-2.33
Damage/destruction of sites of archaeological importance	-4.50	-1.50	-2.25
Damage/destruction of sites with palaeontological resources	-4.50	-1.50	-2.00
The use of vehicles and machinery may generate noise in the immediate vicinity	-8.00	-4.50	-5.25
<b>Decommissioning Phase</b>			
Removal of equipment and the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and due to blowing winds	-6.00	-3.50	-4.08
Noise will be generated during the removal of equipment on site. This noise is not expected to exceed occupational noise limits and will be short lived	-6.00	-3.00	-3.50
Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species	-11.00	-3.00	-3.50
Continued displacement of the faunal community (including threatened or protected species) due to ongoing anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching)	-7.00	-2.50	-2.92
<b>Rehabilitation and Closure Phase</b>			
The rehabilitation of the trench sites will result in the affected soil and land use being restored. This will also result in the resumption of the use of the land since the infrastructure would have been removed	10.50	15.00	17.50
Compaction of soil due to vehicles/machinery utilised during site rehabilitation	-6.00	-3.50	-3.50

Impact	Pre-Mitigation ER	Post-Mitigation ER	Final Score
Rehabilitation the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and due to blowing winds. Vehicles and machinery will also generate diesel or petrol fumes. Generated dust will migrate towards the predominant wind direction and may settle on surrounding properties including nearby vegetation	-9.00	-3.50	-4.08
Noise will be generated during the rehabilitation of the sites. This noise is not expected to exceed occupational noise limits and will be short lived	-5.25	-3.00	-3.00
Encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species and potential re-establishment of natural species that were removed. The nature of the erosion will depend on the amount of successful vegetation establishment	-13.00	-3.00	-3.00
Displacement of the faunal community (including threatened or protected species) due to rehabilitation of the anthropogenic disturbances and habitat degradation, rehabilitation resulting in the faunal species potentially re-establishing within the area	-9.00	-3.00	-3.00
Damage/destruction to local graves in the area	-5.00	-1.50	-2.00
Damage/destruction of sites of archaeological importance	-5.50	-2.00	-2.33
Damage/destruction of sites with palaeontological resources	-5.50	-2.00	-2.00
Generation and disposal of waste	-8.00	-5.25	-7.00

Refer to Appendix G for a summary of the full scoring for each of the assessed impacts.

## 14. SUMMARY OF SPECIALIST REPORTS

### Biodiversity and Wetland Assessment

A late-dry season Terrestrial Biodiversity and Wetland Assessment was undertaken by The Biodiversity Company. The assessment was conducted on a desktop level and a field survey was undertaken in order to increase confidence in the information obtained from desktop studies. The field survey primarily focussed on the prospecting footprint (areas proposed for the excavation of two trenches). Listed below are the key findings:

- From an ecological perspective, the proposed prospecting footprint is situated predominantly within disturbed and semi-disturbed habitats. Although somewhat disturbed, it is believed that these areas may still support some faunal species, and there is a moderate likelihood that Species of Conservation Concern may occur.
- The application area is situated across five vegetation types, namely (i) Vredefort Dome Granite Grassland, (ii) Andesite Mountain Bushveld, (iii) Gold Reef Mountain Bushveld, (iv) Vaal Vet Sandy Grassland and (v) Central Free State Grassland. The prospecting footprint is specifically situated within only one vegetation type, namely the Vredefort Dome Granite Grassland, which is classified as

Endangered according to Mucina and Rutherford (2006) and Vulnerable according to the National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004).

- The proposed invasive prospecting activities will result in limited direct loss and destruction of habitats (including an Endangered vegetation type), possible direct mortalities and displacement of fauna and flora may occur. Due to the already disturbed nature of the prospecting footprint, the impact on flora and fauna is regarded as low-negative.
- According to the mining and biodiversity guidelines, the project area is predominantly classed as having a 'Moderate Biodiversity Importance' and represents a 'Moderate Risk' for Mining.
- Based on the South African National Biodiversity Institute Protected Areas Map and the National Protected Areas Expansion Strategy the project area does not overlap with, nor will it impact upon, any formally protected area.
- No true-Freshwater Ecosystem Priority Area wetlands or rivers were identified within the proposed prospecting footprint.
- Given the access limitations, only desktop data has been used to identify wetland areas. The 500 m assessment boundaries could not be ground truthed. Ultimately, one hydrogeomorphic type has been identified and consists of four wetland units, of which all four are located outside of the 500 m assessment boundaries.
- No functional assessment, ecological health or Ecosystem Importance Sensitivity assessments have been done for the delineated wetland areas due to the dependence on desktop data. A conservative 15 m buffer has been recommended for the identified wetland areas. Given the distance between the proposed trenches and the delineated wetland areas, no risks are expected for the proposed invasive prospecting activities regarding wetlands.

#### **Heritage and Palaeontological Assessment**

A Heritage Impact Assessment and a Desktop Palaeontological Impact Assessment were undertaken by NGT Holdings over the application area. The Heritage Impact Assessment was conducted on a desktop level and a field survey was undertaken with the aim of identifying archaeological and heritage resources within the area proposed for the excavation of two trenches. Listed below are the key findings:

- The application area, which is situated west of the town of Vredefort, is located in a region rich in archaeological and heritage resources.
- The following sites were identified during the field survey:
  - Mim Gro Cem-01: A small cemetery containing 33 graves, dating to the Historical and Contemporary periods, was located on the border of the farms Mimosa Groove 491 and Lindekfeesfontein 73. The cemetery is located approximately 700 metres north-west of Trench 1 and 1.2 kilometres north-west of Trench 2.
  - Lindek Cem-01: A small cemetery containing 32 graves, dating to the Historical and Contemporary period, was identified on the farm Lindekfeesfontein 73. The cemetery is located approximately 2.4 kilometres north-west of Trench 1 and 2.8 kilometres north-west of Trench 2.
  - Rhebok Cem-01: 14 graves dating to the Historical period were identified on the Rhebokfontein West 117. The graves are located approximately 21 kilometres south of Trench 1 and 22 km south of Trench 2.
  - Onreg Cem-01: 11 graves dating to the Historical period were identified on the farm Onreg 1032. The graves are located approximately 21 kilometres south of Trench 1 and 22 kilometres south of Trench 2.

- Site complex-01: Several collapsed stone walls, dating to the Late Iron Age were identified on the farm Rhebokfontein West 117. The stone walls are located approximately 19.5 kilometres south of Trench 1 and 19.1 km south of Trench 2. The cemeteries and stone walls identified in the application area are of high/medium significance.
- In terms of the South African Heritage Resources Agency Palaeontological Sensitivity Layer, the application area is classified as having low to high fossil sensitivity. According to the Desktop Palaeontological Impact Assessment, the two trench areas on the farm Mimosa Grove 491 fall on non-fossiliferous rocks of the Witwatersrand Supergroup while a section in the west occurs on sandstones and shales of the Vryheid Formation that could preserve fossil plants of the Glossopteris flora (early Permian).

## 15. ENVIRONMENTAL IMPACT STATEMENT

The majority of the prospecting activities are non-invasive and will consequently have no impact on the socio-economic and biophysical environment. Invasive activities will entail excavation of 2 trenches (10 m long, 1.5 m wide, 3 m deep each). The total area to be disturbed is anticipated to be 0.03 ha which needs to be viewed in context of the entire proposed application area which covers 18 623.73 ha.

All of the identified impacts will occur for a limited time period and the extent of the impacts will be localised. Based on the impact assessment conducted by the various specialists, the environmental impacts associated with the proposed prospecting activities are expected to be localised and of Medium to Low significance. The impacts will be reduced to Low significance should mitigation measures be implemented.

In terms of site sensitivities, the most sensitive features which will require protection on site may be summarised as follows:

- Critical Biodiversity Areas.
- Ecological Support Areas.
- Watercourses and wetlands.
- Heritage and archaeological sites (cemeteries and a stonewall complex).

### 16. FINAL SITE MAP

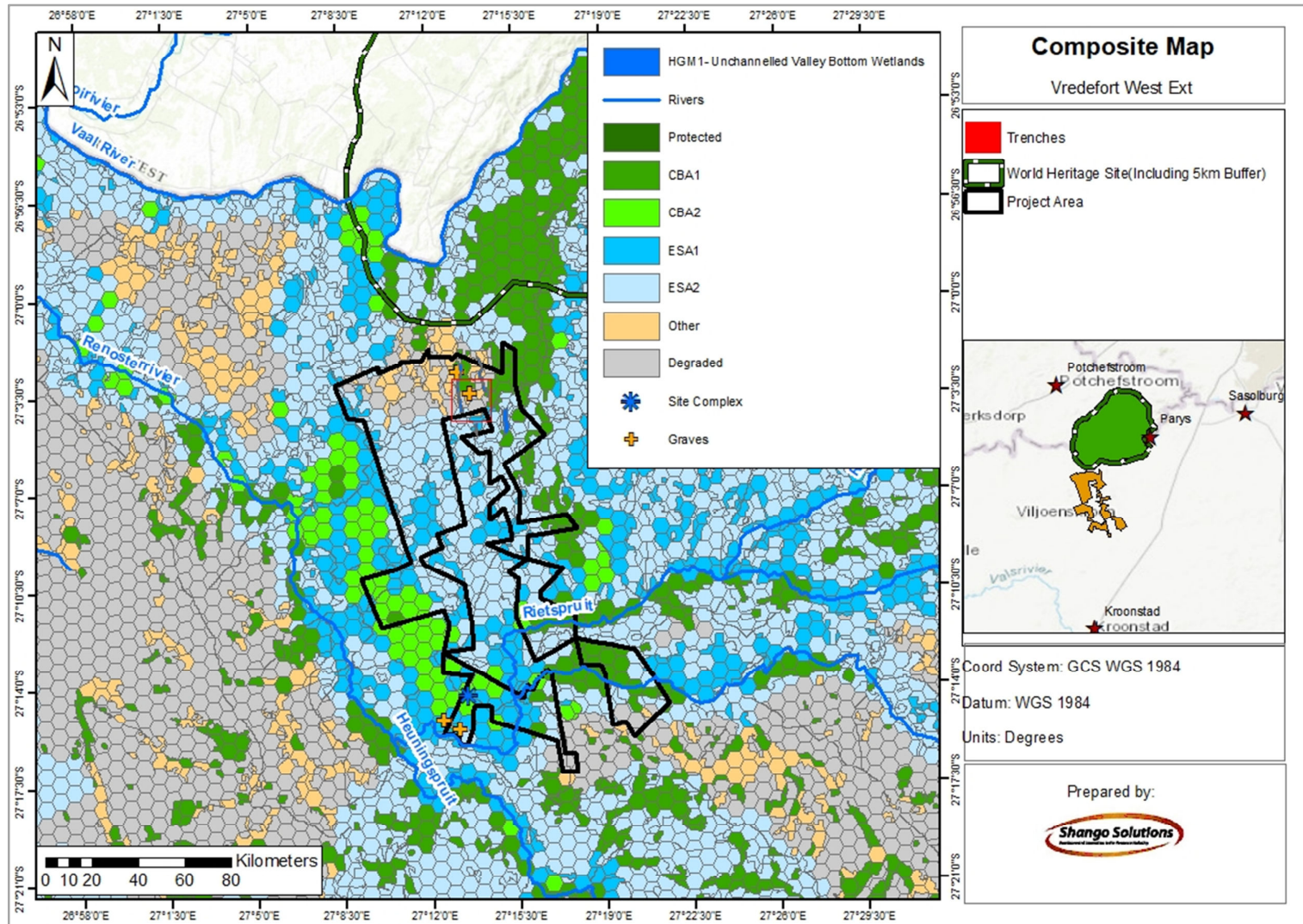


Figure 21: Composite map of the application area (refer to Appendix D for an enlarged map).

## 17. SUMMARY OF POSITIVE AND NEGATIVE IMPLICATIONS AND RISKS

The following negative impacts were identified and assessed in the Basic Assessment Report:

- Safety and security risks to landowners and lawful occupiers.
- Interference with existing land uses.
- Ineffective communication channels leading to community unrest.
- Friction between local residents/landowners and prospecting personnel.
- Perceptions and expectations.
- Localised spillages of oils from machinery leading to groundwater contamination.
- Potential deterioration in surface water quality due to potential accidental spillages of hazardous substances.
- Damage/destruction to local graves in the area.
- Damage/destruction of sites of archaeological importance.
- Damage/destruction of sites with palaeontological resources.
- Further loss and fragmentation of the vegetation community (including portions of a Vulnerable vegetation type).
- Displacement of faunal community (including threatened or protected species) due to habitat loss, disturbance, poaching (due to increased human presence) and/or direct mortalities.
- Possible increase in dust generation as a result of trench excavation and operation of heavy machinery.
- Air pollution due to carbon emissions and ambient air pollutants.
- Scaring of the landscape as a result of the clearance of vegetation.
- Visual intrusion due to vehicle movement and established infrastructure.
- Noise generated by use of vehicles and machinery.
- Localised chemical pollution of soils as a result of hydrocarbon spillages.
- Soil erosion due to vegetation clearance.
- Localised loss of soil and land capability due to reduction in nutrient status.
- Increase in traffic volumes.
- Soil compaction caused by vehicles and machinery.
- Disruption of soil profile.
- Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species.
- Continued displacement of the faunal community (including threatened or protected species) due to ongoing anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching).
- Potential leaks, discharges, litter, pollutant from development into the surrounding environment. Thus harming flora and fauna species.
- Encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species and potential re-establishment of natural species that were removed. The nature of the erosion will depend on the amount of successful vegetation establishment.
- Displacement of the faunal community (including threatened or protected species) due to rehabilitation of the anthropogenic disturbances and habitat degradation, rehabilitation resulting in the faunal species potentially re-establishing within the area.
- Generation and disposal of waste.

The positive implications of the Vredefort West Extension Prospecting Right are (i) job creation during prospecting operations, (ii) training of unskilled labourers prior to commencement of prospecting operations, (iii) possible boost in short-term local business opportunities, (iv) discovery of economically viable mineral resources and (v) restoration of soil and land use during rehabilitation.

## 18. PROPOSED IMPACT MANAGEMENT OBJECTIVES AND OUTCOMES

The objectives of the EMPR will be to:

- Provide sufficient information to strategically plan the prospecting activities to avoid unnecessary social and environmental impacts.
- Provide sufficient information and guidance to plan prospecting activities in a manner that would reduce impacts (both social and environmental) as far as practically possible.
- Ensure an approach that will provide the necessary confidence in terms of environmental compliance.
- Provide a management plan that is effective and practical for implementation.

Through implementation of the following proposed mitigation measures it is anticipated that the identified social and environmental impacts can be managed and mitigated effectively.

### 18.1 Planning Phase

Environmental Aspect	Potential impacts	Mitigation Measures
Socio-Economic	Safety and security risks to landowners and lawful occupiers	Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowner. This formal agreement should additionally stipulate the landowner's special conditions which would form the legally binding agreement
		All homestead gates must be closed immediately upon entry/exit
		Vehicles used must be in a roadworthy condition. Speed limits must be adhered to and all local, provincial and national regulations with regards to road safety and transport
	Interference with existing land uses	The Applicant must enter into formal written agreements with the affected landowners and provide compensation for any loss of revenue due to the prospecting activities

### 18.2 Construction Phase

Environmental Aspect	Potential impacts	Mitigation Measures
Socio-Economic	Safety and security risks to landowners and lawful occupiers	Ensure construction activities are consistent with occupational health and safety requirements
		Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowner. This formal agreement should additionally stipulate the landowner's special conditions which would form the legally binding agreement
		All homestead gates must be closed immediately upon entry/exit
		Vehicles used must be in a roadworthy condition and their loads secured. Speed limits must be adhered to and all local, provincial and national regulations with regards to road safety and transport
	Interference with existing land uses	The Applicant must enter into formal written agreements with the affected landowners and provide compensation for any loss of revenue due to the prospecting activities

Environmental Aspect	Potential impacts	Mitigation Measures
	Ineffective communication channels leading to community unrest	Ensure that information is communicated in a manner which is understandable and accessible to I&APs
	Friction between local residents/landowners and prospecting personnel	All operations will be carried out under the guidance of a strong, experienced manager with proven skills in public consultation and conflict resolution
		All prospecting personnel will be made aware of the local conditions and sensitivities in the prospecting area and the fact that some of the local residents may not welcome the prospecting activities in the area
		There will be a strict requirement to treat local residents with respect and courtesy at all times
	Possible boost in short-term local small business opportunities	Contractors will utilise accommodation in nearby towns instead of staying on site
	Perceptions and expectations	Adhere to an open and transparent communication procedure with stakeholders at all times
		Ensure that accurate and regular information is communicated to I&APs
		Enhance project benefits and minimise negative impacts through intensive consultation with stakeholders
Job creation	Where possible, the Applicant and contractors will source local labour. However, the number of jobs would not be substantial and duration thereof would be short lived	
Training of unskilled labourers	Where possible, the Applicant will source local unskilled labourers to train	
Groundwater	Localised spillages of oils from machinery leading to groundwater contamination	All construction equipment shall be parked in a demarcated area. Drip trays shall be used when equipment is not used for some time
		All preventative servicing of earth moving equipment and construction vehicles shall be undertaken off site
		Refuelling of vehicles will only be allowed in designated areas
Surface Water	Potential deterioration in water quality due to the potential accidental spillages of hazardous substances	No construction activities will be undertaken within 100 m of the nearby streams without consent from the DWS
		Adequate stormwater management must be incorporated into the design of the project in order to prevent contamination of water courses from dirty water
Heritage Resources	Damage /destruction to local graves in the area	It is proposed that a 100 m buffer be maintained around cemeteries and that no construction material be placed near the cemeteries
	Damage/destruction of sites of archaeological importance	No machinery or construction material should be placed near the stonewalls as this is a "No-Go" Area
Palaeontological Resources	Damage/destruction of sites with palaeontological resources	Conduct a field assessment and establish a protocol for finds prior to commencement of the construction phase



Environmental Aspect	Potential impacts	Mitigation Measures
Biodiversity (Flora and Fauna)	Further loss and fragmentation of the vegetation community (including portions of a Vulnerable vegetation type)	It is recommended that areas to be developed be specifically demarcated so that during the construction phase, only the demarcated areas be impacted upon (including temporarily demarcating the defined prospecting footprint) and preventing movement of workers into surrounding natural areas
		Any areas of natural, indigenous vegetation should be declared as "No-Go" areas during the construction phase and all efforts must be made to prevent access to this area from construction workers, machinery, domestic animals and the general public
		A qualified Ecology Specialist must be on site when construction begins to identify species that will be directly disturbed and to relocate fauna/flora that is found during construction (including all reptiles and amphibians)
		If any faunal species are encountered during construction, activities should temporarily cease, and an appropriate specialist should be consulted to identify the correct course of action
		During vegetation clearance, methods should be employed to minimise potential harm to fauna species. Clearing has to take place in a phased and slow manner, commencing from the interior of the site progressing outwards towards the boundary to maximise potential for mobile species to move to adjacent areas
		Construction activities and vehicles could cause spillages of lubricants, fuels and construction material. All vehicles and equipment must be maintained, and all re-fuelling and servicing of equipment is to take place in demarcated areas outside of the application area
		Prior and during vegetation clearance any larger fauna species noted should be given the opportunity to move away from the construction machinery
Air Quality	Possible increase in dust generation as a result of trench excavation and operation of heavy machinery	Dust suppression measures shall be implemented on dry weather days and periods of high wind velocities
		A speed limit of 40 km/hr shall apply to limit vehicle entrained dust from the unpaved road
	Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment	All construction equipment must be scheduled for preventative maintenance to ensure the functioning of the exhaust systems to reduce excessive emissions and limit air pollution
Visual	Scaring of the landscape as a result of the clearance of vegetation	Ensure that areas stripped of vegetation are kept to a minimum
	Visual intrusion as a result of the movement of heavy machinery and	Movement of vehicles shall be kept to outside busy hours to minimise the visual impacts on the residents

Environmental Aspect	Potential impacts	Mitigation Measures
	the establishment of the required infrastructure	Materials transported on public roads must be covered
Noise	The use of vehicles and machinery may generate noise in the immediate vicinity	All construction vehicles and machinery must be maintained in good working order
		When working or travelling past noise sensitive receptors, no unnecessary hooting or noise should occur
Soil, Land Use and Land Capability	Localised chemical pollution of soils as a result of vehicle hydrocarbon spillages	Any spills or leaks must immediately be cleaned up and the contaminated soil suitably disposed of
		Machinery to be used for the operation will be of good working conditions
	Localised clearing of vegetation and compaction of the construction footprint will result in the soils being particularly more vulnerable to soil erosion	The time in which soils are exposed during construction activities should remain as short as possible
Due to the sensitivity of the soil layer and the associated risk of erosion, construction should occur only in the dry season in order to prevent run-off and erosion		
Traffic	Increase in traffic volumes as a result of pre-construction activities which may lead to an increase in traffic congestion along the provincial roads and farm tracks around the prospecting area	Local speed limits and traffic laws shall apply at all times to minimise the occurrences of accidents on public roads
		The number of construction vehicles and trips shall be kept to a minimum
Waste Management	Potential water and soil pollution as a result of inappropriate waste management practices	Waste shall not be buried or burned on site
		No dumping shall be allowed near or on site
		All general waste shall be disposed of at the nearest licensed landfill site

### 18.3 Operational Phase

Environmental Aspect	Potential impacts	Mitigation Measures
Socio-Economic	Safety and security risks to landowners and lawful occupiers	Ensure invasive prospecting activities are consistent with occupational health and safety requirements
		Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowners. This formal agreement should additionally stipulate the landowner's special conditions which should form a legally binding agreement
		All homestead gates must be closed immediately upon entry/exit
	Vehicles used must be in a roadworthy condition and their loads secured. Speed limits must be adhered to and all local, provincial and national regulations with regards to road safety and transport	
Interference with existing land uses	Avoid farm lands actively used for farming	
	Ensure that negotiations on compensation are undertaken before invasive activities can commence. This will include any	

Environmental Aspect	Potential impacts	Mitigation Measures
		other conditions that the landowner may deem necessary for the prospecting operation
		Use sites that are unused and that are in the degraded state
	Perceptions and expectations	Adhere to an open and transparent communication procedure with stakeholders at all times
		Ensure that accurate and regular information is communicated to I&APs
		Enhance project benefits and minimise negative impacts through intensive consultation with stakeholders
	Job creation	Where possible, the Applicant and contractors will source local labour. However, the number of jobs would not be substantial and duration thereof would be short lived
	Discovery of economically viable mineral resources	No mitigation measures are proposed for this impact
	Training of unskilled labourers	Where possible, the Applicant will source local unskilled labourers to train
Groundwater	Pollution of groundwater due to spillage of hydrocarbons from vehicles and machinery during excavation of trenches	Ensure that detailed baseline water quality and quantity samples are obtained and analysed for reference purposes
		Drip trays must be placed under vehicles
		During refuelling of vehicles or equipment, drip trays must be utilised to prevent spills or leaks
	Storage of hydrocarbons and chemicals may impact on groundwater as a result of spillages and uncontrolled release	Drip trays must be placed under vehicles and machinery
Surface Water	Contamination of surface water due to spillage of oils, fuels and chemicals	It is proposed that the following condition for Environmental Authorisation be set from a groundwater perspective: <ul style="list-style-type: none"> <li>No development should take place within 100 m of the rivers and streams</li> </ul>
Heritage Resources	Damage/destruction to local graves in the area	It is proposed that a 100 m m buffer be maintained around cemeteries during prospecting operations
	Damage/destruction of sites of archaeological importance	No prospecting activities should take place near the stonewalls as this is a "No-Go" Area
Palaeontological Resources	Damage/destruction of sites with palaeontological resources	Conduct a field assessment and establish a protocol for finds prior to commencement of prospecting activities
Biodiversity (Flora and Fauna)	Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species	As far as possible, the proposed prospecting (including access routes) should be placed in areas that have already been disturbed, and no further loss of primary or secondary vegetation should be permitted
		The duration of the prospecting should be minimised to as short term as possible, in order to reduce the period of disturbance on flora.
		Areas of indigenous vegetation, even secondary communities, should under no circumstances be fragmented or disturbed further or used as an area for dumping of waste
		Trench areas should completely avoid any trees, where

Environmental Aspect	Potential impacts	Mitigation Measures
		possible (especially any protected tree species)
		Any areas of natural, indigenous vegetation should be declared as "No-Go" area during the operational phase and all efforts must be made to prevent access to this area from construction workers, machinery, domestic animals and the general public
	Continued displacement and fragmentation of the faunal community (including threatened or protected species) due to on-going anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching)	All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times
		Fauna species such as frogs and reptiles that have not moved away should be carefully and safely removed to a suitable location beyond the extent of the prospecting footprint by a suitably qualified specialist trained in the handling and relocation of animals
		No trapping, killing, poaching, snaring or poisoning of any wildlife is to be allowed on site, including snakes, birds, snakes, lizards, frogs, insects or mammals
The duration of the prospecting should be minimised to as short term as possible, in order to reduce the period of disturbance on fauna		
Potential leaks, discharges, litter, pollutant from development into the surrounding environment. Thus harming fauna and flora species	Vehicles could cause spillages of lubricants and fuels. All vehicles and equipment must be maintained, and all re-fuelling and servicing of equipment is to take place in demarcated areas outside of the prospecting footprint	
Air Quality	The prospecting operation will require vehicular movement which may result in possible increase in dust generation	Dust suppression must be conducted during the operational phase of the project
		Correct speed will be maintained at the proposed project site
		A speed limit of 40 km/hr shall apply to limit vehicle entrained dust from the unpaved road
Increase in carbon emissions and ambient air pollutants (NO <sub>2</sub> and SO <sub>2</sub> ) as a result of movement of vehicles and operation of machinery/equipment	Vehicle maintenance must be conducted regularly to avoid excessive diesel fumes	
Visual	The excavators used during the trenching operations will be visible from the nearby residents and properties	Movement of vehicles shall avoid busy hours to minimise the visual impacts on the residents
		Materials transported on public roads must be covered
Noise	The use of vehicles and machinery may generate noise in the immediate vicinity	All vehicles and machinery must be maintained in good working order
		When working or travelling past noise sensitive receptors, no unnecessary hooting or noise should occur
Soil, Land Use and Land Capability	Top soils removal, storage and replacement during trench excavation will result in the disruption of the soil profile	Ensure that topsoil is properly stored, away from the streams and drainage areas
		Soil contamination due to spillage of hydrocarbons
	Drip trays must be placed under vehicles	
Any spills or leaks must immediately be cleaned up and the contaminated soil suitably disposed of		

### 18.4 Decommissioning Phase

Environmental Aspect	Potential impacts	Mitigation Measures
Biodiversity (Flora and Fauna)	Continued encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species	<p>It is recommended that the prospecting footprint be demarcated during the decommissioning phase so that only the demarcated areas are impacted upon. Demarcation will also prevent movement of workers into surrounding natural areas</p> <p>Areas of indigenous vegetation, even secondary communities, should under no circumstances be fragmented or disturbed further or used as an area for dumping of waste</p> <p>Any areas of natural, indigenous vegetation should be declared a "No-Go" area during the decommissioning phase</p>
	Continued displacement of the faunal community (including threatened or protected species) due to on-going anthropogenic disturbances and habitat degradation (litter, road mortalities and/or poaching)	<p>All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times</p> <p>The duration of the decommissioning phase should be minimised to as short term as possible, in order to reduce the period of disturbance on fauna and flora</p>
Air Quality	Removal of equipment and the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and due to blowing winds	Dust suppression must be conducted during the decommissioning phase of the project whenever excessive dust is generated dust from the unpaved road
Noise	Noise will be generated during the removal of equipment on site. This noise is not expected to exceed occupational noise limits and will be short lived	Where necessary, provide employees with ear plugs and employees must be instructed to use the ear plugs
		Ensure that equipment is well maintained and fitted with the correct and appropriate noise abatement measures

### 18.5 Rehabilitation and Closure Phase

Environmental Aspect	Potential impacts	Mitigation Measures
Heritage Resources	Damage/destruction to local graves in the area	It is proposed that a 100 m buffer be maintained around cemeteries during rehabilitation and closure
	Damage/destruction of sites of archaeological importance	No activities should take place near the stonewalls as this is a "No-Go" Area
Palaeontological Resources	Damage/destruction of sites with palaeontological resources	Conduct a field assessment and establish a protocol for finds prior to rehabilitating the site
Biodiversity (Flora and Fauna)	Encroachment and displacement of an indigenous and Vulnerable vegetation community by alien invasive plant species and potential re-establishment of natural species that were removed. The nature of the erosion will depend on the amount of successful vegetation establishment	<p>Areas that are denuded during construction need to be re-vegetated with indigenous vegetation to prevent erosion during flood events. This will also reduce the likelihood of encroachment by alien invasive plant species</p> <p>Rehabilitation of the trenches must be made a priority. Rehabilitation must include re-filling of the open trenches with appropriate rock and soils and suitably compacted. Top soils must also be utilised, and the area must be re-vegetated with plant and grass species which are endemic to this vegetation type</p>
	Displacement of the faunal community (including threatened or protected	All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times

Environmental Aspect	Potential impacts	Mitigation Measures
	species) due to rehabilitation of the anthropogenic disturbances and habitat degradation, rehabilitation resulting in the faunal species potentially re-establishing within the area	Any larger fauna species noted during rehabilitation should be given the opportunity to move away
Air Quality	Rehabilitation the prospecting sites will require vehicular movement. This will result in the generation of dust by movement of vehicles and due to blowing winds. Vehicles and machinery will also generate diesel or petrol fumes. Generated dust will migrate towards the predominant wind direction and may settle on surrounding properties including nearby vegetation	All vehicles utilising public gravel roads must adhere to the speed limits
		Vehicle maintenance must be conducted regularly to avoid excessive diesel or petrol fumes
		Dust suppression must be conducted during the rehabilitation and closure phases of the project whenever excessive dust is generated
Noise	Noise will be generated during the rehabilitation of the sites. This noise is not expected to exceed occupational noise limits and will be short lived	Where necessary, provide employees with ear plugs and employees must be instructed to use the ear plugs
		Ensure that equipment is well maintained and fitted with the correct and appropriate noise abatement measures
Soil, Land Use and Land Capability	The rehabilitation of the trench sites will result in the affected soil and land use being restored. This will also result in the resumption of the use of the land since the infrastructure would have been removed	Ensure that the rehabilitation work is conducted in such a manner that soil is protected from probable spillages
		All oil spills will be remedied using approved methodologies. The contaminated soils will be removed and disposed of at a licensed waste disposal facility.
	Compaction of soil due to vehicles/machinery utilised during site rehabilitation	Avoid having vehicles repeatedly travel on the same tracks Reduce traffic
Environmental Pollution	Generation and disposal of waste	All waste generated from the rehabilitation sites will be collected in proper receptacles and removed to registered disposal facilities e.g., sewage treatment plant or solid waste disposal site

## 19. ASPECTS FOR INCLUSION AS CONDITIONS OF AUTHORISATION

In authorising the proposed Vredefort West Extension Prospecting Right project, the following conditions should form part of the Environmental Authorisation:

- The terms and conditions for access to site between the Applicant and affected landowners must be finalised prior to commencement of invasive prospecting activities.
- Stakeholder engagement will continue throughout the prospecting activities to ensure that the community and landowners are kept informed and allowed to raise issues. These issues will then be addressed through a grievance mechanism.
- The Applicant is to appoint a suitably qualified Environmental Control Officer (ECO) who must oversee the invasive prospecting activities and monitor compliance with the EMPR and relevant legislation.
- A 100 m buffer zone around watercourses must be regarded as a 'No-Go' area for invasive prospecting activities.
- A 100 m buffer zone around existing structures (such as dwellings; cultivated fields, gravesites, any fences, etc.) must be regarded as 'No-Go' areas for invasive prospecting activities unless permission is granted by the relevant authority and/or landowner.

- The Applicant should adhere to the conditions of the EA, EMPR and specialist reports (where relevant) for this project.
- Rehabilitation and closure must be undertaken as part of the closure plan.

## **20. DESCRIPTION OF ANY ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE**

The following assumptions, uncertainties, and gaps in knowledge are applicable to this BAR:

- As per the scope of work, the fieldwork component of the assessment comprised of one assessment only, which was conducted during the dry season. During this period the majority of floral species are not flowering, and this presents a major limitation to the identification of plant species within the application area.
- This study has not assessed any temporal trends for the respective seasons.
- The assessment was based on the results of a single dry season survey only, and information provided should be interpreted accordingly.
- Field assessments were completed to assess as much of the site as possible with focus on the proposed directly impacted areas.
- Due to limited access, including no access to the proposed prospecting footprint, information has been extrapolated from surveyed areas/systems. Additional emphasis has been placed on desktop data to remedy this issue.
- Taking into account the on site seasonal conditions, a conservative approach was adopted in assessing the ecological integrity and functioning of the wetland systems.
- Only wetlands that were likely to be impacted upon by the proposed prospecting activities were assessed in the field. Wetlands located within a 500 m radius of the sites, but not in a position within the landscape to be measurably affected by the developments were not considered as part of this assessment.
- Assumptions have been made that potential wetland areas identified over desktop studies are characterised by wetland conditions and have therefore been deemed to be wetland areas.
- The GPS used for water resource delineations is accurate to within five meters. Therefore, the wetland delineation plotted digitally may be offset by at least five meters to either side.
- During the initial HIA study of the overall site, several limitations were observed. It was found that the landowners, whose properties are located in the proposed prospecting area, are upset with regard to the proposed prospecting activities. This resulted in the heritage specialists being unable to gain access to the properties to conduct the required studies. As such this HIA prioritised the Farm Mimosa Grove 491 where invasive prospecting is planned.

## **21. REASONED OPINION AS TO WHETHER THE PROPOSED ACTIVITY SHOULD OR SHOULD NOT BE AUTHORISED**

According to the impact assessment undertaken for the proposed project, the key potential impacts are expected to be localised and of Medium to Low significance. The significance of the impacts can be reduced to Low if the mitigation measures are implemented.

Should the activity be authorised, the project will result in job creation although for a short term, as well as a short boost to local businesses. Furthermore, should prospecting prove successful and a resource quantified, it would indicate a potential viable economic activity in the form of mining. Mining will contribute greatly to the socio-

economic status quo in the form of increased income, employment and other benefits that would cascade through the local, regional and national levels.

Based on the various impact assessments as well as the mitigation measures put forward in this report, it is the opinion of the EAP that this activity should be authorised with conditions attached.

## **22. PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED**

The Environmental Authorisation is required for five (5) years.

## **23. UNDERTAKING**

It is confirmed that the undertaking required to meet the requirements of this section is provided at the end of the EMPR and is applicable to both the BAR and the EMPR.

## **24. FINANCIAL PROVISION**

The Regulations pertaining to the Financial Provision for Prospecting, Mining or Production Operations promulgated under Section 44(A)(e), (f), (g), (h) read with sections 24(5)(b)(ix), 24(5)(d), 24N, 24P and 24R of the National Environmental Management Act, 1998 (Act 107 of 1998) (20 November 2015) have been considered and this is anticipated to result in an increase in the rehabilitation costs estimated using the above mentioned quantum.

The amount that is required to both manage and rehabilitate the environment in respect of rehabilitation is reflected in the quantum of financial provision in Section 35 (Part B) of this report.

## **25. SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY**

No additional information has been requested from the Competent Authority.

## **26. COMPLIANCE WITH THE PROVISIONS OF SECTIONS 24(4)(A) AND (B) READ WITH SECTION 24(3)(A) AND (7) OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) THE BAR REPORT MUST INCLUDE THE:**

### **26.1 Impact on the Socio-Economic Conditions of any Directly Affected Person**

The potential impacts on the socio-economic conditions have the potential to include:

- Safety and security risks to landowners and lawful occupiers:
  - The potential exists for a group of unfamiliar workers to enter the project area during the prospecting activities. This impact could potentially affect the local communities. However the impact will be minimal as people on site will be limited to the Applicant, trenching contractor, specialists, Environmental Control Officer and geologists for the geological and geophysical surveys.
- Interference with existing land uses:
  - Access to the application area for the geological and geophysical survey will be required which may interrupt the existing land uses, such as livestock grazing, residential developments and



game activities. However, this impact will be minimal as no heavy equipment will be brought on site and it is of short duration.

- Ineffective communication channels leading to community unrest:
  - There may be cases wherein affected landowners and I&APs speak in a language that the EAP does not comprehend and vice versa. However, this impact will be minimal as individuals who can speak and understand those specific languages will be sourced in order to break communication barriers.
- Possible boost in short-term local small business opportunities:
  - The possible use of local guest houses/accommodating during invasive prospecting activities will result in a boost in short-term local business opportunities.
- Perception and expectations:
  - The proposed Prospecting Right may create interest, particularly in the potential for employment and concerns over damage to natural resources. As such, perceptions and expectations must be managed through on-going, open and transparent communication with affected stakeholders, communities and landowners.
- Job creation:
  - Where possible, the applicant and contractors will source local labour. This will enable the use of the local labour force and as such create employment for the locals. Due to the technical skills required to undertake prospecting, the number of jobs would not be substantial and duration thereof would be short lived.
- Training of unskilled labourers:
  - Prior to commencement of invasive prospecting activities, labourers sourced will receive training on aspects such as employee health and safety on site, action plans on site in the event of spills, leaks and other impacts to soils and aquatic systems etc.
- Discovery of economically viable mineral resources:
  - Should prospecting prove successful and a resource quantified, it would indicate a potential in the form of mining. Mining will contribute greatly for local economic stimulation through direct employment, future business opportunities, royalties and tax revenues.

The consultation process will allow directly affected parties to raise their concerns. Further to this, it must be noted that I&APs, including directly affected parties such as landowners, were given the opportunity to review and comment on the draft BAR and EMPR. The results of the public consultation have been included in this final report submitted to the department for adjudication.

## **26.2 Impact on any National Estate Referred to in Section 3(2) of the National Heritage Resources Act**

Notice of the proposed Prospecting Right Application has been uploaded onto the South African Heritage Resources Agency's (SAHRA) website, South African Heritage Information System (SAHRIS). Please refer to Appendix E8 or Table 6 for comments received from SAHRA regarding the initial notification, draft BAR and EMPR and the supporting Heritage Impact Assessment and Desktop Palaeontological Impact Assessment.

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

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



## PART B:

# ENVIRONMENTAL MANAGEMENT PROGRAMME

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### 28. INTRODUCTION

#### 28.1 Details of the EAP

The details and expertise of the EAP are detailed in Sections 1.2 and 1.3 above as required.

#### 28.2 Description of the Aspects of the Activity

A description of the aspects of the activity covered by the EMPR below is included in Section 2 above.

### 29. IMPACT MANAGEMENT OBJECTIVES INCLUDING MANAGEMENT STATEMENTS

#### 29.1 Determination of Closure Objectives

The vision, and consequent objective and targets for rehabilitation, decommissioning and closure, aim to reflect the local environmental and socio-economic context of the project, and to represent both the corporate requirements and the stakeholder expectations.

The receiving environment within which the proposed prospecting activities will be undertaken includes the following key land uses:

- Cultivated fields (high and medium use).
- Grassland.
- Wetlands.
- Permanent water (rivers).
- Woodland/open bush.
- Urban Township.
- Low shrub land.
- Mine buildings.

Concerns raised by the stakeholders consulted during the public participation process for the basic assessment have been taken into consideration and are included in this final BAR and EMPR which will be submitted to the DMR.

In practice, the post closure land use will depend on the pre-prospecting land use applicable to the specific location of the invasive prospecting activities. Considering that the exact locations of the planned prospecting activities have been identified and assessed, it can be concluded that the closure plan will sufficiently address the objectives for the preferred alternative. However, this EMPR aims to address the key closure objectives which are likely to remain consistent for the majority of the prospecting activities.

The EMPR includes a monitoring and a rehabilitation plan. The plan shall outline the closure objectives which are aimed at reinstating the landform, land use and vegetation units to the same as before prospecting operations take place, unless a specific and reasonable alternate land use is requested by the landowner. As such, the intended end use for the disturbed prospecting areas and the closure objectives will be defined in consultation with the relevant landowner. Proof of such consultation will be submitted together with the Application for a

Closure Certificate. The overall aim of the rehabilitation plan is to rehabilitate the environment to a condition as close as possible to that which existed prior to prospecting. This shall be achieved with the following specific objectives:

- Eliminate any safety risks associated with trenches through adequate backfilling.
- Remove and/or rehabilitate all pollution and pollution sources such as waste materials and spills.
- Re-vegetation. This involves either reseeded or allowing natural succession depending on the area, climate etc.
- Storm water management and erosion control. Management of storm-water and prevention of erosion during rehabilitation (e.g. cut off drains, berms etc. and erosion control where required).
- Monitoring and maintenance of rehabilitated areas forming part of site closure to ensure the long-term effectiveness and sustainability of measures implemented.
- Successful closure (obtain closure certificate).

### **29.2 Volume and Rate of Water Use Required for the Operation**

The rates and volumes of water to be used are not available at this stage. The water that will be used for prospecting activities will be sourced on agreement from an existing authorised water user which could be either the landowner or local municipality. No water will be abstracted in terms of section 21 (a) of the National Water Act, 1998 (Act 36 of 1998).

### **29.3 Has a Water Use License Been Applied For?**

No invasive prospecting activity will occur within identified watercourses. No Water Use License has been applied for as part of this this Prospecting Right application. It is not anticipated that abstraction related water uses may be applicable. However, should abstraction related to water uses be applicable, it is recommended that this be confirmed with the Department of Water and Sanitation (DWS) prior to commencement of the invasive prospecting activities that require water. Should any of the National Water Act (NWA) Section 21 water uses become applicable, then the Applicant will need to apply for the relevant water uses from the DWS prior to undertaking such activities.

## 29.4 Impacts to be Mitigated in their Respective Phases

Table 28: Impacts to be mitigated.

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
Site clearance	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Up to 0.03 ha</li> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>During vegetation clearance, methods should be employed to minimise potential harm to fauna species. Clearing has to take place in a phased and slow manner, commencing from the interior of the site progressing outwards towards the boundary to maximise potential for mobile species to move to adjacent areas</li> <li>Utilise local labour if possible</li> <li>Prior to and during vegetation clearance any larger fauna species noted should be given the opportunity to move away from the machinery</li> <li>The duration of the prospecting should be minimised to as short term as possible, in order to reduce the period of disturbance on fauna and flora</li> <li>All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times</li> <li>As far as possible, the proposed prospecting (including access routes) should be placed in areas that have already been disturbed, and no further loss of primary or secondary vegetation should be permitted</li> <li>Maintain a buffer of at least 100 m around heritage sensitive areas</li> <li>Minimise dust generation</li> </ul>	<ul style="list-style-type: none"> <li>NEMA</li> <li>MPRDA</li> <li>NEMBA</li> <li>NEMAQA</li> <li>Dust Regulations</li> <li>NWA</li> <li>DWAF Best Practice Guidelines</li> <li>NHRA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
			<ul style="list-style-type: none"> <li>Limit vehicle access</li> <li>Implement alien vegetation management</li> <li>On-going identification of risks and impacts</li> <li>Emergency preparedness</li> <li>Monitoring and review</li> <li>No trapping, killing or poisoning of any wildlife is to be allowed on site</li> <li>Conduct a field assessment and establish a protocol for finds prior to commencement of prospecting activities</li> <li>Due to the sensitivity of the soil layer and the associated risk of erosion, construction should occur only in the dry season in order to prevent run-off and erosion</li> </ul>		
Site access	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>18 623.73 ha</li> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>All employees and visitors to the site must undergo a site induction which shall include basic environmental awareness and site specific environmental requirements (e.g. site sensitivities and relevant protocols/procedures). This induction should be presented or otherwise facilitated by the Contractor's Environmental Officer wherever possible</li> </ul>	<ul style="list-style-type: none"> <li>NEMA</li> <li>OSH</li> <li>MHSA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>
Establishment of site infrastructure	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Up to 0.03 ha</li> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>Minimise physical footprint of construction</li> <li>Ensure construction is consistent with occupational health and safety requirements</li> <li>Minimise vegetation clearance</li> <li>Minimise waste and control waste disposal</li> </ul>	<ul style="list-style-type: none"> <li>NEMA</li> <li>MPRDA</li> <li>NEMBA</li> <li>NEMAQA</li> <li>Dust</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
			<ul style="list-style-type: none"> <li>• Demarcate trench sites with security access control and warning signs</li> <li>• Ensure adequate containment of waste to prevent pollution</li> <li>• Minimise dust generation</li> <li>• Limit vehicle access to approved access roads</li> <li>• Prepare contingency plans for spillage and fire risks</li> <li>• Any areas of natural, indigenous vegetation should be declared as “No-Go” areas during the construction and operational phases and efforts must be made to prevent access to these areas from construction workers, machinery, domestic animals and the general public</li> <li>• A qualified Ecology Specialist must be on site when construction begins to identify species that will be directly disturbed and a qualified Biodiversity Specialist must be assigned to relocate fauna/flora that is found during construction (including all reptiles and amphibians)</li> <li>• All livestock (including cattle, pigs, goats, domestic dogs and cats) must be kept out of the prospecting footprint at all times</li> <li>• If any faunal species are recorded during construction, activities should temporarily cease, and an appropriate specialist should be consulted to identify the correct course of action</li> </ul>	<ul style="list-style-type: none"> <li>• Regulations NWA</li> <li>• DWAF Best Practice Guidelines</li> </ul>	
Storage of construction	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 0.03 ha</li> <li>• Short term</li> </ul>	<ul style="list-style-type: none"> <li>• Any equipment that may leak and does not have to be transported regularly must be placed on</li> </ul>	<ul style="list-style-type: none"> <li>• NWA</li> <li>• DWAF Best</li> </ul>	<ul style="list-style-type: none"> <li>• Throughout construction and</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
vehicle		and localised	<p>watertight drip trays to catch any potential spillages of pollutants. The drip trays must be of an adequate size</p> <ul style="list-style-type: none"> <li>Drip trays must be cleaned regularly and shall not be allowed to overflow. All spilled hazardous substances must be collected and adequately disposed of at a suitably licensed facility</li> <li>Compacting of soil must be avoided as far as possible, and the use of heavy machinery must be restricted in areas outside of the proposed prospecting sites to reduce the compaction of soils</li> </ul>	Practice Guidelines	operation
Transportation/ access to and from the trench sites	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Up to 0.03 ha</li> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>Where possible, the trench sites should be located along existing access roads to reduce the requirement for additional access roads</li> <li>Any new temporary access routes to the trench sites should result in minimal disturbance to existing vegetation</li> <li>Prior to accessing any portion of land, the Applicant must enter into formal written agreements with the affected landowner. This formal agreement should additionally stipulate the landowner's special conditions which would form a legally binding agreement</li> <li>All property gates must be closed immediately upon entry/exit</li> <li>Under no circumstances may the contractor damage any property gates, fences, etc.</li> <li>On site vehicles must be limited to approved access routes and areas on the site so as to minimise excessive environmental disturbance to</li> </ul>	<ul style="list-style-type: none"> <li>NEMA</li> <li>NEMBA</li> <li>CARA</li> <li>NEMAQA</li> <li>Dust Regulations</li> <li>Road Traffic Act</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>



Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
			<p>the soil and vegetation on site, and to minimise disruption of traffic (where relevant)</p> <ul style="list-style-type: none"> <li>All vehicles using public roads must be in a roadworthy condition and their loads secured. They must adhere to the speed limits and all local, provincial and national regulations with regards to road safety and transport</li> <li>All measures should be implemented to minimise potential of dust generation</li> <li>A speed limit of 40 km/hr shall apply to limit vehicle entrained dust from the unpaved road</li> </ul>		
Storage of hazardous substances	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Up to 0.03 ha</li> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>All hazardous substances (e.g. fuel, grease, oil, brake fluid, hydraulic fluid) must be handled, stored and disposed of in a safe and responsible manner to prevent pollution of the environment and harm to people or animals. Appropriate measures must be implemented to prevent spillage and appropriate steps must be taken to prevent pollution in the event of a spill in a way that does not pose any danger of pollution even during times of high rainfall</li> <li>Hazardous substances must be confined to specific and secured areas, and stored at all time within bunded areas</li> <li>Adequate spill prevention and cleanup procedures should be developed and implemented during the prospecting</li> <li>Should any major spills of hazardous materials take place, such should be reported in terms of the Section 30 of the NEMA</li> </ul>	<ul style="list-style-type: none"> <li>NWA</li> <li>NEMWA</li> <li>DWAF Best Practice Guidelines</li> <li>NEMA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
Waste management	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>All general waste shall be disposed of at the the nearest licensed landfill site</li> <li>Waste management must be a priority and all waste must be collected and stored adequately. It is recommended that all waste be removed from site on a weekly basis to prevent rodents and pests entering the site</li> <li>Waste shall not be buried or burned on site</li> </ul>	<ul style="list-style-type: none"> <li>DWAF Minimum requirements for waste disposal</li> <li>NEMWA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>
Excavation of trenches	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Up to 0.03 ha</li> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>Vegetation clearing for prospecting sites should be kept to a minimum in order to reduce the disturbance footprint</li> <li>Compaction of soil must be avoided as far as possible and the use of heavy machinery must be restricted in areas outside of the proposed prospecting sites to reduce the compaction of soils</li> <li>All measures should be implemented to minimise the potential of dust generation</li> <li>Local residents should be notified of any potentially noisy activities or work and these activities should be undertaken at reasonable times of the day. These works should not take place at night or on weekends</li> <li>Noise attenuation on engines must be adequate and the noisy activities must be restricted as far as is possible to times and locations whereby the potential for noise nuisance is reduced</li> <li>When working near a potential sensitive area, the contractor must limit the number of simultaneous activities to the minimum</li> </ul>	<ul style="list-style-type: none"> <li>SANS 10103</li> <li>ECA Noise Regulations</li> <li>NEMAQA</li> <li>Dust Regulations</li> <li>NWA</li> <li>NEMBA</li> <li>OHS and MHSA</li> <li>NEMWA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction, operation and decommissioning</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
			<ul style="list-style-type: none"> <li>• Ensure proper storage of fuels</li> <li>• On site vehicles must be limited to approved access routes and areas on the site so as to minimise excessive environmental disturbance to the soil and vegetation on site, and to minimise disruption of traffic</li> <li>• Workforce should be kept within defined boundaries and to agreed access routes</li> <li>• No invasive prospecting activities are to be undertaken within 100 m of a watercourse</li> <li>• No ablution or site laydown areas are to be located within 100 m of a watercourse</li> <li>• Workers must be easily identifiable by clothing and ID badges. Workers should carry with them, at all times, a letter from the applicant stating their employment, title, role and manager contact details</li> </ul>		
Re-fuelling	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation</li> </ul>	<ul style="list-style-type: none"> <li>• Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>• Refueling may only take place within demarcated areas that are subject to appropriate spill prevention and containment measures. Refueling and transfer of hazardous chemicals and other potentially hazardous substances must be carried out in a way to minimise the potential for leakage and to prevent spillage onto the soil</li> <li>• Drip trays should be utilised in relevant locations (inlets, outlets, points of leakage, etc.) during transfer so as to prevent such spillage or leakage. Any accidental spillages must be contained and cleaned up promptly</li> </ul>	<ul style="list-style-type: none"> <li>• NWA</li> <li>• DWAF BPG</li> </ul>	<ul style="list-style-type: none"> <li>• Throughout construction and operation</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
Maintenance and repair	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>Trucks, machinery and equipment must be regularly serviced to ensure they are in proper working condition and to reduce risk of leaks. All leaks must be cleaned up immediately using spill kits or as per the emergency response plan. For large spills a hazardous materials specialist shall be utilised</li> <li>Accidental hydrocarbon spillages must be reported immediately, and the affected soil should be removed, and rehabilitated or if this is not possible, disposed of at a suitably licensed waste disposal facility</li> </ul>	<ul style="list-style-type: none"> <li>NWA</li> <li>DWAF BPG</li> <li>NEMA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout construction and operation</li> </ul>
Removal of surface infrastructure	<ul style="list-style-type: none"> <li>Decommissioning</li> </ul>	<ul style="list-style-type: none"> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>All infrastructure, equipment, and other items used during prospecting will be removed from the site</li> <li>Compaction of soil must be avoided as far as possible. The use of heavy machinery must be restricted in areas outside of the proposed prospecting sites to reduce the compaction of soils</li> </ul>	<ul style="list-style-type: none"> <li>MPRDA</li> <li>Rehab Plan</li> </ul>	<ul style="list-style-type: none"> <li>Throughout decommissioning</li> </ul>
Removal of waste	<ul style="list-style-type: none"> <li>Decommissioning</li> </ul>	<ul style="list-style-type: none"> <li>Short term and localised</li> </ul>	<ul style="list-style-type: none"> <li>Any excess or waste material or chemicals must be removed from the site and must preferably be recycled (e.g. oil and other hydrocarbon waste products). Any waste materials or chemicals that cannot be recycled must be disposed of at a suitably licensed waste facility</li> </ul>	<ul style="list-style-type: none"> <li>NWA</li> <li>DWAF BPG</li> <li>NEMWA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout decommissioning</li> </ul>
Rehabilitation	<ul style="list-style-type: none"> <li>Rehabilitation</li> </ul>	<ul style="list-style-type: none"> <li>All disturbed areas</li> </ul>	<ul style="list-style-type: none"> <li>Restoration and rehabilitation of disturbed areas must be implemented as soon as prospecting activities are completed</li> <li>Sites must be restored to the original condition with vegetation cover (where applicable) equaling</li> </ul>	<ul style="list-style-type: none"> <li>MPRDA</li> <li>Rehab Plan</li> <li>NEMA</li> </ul>	<ul style="list-style-type: none"> <li>Throughout rehabilitation</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
			<p>the surrounding vegetation cover</p> <ul style="list-style-type: none"> <li>• All debris and contaminated soils must be removed and suitably disposed of</li> <li>• Contours and natural surrounding must be reformed</li> <li>• Natural drainage patterns must be restored</li> <li>• All surface infrastructure on site must be removed</li> <li>• Temporary access routes/roads must be suitably rehabilitated</li> <li>• Sites must be monitored by the ECO (including relevant specialist's inputs, if necessary) for adequate rehabilitation until the desired rehabilitation objectives have been achieved</li> <li>• Rehabilitation of the trenches must be made a priority (and be concurrent). Rehabilitation must include re-filling of the open trenches with appropriate rock and soils and suitably compacted. Top soils must also be utilised, and the area must be re-vegetated with plant and grass species which are endemic to this vegetation type</li> </ul>		
Consultation	<ul style="list-style-type: none"> <li>• Planning</li> <li>• Construction</li> <li>• Operation</li> </ul>	<ul style="list-style-type: none"> <li>• Medium term</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder engagement will continue throughout the prospecting activities to ensure the community and landowners are kept informed and allowed to raise issues. The Applicant shall attend applicable community meetings with the affected communities. Any issues raised will then be addressed through a grievance mechanism</li> </ul>	<ul style="list-style-type: none"> <li>• NEMA</li> </ul>	<ul style="list-style-type: none"> <li>• Throughout planning, construction and operation</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Post operational</li> </ul>	<ul style="list-style-type: none"> <li>• All rehabilitated</li> </ul>	<ul style="list-style-type: none"> <li>• The post-operational monitoring and management period following decommissioning</li> </ul>	<ul style="list-style-type: none"> <li>• MPRDA</li> </ul>	<ul style="list-style-type: none"> <li>• Throughout post-operation</li> </ul>

Activities	Phase	Size and scale of disturbance	Mitigation measures	Compliance with standards	Time period for implementation
		areas	<p>of prospecting activities must be implemented by a suitable qualified independent party for a minimum of one (1) year unless otherwise specified by the competent authority. The monitoring activities during this period will include but not be limited to</p> <ul style="list-style-type: none"> <li>- Biodiversity monitoring</li> <li>- Re-vegetation of disturbed areas where required. Provision must be made to monitor any unforeseen impact that may arise as a result of the proposed prospecting activities and incorporated into post closure monitoring and management</li> </ul>	<ul style="list-style-type: none"> <li>• Rehab Plan</li> </ul>	

### 29.5 Impact Management Actions and Outcomes

Table 29: Impact management actions and outcomes.

Activity	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
Site clearance	<ul style="list-style-type: none"> <li>• Interference of existing land uses</li> <li>• Safety and security risks to landowners and lawful occupier</li> <li>• Friction between landowner and workers</li> <li>• Possible increase in dust generation</li> <li>• Loss and fragmentation of the vegetation community</li> <li>• Scaring of landscape</li> <li>• Displacement of faunal community</li> </ul>	<ul style="list-style-type: none"> <li>• Visual</li> <li>• Soil, land use and land capability</li> <li>• Air quality</li> <li>• Surface water</li> <li>• Groundwater</li> <li>• Noise</li> <li>• Biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid and control through implementation of EMPR mitigation measures (e.g., vehicle maintenance, dust suppression)</li> </ul>	<ul style="list-style-type: none"> <li>• NEMA</li> <li>• NEMBA</li> <li>• CARA</li> <li>• Threatened Protected Species (TOPS) Regulations</li> <li>• NEMAQA</li> <li>• Dust Regulations</li> </ul>

Activity	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
	<ul style="list-style-type: none"> <li>Localised spillages from machinery leading to groundwater contamination</li> <li>Potential deterioration in water quality due to the potential accidental spillages of hazardous substances</li> <li>Soil erosion</li> <li>Noise generation</li> <li>Damage/destruction of sites of archaeological importance</li> <li>Damage/destruction of graves in the area</li> <li>Damage/destruction of palaeontological resources</li> </ul>	<ul style="list-style-type: none"> <li>Socio-economic</li> <li>Heritage</li> <li>Palaeontological</li> </ul>			<ul style="list-style-type: none"> <li>NWA</li> <li>DWAF best Practice Guidelines</li> <li>NHRA</li> </ul>
Storage of construction vehicles	<ul style="list-style-type: none"> <li>Contamination of surface water and groundwater due to leakage of hydrocarbons</li> <li>Soil contamination</li> <li>Visual intrusion as a result of the construction vehicles stored on site</li> <li>Potential leaks into surrounding environment. Thus harming flora and fauna species</li> <li>Compaction of soil</li> </ul>	<ul style="list-style-type: none"> <li>Surface water</li> <li>Groundwater</li> <li>Soils</li> <li>Visual</li> </ul>	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Avoid through implementation of EMPR mitigation measures (e.g. place drip-trays under vehicles to prevent contamination due to hydrocarbon spillage)</li> </ul>	<ul style="list-style-type: none"> <li>Threatened Protected Species (TOPS) Regulations</li> <li>NWA</li> <li>DWAF best Practice Guidelines</li> <li>NEMBA</li> <li>NEMA</li> </ul>
Transportation to and from the trench sites	<ul style="list-style-type: none"> <li>Increase in traffic volumes</li> <li>Loss and fragmentation of the vegetation community</li> <li>Dust generation due to vehicular movement</li> </ul>	<ul style="list-style-type: none"> <li>Soils</li> <li>Biodiversity</li> <li>Air quality</li> <li>Traffic</li> </ul>	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Avoid through implementation of EMPR mitigation measures (e.g. speed limit enforcement, dust</li> </ul>	<ul style="list-style-type: none"> <li>Threatened Protected Species (TOPS) Regulations</li> <li>NEMBA</li> </ul>

Activity	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
	<ul style="list-style-type: none"> <li>• Compaction of soil due to vehicular movement</li> </ul>			suppression)	<ul style="list-style-type: none"> <li>• NEMAQA</li> <li>• Dust Regulations</li> <li>• NWA</li> <li>• DWAF best Practice Guidelines</li> </ul>
Storage of hazardous substances	<ul style="list-style-type: none"> <li>• Storage of hydrocarbons and chemicals may impact on groundwater as a result of spillages and uncontrolled release</li> <li>• Contamination of surface water due to spillage of oils, fuels and chemicals</li> </ul>	<ul style="list-style-type: none"> <li>• Surface water</li> <li>• Groundwater</li> </ul>	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid through implementation of EMPR mitigation measures (e.g. placing drip-trays to prevent spillage, delineating a 100 m buffer from water courses)</li> </ul>	<ul style="list-style-type: none"> <li>• NEMA</li> <li>• NWA</li> <li>• DWAF best Practice Guidelines</li> </ul>
Waste management	<ul style="list-style-type: none"> <li>• Generation and disposal of waste</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Construction</li> <li>• Operation</li> <li>• Decommissioning</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid through implementation of EMPR mitigation measures (e.g. collect waste and dispose at a registered waste disposal facility)</li> </ul>	<ul style="list-style-type: none"> <li>• DWAF minimum requirement for waste disposal</li> <li>• NEMWA</li> </ul>
Excavation of 2 trenches	<ul style="list-style-type: none"> <li>• Interference with existing land uses</li> <li>• Safety and security risks to landowners and lawful occupiers</li> <li>• Discovery of economically viable mineral resources</li> <li>• Job creation</li> </ul>	<ul style="list-style-type: none"> <li>• Socio-economic</li> <li>• Groundwater</li> <li>• Surface water</li> <li>• Soil, land use and land capability</li> </ul>	<ul style="list-style-type: none"> <li>• Operation</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid through implementation of EMPR mitigation measures (e.g. ensure that equipment is well maintained and</li> </ul>	<ul style="list-style-type: none"> <li>• SANS10103</li> <li>• ECA Noise Regulations</li> <li>• NEMAQA</li> <li>• Dust Regulations</li> </ul>



Activity	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
	<ul style="list-style-type: none"> <li>Contamination of soil, groundwater and surface water due to spillage of hazardous substances</li> <li>Dust generation</li> <li>Noise</li> <li>Encroachment and displacement of Vulnerable vegetation community</li> <li>Displacement and fragmentation of faunal community</li> <li>Visual intrusion as a result of excavators and machinery on site</li> <li>Disruption of soil profile due to excavation process</li> </ul>	<ul style="list-style-type: none"> <li>Air quality</li> <li>Noise</li> <li>Biodiversity</li> <li>Visual</li> </ul>		fitted with the correct and appropriate noise abatement measures)	<ul style="list-style-type: none"> <li>NWA</li> <li>Threatened Protected Species (TOPS) Regulations</li> <li>NEMA</li> </ul>
Refuelling	<ul style="list-style-type: none"> <li>Potential hydrocarbon spills that could pollute soil or surface and/or groundwater resources</li> </ul>	<ul style="list-style-type: none"> <li>Soils</li> <li>Surface water</li> <li>Groundwater</li> </ul>	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Avoid through implementation of EMPR mitigation measures (e.g. during refuelling of vehicles or equipment, drip trays must be utilised to prevent spills or leaks) into the soil</li> </ul>	<ul style="list-style-type: none"> <li>NWA</li> <li>DWAF best Practice Guidelines</li> <li>NEMA</li> </ul>
Maintenance and repair	<ul style="list-style-type: none"> <li>Potential hydrocarbon spills that could pollute soils, surface water and groundwater resources</li> </ul>	<ul style="list-style-type: none"> <li>Soils</li> <li>Surface water</li> <li>Groundwater</li> </ul>	<ul style="list-style-type: none"> <li>Construction</li> <li>Operation</li> </ul>	<ul style="list-style-type: none"> <li>Control through implementation of EMPR mitigation measures (e.g. utilise drip trays to prevent spills or</li> </ul>	<ul style="list-style-type: none"> <li>NWA</li> <li>DWAF best Practice Guidelines</li> <li>NEMA</li> </ul>

Activity	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
				leaks)	
Removal of surface infrastructure	<ul style="list-style-type: none"> <li>• Compaction of soil</li> <li>• Dust generation due to movement of vehicles</li> <li>• Noise generated during removal or equipment</li> <li>• Encroachment and displacement of an indigenous and Vulnerable vegetation by alien invasive species</li> <li>• Displacement of the faunal community due to continued anthropogenic impacts</li> </ul>	<ul style="list-style-type: none"> <li>• Soils</li> <li>• Air quality</li> <li>• Noise</li> <li>• Biodiversity</li> </ul>	<ul style="list-style-type: none"> <li>• Decommissioning</li> </ul>	<ul style="list-style-type: none"> <li>• Control through implementation of EMPR mitigation measures (e.g. any areas of natural, indigenous vegetation should be declared a "No-Go" area during the decommissioning phase)</li> </ul>	<ul style="list-style-type: none"> <li>• MPRDA in accordance with Rehabilitation Plan</li> </ul>
Rehabilitation	<ul style="list-style-type: none"> <li>• Compaction of soil due to vehicles and machinery utilised</li> <li>• Dust generation</li> <li>• Noise</li> <li>• Damage/destruction of local graves in the area</li> <li>• Damage/destruction of sites of archaeological importance</li> <li>• Damage/destruction of palaeontological resources</li> <li>• Introduction of alien invasive species</li> <li>• Displacement of faunal community</li> <li>• Generation and disposal of waste</li> </ul>	<ul style="list-style-type: none"> <li>• Soils, land use and land capability</li> <li>• Air quality</li> <li>• Noise</li> <li>• Heritage</li> <li>• Palaeontological</li> <li>• Biodiversity</li> <li>• Environmental pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Closure and Rehabilitation</li> </ul>	<ul style="list-style-type: none"> <li>• Control through implementation of EMPR mitigation measures (e.g. waste collection and disposal of waste at a registered waste disposal site)</li> </ul>	<ul style="list-style-type: none"> <li>• MPRDA in accordance with Rehabilitation Plan</li> <li>• NHRA</li> </ul>
Monitoring of rehabilitated sites	<ul style="list-style-type: none"> <li>• Soil compaction</li> </ul>	<ul style="list-style-type: none"> <li>• Soils, land use and land</li> </ul>	<ul style="list-style-type: none"> <li>• Post-operation</li> </ul>	<ul style="list-style-type: none"> <li>• Control through implementation of</li> </ul>	<ul style="list-style-type: none"> <li>• MPRDA and Regulations</li> </ul>

Activity	Potential impact	Aspects affected	Phase	Mitigation type	Standard to be achieved
	<ul style="list-style-type: none"> <li>• Soil contamination</li> <li>• Soil erosion</li> <li>• Safety and security risks to landowners and lawful occupiers</li> </ul>	<ul style="list-style-type: none"> <li>capability</li> <li>• Socio-economic</li> </ul>		EMPR mitigation measures	

### 30. FINANCIAL PROVISION

The requirement for final rehabilitation, decommissioning and closure stems primarily from the legislative requirements of the MPRDA and NEMA. On 20<sup>th</sup> of November 2015 the Minister promulgated the Financial Provisioning Regulations under the NEMA. The Regulations aim to regulate the determination of financial provision as contemplated in the NEMA for the costs associated with the undertaking of management, rehabilitation and remediation of environmental impacts from prospecting, prospecting, mining or production operations through the lifespan of such operations and latent or residual environmental impacts that may become known in the future. These regulations provide for, inter alia:

- Determination of financial provision: An Applicant or holder of a right or permit must determine and make financial provision to guarantee the availability of sufficient funds to undertake rehabilitation and remediation of the adverse environmental impacts of prospecting, prospecting, mining or production operations, as contemplated in the Act and to the satisfaction of the Minister responsible for mineral resources.
- Scope of the financial provision: Rehabilitation and remediation; decommissioning and closure activities at the end of operations; and remediation and management of latent or residual impacts.
- Regulation 6: Method for determining financial provision – An applicant must determine the financial provision through a detailed itemisation of all activities and costs, calculated based on the actual costs of implementation of the measures required for:
  - Annual rehabilitation – annual rehabilitation plan.
  - Final rehabilitation, decommission and closure at end of life of operations – rehabilitation, decommissioning and closure plan.
  - Remediation of latent defects.
- Regulation 10: An applicant must-
  - Ensure that a determination is made of the financial provision and the plans contemplated in regulation 6 are submitted as part of the information submitted for consideration by the Minister responsible for mineral resources of an application for environmental authorisation, the associated environmental management programme and the associated right or permit in terms of the Mineral and Petroleum Resources Development Act, 2002.
  - Provide proof of payment or arrangements to provide the financial provision prior to commencing with any prospecting, prospecting, mining or production operations.
- Regulation 11: Requires annual review, assessment and adjustment of the financial provision. The review of the adequacy of the financial provision including the proof of payment must be independently audited (annually) and included in the audit of the EMPR as required by the EIA Regulations.

Appendix 4 of the Financial Provisioning Regulations provides the minimum content of a final rehabilitation, decommissioning and closure plan (FRDCP).

#### 30.1 Other Guidelines

The following additional guidelines which relate to financial provisioning and closure have been published in the South African context:

- Best Practice Guideline G5: Water Management Aspects for Mine Closure: This guideline was prepared by the DWS and aims to provide a logical and clear process that can be applied by mines and the

competent authorities to enable proper mine closure planning that meets the requirements of the relevant authorities. This guideline is aimed primarily at larger scale mines and does not specifically address closure issues related to closure of prospecting activities. However certain principles related to closure and water management are relevant. The following technical factors which should be considered during closure, and which are likely to relate to prospecting activities, have been considered:

- Land use plan: directly interlinked with water management issues insofar as water is required to support the intended land use- in this regard the surrounding communities and the land uses implemented rely on available ground and surface water to be sustained. Management of water quality and quantity has been identified as an aspect to be covered in this BAR and EMPR.
- Public participation and consultation: consultation is fundamental to closure and there is a need for full involvement of stakeholders in the development of the final closure plans, and in the agreement of closure objectives- in this regard this FRDCP has been made available through the Basic Assessment public participation process for comment by relevant stakeholders.
- Guideline for the Evaluation of the Quantum of Closure Related Financial Provision Provided by a Mine: The objectives of the guideline include the need to improve the understanding of the financial and legal aspects pertaining to the costing of remediation measures as a result of mining activities. Whilst this guideline predates the recent NEMA Financial Provisioning Regulations, it does contain certain principles and concepts that remain valid and have been considered in the calculation of the Financial Provision.

### **31. DESCRIBE THE CLOSURE OBJECTIVES AND THE EXTENT TO WHICH THEY HAVE BEEN ALIGNED TO THE BASELINE ENVIRONMENT DESCRIBED UNDER THE REGULATION**

Considering the relatively limited impact of the proposed prospecting activities, the closure objectives are aimed at re-instating the landform, land use and vegetation units to the same as before prospecting operations took place unless a specific, reasonable alternate land use is requested by the landowner. As such, the intended end use for the disturbed prospecting areas and the closure objectives will be defined in consultation with the relevant landowner. Proof of such consultation will be submitted together with the Application for Closure Certificate. The overall aim of the rehabilitation plan is to rehabilitate the environment to a condition as close as possible to prospecting.

This shall be achieved with a number of specific objectives:

- Eliminate any safety risks associated with trenches through adequate backfilling.
- Remove and/or rehabilitate all pollution and pollution sources such as waste materials and spills.
- Re-vegetation. This involves either reseeding or allowing natural succession depending on the area, climate etc.
- Storm water management and erosion control. Management of storm-water and prevention of erosion during rehabilitation (e.g. cut off drains, berms etc. and erosion control where required).
- Monitoring and maintenance of rehabilitated areas forming part of site closure to ensure the long-term effectiveness and sustainability of measures implemented.
- Successful closure (obtain closure certificate).

## **32. CONFIRM SPECIFICALLY THAT THE ENVIRONMENTAL OBJECTIVES IN RELATION TO CLOSURE HAVE BEEN CONSULTED WITH LANDOWNER AND INTERESTED AND AFFECTED PARTIES**

The Public Participation Process (PPP) is a requirement of several pieces of the South African legislation and aims to ensure that all relevant Interested and Affected Parties (I&APs) are consulted, involved and their opinions are taken into account and a record included in the reports submitted to Authorities. The process ensures that all stakeholders are provided this opportunity as part of a transparent process which allows for a robust and comprehensive environmental study. The PPP which forms part of the Prospecting Right application needs to be managed sensitively and according to best practises in order to ensure and promote:

- Compliance with national legislation.
- Establish and manage relationships with key stakeholder groups.
- Encourage involvement and participation in the environmental study and authorisation/ approval process.

As such, the purpose of the PPP and stakeholder engagement process is to:

- Introduce the proposed project.
- Explain the environmental authorisations required.
- Explain the environmental studies already completed and yet to be undertaken (where applicable).
- Determine and record issues, concerns, suggestions and objections to the project.
- Provide opportunity for input and gathering of local knowledge.
- Establish and formalise lines of communication between the I&APs and the project team.
- Identify all significant issues for the project.
- Identify possible mitigation measures or environmental management plans to minimise and/or prevent negative environmental impacts and maximise and/or promote positive environmental impacts associated with the project.

Landowners and I&APs have been consulted and provided an opportunity to comment on the draft BAR and EMPR including all decommissioning, closure and rehabilitation plans.

## **33. REHABILITATION PLAN**

### **33.1 Integrated Rehabilitation and Closure Plan**

The main aim in developing this rehabilitation plan is to mitigate the impacts caused by the prospecting activities and to restore land back to a satisfactory standard. It is best practice to develop the rehabilitation plan as early as possible so as to ensure the optimal management of rehabilitation issues that may arise. It is important that the project's closure plan is defined and understood before starting the process and is complementary to the rehabilitation goals. Rehabilitation and closure objectives need to be tailored to the project and be aligned with the EMPR.

The overall rehabilitation objectives for this project are as follows:

- Maintain and minimise impacts to the ecosystem within the application area.
- Re-establishment of the pre-developed land capability to allow for a suitable post-prospecting land use.
- Prevent soil, surface water and groundwater contamination.
- Comply with the relevant local and national regulatory requirements.
- Maintain and monitor the rehabilitated areas.

Successful rehabilitation must be sustainable, requires an understanding of the basic baseline environment and project management to ensure that the rehabilitation program is a success.

It is noted that an application for environmental authorisation must be submitted for closure in accordance with Listing Notice 1 Activity 22:

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) or
- II. A prospecting right, mining permit, production right or exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure.

### **33.2 Phase 1: Making Safe**

Cement and liquid concrete are hazardous to the natural environment on account of the very high pH of the material, and the chemicals contained therein. As a result, the contractor shall ensure that:

- Concrete shall not be mixed directly on the ground.
- The visible remains of concrete, either solid, or from washings, shall be physically removed immediately and disposed of as waste, (washing of visible signs into the ground is not acceptable).
- All excess aggregate shall also be removed.

### **33.3 Phase 2: Landform Design, Erosion Control and Re-vegetation**

Landform, erosion control and re-vegetation form an important portion of the rehabilitation process. Landform and land use are closely interrelated, and the landform should be returned as closely as possible to the original landform. Community expectations, compatibility with local land use practices and regional infrastructure, or the need to replace natural ecosystems and faunal habitats all support returning the land as closely as possible to its original appearance and productive capacity.

This requires the following:

- Shape, level and de-compact the final landscape after removing all the project infrastructure, dress with topsoil and, where necessary, vegetate with indigenous species. Commission specialists to assist in planning re-vegetation and the management of environmental impact, as required.
- Remove access roads with no beneficial re-use potential by deep ripping, shaping and levelling after the removal and disposal of any culverts, drains, ditches and/or other infrastructure. Natural drainage patterns are to be reinstated as closely as possible.
- Shape all channels and drains to smooth slopes and integrate into the natural drainage pattern.
- Construct contour banks and energy dissipating structures as necessary to protect disturbed areas from erosion prior to stabilisation.
- Promote re-vegetation through the encouragement of the natural process of secondary succession.
- Natural re-vegetation is dependent on de-compaction of sub-soils and adequate replacement of the accumulated reserves of topsoil (for example, over the trench site), so as to encourage the establishment of pioneer vegetation.
- Remove alien and/or exotic vegetation.
- Undertake a seeding programme only where necessary.

### **33.4 Phase 3: Monitoring and Maintenance**

The post-operational monitoring and management period following decommissioning of prospecting activities must be implemented by a suitable qualified independent party for a minimum of one (1) year unless otherwise specified by the competent authority.

The monitoring activities during this period will include but not be limited to:

- Biodiversity monitoring.
- Re-vegetation of disturbed areas where required.

Provision must be made to monitor any unforeseen impact that may arise as a result of the proposed prospecting activities and incorporated into post closure monitoring and management.

### **33.5 Post-Closure Monitoring and Maintenance**

Prior to decommissioning and rehabilitation activities, a monitoring programme shall be developed and submitted to the relevant authority for approval, as a part of the Final Rehabilitation Plan. The programme is to include proposed monitoring during and after the closure of the trench site and related activities.

It is recommended that the post-closure monitoring include the following:

- Confirmation that any waste, wastewater or other pollutants that is generated as a result of decommissioning will be managed appropriately, as per the detailed requirements set out in the Final Rehabilitation Plan.
- Confirmation that all de-contaminated sites are free of residual pollution after decommissioning.
- Confirmation that acceptable cover has been achieved in areas where natural vegetation is being re-established. 'Acceptable cover' means re-establishment of pioneer grass communities over the disturbed areas at a density similar to surrounding undisturbed areas, non-eroding and free of invasive alien plants.
- Confirmation that the trench site is safe and is not resulting in a pollution hazard.

Annual environmental reports will be submitted to the Designated Authority and other relevant Departments for at least one year post-decommissioning. The frequency and duration of this reporting period may be increased to include longer term monitoring, at intervals to be agreed with the designated authority.

The monitoring reports shall include a list of any remedial action necessary to ensure that infrastructure that has not been removed remains safe and pollution free and that rehabilitation of project sites are in a stable, weed and free condition.

## **34. EXPLAIN WHY IT CAN BE CONFIRMED THAT THE REHABILITATION PLAN IS COMPATIBLE WITH THE CLOSURE OBJECTIVES**

The rehabilitation plan is compatible with the closure objectives in that it seeks to ensure that negative impacts on the receiving environment that could not be prevented or mitigated during prospecting are rehabilitated. The use of indigenous species during re-vegetation will ensure that ecosystem restoration is initiated and prevent invasion by alien species. The appropriate disposal of waste will ensure that land is usable, in alignment with surrounding land uses and that no hazardous materials are left on site post-prospecting.



**35. CALCULATE AND STATE THE QUANTUM OF THE FINANCIAL PROVISION  
REQUIRED TO MANAGE AND REHABILITATE THE ENVIRONMENT IN  
ACCORDANCE WITH THE APPLICABLE GUIDELINE**

Table 30 details the quantum for financial provision for the Final Rehabilitation, Decommissioning and Closure Plan.

Table 30: Quantum for financial provision.

<b>CALCULATION OF THE QUANTUM</b>							
<b>Prospecting Right Applicant:</b> White Rivers Exploration (Pty) Ltd				<b>Project name:</b> Vredefort West Extension			
				<b>Date:</b> Sep-18			
No.	Description	Unit	A	B	C	D	E=A*B*C*D
			Quantity	Master rate	Multiplication factor	Weighting factor 1	Amount (ZAR)
1	Dismantling of processing plant and related structures (including overland conveyors and power lines)	m <sup>3</sup>	0	R 13.38	1	1	R 0.00
2 (A)	Demolition of steel buildings and structures	m <sup>2</sup>	0	R 184.76	1	1	R 0.00
2 (B)	Demolition of reinforced concrete buildings and structures	m <sup>2</sup>	0	R 272.30	1	1	R 0.00
3	Rehabilitation of access roads	m <sup>2</sup>	0	R 33.05	1	1	R 0.00
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0	R 320.91	1	1	R 0.00
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m	0	R 175.05	1	1	R 0.00
5	Demolition of housing and/or administration facilities	m <sup>2</sup>	0	R 370.69	1	1	R 0.00
6	Opencast rehabilitation including final voids and ramps	ha	0	R 193 714.14	1	1	R 0.00
7	Sealing of shafts adits and inclines	m <sup>3</sup>	0	R 99.19	1	1	R 0.00
8 (A)	Rehabilitation of overburden and spoils	ha	0	R 129 142.75	1	1	R 0.00
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	R 160 844.97	1	1	R 0.00
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0	R 467 170.04	1	1	R 0.00
9	Rehabilitation of subsided areas	ha	0	R 108 137.61	1	1	R 0.00
10	General surface rehabilitation:	ha	0.03	R 102 302.84	1	1	R 3 069.09
	Earthworks: backfilling excavations, reshaping and topsoil replacement	m <sup>3</sup>	90	R 11.00	1	1	R 990.00
	Removal and disposal of waste	Per site	2	R 3 000.00	1	1	R 6 000.00
	Re-vegetation (apply fertilizer and seed)	ha	0.03	R 21 000.00	1	1	R 630.00
11	River diversions	ha	0	R 102 302.84	1	1	R 0.00
12	Fencing	m	0	R 116.69	1	1	R 0.00
13	Water management	ha	0	R 38 898.42	1	1	R 0.00
14	2 to 3 years of maintenance and aftercare	ha	0.03	R 13 614.45	1	1	R 6 807.22
15 (A)	Specialist study	Sum	0			1	R 0.00
15 (B)	Specialist study	Sum	0			1	R 0.00
							R 17 496.31
Weighting Factor 2						1.1	
<b>Sub Total 1</b>							<b>R 17 496.31</b>
1. Preliminary and General						12%	R 2 099.56
2. Contingency						10%	R 1 749.63

<b>Sub Total 2</b>			<b>R 21 345.49</b>
VAT - 15%			R 2 988.37
<b>Grand Total</b>			<b>R 24 333.86</b>
<b>ENVIRONMENTAL SENSITIVITY</b>	Medium	(High = H, Medium = M, Low = L)	
<b>RISK CLASS</b>	C	(A, B, C)	
<b>WEIGHTING FACTOR 1</b>	Flat	(Flat; Undulating; Rugged)	
<b>WEIGHTING FACTOR 2</b>	Remote	(Urban; Peri-urban; Remote)	

### **36. CONFIRM THAT THE FINANCIAL PROVISION WILL BE PROVIDED AS DETERMINED**

According to Regulation 8 pertaining to the Financial Provision for prospecting, exploration, mining or production operations (GN 1147), an applicant or holder of a right or permit must make financial provision by one or a combination of the following:

- Financial guarantee from a bank registered in terms of the Banks Act, 1990 (Act 94 of 1990) or from a financial institution registered by the Financial Services Board as an insurer or underwriter.
- Deposit into an account administered by the Minister responsible for mineral resources.
- Contribution to a trust fund established in terms of applicable legislation.

An amount of R 24 333.86 has been proposed as financial provision for this project. The Creasy Group of companies has committed to finance the prospecting costs, including the financial provision. This group is a long standing investor into the South African minerals industry.

### 37. MECHANISMS FOR MONITORING COMPLIANCE

Table 31: Mechanisms for monitoring compliance.

Source activity	Impacts requiring monitoring programmes	Functional requirements for monitoring	Roles and responsibilities	Monitoring and reporting frequency and time periods for implementation
Locate and acquire all available gold (and gold by-products) and coal, geological and geophysical data relevant to prospect	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Inventorise, capture and QA/QC data	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Desktop studies	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Field visit	<ul style="list-style-type: none"> <li>Safety and security risks to landowners and lawful occupiers</li> </ul>	<ul style="list-style-type: none"> <li>Complaints register</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> </ul>	<ul style="list-style-type: none"> <li>Once-off site visit and reporting</li> </ul>
Data synthesis and generation of initial geological model	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Ground magnetic survey (if required), aeromagnetic survey and data compilation and interpretation	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Site inspections and checklists</li> <li>Complaints register</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> </ul>	<ul style="list-style-type: none"> <li>Once-off site visit and reporting</li> </ul>
Location of key historic borehole core, if available	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Re-logging and re-sampling of historic core	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

Source activity	Impacts requiring monitoring programmes	Functional requirements for monitoring	Roles and responsibilities	Monitoring and reporting frequency and time periods for implementation
	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Surface mapping and sampling	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Site inspections and checklists</li> <li>Complaints register</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> </ul>	<ul style="list-style-type: none"> <li>Once-off site visit and reporting</li> </ul>
Site clearance	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Document control</li> <li>Site inspections and checklists</li> <li>Report review and development of corrective action plans</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> <li>Environmental specialist</li> <li>Senior environmental management</li> </ul>	<ul style="list-style-type: none"> <li>Annual site visit</li> <li>Annual environmental audit report</li> </ul>
Excavation of 2 trenches to a depth of 3 m, mapping and sampling	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Document control</li> <li>Site inspections and checklists</li> <li>Report review and development of corrective action plans</li> <li>Demarcation of sensitive areas</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> <li>Environmental specialist</li> <li>Senior environmental management</li> <li>Hydro-geologist (if required)</li> </ul>	<ul style="list-style-type: none"> <li>Annual site visit</li> <li>Annual environmental audit report</li> </ul>
Finalisation of 3D geological model	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>
Environmental screening	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Complaints register</li> <li>Site inspections and checklists</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> </ul>	<ul style="list-style-type: none"> <li>Monthly inspections and checklists during the invasive phase of the project</li> </ul>

Source activity	Impacts requiring monitoring programmes	Functional requirements for monitoring	Roles and responsibilities	Monitoring and reporting frequency and time periods for implementation
Temporary general waste storage	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Complaints register</li> <li>Site inspections and checklists</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> </ul>	<ul style="list-style-type: none"> <li>Daily inspections and checklists</li> </ul>
Temporary hazardous waste storage	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Complaints register</li> <li>Site inspections and checklists</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> </ul>	<ul style="list-style-type: none"> <li>Daily inspections and checklists</li> </ul>
Undertaking decommissioning and rehabilitation as per the rehabilitation plan	<ul style="list-style-type: none"> <li>Alien vegetation management</li> <li>Noise (if any complaints are registered by the residents)</li> <li>Air quality (if any complaints are registered by the residents)</li> </ul>	<ul style="list-style-type: none"> <li>Site inspections and checklists</li> <li>Report review and development of corrective action plans</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Contractor's environmental representative</li> <li>Environmental specialist</li> <li>Senior environmental management</li> </ul>	<ul style="list-style-type: none"> <li>Annual site visit</li> <li>Annual environmental audit report</li> </ul>
Monitoring of rehabilitation efforts	<ul style="list-style-type: none"> <li>All impacts identified in the EMPR</li> </ul>	<ul style="list-style-type: none"> <li>Complaints register</li> <li>Site inspections and checklists</li> </ul>	<ul style="list-style-type: none"> <li>ECO</li> <li>Independent environmental auditor</li> </ul>	<ul style="list-style-type: none"> <li>Continually monitor for a period of one (1) year</li> </ul>
Resource estimation and concept study	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>

### **38. INDICATE THE FREQUENCY OF THE SUBMISSION OF THE PERFORMANCE ASSESSMENT/ ENVIRONMENTAL AUDIT REPORT**

The result of environmental monitoring and compliance to the approved EMPR will be undertaken every year and submitted to the DMR in the form of a Performance Assessment/ Environmental Audit Report. Included in the report will be the following relevant information:

- The period when the assessment/audit was conducted.
- The scope of the assessment.
- The procedures used for conducting the assessment.
- Interpreted information gained from monitoring the EMPR.
- Evaluation criteria used during the assessment.
- Results of the assessment are to be discussed and mention must be made of any gaps in the EMPR and how it can be rectified.

Any emergency or unforeseen impacts will be reported immediately to the DMR and other relevant government departments.

### **39. ENVIRONMENTAL AWARENESS PLAN AND TRAINING**

Training and Environmental Awareness is an integral part of a complete EMPR. The overall aim of the training will be to ensure that all site staff are informed of their relevant requirements and obligations pertaining to the relevant authorisations, licences, permits and the approved EMPR and protection of the environment.

The applicant and contractor must ensure that all relevant employees are trained and capable of carrying out their duties in an environmentally responsible and compliant manner, and are capable of complying with the relevant environmental requirements.

To obtain buy-in from staff, individual employees need to be involved in:

- Identifying the relevant risks.
- Understanding the nature of risks.
- Devising risk controls.
- Given incentive to implement the controls in terms of legal obligations.

The applicant shall ensure that adequate environmental training takes place. All employees shall have been given an induction presentation on environmental awareness. Where possible, the presentation needs to be conducted in the language of the employees. All training must be formally recorded and attendance registers retained.

The environmental training should, as a minimum, include the following:

- General background and definition to the environment.
- The environmental impacts, actual or potential, of their work activities.
- Compliance with mitigation measures proposed for sensitive areas.
- The environmental benefits of improved personal performance.
- Their roles and responsibilities in achieving compliance with the environmental policy and procedures and with the requirement of the applicant's environmental management systems, including emergency preparedness and response requirements.
- The potential consequences (legal and/or other) of departure from specified operating procedures.
- The mitigation measures required to be implemented when carrying out their work activities.



- All operational risks must be identified and processes established to mitigate such risk, proactively. Thus, the applicant needs to inform the employees of any environmental risks that may result from their work, and how these risks must be dealt with in order to avoid pollution and/or degradation of the environment.
- In the case of new staff (including contract labour) the contractor/applicant shall keep a record of adequate environmental induction training, the importance of compliance with all environmental policies.

### **39.1 Manner in Which Employees Will Be Informed Of Environmental Risks**

Environmental awareness could be fostered by an induction course for all personnel on site, before commencing site visits. Personnel should also be alerted to particular environmental concerns associated with their tasks for the area in which they are working. Courses must be given by suitably qualified personnel and in a language and medium understood by personnel.

The environmental awareness training programme will include the following:

1. Occupational Health and Safety Training (OHS).
2. Environmental Awareness Training EMPR management actions.

Environmental awareness training will focus on the following specific aspects and be undertaken in "Tool box talk topics" prior to site access:

1. Waste collection and disposal.
2. EMPR management options and application.

### **39.2 Manner in Which Risks Will Be Dealt With To Avoid Pollution or Degradation**

The broad measures to control or remedy any causes of pollution or environmental degradation as a result of the proposed prospecting activities taking place are provided below:

- Contain potential pollutants and contaminants (where possible) at source.
- Handling of potential pollutants and contaminants (where possible) must be conducted in bunded areas and on impermeable substrates.
- Ensure the timeous clean-up of any spills.
- Implement a waste management system for all waste streams present on site.
- Investigate any I&AP claims of pollution or contamination as a result of mining activities.
- Implement the impact management objectives, outcomes and actions, as described above.

It is of critical importance that the broad measures to control or remedy any causes of pollution or environmental degradation are applied during onsite prospecting activities.

## **40. SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY**

No additional information was requested or is deemed necessary.

## 41. UNDERTAKING

**The EAP herewith confirms:**

- (a) The correctness of the information provided in the reports.
- (b) The inclusion of comments and inputs from stakeholders and I&APs.
- (c) The inclusion of inputs and recommendations from the specialist reports, where relevant.
- (d) That the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties are correctly reflected herein.



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Signature of the Environmental Assessment Practitioner:

**Shango Solutions**

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Name of company (if applicable):

**22 October 2018**

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Date:

**The Applicant herewith confirms:**

- (a) The person whose name is stated below is the person authorised to act as representative of the Applicant in terms of the resolution submitted with the application.
- (b) The applicant undertakes to execute the Environmental Management Programme as proposed.



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

**White Rivers Exploration (Pty) Ltd**

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Name of company:

**22 October 2018**

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Date:

## 42. REFERENCES

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