

# A SCOPING REPORT ON THE ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ACTIVITIES ON EPL 8897, CENTRAL NAMIBIA

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## **Impala Environmental Consulting**

Unit 89, Auas Hill Village, Auas Blick, Windhoek

Tel: 0856630598

[eia@impalac.com](mailto:eia@impalac.com)

[www.impalac.com](http://www.impalac.com)



## **Proponent Contact:**

+264812546157



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# ENVIRONMENTAL ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897, CENTRAL NAMIBIA

## EXECUTIVE SUMMARY

### 1. Introduction

#### 1.1 Overview

The proponent, Tartisius Gaeseb, was granted an exclusive prospecting licence (EPL) by the Ministry of Mines and Energy. The licence holder intends to explore for copper. Impala Environmental Consulting was appointed by the proponent to undertake an Environmental Assessment (EA) and Environmental Management Plan (EMP) for the mineral exploration project.

#### 1.2 Location

The mineral license is located 40 km north of Outjo. The coordinates for the centre of the licence are 16.103698 and -19.712154. It covers farms Taurus, Tzairis, Tzoron, Marmorkopf, Gub, Winnie, Urob, Chorab, Koenig, Alexander and Dempsey.

#### 1.3 Environmental Assessment Requirements

The Environmental Regulations procedure (GN 30 of 2012) stipulates that no mining and mineral exploration activities may be undertaken without an environmental clearance certificate. As such, an environmental clearance certificate must be applied for in accordance with regulation 6 of the 2012 environmental regulations. It is imperative that the environmental proponent must conduct a public consultation process in accordance with regulation 21 of the 2012 environmental procedure, produce an environmental scoping report and submit an Environmental Management Plan for the proposed mineral exploration activities.

#### 1.4 Project Alternatives

An alternative to the proposed mineral exploration activity would be to allocate the land-usage to other income generating activities tourism activities. The proposed project will strictly employ locals from nearby towns and settlements.

# ENVIRONMENTAL ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897, CENTRAL NAMIBIA

## FINAL SCOPING REPORT

### Table of Contents

|   |    |
|---|----|
| EXECUTIVE SUMMARY .....                                       | 1  |
| 1. Introduction .....   | 7  |
| 1.1 Project Background .....                                  | 7  |
| 1.1.1 Mineral Licence Tenure.....                             | 8  |
| 1.1.2 Environmental Consultant .....                          | 8  |
| 1.1.3 Proponent of the Proposed Project.....                  | 8  |
| 1.2 Project Location .....                                    | 10 |
| 1.3 Infrastructure and Services.....                          | 11 |
| 1.3.1 Electricity .....                                       | 11 |
| 1.3.2 Water Supply .....                                      | 11 |
| 1.3.3 Refuse and Waste Removal .....                          | 11 |
| 1.3.4 IT Systems and Communication .....                      | 11 |
| 1.3.5 Security and Fencing.....                               | 11 |
| 1.3.6 Buildings .....   | 12 |
| 1.3.7 Roads .....   | 12 |
| 1.3.8 Mobile Equipment.....                                   | 12 |
| 1.3.9 Fuel Distribution, storage and supply.....              | 13 |
| 1.3.10 Storage of Lubrication and consumables.....            | 13 |
| 1.3.11 Fire Fighting Provision.....                           | 13 |
| 1.4 Environmental Impact Assessment Requirements .....        | 13 |
| 1.5 Purpose of the Scoping Report .....                       | 13 |
| 1.6 Terms of Reference .....                                  | 14 |
| 1.6.1 Environmental Assessment Approach and Methodology ..... | 16 |
| 1.6.2 List of Specialist Studies Undertaken .....             | 18 |
| 1.7 Need and Desirability .....                               | 18 |
| 1.7.1 Need of the Exploration Project .....                   | 18 |

|   |    |
|---|----|
| 1.7.2 Alternatives.....   | 19 |
| 2 Summary of applicable legislation .....                       | 20 |
| 2.1 Environmental Management Act of 2007 .....                  | 20 |
| 2.2 The Minerals Prospecting and Mining Act of 1992.....        | 20 |
| 2.3 Water Resources Management Act of 2004 .....                | 20 |
| 2.4 Nature conservation ordinance, ordinance No. 4 of 1975..... | 20 |
| 2.5 National Heritage Act, 2004 (Act No. 27 of 2004).....       | 21 |
| 2.6 Petroleum Products and Energy Act No. 13 of 1990 .....      | 21 |
| 2.7 Forest Act, No. 12 of 2001.....                             | 22 |
| 2.8 Atmospheric Pollution Prevention Ordinance 11 of 1976.....  | 22 |
| 2.9 Hazardous Substance Ordinance, No. 14 of 1974.....          | 22 |
| 2.10 Namibian Water Corporation (Act 12 of 1997) .....          | 23 |
| 2.11 Public and Environmental Health Act, 2015 .....            | 23 |
| 2.12 Agricultural (Commercial) Land Reform Act 6 of 1995.....   | 23 |
| 3 Description of Proposed Mineral exploration Project.....      | 24 |
| 3.1 Introduction .....  | 24 |
| 3.2 Techniques for Mineral Exploration.....                     | 24 |
| 3.2.1 Target Generation .....                                   | 24 |
| 3.2.2 Target Drilling .....                                     | 25 |
| 3.2.3 Resource Evaluation .....                                 | 26 |
| 3.2.4 Resource Definition .....                                 | 26 |
| 3.3 Labour Requirements .....                                   | 26 |
| 4 Description of the Current Environment.....                   | 27 |
| 4.1 Introduction .....  | 27 |
| 4.2 Climatic Conditions .....                                   | 27 |
| 4.2.1 Temperature .....   | 27 |
| 4.2.2 Precipitation.....  | 28 |
| 4.2.3 Wind .....  | 29 |
| 4.2.4 Humidity.....   | 30 |
| 4.2 Air Quality .....   | 31 |
| 4.3 Geology.....  | 32 |

|  |    |
|--|----|
| 4.3.1 Geological setting.....                                      | 32 |
| 4.4 Hydrogeology and Water Resources .....                         | 33 |
| 4.5 Flora.....   | 34 |
| 4.6 Fauna.....   | 37 |
| 4.6.1 Introduction.....  | 37 |
| 4.6.2 Amphibians.....  | 37 |
| 4.6.3 Mammals.....   | 39 |
| 4.6.4 Reptiles.....  | 40 |
| 4.7 Avifauna (Birds).....  | 41 |
| 4.8 Archaeology and Heritage Sites.....                            | 42 |
| 4.9 Socio-Economic Environment .....                               | 42 |
| 4.9.1 Demographics of Outjo.....                                   | 42 |
| 4.9.2 Social Economic Impact.....                                  | 42 |
| 5. Assessment of Impacts.....                                      | 44 |
| 5.1. Overall socio-economic benefits and issues .....              | 45 |
| 5.1.1. Socio-economic benefits .....                               | 45 |
| 5.2. Mineral Exploration phases and associated issues .....        | 46 |
| 5.2.1. Mapping and Geochemical Sampling Phase of the Project ..... | 46 |
| 5.2.2. Drilling Phase of the Project.....                          | 48 |
| 6. Environmental Management Plan.....                              | 53 |
| 6.1 Overview.....  | 53 |
| 6.2 Environmental Management Principles.....                       | 53 |
| 6.3 Impacts on the Bio-physical Environment .....                  | 55 |
| 6.3.1 Impacts on Archaeological Sites.....                         | 55 |
| 6.3.2 Impacts on Fauna.....  | 56 |
| 6.3.3 Impacts on Avifauna.....                                     | 57 |
| 6.3.4 Impact on Vegetation .....                                   | 57 |
| 6.3.5 Impacts of Alien invasive Plants.....                        | 57 |
| 6.3.6 Impacts on Socio-Economic.....                               | 58 |
| 6.3.7 Visual Impacts .....   | 59 |
| 6.3.8 Use of Natural Resources .....                               | 59 |

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|  |    |
|--|----|
| 6.3.9 Generation of Solid Waste .....                                    | 59 |
| 6.3.10 Noise .....   | 59 |
| 6.3.11 Air Quality .....   | 60 |
| 6.4 Summary of Environmental Management Plan during construction, .....  | 60 |
| operation and decommissioning phases .....                               | 60 |
| 6.5 Monitoring, Auditing and Reporting .....                             | 64 |
| 6.5.1 Inspections and Audits .....                                       | 64 |
| 6.5.2 Environmental Management System Framework .....                    | 65 |
| 6.6 Closure Plan .....   | 68 |
| 6.6.1 Alternatives Considered .....                                      | 69 |
| 6.6.2 Preferred Alternative: Rehabilitation/ Backfill of boreholes ..... | 69 |
| 6.6.3 Closure Assumptions .....  | 70 |
| 6.6.4 Closure and Rehabilitation Activities .....                        | 71 |
| 7. Public Participation Process .....                                    | 74 |
| 8. Conclusion .....  | 75 |
| 9. References .....  | 77 |
| Appendix A .....   | 79 |
| Appendix B: Proof of Advertisements, Letters and Notices .....           | 86 |
| Appendix of CV's .....   | 86 |

## List of Figures

|  |    |
|--|----|
| Figure 1 A satellite imagery showing the orientation of the mineral exploration licence .....    | 7  |
| Figure 2 Locality map of the exclusive prospecting licence area .....                            | 10 |
| Figure 3 Topographic map showing the existing road network within the licence area. ....         | 12 |
| Figure 4 Flowchart of the Environmental Impact Assessment process followed in Namibia. ....      | 15 |
| Figure 5 A graph showing the temperature patterns in Outjo, from www.worldweatheronline.com..... | 28 |
| Figure 6 A graph showing rainfall patterns in Outjo, from www.worldweatheronline.com.....        | 29 |
| Figure 7 A graph showing windspeed patterns in Outjo, from www.worldweatheronline.com.....       | 30 |
| Figure 8 A graph showing the humidity patterns in Outjo, from www.worldweatheronline.com.....    | 31 |
| Figure 9 A geological map of the area .....  | 33 |
| Figure 10 A Hydrological map of the area .....   | 34 |

## List of Tables

|  |    |
|--|----|
| Table 1 A table showing plant species which are likely to occur in the area .....                              | 35 |
| Table 2 Table of plant species which are protected under the Forestry Act and likely to occur in the area..... | 37 |
| Table 3 A list of amphibian species which may occur in the project area .....                                  | 38 |
| Table 4 Mammal species which are likely to occur within the project area. ....                                 | 39 |
| Table 5 Protected reptile species in the project area.....   | 40 |
| Table 6 Bird species which are likely to occur within the site area. ....                                      | 41 |
| Table 7 Assessment methodology used to examine the impacts identified .....                                    | 44 |
| Table 8 Impact evaluation for socio-economy .....  | 46 |
| Table 9 Impact evaluation for the target generation phase of the project .....                                 | 48 |
| Table 10 Impact evaluation for the operational phase of the project.....                                       | 51 |
| Table 11 Registered IAP's from various organs of state. ....   | 74 |

## 1. Introduction

### 1.1 Project Background

The proponent, Tartisius Gaeseb, was granted an exclusive prospecting licence (EPL) by the Ministry of Mines and Energy. The licence holder intends to explore for Copper. An outline of the area is shown in the image below.

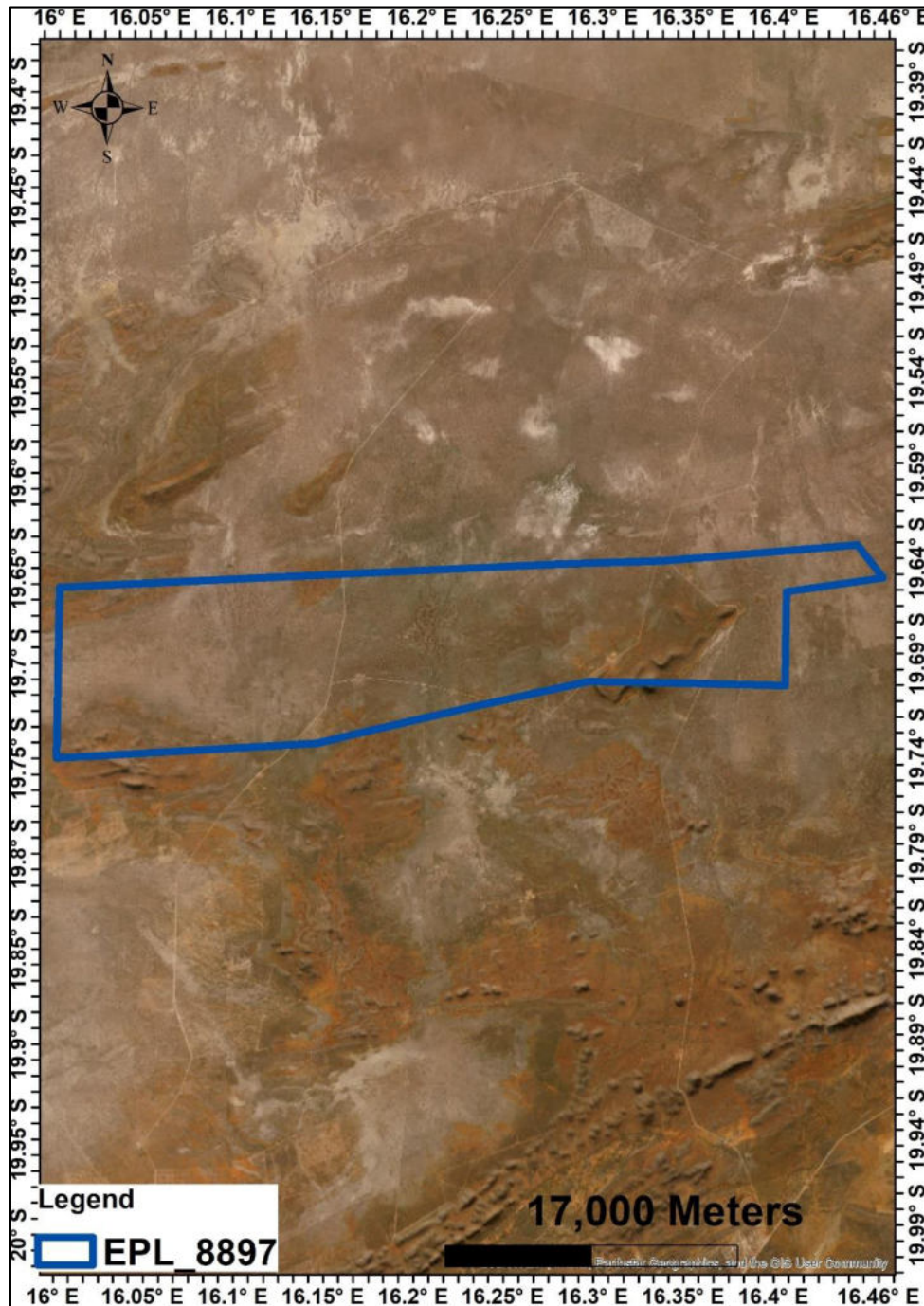


Figure 1 A satellite imagery showing the orientation of the mineral exploration licence



Figure 2 shows the surrounding farms of the project area. The licence falls within a traditional authority area.

### 1.1.1 Mineral Licence Tenure

The exclusive prospecting number is 14/2/1/4/2/**8897**. The mineral licence is issued to Tartisius Gaeseb.

The size of the mineral licence is **37,308.8959 Hectares**. It is granted Base and Rare Metals, Dimension Stones, Industrial Minerals, Precious Metals and Precious Stones commodities.

### 1.1.2 Environmental Consultant

Impala Environmental Consulting cc was appointed by the proponent to undertake an Environmental Assessment (EA) and Environmental Management Plan (EMP) for the mineral exploration project. Impala does not have any interest, be it business, financial, personal or other, in the proposed activity, application or appeal, other than fair remuneration for work performed on this project. The public participation process and report writing was overseen by Mr. Ndaluka Amutenya as the EAP. CV's of various role players are annexed to the appendix section of this report.

### 1.1.3 Proponent of the Proposed Project

The Exclusive Prospecting Licence belongs to Tartisius Gaeseb.

| Licence Holder   | Postal Address  | Email Address        | Contact       |
|------------------|---|----------------------|---------------|
| Tartisius Gaeseb | P. O. Box 70567,<br>Khomasdal,<br>Windhoek,<br>Khomas, 9000,<br>Namibia | gtartisius@gmail.com | +264812546157 |







## **1.3 Infrastructure and Services**

### **1.3.1 Electricity**

At this stage, electricity requirements for the project are minimal. The bulk of the power supply to the exploration site will be sourced from the proponent's own generator. The power requirements for the proposed project will be minimal as power will only be required for the following activities:

- Emergency lighting.
- Powering small machinery during the mineral exploration process.
- Power supply for temporary office block or container if necessary.

### **1.3.2 Water Supply**

The water requirements for the project are minimal. Water containers will be brought on site and utilized whenever necessary. The water will mostly be used for general consumption and cleaning. The water used for drilling will be recycled.

### **1.3.3 Refuse and Waste Removal**

The proponent will negotiate directly with all suppliers of consumables such as grease, oil etc. to remove these materials for disposal once they have been used and need to be discarded. The proponent will provide adequate temporary sanitary facilities and such facilities must be maintained in a hygienic condition. Sewerage will be disposed of in a manner not polluting the environment. The proponent will remove all refuse pertaining to the proponent's activities, domestic or otherwise, from the property. The Miner will undertake environmental rehabilitation, both during and at the conclusion of the mineral exploration operations.

### **1.3.4 IT Systems and Communication**

If drilling commences, provision will be made for two-way radios to enable the drill rig operators and the on-site staff to communicate effectively.

### **1.3.5 Security and Fencing**

No provision has been made for fencing although strict access to and from the exploration site will be facilitated by personnel.

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### **1.3.9 Fuel Distribution, storage and supply**

During the drilling phase, diesel will be delivered to the by road transport and offloaded into the vehicles by offloading pumps.

#### **1.3.10 Storage of Lubrication and consumables**

During the drilling phase, consumables and lubricants will be stored in a designated area within a container. These substances will only be used for mechanical purposes and are assumed to be non-hazardous.

#### **1.3.11 Fire Fighting Provision**

Portable fire-extinguishers will be fitted, as required, in vehicles and, as well as in the mobile containers where possible.

### **1.4 Environmental Impact Assessment Requirements**

The Environmental Regulations procedure (GN 30 of 2012) stipulates that no mineral exploration activities may be undertaken without an environmental clearance certificate. As such, an environmental clearance certificate must be applied for in accordance with regulation 6 of the 2012 environmental regulations. It is imperative that the environmental proponent must conduct a public consultation process in accordance with regulation 21 of the 2012 environmental procedure, produce an environmental scoping report and submit an Environmental Management Plan for the proposed mineral exploration activities.

### **1.5 Purpose of the Scoping Report**

The scoping report is prepared for the Environmental Impact Assessment for mineral exploration on an area which is located about 40 km north of Outjo. Environmental scoping is a critical step in the preparation of an EIA for the proposed mineral exploration activities. The scoping process identifies the issues that are likely to be most important during the EIA and eliminates those that are of little concern. The scoping process shall be concluded with the establishment of terms of reference for the preparation of an EIA, as set out by the Ministry of Environment and tourism. The purpose of this scoping report is to:

- 
- Identify any important environmental issues to be considered before commencing with mineral exploration activities on the proposed mineral exploration sites.
  - To identify appropriate time and space boundaries of the EIA study.
  - To identify information required for decision-making.

As such, the key objectives of this scoping study are to:

- Inform the public about the proposed mineral exploration activities.
- Identify the main stakeholders, their comments and concerns.
- Define reasonable and practical alternatives to the proposal.
- To establish the terms of reference for an EIA study.

## **1.6 Terms of Reference**

The approach and methodology taken was guided by the Environmental Regulations of 2012 and the Terms of Reference (ToR) which were provided by the proponent:

- Identify all legislation and guidelines that have reference to the proposed project.
- Identify existing environmental (both bio-physical and socio-economic) conditions of the area in order to determine their environmental sensitivity.
- Inform Interested and Affected Parties (I&APs) and relevant authorities of the details of the proposed development and provide them with a reasonable opportunity to participate during the process.
- Consider the potential environmental and social impacts of the development and assess the significance of the identified impacts.
- Compile a Scoping Report detailing all identified issues and possible impacts, stipulating the way forward and identifying specialist investigations, if required.
- Outline management and mitigation measures in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.
- Submit the final scoping report to the competent authority and the Environmental Commissioner.

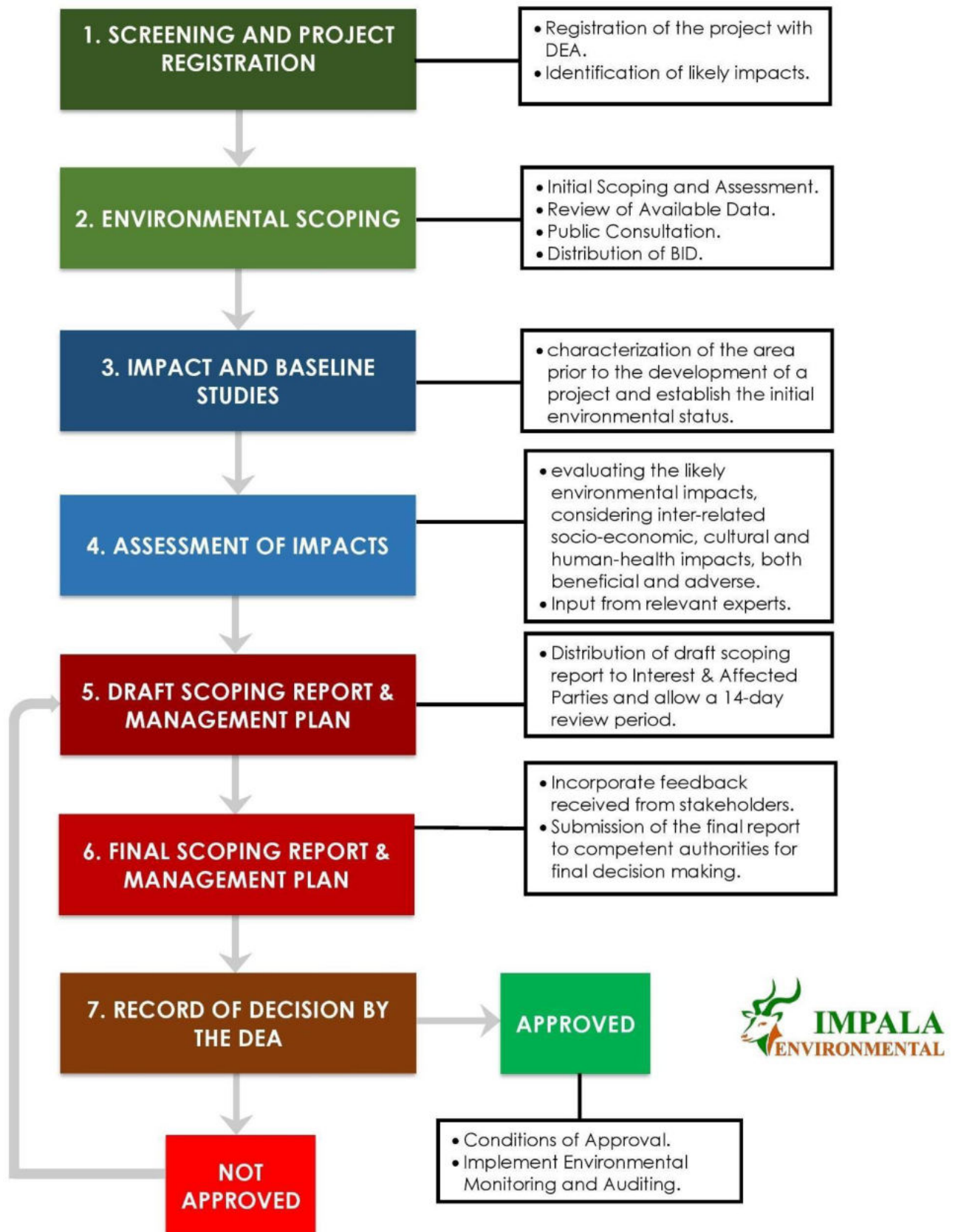


Figure 4 Flowchart of the Environmental Impact Assessment process followed in Namibia.



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## 1.6.1 Environmental Assessment Approach and Methodology

Environmental assessment process in Namibia is governed by the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 gazetted under the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007) and in line with the provisions of the Cabinet approved Environmental Assessment Policy for Sustainable Development and Environmental Conservation of 1995.

This report has taken into consideration all the requirements for preparation of all the supporting documents and application for an Environmental Clearance Certificate and lodgement of such application to the Environmental Commissioner (EC), Department of Environmental Affairs (DEA) in the Ministry of Environment and Tourism (MET).

The purpose of the Scoping Phase was to communicate the scope of the proposed project to Interested and Affected Parties (I&APs), to consider project alternatives, to identify the environmental (and social) aspects and potential impacts for further investigation and assessment, and to develop the terms of reference for specialist studies to be conducted in the Impact Assessment Phase if necessary. The steps undertaken during the Scoping Phase are summarised below.

### 1.6.1.1 Project Initiation and Screening

The project registered on the online ECC portal ([eia.met.gov.na](http://eia.met.gov.na)) in order to provide notification of the commencement of the EIA process and to obtain clarity on the process to be followed.

### 1.6.1.2 Initial Scoping Public Participation Process

The objective of the public scoping process was to ensure that interested and affected parties (I&APs) were notified about the proposed project, given a reasonable opportunity to register on the project database and to provide initial comments. Steps that were undertaken during this phase are summarised below:

- **I&AP identification:** A preliminary I&AP database was compiled using the farmer's contact details that were obtained from the Ministry of Lands and contact details of other interested and affected parties that were provided by the proponent. Additional I&AP's were added to the database based on

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responses to the advertisements and notification letters, as well as attendees to the various meetings.

- **Notification letter and Background Information Document (BID):** A notification letter and Background Information Document was distributed for review and comment for a period of 3-4 weeks after commencement of the project.
- **Advertisements and site notice:** Advertisements announcing the proposed project, the availability of the BID, public meetings and the I&AP registration / comment period were placed in two widely distributed newspapers for two consecutive weeks. Site notices were placed on the boundaries of farm fences and on the notice boards of the Regional Council.

Over and above the issues raised were incorporated into the scoping report. These submissions were collated and responded to as indicated in the public participation section of the scoping report.

#### **1.6.1.3 Compilation and Review of Draft Scoping Report (DSR)**

The DSR was prepared in compliance with Section 8 of the EIA Regulations of 2012 and incorporated with comments received during the initial Public Participation Process. The DSR was distributed for a 14-day review and comment period.

#### **1.6.1.4 Final Scoping Report and Completion of the Scoping Phase**

The Final Scoping Report (FSR) summarises the following: the legal and policy framework; approach to the EIA and process methodology; the project's need and desirability; proposed project activities; key characteristics of the receiving environment; and key issues of concern that will be further investigated and assessed in the next phase of the EIA.

The FSR complies with Section 8 of the EIA Regulations 2012. All written submissions received during the DSR review and comment period will be collated and responded to. The FSR was submitted to the competent authority. In terms of Section 32 of the Environmental Management Act, 2007 (No. 7 of 2007), the competent authority is then required to make a recommendation on the acceptance or rejection of the report to Ministry of Environment and Tourism (MET): Department of Environmental Affairs (DEA), who will make the final decision.

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## 1.6.2 List of Specialist Studies Undertaken

Section 9(a) of the Environmental Regulations of 2012 requires a disclosure of all the tasks to be undertaken as part of the assessment process, including any specialist to be included if necessary.

The mineral exploration project has not commenced yet. This means that the proponent has not conducted any surface exploration activities (i.e. geophysical survey, geological mapping and geochemical sampling) to find anomalies and determine suitable targets which can be tested with drilling. As such, no field specific specialist studies were commissioned by the proponent as no specific target area has been delineated yet. Although specialist studies were deemed unnecessary for this environmental impact assessment due to low intensity and extent of the exploration activities at this stage, a heritage impact assessment study was undertaken for this project. Specialist studies conducted in the area, in previous years, have been reviewed as part of the scoping and assessment process of this project.

After the proponent successfully drills a delineated target, undertakes a feasibility study and confidently decides to proceed with mining, a full environmental impact assessment will be carried out with appropriate site-specific specialist studies on groundwater, air-quality, fauna, flora, archaeology and avifauna.

## 1.7 Need and Desirability

### 1.7.1 Need of the Exploration Project

Mineral exploration companies play an important role in the development of a country's mineral resources. When minerals are mined, the company selling the product must pay a royalty to the government). The royalties are set by the government at a level that will encourage others to risk their capital in finding and developing these minerals, rather than the government risking taxpayer's money. This way the country can share in benefit of mineral resources without risking funds required for key everyday services to the community.

Namibia has a long tradition of mining. In 2018, mining contributed 14% of GDP and expanded 28%. In 2019, the mining industry contributed over 300 million dollars to government revenue. The whole industry contributed around 2.2 billion dollars to the national economy in the same period. However, a drop in diamond and uranium

production caused a contraction of 11,1%. Lower mineral commodity prices led to the declining expenditure on exploration. In 2019, the mining industry paid over 300 million dollars in wages and salaries and provided 16 324 direct jobs with 9 027 permanent employees. Temporary jobs figured out 800, while 6 515 were contractor jobs.

The exploration project may assist in helping Namibia attain some of the goals set out in National Development Plans such as the Fifth National Development Plan (NDP5) and the Harambee Prosperity Plan (HPP). During the exploration phase, the project will provide employment to at least 15 people from the surrounding towns and settlements. If the exploration project leads to the discovery of an economically viable mineral deposit, this may subsequently lead to the development of a mine within the area. A mine can significantly contribute to social-economic development around the surrounding community.

### **1.7.2 Alternatives**

During the application of the exploration licence, no alternative sites were considered. The proposed exploration site has shown the potential to host an orogenic gold deposit.

#### **1.7.2.1 Exploration Method Alternatives**

Geochemical sampling and geological mapping methods will be used during the initial exploration period until a target is delineated. Thereafter, reverse circulation and diamond drilling methods will be employed to test the depth and extent of the mineralised rock units. If more modern, effective, and environmentally friendly exploration methods than the preferred ones are developed, such methods will be assessed and or considered.

#### **1.7.2.2 No-Go Alternatives**

The no-go alternative will mean that the current land activities such as farming and important vegetation species will not be disturbed, that is, there will not be disturbance of the flora and fauna.

No-go alternative will result in the non-exploration of minerals and bring benefications to the receiving environment. However, the no-go alternative is not considered since it will lead to negative socio-economic impacts.



## **2 Summary of applicable legislation**

All mineral rights, related to mineral exploration activities in Namibia, are regulated by the Ministry of Mines and Energy whereas the environmental regulations are regulated by the Ministry of Environment and Tourism. The acts that affect the implementation, operation and management of mineral exploration activities in Namibia are shown below.

### **2.1 Environmental Management Act of 2007**

**Line Ministry:** Ministry of Environment and Tourism

The regulations that accompany this act lists several activities that may not be undertaken without an environmental clearance certificate issued in terms of the Act. The act further states that any clearance certificate issued before the commencement of the act (6 February 2012) remains in force for one year. If a person wishes to continue with activities covered by the act, he or she must apply for a new certificate in terms of the Environmental Management Act.

### **2.2 The Minerals Prospecting and Mining Act of 1992**

**Line Ministry:** Ministry of Mines and Energy

The Minerals Prospecting and Mining Act No.33 of 1992 approves and regulates mineral rights in relation to exploration, reconnaissance, prospecting, small scale mining, mineral exploration, large-scale mining and transfers of mineral licences.

### **2.3 Water Resources Management Act of 2004**

**Line Ministry:** Ministry of Agriculture, Water and Forestry

The act provides for the management, protection, development, usage and conservation of water resources; to provide for the regulation and monitoring of water resources and to provide for incidental matters.

### **2.4 Nature conservation ordinance, ordinance No. 4 of 1975**

**Line Ministry:** Ministry of Environment and Tourism

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The Nature Ordinance 4 of 1975 covers game parks and nature reserves, the hunting and protection of wild animals (including reptiles and wild birds), problem animals, fish, and the protection of indigenous plants. It also establishes a nature conservation board. The basic set of regulations under the ordinance is contained in GN 240/1976 (OG 3556). The topics covered in the regulations include tariffs (game parks), regulations relating to game parks, swimming baths, use of boats in game parks, inland fisheries, keeping game and other wild animals in capturing. In addition, the ordinance also regulates game dealers, game skins, protected plants, birds kept in cages, trophy hunting of hunt-able game, hunting at night, export of game and game meat, sea birds, private game parks, nature reserves, regulations of wildlife associations and registers for coyote getters.

## **2.5 National Heritage Act, 2004 (Act No. 27 of 2004)**

**Line Ministry/Body:** National Heritage Council

The National Heritage Act provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects; to establish a National Heritage Council; to establish a National Heritage Register; and to provide for incidental matters.

## **2.6 Petroleum Products and Energy Act No. 13 of 1990**

**Line Ministry/Body:** Ministry of Mines and Energy

The act regulates the importation and usage of petroleum products. The act reads as “To provide measures for the saving of petroleum products and an economy in the cost of the distribution thereof, and for the maintenance of a price thereof; for control of the furnishing of certain information regarding petroleum products; and for the rendering of services of a particular kind, or services of a particular standard; in connection with motor vehicles; for the establishment of the National Energy Fund and for the utilization thereof; for the establishment of the National Energy Council and the functions thereof; for the imposition of levies on fuel; and to provide for matters incidental thereof”.

## 2.7 Forest Act, No. 12 of 2001

**Line Ministry/Body:** Ministry of Agriculture, Water and Forestry

The act regulates the cutting down of trees and reads as follows “To provide for the establishment of a Forestry Council and the appointment of certain officials; to consolidate the laws relating to the management and use of forests and forest produce; to provide for the protection of the environment and control and management of forest trees; to repeal the preservation of Bees and Honey proclamation 1923, preservation of Trees and Forests Ordinance, 1952 and the Forest Act, 1968; and to deal with incidental matters”.

The constitution defines the function of the Ombudsman and commits the government to sustainable utilization of Namibia’s natural resources for the benefit of all Namibians and describes the duty to investigate complaints concerning the over-utilization of living natural resources for the benefit of all Namibians and describes the duties to investigate complaints concerning the over-utilization of living natural resources, the irrational exploitation of non-renewable resources, the degradation and the destruction of ecosystem and failure to protect the beauty and character of Namibia. Article 95 states that *“the state shall actively promote and maintain the welfare of the people by adopting; inter-alia policies aimed at maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of natural resources on a sustainable basis for the benefit of all Namibians both present and future”*.

## 2.8 Atmospheric Pollution Prevention Ordinance 11 of 1976

**Line Ministry/Body:** Ministry of Health and Social Services

This ordinance provides for the prevention of air pollution and is affected by the Health Act 21 of 1988. Under this ordinance, the entire area of Namibia, with the exception of East Caprivi, is proclaimed as a controlled area for the purposes of section 4(1) (a) of the ordinance.

## 2.9 Hazardous Substance Ordinance, No. 14 of 1974

**Line Ministry/Body:** Ministry of Safety and Security

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The ordinance provides for the control of toxic substances. It covers manufacture, sale, use, disposal and dumping as well as import and export. Although the environmental aspects are not explicitly stated, the ordinance provides for the importing, storage and handling.

## **2.10 Namibian Water Corporation (Act 12 of 1997)**

**Line Ministry/Body:** Namibian Water Corporation

The act caters for water rehabilitation of prospecting and mineral exploration areas, environmental impact assessments and for minimising or preventing pollution.

## **2.11 Public and Environmental Health Act, 2015**

**Line Ministry/Body:** Ministry of Health and Social Services

provide a framework for a structured uniform public and environmental health system in Namibia; and to provide for incidental matters.

## **2.12 Agricultural (Commercial) Land Reform Act 6 of 1995**

**Line Ministry/Body:** Ministry of Lands, Resettlement and Rehabilitation

To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian citizens who do not own or otherwise have the use of any or of adequate agricultural land, and foremost to those Namibian citizens who have been socially, economically or educationally disadvantaged by past discriminatory laws or practices; to vest in the State a preferent right to purchase agricultural land for the purposes of the Act; to provide for the compulsory acquisition of certain agricultural land by the State for the purposes of the Act; to regulate the acquisition of agricultural land by foreign nationals; to establish a Lands Tribunal and determine its jurisdiction; and to provide for matters connected therewith.



### **3 Description of Proposed Mineral exploration Project**

#### **3.1 Introduction**

Copper is a chemical element with the symbol Cu (from Latin: cuprum) and atomic number 29. It is a soft, malleable, and ductile metal with very high thermal and electrical conductivity. A freshly exposed surface of pure copper has a pinkish-orange colour. Copper is used as a conductor of heat and electricity, as a building material, and as a constituent of various metal alloys, such as sterling silver used in jewellery, cupronickel used to make marine hardware and coins, and constantan used in strain gauges and thermocouples for temperature measurement. Copper is one of the few metals that can occur in nature in a directly usable metallic form (native metals). This led to very early human use in several regions, from c. 8000 BC. Thousands of years later, it was the first metal to be smelted from sulphide ores, c. 5000 BC; the first metal to be cast into a shape in a mold, c. 4000 BC; and the first metal to be purposely alloyed with another metal, tin, to create bronze, c. 3500 BC.

Copper used in buildings, usually for roofing, oxidizes to form a green Verdigris (or patina). Copper is sometimes used in decorative art, both in its elemental metal form and in compounds as pigments. Copper compounds are used as bacteriostatic agents, fungicides, and wood preservatives.

#### **3.2 Techniques for Mineral Exploration**

##### **3.2.1 Target Generation**

Target generation involves certain stages, such as mapping, geochemical survey and remote sensing. Mapping includes development of the geological, topographical (base), geochemical, and structural maps. Geological map focuses on identifying and mapping outcrops, describing mineralization and alteration zones, and making geological cross sections. In other words, it relies on the identification of rocks and minerals and the understanding of the environment in which they form. It aims to find what rock types occur at or close to the surface and how these rock types are related to each other, e.g., by defining their boundaries, ages, and structure. Topographical map, which is a base map, depicts the topographical features (contour, hill, stream, etc.). Geochemical map includes surface sample locations and results, including

analyses of rock, silt, and soil samples. Geophysical map depicts the geology and results obtained from geophysical survey. Structural map shows the orientation data (strike, dip, type, etc.) of bedding planes, faults, folds, joints and other structural features. They are all gathered to be used for the interpretation in copper mineral exploration (Mentes, 2012).

### **3.2.1.1 Geochemical Survey**

Geochemical survey is a kind of sampling method in mineral exploration and results in 'Assay' after laboratory works. Exploration geochemistry has evolved from its early origins using the chemistry of the environment surrounding a deposit in order to locate it. In mineral exploration studies, geochemical methods involve the geochemical analysis of geological materials, including rock, soil, and stream sediment or silt sediment. In addition to these surface samples, any materials obtained from drilling can be analysed for the evaluation. This survey provides physical results to be worked on for the further interpretation and is used for identifying geochemical anomalies, which are used for geochemical mapping (Mentes, 2012). During the first phase, the type of sampling methods that will be applied are bulk sampling.

### **3.2.1.2 Remote Sensing**

Remote Sensing is the collection of information about an object or area without being in physical contact with it. Data gathering systems used in remote sensing are photographs obtained from manned space flights or airborne cameras, and electronic scanner or sensors such as multispectral scanners in satellites or airplanes and TV cameras, all of which record data digitally. Aerial photography and satellites allow people to work with modern techniques. Aerial photography is used to sense the amount (quantity) of mineral in a particular area. The mineral exploration team collects information such as tracks, roads, fences, and habitation, as well as maps of outcrops, regolith, and vegetation cover across a region. Landsat image (satellite imagery) is used both for the visible light spectrum over mineral exploration (Mentes, 2012).

### **3.2.2 Target Drilling**

Target drilling is the process whereby rigs or some operated tools are used to make boreholes to intercept a rock unit. It can be done by contractors with more experienced

operators. This method is used to obtain very detailed information about rock types, mineral content, and rock fabric, and the relationships between rock layers close to the surface and those at depth. Then, subsurface geology in an area is evaluated after the results are obtained. That indicates if the potentially economic resources are present or not.

### **3.2.3 Resource Evaluation**

It is an evaluation of tonnage (volume) and grade (concentration or weight percent) of the ore body. The volume is determined by using drill data to outline the deposit in the subsurface, and by using geometric models to calculate the volume. The grade is the average concentration determined from numerous assays of drill samples. The purpose of the resource evaluation is to understand the possibility to expand the known size of the deposit and mineralization. This step should give an information or idea about proceeding of mineral exploration activities. Resources at this work are determined during exploration and do not provide certain results of grade and tonnage. In order to get an exact size, quality of the commercial mineral, 'reserve definition', which is next step of mineral exploration studies, is used (Mentes, 2012).

### **3.2.4 Resource Definition**

Reserve definition is important to transform a mineral resource into an economic asset, which is an ore reserve and find the answer if it is valuable or not. 'Reserve' is more intensive, technical, and well characterized term with its exact quality and size relative to 'Resource'. Also, reserve estimation may be changed over time because of the assessments during and after the mining. The main purpose of this stage is the making decision on the techniques just before extraction as a result of the results. It includes technical, economic evaluation, geotechnical assessment, and engineering studies of the rocks surrounding the deposit to determine the potential parameters of proposed open pit or underground mining methods. At the end of this process, a feasibility study is published, and the deposit is supposed to either be uneconomic or economic.

## **3.3 Labour Requirements**

The proponent intends to employ about 5-15 personnel, including 3 management staff for the first phase of the project. The employees will be sourced from the local community including people from Outjo. All employees will undergo a safety induction, first aid training course and wildlife awareness program. The Labour Act of 2007 will always be adhered to.

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## 4 Description of the Current Environment

### 4.1 Introduction

This section aims to document the present state of the environment, the likely impact of changes being planned and the regular monitoring to attempt to detect changes in the environment. As such, this area represents a high fauna diversity.

Namibia has four very large and arid regions which set them apart in various ways from the rest of the country; Kunene and Erongo region in the west and Karas and Erongo in the south (Mendelsohn, et al., 2002). Kunene Region occupies the northwest corner of Namibia. The Skeleton Coast Park forms its entire western boundary with the Atlantic Ocean. The Kunene River with its Epupa Falls forms an international boundary with Angola to the north. Nationally, Kunene is bordered by Omusati Region and the western boundary of Etosha National Park. In the south it forms the southern boundary of most of Etosha National Park and borders Erongo and Erongo regions.

The region is home to the Skeleton Coast Park and many conservancies.

The Kunene Region encompasses a range of biomes or landscapes neatly arranged parallel to one another. On the west is the forbidding Skeleton Coast - a region of rocks, fog, shipwrecks and desolation, washed by the waters of the Benguela current, which brings Antarctic cold to desert heat. The region's administrative capital is Opuwo. The Kunene Region covers an area of 115,293 km<sup>2</sup> of the total Namibian land. This figure shows a population density of 1.6 persons per km<sup>2</sup>. Kunene Region is the second largest region in Namibia after //Karas Region.

### 4.2 Climatic Conditions

#### 4.2.1 Temperature

In the proposed area, the hot season lasts for 4.6 months, from September 8 to January 26, with an average daily high temperature above 32°C. The hottest month of the year in Outjo is December, with an average high of 33°C and low of 17°C.

The cool season lasts for 2.3 months, from May 25 to August 1, with an average daily high temperature below 27°C. The coldest month of the year in Outjo is June, with an average low of 7°C and high of 26°C.

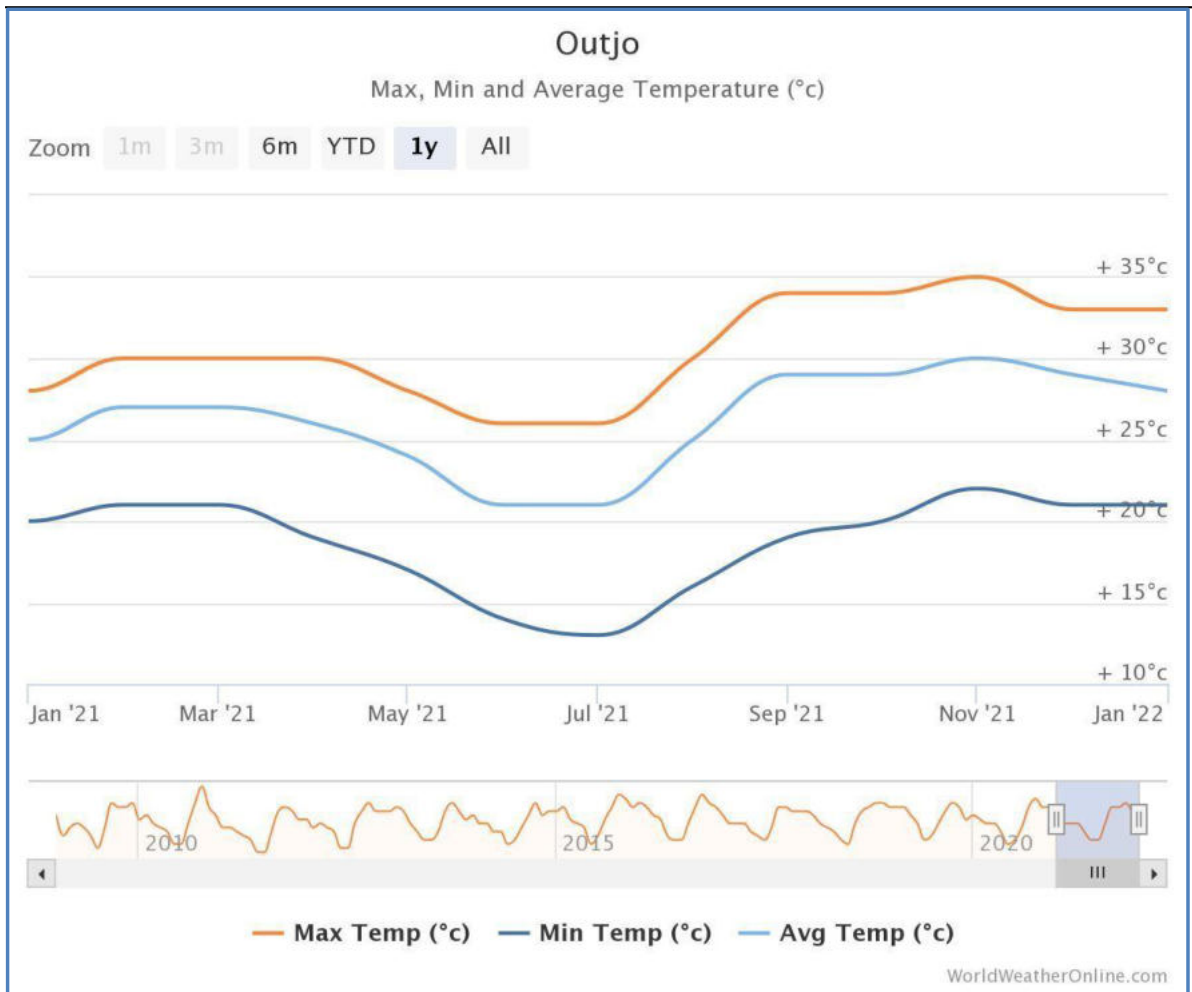


Figure 5 A graph showing the temperature patterns in Outjo, from [www.worldweatheronline.com](http://www.worldweatheronline.com)

#### 4.2.2 Precipitation

In the proposed area, the highest rainfall is usually experienced in March which may reach 180 mm with average rainfall days of 14. In January months, rain-fall may reach about 100 mm with average rainfall days. The graph below shows the rainfall patterns in the area.



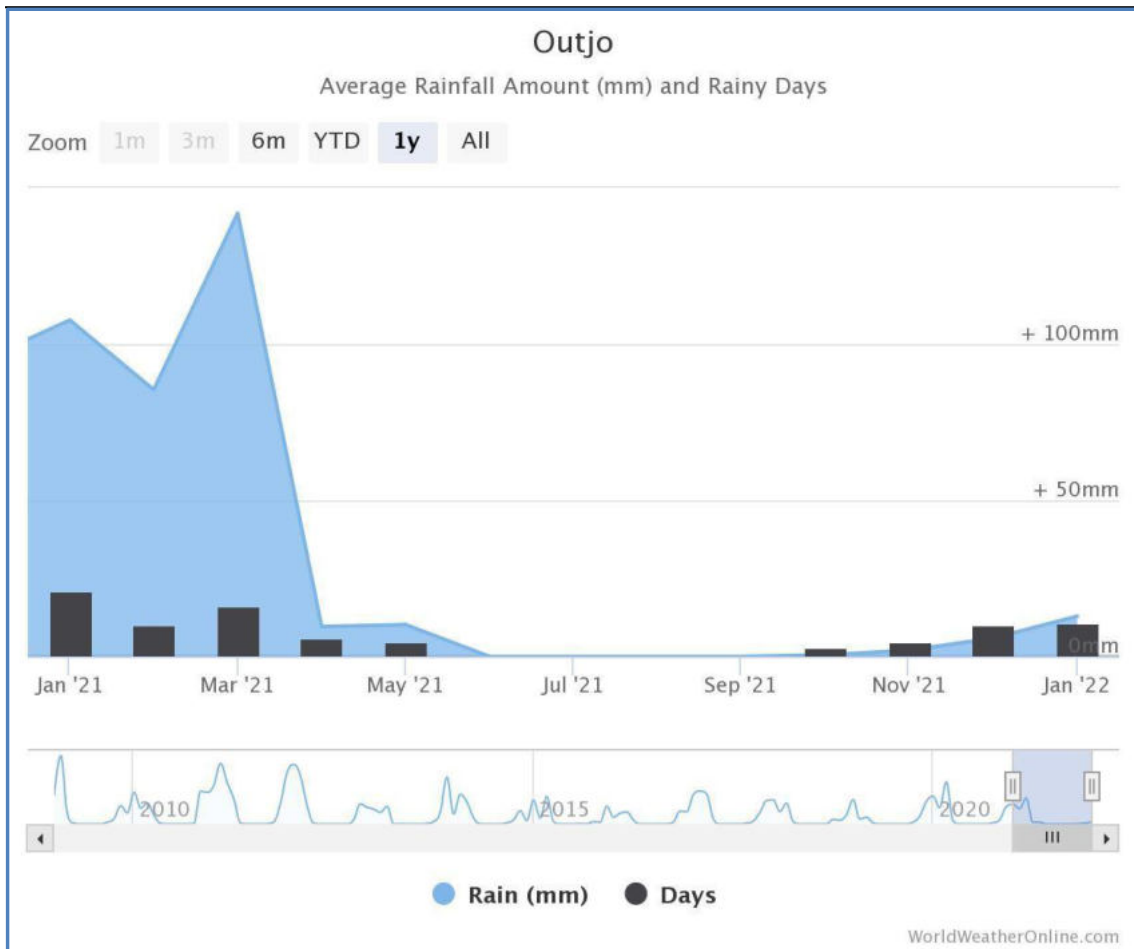


Figure 6 A graph showing rainfall patterns in Outjo, from [www.worldweatheronline.com](http://www.worldweatheronline.com)

#### 4.2.3 Wind

The windiest months (with the highest average wind speed) are October and November (17.5kmph). The calmest month (with the lowest average wind speed) is March (13kmph).

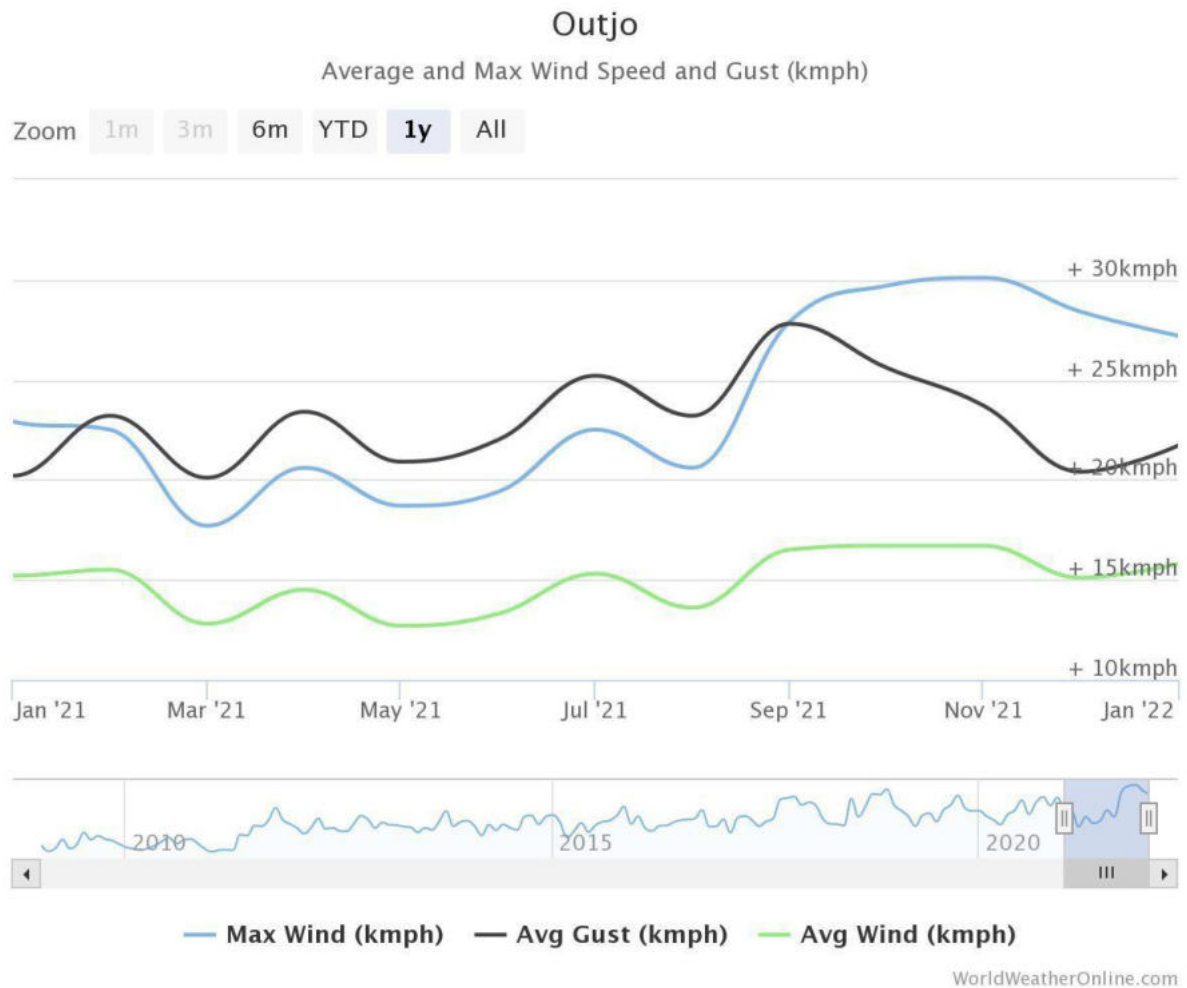


Figure 7 A graph showing windspeed patterns in Outjo, from [www.worldweatheronline.com](http://www.worldweatheronline.com)

#### 4.2.4 Humidity

The relative humidity during the least humid months of the year, i.e. September and November, is around 16-18% and the most humid month is January with 50-60% humidity. Namibia has a low humidity in general, and the lack of moisture in the air has a major impact on its climate by reducing cloud cover and rain and increases the rate of evaporation.

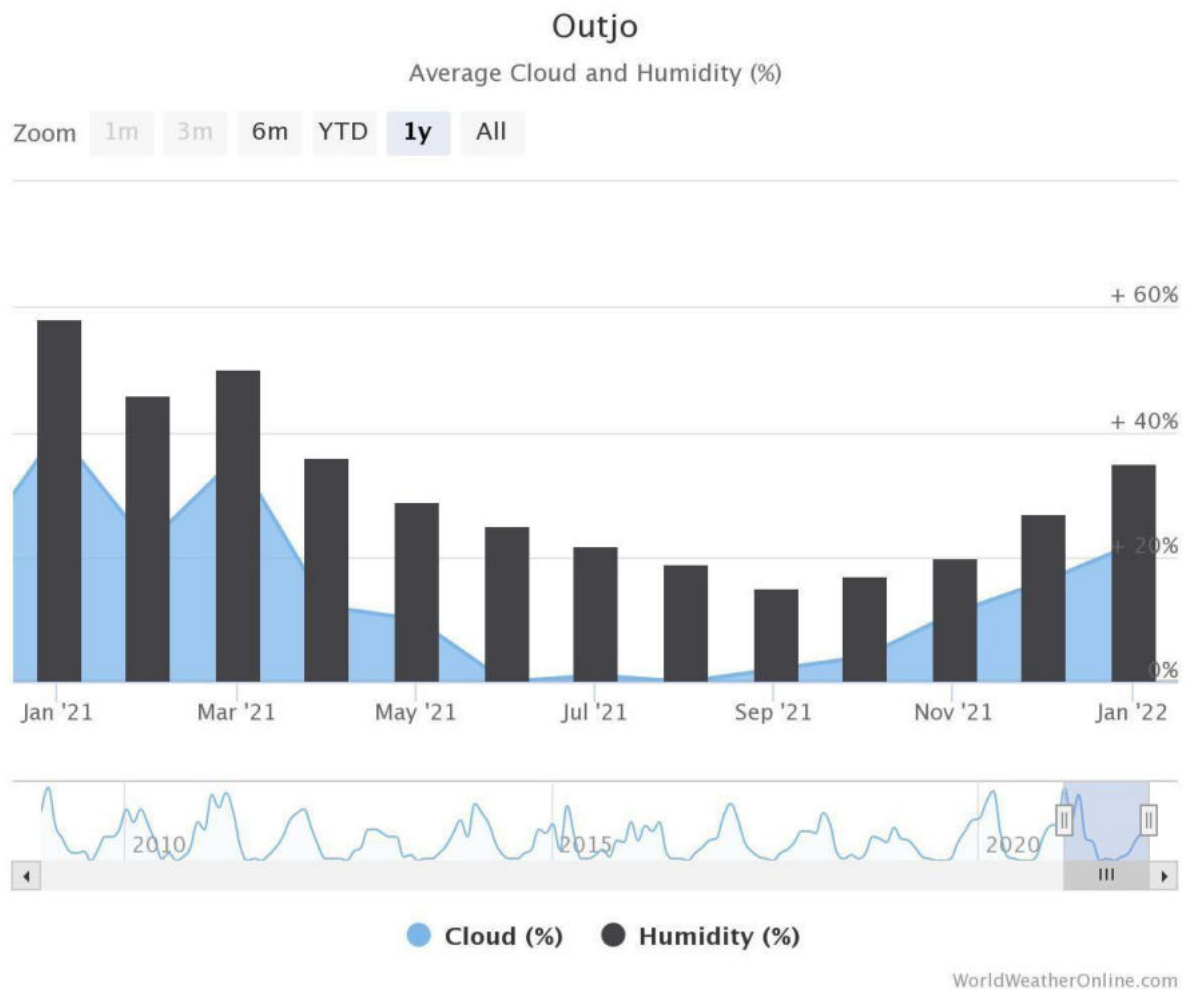


Figure 8 A graph showing the humidity patterns in Outjo, from [www.worldweatheronline.com](http://www.worldweatheronline.com)

## 4.2 Air Quality

Activities around the exploration licence area mainly consist of tourism and small-scale livestock farming. Besides other exploration activities, there are no other industries or operating mines in the area or mines in the area. Probable sources of air pollution in the area are emissions and dust from vehicles travelling on gravel roads, dust generated by cattle grazing and wind erosion from the exposed areas.

PM<sub>10</sub> describes all particulate matter in the atmosphere with a diameter equal to or less than 10 µm and are generally emitted from motor vehicles (diesel engines) and burning of wood. PM<sub>2.5</sub> describes all particulate matter in the atmosphere with a diameter equal to or less than 2.5 µm and are mostly related to combustion. NO<sub>2</sub> and nitric oxide (NO) are formed simultaneously in combustion processes and other high temperature operations such as blast furnaces. Sources of SO<sub>2</sub> include fossil fuel

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combustion from industry and power plants. SO<sub>2</sub> is emitted when coal or other biomass fuels are burnt for energy.

Data from accuweather.com shows that the air quality in the area is generally excellent with an air quality index of 15 AQI. The ground-level ozone (O<sub>3</sub>) is about 15 µg/m<sup>3</sup> which is excellent. The fine particle matter levels (PM<sub>2.5</sub>) are about 9 µg/m. The particle matter (PM<sub>10</sub>) is about 9 µg/m<sup>3</sup>. The nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), and sulphur dioxide (SO<sub>2</sub>) levels in the area are recorded to be 0 µg/m<sup>3</sup>.

## **4.3 Geology**

### **4.3.1 Geological setting**

The Geology of the area is underlain by Paleoproterozoic metamorphic rocks of the Huab Metamorphic Complex, which outcrop as an inlier of the Congo Craton surrounded by stratified rocks of the Damaran Orogen (Miller, 2008). The metamorphic basement was intruded at ca 750 Ma by alkaline silicate rocks and carbonatites of the Lofdal carbonatite complex. The complex comprises an early silicate intrusive assemblage of dominantly nepheline syenite, and a later carbonatite intrusive assemblage ranging from soviet through dolomitic and ankeritie carbonatite.

The EPL area is made up of orthogneiss, metasediments, granite, and amphibolites from the Huab Metamorphic Complex. Other parts of the licence area consist of dolomites, limestones, shale and chert from the Tsumeb Subgroup of the Otavi Group.





The area is underlain by rocks with little groundwater potential.

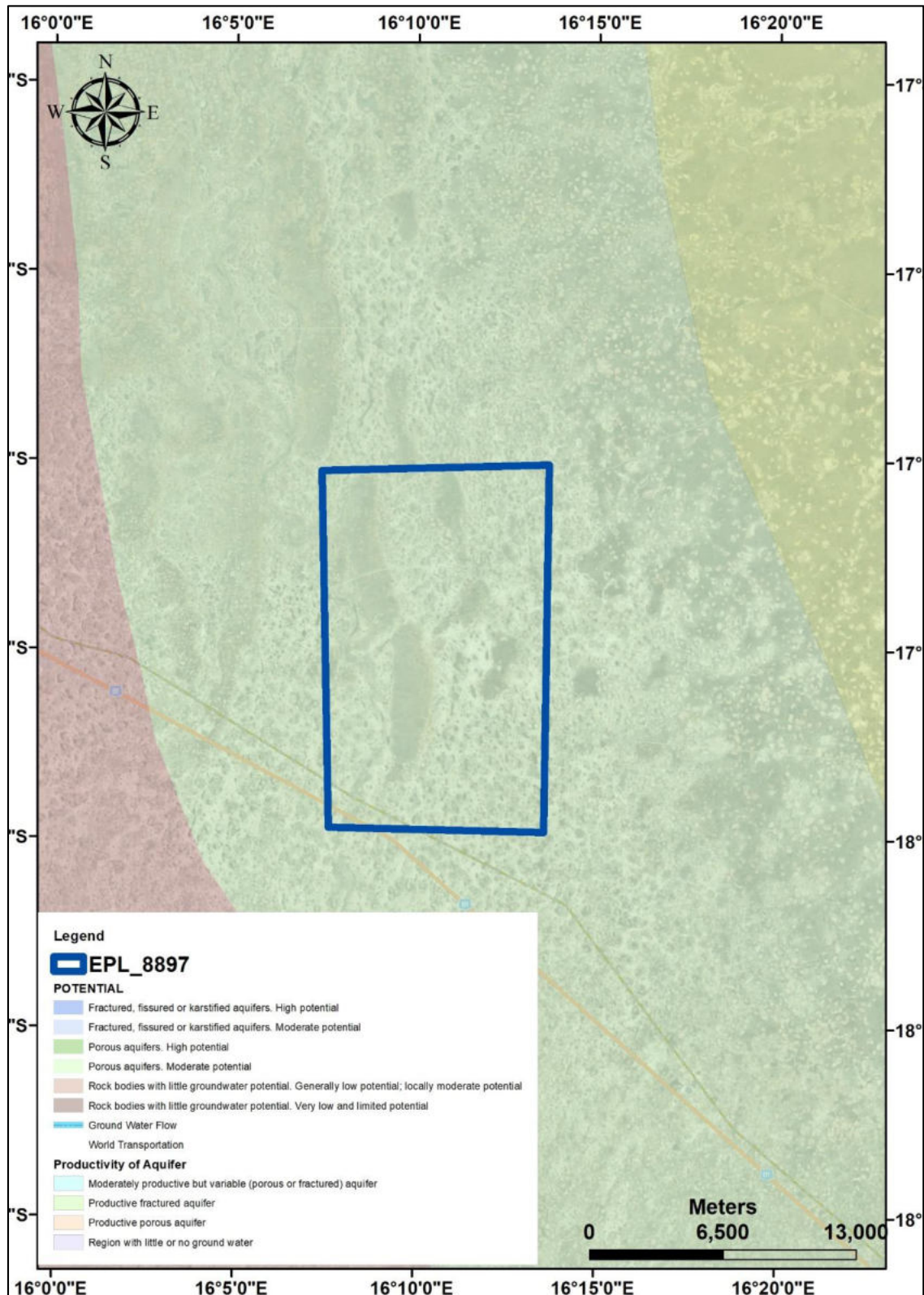


Figure 10 A Hydrological map of the area

### 4.5 Flora

Rainfall in the kunene Region is usually both low and extremely variable which means that years of abundant rain often followed by extreme dry conditions (Mendelsohn, et

al., 2002). In form, vegetation is generally sparse, with few trees and a thin variety of grass. Plant cover varies in relation to rainfall and so the eastern parts of Erongo have more grass and trees than the Western, coastal areas (Christian, 2005). The surrounding area is characterised by high botanical diversity. Based on the literature review, all the vegetation that are found within the vicinity of the area are of “medium” to “high” sensitivity against external conditions. The growing season is very short due to the semi-arid climate.

Grass is dependable on rainfall, which in-turn causes livestock and other animals to suffer during periods of minimal rainfall (Burke, 2003). The mineral exploration area, which is semi-arid, contains diverse vegetation species which include a number of species endemic to Namibia. Table 1 below lists the different plant species which are most likely to occur within the project area.

**Table 1 A table showing plant species which are likely to occur in the area**

| SCIENTIFIC NAME                  | COMMON NAME           | STATUS IN NAMIBIA       |
|----------------------------------|-----------------------|-------------------------|
| <i>Acacia erioloba</i>           | Camel thorn           | Protected               |
| <i>Acacia mellifera</i>          | Black thorn           | Secure                  |
| <i>Acacia reficiens</i>          | False umbrella thorn  | Secure                  |
| <i>Acacia haematoxylon</i>       | Grey camel thorn      | Protected               |
| <i>Acacia erubescens</i>         | Blue thorn            | Secure                  |
| <i>Acacia karroo</i>             | Sweet thorn           | Secure                  |
| <i>Acacia tortolis</i>           | Umbrella thorn        | Secure                  |
| <i>Acacia hereroensis</i>        | False hook-thorn      | Secure                  |
| <i>Commiphora tenuipetiolata</i> | White-stem corkwood   | Secure                  |
| <i>Aloe littoralis</i>           |                       | Protected               |
| <i>Ozoroa crassinervia</i>       | Namibian resin tree   | Near endemic, protected |
| <i>Boscia albitrunca</i>         | Shepherd's tree       | Protected               |
| <i>Albizia anthelmintica</i>     | Worm-bark false-thorn | Protected               |
| <i>Ziziphus mucronata</i>        | Buffalo-thorn         | Protected               |
| <i>Catophractes alexandri</i>    | Trumpet thorn         | Secure                  |
| <i>Combretum apiculatum</i>      | Red bush willow       | Secure                  |
| <i>Commiphora dinteri</i>        |                       | Endemic                 |
| <i>Commiphora glandulosa</i>     | Tall common corkwood  | Secure                  |
| <i>Commiphora glaucescens</i>    | Blue-leaved corkwood  | Nearendemic             |
| <i>Croton gratissimus</i>        | Lavender fever-berry  | Secure                  |
| <i>Cyphostemma bainesii</i>      |                       | Endemic, protected      |
| <i>Dichrostachys cinerea</i>     | Sickle bush           | Secure                  |
| <i>Diospyros lycioides</i>       | Blue bush             | Secure                  |
| <i>Dombeya rotundifolia</i>      | Common wild pear      | Endemic                 |

|                                     |                         |              |
|-------------------------------------|-------------------------|--------------|
| <i>Ehretia alba</i>                 |                         | Secure       |
| <i>Elephantorrhiza suffruticosa</i> |                         | Secure       |
| <i>Euclea pseudebenus</i>           | Ebony tree              | Protected    |
| <i>Euclea undulata</i>              | Common guarri           | Secure       |
| <i>Euphorbia guerichiana</i>        | Western woody milk bush | Secure       |
| <i>Euphorbia virosa</i>             |                         | Secure       |
| <i>Ficus cordata</i>                | Namaqua fig             | Protected    |
| <i>Ficus ilicina</i>                | Laurel fig              | Secure       |
| <i>Ficus sycomorus</i>              | Common cluster fig      | Protected    |
| <i>Grewia bicolor</i>               | White raisin            | Secure       |
| <i>Grewia flava</i>                 | Velvet raisin           | Secure       |
| <i>Grewia flavescens</i>            | Sand paper raisin       | Secure       |
| <i>Gymnosporia senegalensis</i>     | Red spike-thorn         | Secure       |
| <i>Ipomoea adenioides</i>           |                         | Secure       |
| <i>Lycium bosciifolium</i>          |                         | Secure       |
| <i>Lycium cinereum</i>              |                         | Secure       |
| <i>Lycium eenii</i>                 |                         | Secure       |
| <i>Lycium hirsutum</i>              |                         | Secure       |
| <i>Lycium villosum</i>              |                         | Secure       |
| <i>Maerua juncea</i>                |                         | Secure       |
| <i>Maerua schinzii</i>              | Ringwood tree           | Protected    |
| <i>Manuleopsis dinteri</i>          |                         | Endemic      |
| <i>Melianthus comosus</i>           |                         | Secure       |
| <i>Obetia carruthersiana</i>        |                         | Near endemic |
| <i>Pechuel-Loeschea leubnitziae</i> |                         | Secure       |
| <i>Sterculia africana</i>           | African star-chestnut   | Protected    |
| <i>Tarchonanthus camphoratus</i>    |                         | Secure       |
| <i>Tetragonia schenckii</i>         |                         | Secure       |
| <i>Vernonia cinerascens</i>         |                         | Secure       |
| <i>Searsia (Rhus) ciliata</i>       |                         | Secure       |
| <i>Searsia (Rhus) lancea</i>        | Karree                  | Protected    |
| <i>Searsia (Rhus) marlothii</i>     |                         | Secure       |

The density of vegetation in the vicinity of the mineral exploration site is sparse. Every effort will be made to protect the existing trees and shrubs, as these are very important to the ambience and visual appeal of the mineral exploration site. A vegetation expert will be consulted throughout the lifecycle of the mineral exploration program. The protected plant species in the project area are shown in the table below.

Table 2 Table of plant species which are protected under the Forestry Act and likely to occur in the area.

| SCIENTIFIC NAME              | COMMON NAME           |
|------------------------------|-----------------------|
| <i>Acacia erioloba</i>       | Camel thorn           |
| <i>Acacia haematoxylon</i>   | Grey camel thorn      |
| <i>Albizia anthelmintica</i> | Worm-bark false-thorn |
| <i>Boscia albitrunca</i>     | Shepherd's tree       |
| <i>Euclea pseudebenus</i>    | Ebony tree            |
| <i>Ficus cordata</i>         | Namaqua fig           |
| <i>Ficus sycomorus</i>       | Common cluster fig    |
| <i>Maerua schinzii</i>       | Ringwood tree         |
| <i>Ozoroa crassinervia</i>   | Namibian resin tree   |
| <i>Searsia (Rhus lancea)</i> | Karree                |
| <i>Sterculia Africana</i>    | African star-chestnut |

## 4.6 Fauna

### 4.6.1 Introduction

The information is based on a detailed literature review and a site visit which was carried out. The purpose of the Fauna literature review is to identify all potential amphibians, reptiles, and mammals expected on the project area and the surrounding farms in the vicinity of the mineral exploration area. The proposed mineral exploration area supports numerous faunal species but there are no species that are exclusive to the study area.

Larger types of animals such as zebras, giraffes, lions and elephants are rare in this area. There are no species which are exclusively endemic to the exploration area. Based on literature review, development of a mineral exploration project in the area will not have a negative impact on any of the species in the project area.

### 4.6.2 Amphibians

Based on the literature review, there are generally 14 types of amphibian species that occur in project area. Nine of these amphibian species occur abundantly, two occur rarely and six of them occur uncommonly. Griffin (1998) highlighted that amphibian

species are declining throughout the world due to various factors such as climate change and habitat destruction. There are approximately 4000 species of amphibians worldwide of which over 200 species are present in Southern Africa and 57 in Namibia (Griffin, 1998). However, this low figure may be due to the lack of detailed studies carried out on amphibians. The table below shows the different amphibian species that are likely to occur within the study area.

**Table 3 A list of amphibian species which may occur in the project area**

| SCIENTIFIC NAME  | COMMON NAME         | STATUS                                 | OCCURRENCE | REFERENCE         |
|--|---------------------|--|------------|-------------------|
| <b>PLATANNAS</b>   |                     |  |            |                   |
|  |                     |  |            |                   |
| <i>Xenopus laevis</i>  | COMMON PLATANNA     | <b>SECURE</b>                          | ABUNDANTLY | (Daudin, 1802)    |
|  |                     |  |            |                   |
| <b>TOADS</b>   |                     |  |            |                   |
| <i>Breviceps adspersus</i>   | BUSHVELD RAIN FROG  | <b>SECURE</b>                          | ABUNDANTLY | Peters, 1882      |
| <i>Bufo dombensis</i>  | DOMBE DWARF TOAD    | <b>ENDEMIC &amp; INADEQUETLY KNOWN</b> | ABUNDANTLY | Bocage, 1895      |
| <i>Bufo poweri</i>   | MOTTLED TOAD        | <b>SECURE</b>                          | ABUNDANTLY | Hewitt, 1935      |
|  |                     |  |            |                   |
| <b>FOSSORIAL FROGS</b>   |                     |  |            |                   |
| <i>Phrynomantis affinis</i>  | SPOTTED RUBBER FROG | <b>AMBIGUOUS (RARE?)</b>               | RARELY     | (Boulenger, 1901) |
| <i>Phrynomantis bifasciatus</i>                                      | BANDED RUBBER FROG  | <b>SECURE</b>                          | ABUNDANTLY | (Smith, 1848)     |
|  |                     |  |            |                   |
| <b>SAND FROGS, BULLFROGS, RIDGED FROGS, CACOS, PUDDLE FROGS etc.</b> |                     |  |            |                   |
| <i>Cacosternum boettgeri</i>   | COMMON CACO         | <b>SECURE</b>                          | ABUNDANTLY | (Boulenger, 1882) |
| <i>Hildebrandtia ornata</i>  | ORNATE FROG         | <b>SECURE</b>                          | UNCOMMONLY | (Peters, 1878)    |
| <i>Phrynobatrachus mababiensis</i>                                   | MABABE PUDDLE FROG  | <b>SECURE</b>                          | UNCOMMONLY | FitzSimons, 1932  |
| <i>Phrynobatrachus natalensis</i>                                    | SNORING PUDDLE FROG | <b>SECURE</b>                          | UNCOMMONLY | (A. Smith, 1849)  |
| <i>Pyxicephalus adspersus</i>  | GIANT BULLFROG      | <b>SECURE</b>                          | ABUNDANTLY | Tschudi, 1838     |



|  |                    |               |            |                       |
|--|--------------------|---------------|------------|-----------------------|
| <i>Tomopterna krugeriensis</i>               | KNOCKING SAND FROG | <b>SECURE</b> | RARELY     | Passmore et al, 1975  |
| <i>Tomopterna tandyi</i>                     | TANDY'S SAND FROG- | <b>SECURE</b> | ABUNDANTLY | Channing et al, 1996  |
| <b>TREE FROGS, REED FROGS &amp; KASSINAS</b> |                    |               |            |                       |
| <i>Kassina senegalensis</i>                  | BUBBLING KASSINA   | <b>SECURE</b> | ABUNDANTLY | (Dumèril et al, 1841) |

#### 4.6.3 Mammals

Based on the literature review, there are generally about 68 species of mammals expected to occur within the immediate area. There are generally 25 species which rarely occur, 2 species that occur seasonally, 4 that occur occasionally, and 33 that occur abundantly within the project area. Considering the relative size of the mineral exploration area, the mammal fauna will not be affected by the mineral exploration activities of the proponent. Namibia is seemingly well endowed with mammal diversity with around 250 species known to be present within the country (Griffin, 1998). There are currently 14 mammal species which are considered to be endemic to Namibia, including 11 species of rodents and small carnivores which are not well known. Griffin (1998), points out that most of these endemic mammals are associated with the Namib and Escarpment with 60% of these appearing to be rock-dwelling species. The author, Griffin (1998) further highlights that the endemic mammal fauna is best characterized by the endemic rodent family *Petromuridae* (Dassie rat) and the rodent genera *Gerbillurus* and *Petromyscus*. The table below shows the mammal species which are likely to occur within the study area. A full list, of mammal species that are likely to occur within the area, is in the appendix section at the end.

**Table 4 Mammal species which are likely to occur within the project area.**

| SCIENTIFIC NAME                   | COMMON NAME               |
|-----------------------------------|---------------------------|
| <i>Acinonyx jubatus</i>           | Cheetah                   |
| <i>Antidorcas marsupialis</i>     | Springbok                 |
| <i>Atelerix frontalis angolae</i> | Southern African Hedgehog |
| <i>Canis mesomelas</i>            | Black-backed Jackal       |
| <i>Caracal caracal</i>            | Caracal                   |
| <i>Crocuta crocuta</i>            | Spotted Hyena             |
| <i>Cynictis penicillata</i>       | Yellow Mongoose           |
| <i>Equus zebra hartmannae</i>     | Hartmann's Mountain Zebra |

|                                     |                     |
|-------------------------------------|---------------------|
| <i>Felis nigripes</i>               | Black-footed Cat    |
| <i>Felis silvestris/lybica</i>      | African Wild Cat    |
| <i>Galerella sanguinea</i>          | Slender Mongoose    |
| <i>Genetta genetta</i>              | Small Spotted Genet |
| <i>Ictonyx striatus</i>             | Striped Polecat     |
| <i>Lepus capensis</i>               | Cape Hare Secure    |
| <i>Lepus saxatilis</i>              | Scrub Hare          |
| <i>Manis temminckii</i>             | Ground Pangolin     |
| <i>Mellivora capensis</i>           | Honey Badger/Ratel  |
| <i>Oreotragus oreotragus</i>        | Klipspringer        |
| <i>Oryx gazella</i>                 | Gemsbok             |
| <i>Otocyon megalotis</i>            | Bat-eared Fox       |
| <i>Panthera pardus</i>              | Leopard             |
| <i>Parahyaena (Hyaena) brunnea</i>  | Brown Hyena         |
| <i>Phacochoerus africanus</i>       | Common Warthog      |
| <i>Proteles cristatus</i>           | Aardwolf            |
| <i>Raphicerus campestris</i>        | Steenbok            |
| <i>Suricata suricatta marjoriae</i> | Suricate            |
| <i>Sylvicapra grimmia</i>           | Common Duiker       |
| <i>Tragelaphus strepsiceros</i>     | Greater Kudu        |
| <i>Vulpes chama</i>                 | Cape Fox            |

#### 4.6.4 Reptiles

The literature review showed that there are approximately 60 reptile species that are expected to occur in the site area. According to the Namibia Conservation Ordinance of 1975, there are four reptile species protected, namely:

**Table 5 Protected reptile species in the project area**

| SCIENTIFIC NAME               | COMMON NAME             | STATUS    |
|-------------------------------|-------------------------|-----------|
| <i>Psammobates Oculiferus</i> | Kalahari Tent Tortoise  | Protected |
| <i>Python Natalis</i>         | Southern African Python | Protected |
| <i>Geochelone Pardalis</i>    | Leopard Tortoise        | Protected |
| <i>Varanus Albigularis</i>    | Veld Leguaan            | Protected |

Griffin (1998) highlighted the presence of 261 species of reptiles which are present in Namibia. These reptiles make up 30% of the reptile species found on the continent. 55 species of Namibian Lizards are classified as endemic (Griffin, 1998). The author, Griffin (1998), describes that more than 60% of the reptiles found in Namibia are protected by the conservation Ordinance. Although mineral exploration activities do

affect reptile habitat, the project will not have any significant impact on the reptile species within the proposed mineral exploration area. Namibia, with 129 species of lizards, has one of the continent's richest lizard Fauna. The table in the appendix shows the reptile species which are likely to occur within the vicinity of the mineral exploration area.

#### 4.7 Avifauna (Birds)

Simmons et al (2003) points that although Namibia's Avifauna is comparatively sparse compared to the high rainfall equatorial areas elsewhere in Africa, approximately 658 species have already been recorded with a diverse unique group of arid endemics. There are approximately 650 species of birds that have been recorded in Namibia, although the country's avifauna is comparatively sparse compared to the high rainfall equatorial areas in Africa (Brown & Lawson, 1989). Brown et al (1989) mentions that 14 species of birds are endemic or near endemic to Namibia with the majority of Namibian endemics occurring in the Savannah of which ten species occur in a north-south belt of dry Savannah in Central Namibia. Simmons (2003) recorded 63 species of birds within the vicinity of the project area. 650 bird species are recorded in Namibia, of which 160 species are present in area, especially after good rains fall (Christian, 2005). These birds consist of raptors, chats, larks and karoid species. Christian (2005) recorded the presence of the following bird species in the vicinity of the area, which include:

**Table 6 Bird species which are likely to occur within the site area.**

| SCIENTIFIC NAME        | COMMON NAME         |
|------------------------|---------------------|
| Agapornis roseicollis  | Rosy-faced Lovebird |
| Eupodotis rueppellii   | Rüppell's Korhaan   |
| Lanioturdus torquatus  | White-tailed Shrike |
| Parus carpi            | Carp's Tit          |
| Phoeniculus damarensis | Violet Wood-Hoopoe  |
| Poicephalus rueppellii | Rüppell's Parrot    |
| Pternistis hartlaubi   | Hartlaub's Spurfowl |
| Tockus damarensis      | Damara Hornbil      |
| Tockus monteiri        | Monteiro's Hornbill |

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A full list of bird species within the area is shown in the appendix.

## **4.8 Archaeology and Heritage Sites**

A separate archaeological study is attached to this report.

## **4.9 Socio-Economic Environment**

### **4.9.1 Demographics of Outjo**

The Outjo Constituency is located in the South Eastern part of Kunene Region, bordering Kamanjab to the West, Otjiwarongo constituency to the South, Otavi Constituency to the East and Omuthiyagwiipundi constituency to the North. The total area size of Outjo Constituency is 7,466 square kilometers and has a population of 12,447, with a population density of 1.7 per square kilometer, making it the most populous constituency in the region. Sixty one percent (61%) of the population is aged between 15 – 59 years old. The constituency has a fairly high literacy rate of 78% and 65% of the population have already left school.

Outjo forms the entry point for consumer goods and services distributed throughout the region to towns such as Opuwo, Khorixas, Kamanjab and Ruacana to the north. These regional urban areas are connected by tarred roads, making transportation services one of the best in the country with low traffic flow and minimal vehicle accidents. According to SADCbiz.com, Outjo forms the communication and transport hub of the Kunene Region. It is serviced by rail and tarred road from Otjiwarongo and Usakos.

Outjo constituency has a 75% economically active population, were 66% are formally employed in the constituency and 35% are unemployed. 66% of the residents' main source of income is derived from wages and salaries, followed by 10% pensions and 9% cash remittances. About 89% of the households have access to safe water, 47% have no access to toilet facilities (lower than other constituencies in the region) and 48% use electricity for lighting.

### **4.9.2 Social Economic Impact**

Although a few people (including farmers) and animals might be negatively affected by dust and noise, the explorer will ensure that these aspects are properly mitigated. With the potential employment of 15 people, this means that 15 families will benefit

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from the project during the exploration phase. The project has great potential to improve livelihoods and contribute to sustainable development within the surrounding community. Community meetings will be held from time to time by the proponent wherever possible, with the purpose of effectively communicating with the local community and to avoid any unexpected social impacts.

## 5. Assessment of Impacts

The purpose of this assessments of impacts section is to identify and consider the most pertinent environmental impacts and to provide possible mitigation measures that are expected from the mineral exploration activities on EPL 8897. Two different phases are associated with the proposed development. Firstly, the target generation (mapping and sampling) phase, and secondly the drilling phase are being covered by this assessment. Should the mineral exploration activities cease in the future, an EIA will need to be conducted to deal with the associated changes to environment.

Mitigation measures for the identified impacts are also provided in this Section.

The following assessment methodology was used to examine each impact identified:

**Table 7 Assessment methodology used to examine the impacts identified**

| Evaluation Criteria           | Symbol        | Significance of Rating   |
|-------------------------------|---------------|--|
| <b>Nature of impact:</b>      | <b>P or N</b> | Effect the proposed activity would have on the affected environment which is positive ( <b>P</b> ) or negative ( <b>N</b> )  |
| <b>Extent of impact:</b>      | <b>O</b>      | <b>On-Site</b> (the site and it's immediate surrounds)   |
|                               | <b>L</b>      | <b>Local</b> (Mineral exploration Area)  |
|                               | <b>R</b>      | <b>Regional</b> (Kunene Region)  |
|                               | <b>N</b>      | <b>National</b> (Namibia)  |
|                               | <b>I</b>      | <b>International</b>   |
| <b>Duration of impact:</b>    | <b>SD</b>     | Short Duration (0 to 5 years)  |
|                               | <b>MD</b>     | Medium Duration (5 to 15 years)  |
|                               | <b>LD</b>     | Long Duration (lifetime of the development)  |
| <b>Intensity of impact:</b>   | <b>L</b>      | <b>Low</b> intensity where the natural, cultural and social functions and processes are not affected.  |
|                               | <b>M</b>      | <b>Medium</b> intensity where the affected environment is altered but natural, cultural and social functions and processes can continue.                                       |
|                               | <b>H</b>      | <b>High</b> intensity where the affected environment is altered to the extent that natural, cultural and social functions and processes will temporarily or permanently cease. |
| <b>Probability of impact:</b> | <b>LP</b>     | <b>Low probability</b> is when the possibility of the impact occurring is low.   |
|                               | <b>P</b>      | <b>Probable</b> is when there is a distinct possibility that it will occur.  |
|                               | <b>HP</b>     | <b>Highly probable</b> is when the impact is most likely to occur.   |
|                               | <b>D</b>      | <b>Definite</b> where the impact will occur.   |

|   |          |   |
|---|----------|---|
| <b>Significance of Impact:</b><br><b>Further subdivided into impacts with mitigation (MM) measures and impacts with no mitigation measures (NMM).</b> | <b>L</b> | <b>Low Significance</b> is when natural, cultural, social and economic functions and processes are not affected. If the impacts are adverse, mitigation is either easily achieved or little will be required, or both. If impacts are beneficial, alternative means of achieving this benefit are likely to be easier, cheaper, more effective and less time-consuming  |
|   | <b>M</b> | <b>Medium Significance</b> is when the affected environment is altered but natural, cultural, social and economic functions and processes can continue. An impact exists but is not substantial in relation to other impacts that might take effect within the bounds of those that could occur. In the case of beneficial impacts, other means of achieving this benefit are about equal in time, cost and effort.   |
|   | <b>H</b> | <b>High Significance</b> is when the affected environment is altered to the extent that natural, cultural, social and economic functions and processes will temporarily or permanently cease. If impacts are adverse, there is no possible mitigation that could offset the impact, or mitigation is difficult, expensive, time consuming or a combination of these. In the case of beneficial impacts, the impact is of a Substantial order within the bounds of impacts that could occur. |

## 5.1. Overall socio-economic benefits and issues

### 5.1.1. Socio-economic benefits

With the potential employment of 15 people, this means that 15 families will benefit from the project during the exploration phase. The project has great potential to improve livelihoods and contribute to sustainable development within the surrounding community. Community meetings will be held from time to time by the proponent wherever possible, with the purpose of effectively communicating with the local community and to avoid any unexpected social impacts.

#### 5.1.1.1. Potential Direct Benefits

**Direct capital investment:** The mineral exploration project will require a significant capital investment of at least N\$ 10 million. This will be used for mapping, sampling and drilling.

**Stimulation of skills transfer:** Due to the nature of mineral exploration projects, the proponent will implement ad-hoc training programme for some of its staff members. Training programmes will be well structured and staff members will permanently benefit from these training programmes.

**Job creation:** With the potential employment of 15 people, this means that 10 families will benefit from the project during the on-going phase. The project has a great potential to improve livelihoods and contribute to sustainable development within the surrounding community.

#### 5.1.1.2. Potential Indirect Benefits

- The data generated from the exploration programme will be made available to the Ministry of Mines and Energy for future research purposes.
- General enhancement of the health conditions and quality of life for a few people in the surrounding settlements.
- Of significance is the prospect of diversification of the surrounding economy, which is presently mainly focussed on small-scale farming and small-scale mining of semi-precious stones.

#### 5.1.1.3. General socio-economic concerns

Notwithstanding the above benefits there are a few concerns that could reduce or counteract the above benefits related to the project, as follows:

- As the movement of staff and contractors to and from the area increases, the risk of spread of HIV/AIDS increases.
- Increased influx of people to the area as people come in search of job opportunities during the target generation and drilling phase of the mineral exploration project; and
- Increased informal settlement and associated problems.

**Table 8 Impact evaluation for socio-economy**

| Identified Impact                         | Significance |    | Duration | Extent | Intensity | Probability |
|---|--------------|----|----------|--------|-----------|-------------|
|   | NMM          | MM |          |        |           |             |
| Increased spread of HIV/AIDS              | M            | L  | LD       | N      | M         | LP          |
| Increased influx of people to the area    | L            | L  | SD       | L      | L         | P           |
| Increased informal settlement in the area | M            | L  | MD       | L      | L         | LP          |

## 5.2. Mineral Exploration phases and associated issues

### 5.2.1. Mapping and Geochemical Sampling Phase of the Project

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The following potential effects on the environment during the target generation phase of the mineral exploration project have been identified:

#### **5.2.1.1. Dust**

Dust may be generated during this phase and might be aggravated during the winter months when strong winds occur. Dust will be generated by the vehicles moving in the area. Fall out dust settling on vegetation is likely to cause local disruptions in herbivorous and predatory complexes and should be minimised as far as possible.

#### **5.2.1.2. Noise**

Noise will most likely be generated by vehicles during the target generation phase. It is recommended that vehicle movement be limited to normal daytime hours to allow nocturnal animals to roam freely at night.

#### **5.2.1.3. Safety and Security**

During mapping and sampling, small tools and equipment will be used on site. This increases the possibility of injuries and the responsible manager must ensure that all staff members are briefed about the potential risks of injuries on site. The manager is further advised to ensure that adequate emergency facilities, including first aid kits, are available on site. All Health and Safety standards specified in the Labour Act should be complied with.

Should a camp be necessary at a later stage, it should be in such a way that it does not pose a risk to the community members and wildlife that roam the area.

#### **5.2.1.4. Visual**

The proposed exploration area is situated more than 1 km from any main road. As such, any visual impact that might be caused by the exploration team are minimal. In some parts of the area, the topography of the mineral exploration site is slightly elevated.



**Table 9 Impact evaluation for the target generation phase of the project**

| Identified        | Significance |    | Duration | Extent | Intensity | Probability |
|-------------------|--------------|----|----------|--------|-----------|-------------|
|                   | NMM          | MM |          |        |           |             |
| Dust              | L            | L  | SD       | L      | L         | P           |
| Noise             | M            | L  | SD       | L      | M         | D           |
| Safety & Security | L            | L  | SD       | O      | L         | P           |
| Visual            | L            | L  | MD       | O      | L         | LP          |

### 5.2.2. Drilling Phase of the Project

During the operation phase of the project, a few holes will be drilled into the orebody. To conveniently refuelling company vehicles without driving long distances, a small portable fuel storage tank will be brought on site.

#### 5.2.2.1. Air Quality

In terms of air quality, emissions will be given off by 4x4 vehicles and the drill rig but not to an extent that warrants concern. Dust will also be produced by the drill rig and the movement of vehicles in the area.

#### 5.2.2.2. Fire and Explosion Hazard

Hydrocarbons are volatile under certain conditions and their vapours in specific concentrations are flammable. If precautions are not taken to prevent their ignition, fire and subsequent safety risks may arise.

All fuel storage and handling facilities in Namibia must however comply with strict safety distances as prescribed by SANS 10089. SANS 10089 is adopted by the Ministry of Mines and Energy as the national standard.

It must further be assured that enough water is available for fire firefighting purposes. In addition to this, all personnel must be sensitised about responsible fire protection measures and good housekeeping such as the removal of flammable materials including rubbish, dry vegetation, and hydrocarbon-soaked soil from the vicinity of the exploration area. Regular inspections should be carried out to inspect and test firefighting equipment and pollution control materials at the drilling site.

All fire precautions and fire control at the site must be in accordance with SANS 100891:1999, or better. A holistic fire protection and prevention plan is needed.

Experience has shown that the best chance to rapidly put out a major fire, is in the first 5 minutes. It is important to recognise that a responsive fire prevention plan does not solely include the availability of firefighting equipment, but more importantly, it involves premeditated measures and activities to timeously prevent, curb and avoid conditions that may result in fires. An integrated fire prevention plan should be drafted before drilling.

#### **5.2.2.3. Generation of Waste**

Solid waste be generated from contractors, staff members and other visitors to the area. Care should be taken when handling waste material.

The types of waste that could be generated during operation include hazardous industrial waste (e.g. lubricants), general industrial waste (e.g. scrap material), and domestic waste (e.g. packaging). The waste will be temporarily handled and stored on site before being removed for final disposal at permitted waste disposal facilities. A registered Waste Management Company would be contracted to remove all hazardous waste from the exploration site. Ablution facilities will use chemical toilets and/or sealed septic tanks and the sewerage taken to the Uis periodically. No waste will be discharged on site.

#### **5.2.2.4. Health and Safety**

The drilling programme operations can cause serious health and safety risks to workers on site. Occupational exposures are normally related to the dermal contact with fuels and inhalation of fuel vapours during handling of such products. For this reason, adequate measures must be brought in place to ensure safety of staff on site, and includes:

- Proper training of operators;
- First aid treatment;
- Medical assistance;
- Emergency treatment;
- Prevention of inhalation of fumes;
- Protective clothing, footwear, gloves and belts; safety goggles and shields;

- 
- Manuals and training regarding the correct handling of materials and packages should be in place and updated as new or updated material safety data sheets becomes available;
  - And Monitoring should be carried out on a regular basis, including accident reports.

#### **5.2.2.5. Fauna**

Mineral exploration activities may have minor disturbances on the habitat of a few species but no significant impacts on the animals are expected. The proponent shall ensure that no animal shall be captured, killed or harmed by any of the employees in any way. Wildlife poaching will strongly be avoided as this is an offence and anyone caught infringing in this regard will face suspension from the project and will be liable for prosecution.

#### **5.2.2.6. Vegetation**

The natural vegetation is seemingly undisturbed in the project area except for grasses, which have been grazed by livestock and wild animals. Some vegetation species in the area may be adversely impacted by the project. The type of vegetation that might be affected by the project are:

- Bushes
- Ephemeral grasses
- Small trees

Some of the sensitive vegetation types in the area include:

- Shallow drainage line vegetation
- Scrublands surrounding the mineral exploration area

Certain species regarded as particularly important for conservation may yet be identified and made known via an Addendum to this report. If particularly important species are found, they will be located by GPS and their locations communicated to the Ministry of Environment and Tourism. Such locations will then be demarcated and completely avoided.

#### **5.2.2.7. Avifauna**

Birds or Nest sites will not be disturbed by any employee, tourist or contractor. Should the employees observe any bird nesting sites for vultures, they will be reported to the Ministry of Environment and Tourism and the site will be avoided.

#### 5.2.2.8. Alien Invasive Plants

Disturbance to the natural environment often encourages the establishment of alien invasive weed species. Some of the plant species that could become invasive in the area are listed below:

- *Prosopis glandulosa*
- *Lantana camara*
- *Cyperus esculentus*
- *Opuntia imbricate*
- *Cereus jamacara*
- *Melia azedarach*

There are numerous ways in which invasive species can be introduced deliberately or unintentionally.

#### 5.2.2.9 Heritage Impacts

Although no archaeological sites have been identified yet in the project area, appropriate measures will be undertaken upon discovering any new archaeological sites. All archaeological remains are protected under the National Heritage Act (2004) and will not be destroyed, disturbed or removed. The Act also requires that any archaeological finds be reported to the Heritage Council Windhoek.

Table 10 Impact evaluation for the operational phase of the project

| Identified Impact       | Significance |    | Duration | Extent | Intensity | Probability |
|-------------------------|--------------|----|----------|--------|-----------|-------------|
|                         | NMM          | MM |          |        |           |             |
| Air Quality             | M            | L  | LD       | L      | M         | HP          |
| Fire & Explosion Hazard | H            | M  | SD       | O      | M         | LP          |
| Generation of waste     | M            | L  | LD       | O      | L         | D           |
| Health and Safety       | H            | M  | MD       | N      | L         | P           |
| Fauna                   | M            | L  | MD       | L      | M         | D           |
| Vegetation              | M            | L  | MD       | L      | M         | D           |
| Avifauna                | M            | L  | MD       | L      | M         | LP          |
| Alien Invasive Plants   | M            | L  | MD       | L      | M         | P           |
| Heritage                | M            | L  | LD       | O      | H         | LP          |

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### 5.2.2.10 Groundwater Impacts

Mineral exploration activities may affect the availability of water and the quality thereof. exploration works may affect the water availability for deep rooted trees in riverbeds. Surface water for animals may be affected by mineral exploration activities. In rare instances, the quality of the groundwater for water consumption may be compromised by mineral exploration activities.



## **6. Environmental Management Plan**

### **6.1 Overview**

This Environmental Management Plan is intended to give effect to the recommendations of the Environmental Impact Assessment. To achieve this goal, it is essential that all personnel involved on the mineral exploration are fully aware of the environmental issues and the means to avoid or minimize the potential impacts of activities on site. The proposed mineral exploration activities are summarized in Section 3 of the scoping report above. Legal and policy requirements are well known and understood by the proponent, its employees and contractors and will be strictly enforced by its management team. A general description of the environment is contained in Section 4, and more site-specific information on particularly sensitive areas is contained in Section 4 as well. Issues and concerns identified in the EIA will form a set of environmental specifications that will be implemented on site. It is the intention that these environmental specifications should form the basis for an agreement between the proponent and the Ministry of Environment and Tourism. By virtue of that agreement, these specifications will become binding on the proponent.

Environmental management requires a joint effort on the part of all parties involved. The proponent has assigned certain roles to ensure that all players fulfil their responsibilities in this regard.

### **6.2 Environmental Management Principles**

The proponent will ensure that all parties involved in the project uphold the following broad aims:

1. All persons will be required to conduct all their activities in a manner that is environmentally and socially responsible. This includes all consultants, contractors, and sub-contractors, transport drivers, guests and anyone entering the exploration areas in connection with the mineral exploration project.
2. Health, Safety and Social Well Being

- 
- Safeguard the health and safety of project personnel and the public against potential impacts of the project. This includes issues of road safety, precautions against natural dangers on site, and radiation hazards; and,
  - Promote good relationships with the local authorities and their staff.

### 3. Biophysical Environment

- Wise use and conservation of environmental resources, giving due consideration to the use of resources by present and future generations.
- Prevent or minimise environmental impacts.
- Prevent air, water, and soil pollution, Biodiversity conservation and Due respect for the purpose and sanctity of the area.

To achieve these aims, the following principles need to be upheld. **A.**

#### **Commitment and Accountability:**

The proponent's senior executives and line managers will be held responsible and accountable for:

Health and safety of site personnel while on duty, including while travelling to and from site in company vehicles and environmental impacts caused by mineral exploration activities or by personnel engaged in the mineral exploration activities, including any recreational activities carried out by personnel in the area.

#### **B. Competence**

The proponent will ensure a competent work force through appropriate selection, training, and awareness in all safety, health and environmental matters.

#### **C. Risk Assessment, Prevention and Control**

Identify, assess and prioritise potential environmental risks. Prevent or minimize priority risks through careful planning and design, allocation of financial

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resources, management and workplace procedures. Intervene promptly in the event of adverse impacts arising.

#### **D. Performance and Evaluation**

Set appropriate objectives and performance indicators. Comply with all laws, regulations, policies and the environmental specifications. Implement regular monitoring and reporting of compliance with these requirements.

#### **E. Stakeholder Consultation**

Create and maintain opportunities for constructive consultations with employees, authorities, other interested or affected parties. Seek to achieve open exchange of information and mutual understanding in matters of common concern.

#### **F. Continual Improvement**

Through continual evaluation, feedbacks, and innovation, seek to improve performance about social health and well-being and environmental management throughout the lifespan of the mineral exploration project.

#### **G. Financial Provisions for Mineral exploration**

In line with Namibia's environmental rehabilitation policy, the proponent will make the necessary financial provision for compliance with the EMP.

### **6.3 Impacts on the Bio-physical Environment**

#### **6.3.1 Impacts on Archaeological Sites**

The **nature of impact** is outlined below:

- Potential damage to archaeological sites as a result of vehicle tracks, footprints and actions of contractors, employees and visitors of the mineral exploration site.
- As the mitigation measures below are fully enforced, any impact will be significantly reduced compared to with present situation.

**Mitigation Measures** to be enforced:

- 
- Buffer zones will be created around the sites.
  - Adhere to practical guidelines provided by an archaeologist to reduce the archaeological impact of mineral exploration activities.
  - All archaeological sites to be identified and protected before further exploration commences.
  - Notices/information boards will be placed on sites.
  - Training employees regarding the protection of these sites.

**Methods for monitoring:**

- An archaeologist will inspect any identified archaeological sites before commencing with the mineral exploration activities.

**6.3.2 Impacts on Fauna**

The **nature of impact** is outlined below:

- Movement of vehicles in and out of the site.
- Noise produced by moving earth-moving equipment.

**Mitigation Measures** to be enforced:

- Some habitat areas such as trees of the riverbeds and tunnels outcrops will be avoided wherever possible.
- A fauna survey will be conducted to determine the effect of fragmented habitat on game species should the need arise.
- No animals shall be killed, captured or harmed in any way.
- No foodstuff will be left lying around as these will attract animals which might result in human-animal conflict.
- Care will be taken to ensure that no litter is lying around as these may end up being ingested by wild animals
- No animals shall be fed. This allows animals to lose their natural fear of humans, which may result in dangerous encounters.

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**Methods for monitoring:**

- Regular monitoring of any unusual signs of animal habitat.

**6.3.3 Impacts on Avifauna**

Birds or Nest sites will not be disturbed by any employee, visitor or contractor.

**6.3.4 Impact on Vegetation**

The **nature of impact** is outlined below:

- Negative impacts on plants from trenching, compacting and removal of plants.
- Negative Impact from movement of vehicles and the movement of people around the site.
- Negative impacts from land-clearing and mineral exploration operations.

**Mitigation Measures** to be enforced:

- Environmental considerations will always be adhered to before clearing roads, trenching and excavating.
- Paths and roads will be aligned to avoid root zones. Permeable materials will be used wherever possible.
- The movement of vehicles in riverbeds, rocky outcrops and vegetation sensitive areas will be avoided.
- The movement of vehicles will be restricted to certain tracks only.
- Areas with species of concern will be avoided.
- Ministry of Environment and Tourism will be informed of any protected species which will be transplanted in consultation with MET.

**6.3.5 Impacts of Alien invasive Plants**

The **nature of impact** is outlined below:

- Plant or seed material may adhere to car tyres or animals



- 
- Seed or plant material may be imported to site in building materials if the source is contaminated.
  - Seeds may blow from debris removed at sites.

**Mitigation Measures** to be enforced:

- The explorer will ensure that debris is properly disposed of.
- Vehicle tyre inspections can be carried out although this may not be a practical mitigation measure.
- Eradicating alien plants by using an Area Management Plan **Methods for monitoring:**
- Regular monitoring of any unusual signs of alien species.

### 6.3.6 Impacts on Socio-Economic

The **nature of impact** is outlined below:

- Impact from loss of grazing for domestic livestock in “exclusive use zone”
- Impacts on cultural and spiritual values.
- Demographic factors: Attraction of additional population that cannot benefit from the project.
- Perception of Health and Safety risks associated with mineral exploration.

**Mitigation Measures** to be enforced:

- The population change can be mitigated by employing people from the local community and encouraging the contractors to employ local individuals.
- The perception of risks will be mitigated by putting up safety signs wherever possible and ensuring that all employees and visitors to the site undergo a safety induction course.

**Methods for monitoring:**

- Public meetings will be held by the proponent whenever necessary.

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### 6.3.7 Visual Impacts

The **nature of impact** is outlined below:

- Tracks and damaged vegetation caused by the mineral exploration vehicles.

**Mitigation Measures** to be enforced:

- Environmental considerations will be adhered to at all times before clearing roads, trenching and excavating.

**Methods for monitoring:**

- Employees will be trained on the importance of minimising visual impacts.

### 6.3.8 Use of Natural Resources

Water and electricity are very scarce in Namibia. During the exploration, best international practices will be considered as a minimum standard for operation. The bulk of the power supply to the exploration site will be sourced from the proponent's own generator. The proponent will maximise water recycling opportunities wherever possible.

### 6.3.9 Generation of Solid Waste

Correct management of solid waste will involve a commitment to the full waste life cycle by all the employees and contractors of the site. The Proponent's goal is to avoid the generation of solid waste in the first place and if not possible, to minimise the volumes generated by looking at technologies that promote longevity and recycling of products. Ideally, the proponent should transport solid waste to a registered site for disposal. However, it is not certain if such facilities are available in the area or if they have the capacity to handle large increases in volume. Appropriate on-site facilities will be designed to store large volumes of waste.

### 6.3.10 Noise

The **nature of impact** is outlined below:

- Movement of people, and vehicles.
- Noise may be generated from an airborne geophysical survey which may be carried out at a later stage.

**Mitigation Measures** to be enforced:

- Disturbance to fauna that roam the area will be minimized by training the employees on ways to minimise noise.

**6.3.11 Air Quality**

The **nature of impact** is outlined below:

- Dust from movement of people, vehicles and earth-moving machinery. Emissions from vehicles and drill rigs as well.

**Mitigation Measures** to be enforced:

- All staff on should be equipped with dosimeters that measure exposure levels to radiation.
- All staff must be made aware of the health risk and obliged to wear dust masks.

**6.4 Summary of Environmental Management Plan during construction, operation and decommissioning phases**

| <b>Construction/Initial Phase</b> |  |  |   |
|-----------------------------------|--|--|---|
| <b>Environmental Impact</b>       | <b>Proposed mitigation measures</b>  | <b>Responsibility</b>  | <b>Monitoring plan</b>  |
| <b>Air pollution</b>              | <ul style="list-style-type: none"> <li>• Control speed and operation of construction vehicles.</li> <li>• Prohibit idling of vehicles.</li> <li>• Maintenance of vehicles and equipment.</li> <li>• Sensitize field exploration workers and contractors.</li> <li>• Workers should be provided with dust masks if working in sensitive areas.</li> </ul> | <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Site Manager</li> </ul> | <ul style="list-style-type: none"> <li>• Amount of dust produced.</li> <li>• Level of Landscaping carried out.</li> </ul> |
| <b>Noise pollution</b>            | <ul style="list-style-type: none"> <li>• Maintain equipment and vehicles.</li> <li>• Field work should only be carried out only during daytime i.e. 08h00 to 17h00.</li> <li>• Workers should wear earmuffs if working in noisy section.</li> <li>• Management to ensure that noise is kept within reasonable levels.</li> </ul>                         | <ul style="list-style-type: none"> <li>• Contractor</li> <li>• Management</li> </ul>   | Amount of noise   |
| <b>Solid waste</b>                | <ul style="list-style-type: none"> <li>• Any debris should be collected by a waste collection company</li> <li>• If trenches are dug, waste should be re-used or backfilled.</li> <li>• The site should have waste receptacles with bulk storage facilities at convenient points to prevent littering during exploration.</li> </ul>                     | <ul style="list-style-type: none"> <li>• Management</li> </ul>                         | Presence of wellMaintained receptacles and central collection point.  |

|                                       |  |  |  |
|---------------------------------------|--|--|--|
| <b>Oil leaks and spills</b>           | <ul style="list-style-type: none"> <li>Vehicles and equipment should be well maintained to prevent oil leaks.</li> <li>Contractor should have a designated area where maintenance is carried out and that is protected from rainwater.</li> <li>All oil products should be handled carefully.</li> </ul>   | <ul style="list-style-type: none"> <li>Contractor</li> </ul>                     | No oil spills and leaks on the site  |
| <b>First aid</b>                      | <ul style="list-style-type: none"> <li>A well-stocked first aid kit shall be maintained by qualified personnel</li> </ul>  | <ul style="list-style-type: none"> <li>Management</li> </ul>                     | Contents of the first aid kit.   |
| <b>Visual</b>                         | <ul style="list-style-type: none"> <li>Environmental considerations will be adhered to at all times before clearing roads, trenching and excavating.</li> </ul>  | <ul style="list-style-type: none"> <li>Management</li> </ul>                     | <ul style="list-style-type: none"> <li>Employees will be trained on the importance of minimising visual impacts.</li> </ul>  |
| <b>Archaeological Sites</b>           | <ul style="list-style-type: none"> <li>Buffer zones will be created around the sites.</li> <li>Adhere to practical guidelines provided by an archaeologist to reduce the archaeological impact of mineral exploration activities.</li> <li>All archaeological sites to be identified and protected before further exploration commences.</li> </ul>  | <ul style="list-style-type: none"> <li>Management</li> </ul>                     | <ul style="list-style-type: none"> <li>Register of all archaeological sites identified.</li> </ul>   |
| <b>Occupational Health and Safety</b> | <ul style="list-style-type: none"> <li>Provide Personal Protective Equipment Train workers on personal safety and how to handle equipment and machines.</li> <li>A well-stocked first aid kit shall be maintained by qualified personnel.</li> <li>Report any accidents / incidences and treat and Compensate affected workers.</li> <li>Provide sufficient and suitable sanitary conveniences which should be kept clean.</li> </ul>  | <ul style="list-style-type: none"> <li>Contractor</li> <li>Management</li> </ul> | <ul style="list-style-type: none"> <li>Workers using Protective Equipment.</li> <li>Presence of Well stocked First Aid Box.</li> <li>Clean sanitary facilities.</li> </ul> |
| <b>Fauna</b>                          | <ul style="list-style-type: none"> <li>Some habitat areas such as trees of the riverbeds and tunnels outcrops will be avoided wherever possible.</li> <li>A fauna survey will be conducted to determine the effect of fragmented habitat on game species should the need arise.</li> <li>No animals shall be killed, captured or harmed in any way.</li> <li>No foodstuff will be left lying around as these will attract animals which might result in humananimal conflict.</li> </ul> | <ul style="list-style-type: none"> <li>Management</li> </ul>                     | <ul style="list-style-type: none"> <li>Regular monitoring of any unusual signs of animal habitat.</li> </ul>   |
| <b>Alien Invasive Plants</b>          | <ul style="list-style-type: none"> <li>The explorer will ensure that debris is properly disposed off.</li> <li>Vehicle tyre inspections can be carried out although this may not be a practical mitigation measure.</li> <li>Eradicating alien plants by using an Area Management Plan</li> </ul>  | <ul style="list-style-type: none"> <li>Management</li> <li>Contractor</li> </ul> | <ul style="list-style-type: none"> <li>Regular monitoring of any unusual signs of alien species.</li> </ul>  |
| <b>Loss of vegetation</b>             | <ul style="list-style-type: none"> <li>Environmental considerations will be adhered to at all times before clearing roads, trenching and excavating.</li> <li>Paths and roads will be aligned to avoid root zones. Permeable materials will be used wherever possible.</li> <li>The movement of vehicles in riverbeds, rocky outcrops and vegetation sensitive areas will be avoided.</li> <li>The movement of vehicles will be restricted to certain tracks only.</li> </ul>            | <ul style="list-style-type: none"> <li>Contractor</li> <li>Management</li> </ul> | <ul style="list-style-type: none"> <li>Warning signs on site</li> <li>restored vegetation</li> </ul>   |

## Operational Phase

| Environmental/<br>Social<br>Impact   | Proposed mitigation measures   | Responsibility   | Monitoring plan   |
|--------------------------------------|--|--|---|
| <b>Noise pollution</b>               | <ul style="list-style-type: none"> <li>Maintain vehicles and drilling equipment.</li> <li>Exploration drilling should be carried out only during daytime.</li> <li>Workers to wear earmuffs if working in noisy section</li> <li>Management to ensure that noise is kept within reasonable levels.</li> </ul>  | <ul style="list-style-type: none"> <li>Contractor</li> <li>Management</li> </ul> | <ul style="list-style-type: none"> <li>Amount of noise</li> </ul>   |
| <b>Visual</b>                        | <ul style="list-style-type: none"> <li>Environmental considerations will be adhered to at all times before clearing roads, trenching and excavating.</li> </ul>  | <ul style="list-style-type: none"> <li>Management</li> </ul>                     | <ul style="list-style-type: none"> <li>Employees will be trained on the importance of minimising visual impacts.</li> </ul>                             |
| <b>Fauna</b>                         | <ul style="list-style-type: none"> <li>Some habitat areas such as trees of the riverbeds and tunnels outcrops will be avoided wherever possible.</li> <li>A fauna survey will be conducted to determine the effect of fragmented habitat on game species should the need arise.</li> <li>No animals shall be killed, captured or harmed in any way.</li> <li>No foodstuff will be left lying around as these will attract animals which might result in humananimal conflict.</li> </ul> | <ul style="list-style-type: none"> <li>Management</li> </ul>                     | <ul style="list-style-type: none"> <li>Regular monitoring of any unusual signs of animal habitat.</li> </ul>  |
| <b>Alien<br/>Invasive<br/>Plants</b> | <ul style="list-style-type: none"> <li>The explorer will ensure that debris is properly disposed of.</li> <li>Vehicle tyre inspections can be carried out although this may not be a practical mitigation measure.</li> <li>Eradicating alien plants by using an Area Management Plan</li> </ul>   | <ul style="list-style-type: none"> <li>Management</li> <li>Contractor</li> </ul> | <ul style="list-style-type: none"> <li>Regular monitoring of any unusual signs of alien species.</li> </ul>   |
| <b>Loss of<br/>vegetation</b>        | <ul style="list-style-type: none"> <li>Environmental considerations will be adhered to at all times before clearing roads, trenching and excavating.</li> <li>Paths and roads will be aligned to avoid root zones. Permeable materials will be used wherever possible.</li> <li>The movement of vehicles in riverbeds, rocky outcrops and vegetation sensitive areas will be avoided.</li> <li>The movement of vehicles will be restricted to certain tracks only.</li> </ul>            | <ul style="list-style-type: none"> <li>Contractor</li> <li>Management</li> </ul> | <ul style="list-style-type: none"> <li>Warning signs on site</li> <li>restored vegetation</li> </ul>  |
| <b>Solid waste</b>                   | <ul style="list-style-type: none"> <li>Minimize solid waste generated on site.</li> <li>Recycle waste especially waste from trenching.</li> <li>Debris should be collected by waste collection company.</li> <li>Excavation waste should be re-used or backfilled.</li> </ul>  | <ul style="list-style-type: none"> <li>Contractor</li> <li>Management</li> </ul> | <ul style="list-style-type: none"> <li>Amount of waste on Site</li> <li>Presence of wellMaintained receptacles and central collection point.</li> </ul> |



|                                       |  |                           |   |
|---------------------------------------|--|---------------------------|---|
| <b>Oil leaks and spills</b>           | <ul style="list-style-type: none"> <li>Machinery should be well maintained to prevent oil leaks.</li> <li>Contractor should have a designated area where maintenance is carried out and that is protected from rainwater.</li> <li>All oil products should be stored in a site store and handled carefully.</li> </ul>   | • Contractor              | • No oil spills and leaks on the site.  |
| <b>Archaeological Sites</b>           | <ul style="list-style-type: none"> <li>Buffer zones will be created around the sites.</li> <li>Adhere to practical guidelines provided by an archaeologist to reduce the archaeological impact of mineral exploration activities.</li> <li>All archaeological sites to be identified and protected before further exploration commences.</li> </ul>  | • Management              | • Update Register of all archaeological sites identified.   |
| <b>First aid</b>                      | <ul style="list-style-type: none"> <li>A well-stocked first aid kit shall be maintained by qualified personnel</li> </ul>  | • Management              | • Contents of the first aid kit.  |
| <b>Fire preparedness</b>              | <ul style="list-style-type: none"> <li>Firefighting drills carried out regularly.</li> <li>Firefighting emergency response plan.</li> <li>Ensure all firefighting equipment are regularly maintained, serviced and inspected.</li> <li>Fire hazard signs and directions to emergency exit, route to follow and assembly point in case of any fire incidence.</li> </ul>  | • Management              | <ul style="list-style-type: none"> <li>Number of fire drills carried.</li> <li>Proof of inspection on firefighting equipment.</li> <li>Fire Signs put up in strategic places.</li> <li>Availability of firefighting equipment.</li> </ul> |
| <b>Environment Health and Safety</b>  | <ul style="list-style-type: none"> <li>Train workers on personal safety and disaster preparedness.</li> <li>A well-stocked first aid kit shall be maintained by qualified personnel.</li> <li>Report any accidents / incidences and treat and compensate affected workers.</li> <li>Provide sufficient and suitable sanitary conveniences which should be kept clean.</li> <li>Conduct Annual Health and Safety Audits.</li> </ul> | • Management              | <ul style="list-style-type: none"> <li>Provide sanitary facilities.</li> <li>Copies of Annual Audit</li> </ul>  |
| <b>Decommissioning Phase</b>          |  |                           |   |
| <b>Environmental/ Social Impact</b>   | <b>Proposed mitigation measures</b>  | <b>Responsibility</b>     | <b>Monitoring plan/indicator</b>  |
| <b>Noise &amp; Air pollution</b>      | <ul style="list-style-type: none"> <li>Maintain plant equipment.</li> <li>Decommissioning works to be carried out only during daytime.</li> <li>Workers working in noisy section to wear earmuffs.</li> <li>Workers should be provided with dust masks.</li> </ul>   | • Contractor • Management | • Amount of noise   |
| <b>Disturbed Physical environment</b> | <ul style="list-style-type: none"> <li>Undertake a complete environmental restoration programme and introducing appropriate vegetation</li> </ul>  | • Management              |   |

|                                       |   |   |  |
|---------------------------------------|---|---|--|
| <b>Solid waste</b>                    | <ul style="list-style-type: none"> <li>• Solid waste should be collected by a contracted waste collection company</li> <li>• Excavation waste should be re-used or backfilled.</li> </ul>   | <ul style="list-style-type: none"> <li>• Contractor Management</li> </ul> | <ul style="list-style-type: none"> <li>• Amount of waste on Site.</li> <li>• Presence of wellmaintained receptacles and central collection point.</li> </ul> |
| <b>Occupational Health and Safety</b> | <ul style="list-style-type: none"> <li>• Provide Personal Protective Equipment.</li> <li>• Train workers on personal safety and how to handle equipment and machines.</li> <li>• A well-stocked first aid kit shall be maintained by qualified personnel.</li> <li>• Demarcate area under decommissioning.</li> </ul> | <ul style="list-style-type: none"> <li>• Contractor</li> </ul>            | <ul style="list-style-type: none"> <li>• Workers using Protective Equipment.</li> <li>• Presence of a First Aid Box.</li> </ul>                              |

## 6.5 Monitoring, Auditing and Reporting

### 6.5.1 Inspections and Audits

During the life of the project, performance against the EMP commitments will need to be monitored, and corrective action taken where necessary, in order to ensure compliance with the EMP and relevant enviro-legal requirements.

#### 6.5.1.1 Internal Inspections/Audits

The following internal compliance monitoring programme will be implemented:

1. Project kick-off and close-out audits will be conducted on all contractors. This applies to all phases, including drilling contract work during operations:
  - Prior to a contractor beginning work, an audit will be conducted by the applicable phase site manager to ensure that the EMP commitments are included in Contractors' standard operating procedures (SOPs) and method statements.
  - Following completion of a Contractors work, a final close-out audit of the contractor's performance against the EMP commitments will be conducted by the applicable phase site manager.
2. Monthly internal EMP performance audits will be conducted during the construction/initial and decommissioning phases.

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3. Ad hoc internal inspections can be implemented by the applicable phase exploration manager at his/her discretion, or in follow-up to recommendations from previous inspection/audit findings.

#### **6.5.1.2 External Audits**

- At the close of each project phase, and annually during the operational phase, an independently conducted audit of EMP performance will be conducted.
- Specialist monitoring/auditing may be required where specialist expertise are required or in order to respond to grievances or authorities directives.
- Officials from the DEA may at any time conduct a compliance and/or performance inspection of mineral exploration operations. The proponent will be provided with a written report of the findings of the inspection. These audits assist with the continual improvement of the exploration project and the proponent will use such feedback to help improve its overall operations.

#### **6.5.1.3 Documentation**

Records of all inspections/audits and monitoring reports will be kept in line with legislation. Actions will be issued on inspection/audit findings. These will be tracked and closed out.

#### **6.5.1.4 Reporting**

Environmental compliance reports will be submitted to the Ministry of Environment and Tourism on a bi-annual basis.

### **6.5.2 Environmental Management System Framework**

In order implement Environmental Management Practices, an Environmental Management System (EMS) will be established and implemented by the proponent and their Contractors. This subchapter establishes the framework for the compilation of a project EMS. The applicable exploration manager will maintain a paper based and/or electronic system of all environmental management documentation. These will be divided into the following main categories:

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### **6.5.2.1 Policy and Performance Standards**

A draft environmental policy and associated objective, goals and commitments has been included in the EMP. The mineral explorer may adapt these as necessary.

### **6.5.2.2 Enviro-Legal Documentation**

A copy of the approved environmental assessment and EMP documentation will always be available by the proponent. Copies of the Environment Clearance Certificate and all other associated authorisations and permits will also be kept with the exploration team. In addition, a register of the legislation and regulations applicable to the project will be maintained and updated as necessary.

### **6.5.2.3 Impact Aspect Register**

A register of all project aspects that could impact the environment, including an assessment of these impacts and relevant management measures, is to be maintained. This Draft EMP identifies the foreseeable project aspects and related potential impacts of the proposed project, and as such forms the basis for the AspectImpact Register; with the Project Activity. It is however noted that during the life of the project additional project aspects and related impacts may arise which would need to be captured in the Aspect-Impact Register. In this regard, the impact identification principles set forth in the scoping report can be used to update the Register. This method can be modified as required by the applicable exploration manager as necessary during the life of the project.

### **6.5.2.3 Procedures and Method Statements**

In order to affect the commitments contained in this EMP, procedures and method statements will be drafted by the relevant responsible mineral exploration staff and Contractors. These include, but may not be limited:

- Standard operating procedures for environmental action plan and management programme execution.
- Incident and emergency response procedures.
- Auditing, monitoring and reporting procedures, and

- 
- Method statements for EMP compliance for ad hoc activities not directly addressed in the EMP action plans.

All procedures are to be version controlled and signed off by the applicable exploration manager. In addition, knowledge of procedures by relevant staff responsible for the execution thereof must be demonstrable and training records maintained.

#### **6.5.2.4 Register of Roles and Responsibilities**

During project planning and risk assessments, relevant roles and responsibilities will be determined. These must be documented in a register of all environmental commitment roles and responsibilities. The register is to include relevant contact details and must be updated as required.

#### **6.5.2.5 Site Map**

An up to date map of the exploration site indicating all project activities is to be maintained. In addition to the project layout, the following detail must be depicted:

- Materials handling and storage;
- Waste management areas (collection, storage, transfer, etc.);
- Sensitive areas;
- Incident and emergency equipment locations; and Location of responsible parties.

#### **6.5.2.6 Environmental Management Schedule**

A schedule of environmental management actions is to be maintained by the applicable phase site managers and/or relevant Contractors. A master schedule of all such activities is to be kept up to date by the exploration manager. Scheduled environmental actions can include, but are not limited to:

- Environmental risk assessment;
- Environmental management meetings;
- Soil handling, management and rehabilitation;
- Waste collection



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- Incident and emergency response equipment evaluations and maintenance
  - Environmental training;
  - Stakeholder engagement; Environmental inspections; and
  - Auditing, monitoring and reporting.

#### **6.5.2.7 Change Management**

The EMS must have a procedure in place for change management. In this regard, updating and revision of environmental documentation, of procedures and method statements, actions plants etc. will be conducted as necessary in order to account for the following scenarios:

- Changes to standard operating procedures (SOPs);
- Changes in scope;
- Ad hoc actions;
- Changes in project phase; and
- Changes in responsibilities or roles

All documentation will be version controlled and require sign off by the applicable phase site managers.

### **6.6 Closure Plan**

The closure vision for the proposed project is to establish a safe, stable and nonpolluting post-prospecting landscape that can facilitate integrated, self-sustaining and value generating opportunities, thereby leave a lasting positive legacy. The aim of the closure plan is to:

- Creating a safe, physically stable rehabilitated landscape that limits long-term erosion potential and environmental degradation.
- Sustaining long term catchment yield and water quality.
- Focusing on establishing a functional post-prospecting landscape that enables self-sustaining agricultural practices where possible.

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- To encourage, where appropriate, the re-instatement of terrestrial and aquatic wetland biodiversity

### 6.6.1 Alternatives Considered

Considering that this is an exploration project, the proposed project is not complex, and the risks associated with prospecting are understood and can be mitigated at closure. Alternative options for closure are limited. There are only two options that have been considered as activity alternatives for the closure plan:

- **Preferred Alternative:** Closure or Backfill of boreholes with overburden removed during drilling.
- **Alternative 2:** To Leave boreholes open, in-order to allow for groundwater recharge by surface run-off.

### 6.6.2 Preferred Alternative: Rehabilitation/ Backfill of boreholes

Rehabilitation is the restoration of a disturbed area that has been degraded as a result of activities such as mining, road construction or waste disposal, to a land use in conformity with the original land use before the activity started. This also includes aesthetical considerations, so that a disturbed area will not be visibly different to the natural environment. This also involves maintaining physical, chemical and biological ecosystem processes in degraded environments, hence the preferred option of backfilling the boreholes with the overburden removed during development and cover with growth medium to establish vegetation. This option has several advantages as discussed below:

#### Advantages:

- The site will be aesthetically acceptable;
- The site will blend in with the environment;
- The site will be a suitable habitat for fauna and flora again.
- The site will be safe and pollution free;
- Revegetating the site will ensure that the site is non-erodible.

Opting for alternative 1, which is to leave boreholes without backfilling poses a risk in that, these boreholes may fill in with water, which may become attractive to wildlife and communities leading to drowning and the risk of being trapped in the declines. To mitigate these risks, it is necessary to backfill. Treatment technologies should be used to prevent decanting.

### 6.6.3 Closure Assumptions

This closure plan has been developed based on limited available information including environmental data. Some of the information currently available may need to be supplemented during the operational period. Therefore, several assumptions were made about general conditions, and closure and rehabilitation of the facilities at the site to develop the proposed closure actions. As additional information is collected during operations, these assumptions will be reviewed and revised as appropriate.

The assumptions used to prepare this plan include the following:

- The closure period will commence once the last planned weight of minerals has been extracted from the site for laboratory testing.
- The proposed prospecting sites will be adhered to minimise the potential impacts.
- Vegetation establishment will be in line with a project area's indigenous vegetation.
- Water management infrastructure developed for the operational phase will be retained for closure /end of the life of the project as necessary.
- There are limited opportunities for any infrastructure to be built on site and if any infrastructure is built, it will be of limited benefit to the community. Therefore, all buildings will be demolished.
- All hazardous and domestic waste will be transported offsite for disposal in licensed landfills.
- No roads are anticipated to be constructed to access the site; existing roads will be used as far as possible. Where access tracks have been developed in

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cases where there are no roads, these will be rehabilitated and closed as part of normal closure actions.

### **6.6.4 Closure and Rehabilitation Activities**

The rehabilitation actions intended to be undertaken at the end of the life of the proposed prospecting activities are described below.

#### **6.6.4.1 Infrastructure**

All infrastructures will be decommissioned, and the footprints rehabilitated for the establishment of vegetation. Material inventories will be managed near the end of prospecting activities to minimize any surplus materials at closure. Where practicable, equipment and materials with value not needed for post-closure operations will be sold and or removed from the site. Equipment with scrap or salvage value will be removed from the site and sold to recyclers.

A soil contamination investigation will be conducted on completion of demolition activities. The purpose of this is to identify areas of possible contamination and design and implement appropriate remedial measures to ensure that the soil contaminants are removed. Closure actions will include:

- All power and water services to be disconnected and certified as safe prior to commencement of any decommissioning works;
- All remaining inert equipment and decommissioning waste will be disposed to the nearest licensed general waste disposal facility;
- Salvageable equipment will be removed and transported offsite prior and during decommissioning;
- All tanks, pipes and sumps containing hydrocarbons to be flushed or emptied prior to removal to ensure no hydrocarbon/chemical residue remains;

#### **6.6.4.2 Boreholes**

Closure of boreholes will entail backfilling with overburden stripped ahead of prospecting activities. All overburden should be replaced into the void and the final surface reshaped to simulate surrounding topography while ensuring that the surface is free draining.

Once backfilling is complete a growth medium cover will be placed, and vegetation will be established. There may be a requirement to include sacrificial erosion protection measures on the surface while vegetation is being established.

#### **6.6.4.3 Roads**

Existing roads will be used as far as possible. Closure actions concerning roads and parking areas will include:

- Removal of all signage, fencing, shade structures, traffic barriers, etc.
- All 'hard top' surfaces to be ripped along with any concrete structures.
- All potentially contaminated soils are to be identified and demarcated for later remediation; and
- All haul routes that have been treated with saline dust suppression water need to be treated, with the upper surface ripped and removed to designated contaminant disposal areas.

#### **6.6.4.4 Remediation of Contaminated Areas**

All soil, contaminated with hydrocarbons, will be identified, excavated, if possible, to at least 200 mm below the contaminated zone and then treated.

- All tanks, pipes and sumps containing hydrocarbons will be flushed or emptied.
- Removed soils will be managed as determined by the nature and extent of the contamination.
- Liquid storage tanks will be emptied, the structure removed/demolished and sub-surface holes filled; and
- All equipment in which chemicals have been stored or transported will be cleaned and disposed of in a suitable disposal facility.

#### **6.6.4.5 Vegetation**

Successful revegetation will help control erosion of soil resources, maintain soil productivity and reduce sediment loading in streams utilizing non-invasive plants that fit the criteria of the habitat (e.g. soils, water availability, slope and other appropriate

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environmental factors). Invasive species will be avoided, and the area will be managed to control the spread of these species.

To counter the effects of erosion, naturally occurring grassland species will be planted on slopes. These species will provide soil holding capacity and reduce runoff velocity.

The flatter areas will be re-vegetated with the objective of creating a sustainable ecosystem. The occurrence of protected plant species will need to be determined before vegetation is removed and the required permits will be obtained for either destruction or relocation.

#### **6.6.4.6 Waste Management**

Waste management activities will include:

- Hazardous waste will be managed handled, classified and disposed.
- Non-hazardous will be disposed in the nearby licensed landfill site;
- Scrap and waste steel will be sold to recyclers.
- It may be necessary to fence temporary salvage yards for security reasons, particularly where these are located close to public roads.



## 7. Public Participation Process

The public participation process commenced with newspaper advertisements in two widely distributed newspapers for two consecutive weeks as shown in Appendix B.

The registered interested and affected are indicated in the table below:

**Table 11 Registered IAP's from various organs of state.**

| Name               | Position                             | Organization                                   |
|--------------------|--------------------------------------|--|
| Teofillus Nghitila | Executive Director                   | Ministry of Environment and Tourism            |
| Timoteus Mufeti    | Environmental Commissioner           | Ministry of Environment and Tourism            |
| Maria Amakali      | Director: Water Resources Management | Ministry of Agriculture, Water and Land Reform |
| E. Shivolo         | Mining Commissioner                  | Min. of M&E - Mining Commissioner              |

Interested and affected parties that were notified directly include surrounding farmers, government departments, regional council, Namwater, Chamber of Mines and individuals that may be affected by the explorations activities. No negative concerns were received at this stage. Should any interested and affected parties raise any concerns during the on-going project phase, the Ministry of Environment and Tourism will be immediately notified. The registered interested and affected are indicated in the table below.

| Name              | Organization   | email                    | Tel           | Comment   | Response  |
|-------------------|--|--------------------------|---------------|---|---|
| lipinge Ndelimona | EIA Tracking and Monitoring in Namibia (EIA Tracker) Namibian Environment and Wildlife Society | ndeliimonachox@gmail.com | +264814138822 | I hereby request to be registered as an I&AP for the EIA: Environmental Impact Assessment for mineral exploration on EPL 8897, as issued in your public notice in the New Era newspaper. Kindly forward me the Background Information Documents (BID) | Thank you, We have registered you as an I&AP. Attached please find the BID. |

## 8. Conclusion

The scoping report is prepared for the Environmental Impact Assessment for mineral exploration on an area which is located about 40 km north of Outjo. Environmental scoping is a critical step in the preparation of an EIA for the proposed mineral exploration activities.

Basically, mineral exploration is relatively unsophisticated and rudimentary. The methods that will be employed are mainly target generation, target drilling, resource evaluation and mineral resource definition.

With the potential employment of 15 people, this means that 15 families will benefit from the project during the exploration phase. The project has great potential to improve livelihoods and contribute to sustainable development within the surrounding community.

At this stage, electricity requirements for the project are minimal. The bulk of the power supply to the exploration site will be sourced from the proponent's own generator.

The potential negative impacts associated with the proposed mineral exploration project are expected to be low to medium in significance. Provided that the relevant mitigation measures are successfully implemented by the proponent, there are no environmental reasons why the proposed project should not be approved. The project will have significant positive economic impacts that would benefit the local, regional and national economy of Namibia.

Several other potential impacts have been addressed in Section 5 and 6 of this EIA, and will be managed through the implementation of the EMP.

The EMP contains a set of Environmental Specifications that will form part of all contracts between the proponent and contractors such as lubrication companies. The requirements of the EMP will be enforced on site by the Management team, and periodic environmental audits will be undertaken and submitted to MET.

This EIA has been subject to a few limitations, which are explained as follows: -

- 
- the time available in which to secure an environmental contract with the authorities; and,

The limited botanical work done to date did not raise any concerns but will be monitored on an on-going basis. If any “special” species of plants are found, these will be located by GPS. An addendum will then be added to the EMP to indicate localities that should be avoided, or to implement other appropriate measures about any special plants.

## 9. References

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## Appendix A

| SCIENTIFIC NAME                  | COMMON NAME                  | STATUS                | OCCURRENCE   |
|----------------------------------|------------------------------|-----------------------|--------------|
| <i>Eidolon helvum</i>            | STRAW-COLORED FRUIT BAT      | <b>SECURE</b>         | SEASONAL     |
| <i>Nycteris thebaica</i>         | COMMON SLIT-FACED BAT        | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Taphozous mauritanus</i>      | TOMB BAT                     | <b>SECURE</b>         | SEASONAL     |
| <i>Rhinolophus fumigatus</i>     | RÜPPELL'S HORSESHOE BAT      | <b>SECURE</b>         | OCCASIONALLY |
| <i>Rhinolophus darlingi</i>      | DARLING'S HORSESHOE BAT      | <b>SECURE</b>         | OCCASIONALLY |
| <i>Rhinolophus denti</i>         | DENT'S HORSESHOE BAT         | <b>SECURE</b>         | OCCASIONALLY |
| <i>Hipposideros commersoni</i>   | COMMERSON' S LEAF-NOSED BAT  | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Hipposideros caffer</i>       | SUNDEVALL' S LEAF-NOSED BAT  | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Chaerephon nigeriae</i>       | NIGERIAN FREE-TAILED BAT     | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Mops midas</i>                | MIDAS FREE-TAILED BAT        | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Tadarida aegyptiaca</i>       | EGYPTIAN FREE-TAILED BAT     | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Miniopterus inflatus</i>      | GREATER LONG-FINGERED BAT    | <b>SECURE</b>         | RARELY       |
| <i>Miniopterus schreibersi</i>   | SCHREIBERS' LONGFINGERED BAT | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Neoromicia capensis</i>       | CAPE SEROTINE BAT            | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Neoromicia zuluensis</i>      | ALOE SEROTINE BAT            | <b>SECURE</b>         | RARELY       |
| <i>Nycticeinops schlieffenii</i> | SCHLIEFFEN' S BAT            | <b>SECURE</b>         | RARELY       |
| <i>Scotophilus dingani</i>       | AFRICAN YELLOW BAT           | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Atelerix frontalis</i>        | SOUTHERN AFRICAN HEDGEHOG    | <b>UNKNOWN, RARE?</b> | RARELY       |
| <i>Crociodura fuscumurina</i>    | TINY MUSK SHREW              | <b>SECURE</b>         | RARELY       |
| <i>Crociodura hirta</i>          | LESSER RED MUSK SHREW        | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Galago moholi</i>             | SOUTHERN AFRICAN BUSHBABY    | <b>UNKNOWN, RARE?</b> | ABUNDANTLY   |
| <i>Papio ursinus</i>             | CHACMA BABOON                | <b>SECURE</b>         | ABUNDANTLY   |
|                                  |                              |                       |              |
| <i>Lepus victoriae</i>           |                              | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Xerus inaurus</i>             | CAPE GROUND SQUIRREL         | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Funisciurus congicus</i>      | STRIPED TREE SQUIRREL        | <b>SECURE</b>         | RARELY       |
| <i>Saccostomus campestris</i>    | POUCHED MOUSE                | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Tatera leucogaster</i>        | BUSHVELD GERBIL              | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Tatera brantsii</i>           | HIGHVELD GERBIL              | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Desmodillus auricularis</i>   | SHORT-TAILED GERBIL          | <b>SECURE</b>         | RARELY       |
| <i>Gerbillurus pæba</i>          | PYGMY GERBIL                 | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Steatomys pratensis</i>       | FAT MOUSE                    | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Malacothrix typica</i>        | LARGE-EARED MOUSE            | <b>SECURE</b>         | RARELY       |
| <i>Mus indutus</i>               | KALAHARI PYGMY MOUSE         | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Lemniscomys rosalia</i>       | SINGLE-STRIPED MOUSE         | <b>SECURE</b>         | RARELY       |
| <i>Rhabdomys pumilio</i>         | STRIPED MOUSE                | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Thallomys paedulus</i>        | TREE RAT                     | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Thallomys nigricauda</i>      | BLACK-TAILED TREE RAT        | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Aethomys namaquensis</i>      | NAMAQUA ROCK RAT             | <b>SECURE</b>         | RARELY       |
| <i>Aethomys chrysophilus</i>     | RED VELD RAT                 | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Zelotomys woosnami</i>        | WOOSNAM'S DESERT RAT         | <b>RARE</b>           | RARELY       |
| <i>Mastomys natalensis</i>       | NATAL MULTIMAMMATE MOUSE     | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Mastomys coucha</i>           | MULTIMAMMATE MOUSE           | <b>SECURE</b>         | ABUNDANTLY   |
| <i>Graphiurus murinus</i>        | WOODLAND DORMOUSE            | <b>SECURE</b>         | ABUNDANTLY   |



|                                 |                            |                          |            |
|---------------------------------|----------------------------|--------------------------|------------|
| <i>Pedetes capensis</i>         | SPRINGHARE                 | SECURE                   | ABUNDANTLY |
| <i>Hystrix africaeaustralis</i> | SOUTHERN AFRICAN PORCUPINE | SECURE                   | ABUNDANTLY |
| <i>Cryptomys damarensis</i>     | DAMARA MOLE RAT            | SECURE                   | ABUNDANTLY |
| <i>Felis lybica</i>             | AFRICAN WILD CAT           | ENDANGERED & SUPERFICIAL | RARELY     |

|                               |                        |  |              |
|-------------------------------|------------------------|--|--------------|
| <i>Felis nigripes</i>         | SMALL - SPOTTED CAT    | INDETERMINATE; PERIPHERAL; RARE?               | RARELY       |
| <i>Leptailurus serval</i>     | SERVAL                 | AMBIGUOUS & SUPERFICIAL                        | RARELY       |
| <i>Caracal caracal</i>        | CARACAL                | SECURE   | ABUNDANTLY   |
| <i>Panthera pardus</i>        | LEOPARD                | SECURE? & SUPERFICIAL                          | RARELY       |
| <i>Panthera leo</i>           | LION                   | AMBIGUOUS(END ANGERED) & SUPERFICIAL           | EXTINCT      |
| <i>Acinonyx jubatus</i>       | CHEETAH                | INADEQUATELY KNOWN (ENDANGERED?) & SUPERFICIAL | ABUNDANTLY   |
| <i>Civettictis civetta</i>    | CIVET                  | AMBIGUOUS, RARE? & SUPERFICIAL                 | RARELY       |
| <i>Genetta maculata</i>       | SMALL-SPOTTED GENET    | SECURE – SP (taxonomy)                         | ABUNDANTLY   |
| <i>Galarella sanguineus</i>   | SLENDER MONGOOSE       | SECURE   | ABUNDANTLY   |
| <i>Helogale parvula</i>       | DWARF MONGOOSE         | SECURE   | ABUNDANTLY   |
| <i>Mungos mungo</i>           | BANDED MONGOOSE        | SECURE   | ABUNDANTLY   |
| <i>Cynictis penicillata</i>   | YELLOW MONGOOSE        | SECURE   | ABUNDANTLY   |
| <i>Crocuta crocuta</i>        | SPOTTED HYAENA         | SECURE? & SUPERFICIAL                          | EXTINCT      |
| <i>Parahyaena brunnea</i>     | BROWN HYAENA           | INADEQUATELY KNOWN (ENDANGERED?) & SUPERFICIAL | OCCASIONALLY |
| <i>Proteles cristatus</i>     | AARDWOLF               | INADEQUATELY KNOWN (ENDANGERED?) & SUPERFICIAL | ABUNDANTLY   |
| <i>Canis mesomelas</i>        | BLACK-BACKED JACKAL    | SECURE   | ABUNDANTLY   |
| <i>Lycaon pictus</i>          | WILD DOG               | ENDANGERED & SUPERFICIAL                       | EXTINCT      |
| <i>Otocyon megalotis</i>      | BAT-EARED FOX          | ENDANGERED? & SUPERFICIAL- SP (taxonomy)       | RARELY       |
| <i>Vulpes chama</i>           | CAPE FOX               | ENDANGERED?                                    | RARELY       |
| <i>Ictonyx striatus</i>       | STRIPED POLECAT        | SECURE   | ABUNDANTLY   |
| <i>Mellivora capensis</i>     | HONEY BADGER           | SECURE   | RARELY       |
| <i>Poecilogale albinucha</i>  | AFRICAN STRIPED WEASEL | AMBIGUOUS(RARE?)                               | RARELY       |
| <i>Manis temminckii</i>       | SAVANNA PANGOLIN       | ENDANGERED & SUPERFICIAL                       | RARELY       |
| <i>Phacochoerus africanus</i> | SOUTHERN WARTHOG       | SECURE   | ABUNDANTLY   |
| <i>Giraffa camelopardalis</i> | GIRAFFE                | ENDANGERED? & SUPERFICIAL                      | EXTINCT      |
| <i>Alcelaphus buselaphus</i>  | RED HARTEBEEST         | SECURE ?                                       | ABUNDANTLY   |
| <i>Antidorcas marsupialis</i> | SPRINGBOK              | SECURE   |              |
| <i>Connochaetes taurinus</i>  | BLUE WILDEBEEST        | INADEQUATELY KNOWN (ENDANGERED?) & SUPERFICIAL | ABUNDANTLY   |

|                                 |                  |  |            |
|---------------------------------|------------------|--|------------|
| <i>Hippotragus equinus</i>      | ROAN             | <b>ENDANGERED &amp; SUPERFICIAL</b>                          | ABUNDANTLY |
| <i>Madoqua damarensis</i>       | DAMARA DIK-DIK   | <b>INADEQUATELY KNOWN</b>                                    | RARELY     |
| <i>Oryx gazella</i>             | GEMSBOK          | <b>SECURE</b>  | ABUNDANTLY |
| <i>Raphicerus campestris</i>    | STEENBOK         | <b>SECURE</b>  | ABUNDANTLY |
| <i>Sylvicapra grimmia</i>       | COMMON DUIKER    | <b>SECURE</b>  | ABUNDANTLY |
| <i>Syncerus caffer</i>          | BUFFALO          | <b>INSUFFICIENTLY KNOWN &amp; SUPERFICIAL</b>                | ABUNDANTLY |
| <i>Tragelaphus oryx</i>         | ELAND            | <b>INADEQUATELY KNOWN &amp; SUPERFICIAL</b>                  | ABUNDANTLY |
| <i>Tragelaphus strepsiceros</i> | GREATER KUDU     | <b>SECURE</b>  | ABUNDANTLY |
|                                 |                  |  |            |
| <i>Equus burchelli</i>          | PLAINS ZEBRA     | <b>INADEQUATELY KNOWN &amp; SUPERFICIAL</b>                  | EXTINCT    |
| <i>Ceratotherium simum</i>      | WHITE RHINOCEROS | <b>EXTINCT &amp; REINTRODUCED</b><br>(non topotypical stock) | EXTINCT    |
| <i>Diceros bicornis</i>         | BLACK RHINOCEROS | <b>ENDANGERED &amp; SUPERFICIAL</b>                          | EXTINCT    |
| <i>Loxodonta africana</i>       | AFRICAN ELEPHANT | <b>ENDANGERED &amp; SUPERFICIAL</b>                          | EXTINCT    |
| <i>Orycteropus afer</i>         | AARDVARK         | <b>SECURE ?</b>  | ABUNDANTLY |
| <i>Elephantulus intufi</i>      | BUSHVELD SENGI   | <b>ENDEMIC AND SECURE</b>                                    | ABUNDANTLY |

#### Reptile species which are likely to occur within the exploration area:

| SCIENTIFIC NAME                 | COMMON NAME                 | STATUS                              | OCCURRENCE |
|---------------------------------|-----------------------------|-------------------------------------|------------|
| <i>Pelomedusa subrufa</i>       | HELMETED TERRAPIN           | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Geochelone pardalis</i>      | LEOPARD TORTOISE            | <b>ENDANGERED &amp; SUPERFICIAL</b> | ABUNDANTLY |
| <i>Psammobates oculiferus</i>   | KALAHARI TORTOISE           | <b>ENDANGERED</b>                   | ABUNDANTLY |
| <i>Lygodactylus bradfieldi</i>  | NAMIBIAN DWARF GECKO        | <b>ENDEMIC &amp; SECURE</b>         | ABUNDANTLY |
| <i>Colopus wahlbergii</i>       | KALAHARI GROUND GECKO       | <b>SECURE</b>                       | RARELY     |
| <i>Pachydactylus turneri</i>    | TROPICAL BUTTON-SCALE GECKO | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Pachydactylus capensis</i>   | CAPE GECKO                  | <b>SECURE</b>                       | UNCOMMONLY |
| <i>Pachydactylus punctatus</i>  | SPECKLED GECKO              | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Ptenopus garrulus</i>        | COMMON BARKING GECKO        | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Agama aculeata</i>           | COMMON GROUND AGAMA         | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Chamaeleo dilepis</i>        | FLAP-NECK CHAMELEON         | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Acontias occidentalis</i>    | WESTERN LEGLESS SKINK       | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Lygosoma sundevalli</i>      | COMMON WRITHING SKINK       | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Trachylepis capensis</i>     | CAPE SKINK                  | <b>SECURE</b>                       | UNCOMMONLY |
| <i>Trachylepis punctulata</i>   | EASTERN VARIEGATED SKINK    | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Trachylepis wahlbergii</i>   | WAHLBERG'S STRIPED SKINK    | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Trachylepis varia</i>        | COMMON VARIABLE SKINK       | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Heliobolis lugubris</i>      | BUSHVELD LIZARD             | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Ichnotropis capensis</i>     | CAPE ROUGH-SCALED LIZARD    | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Ichnotropis squamulosa</i>   | COMMON ROUGH-SCALED LIZARD  | <b>SECURE</b>                       | ABUNDANTLY |
| <i>Nucras holubi</i>            | HOLUB'S SANDVELD LIZARD     | <b>SECURE</b>                       | UNCOMMONLY |
| <i>Nucras intertexta</i>        | SPOTTED SANDVELD LIZARD     | <b>SECURE</b>                       | UNCOMMONLY |
| <i>Pedioplanis lineocellata</i> | OCELLATED SAND LIZARD       | <b>SECURE</b>                       | ABUNDANTLY |

|                                    |                                    |                           |            |
|------------------------------------|------------------------------------|---------------------------|------------|
| <i>Pedioplanis namaquensis</i>     | NAMAQUA SAND LIZARD                | SECURE                    | ABUNDANTLY |
| <i>Gerrhosaurus auritus</i>        | KALAHARI PLATED LIZARD             | SECURE                    | UNCOMMONLY |
| <i>Gerrhosaurus nigrolineatus</i>  | BLACK-LINED PLATED LIZARD          | SECURE                    | ABUNDANTLY |
| <i>Varanus albigularis</i>         | VELD LEGUAAN (MONITOR)             | ENDANGERED & SUPERFICIAL  | ABUNDANTLY |
| <i>Dalophia pistillum</i>          | BLUNT-TAILED WORM LIZARD           | SECURE ?                  | MARGINALLY |
| <i>Monopeltis anchietae</i>        | ANGOLAN SPADE-SNOUTED WORM LIZARD  | SECURE                    | ABUNDANTLY |
| <i>Monopeltis infuscata</i>        | DUSKY SPADE-SNOUTED WORM LIZARD    | SECURE                    | ABUNDANTLY |
| <i>Monopeltis leonhardi</i>        | KALAHARI SPADE-SNOUTED WORM LIZARD | SECURE                    | MARGINALLY |
| <i>Monopeltis mauricei</i>         | SLENDER SPADE-SNOUTED WORM LIZARD  | SECURE                    | MARGINALLY |
| <i>Zygaspis quadrifrons</i>        | KALAHARI ROUND-HEADED WORM LIZARD  | SECURE                    | ABUNDANTLY |
| <i>Leptotyphlops labialis</i>      | DAMARA WORM SNAKE                  | ENDEMIC & SECURE          | MARGINALLY |
| <i>Leptotyphlops scutifrons</i>    | PETERS= WORM SNAKE                 | SECURE                    | ABUNDANTLY |
| <i>Rhinotyphlops schlegelii</i>    | SCHLEGEL'S BLIND SNAKE             | SECURE                    | ABUNDANTLY |
| <i>Rhinotyphlops boylei</i>        | KALAHARI BLIND SNAKE               | SECURE                    | RARELY     |
| <i>Python natalensis</i>           | SOUTHERN AFRICAN PYTHON            | ENDANGERED & SUPERFICIAL  | ABUNDANTLY |
| <i>Amblyodipsas polylepis</i>      | COMMON PURPLE-GLOSSED SNAKE        | INADEQUETLY KNOWN; RARE?  | RARELY     |
| <i>Amblyodipsas ventrimaculata</i> | KALAHARI PURPLE-GLOSSED SNAKE      | SECURE                    | MARGINALLY |
| <i>Aparallactus capensis</i>       | CAPE CENTIPEDE EATER               | INADEQUETLY KNOWN ; RARE? | RARELY     |
| <i>Atractaspis bibronii</i>        | SOUTHERN STILLETO SNAKE            | SECURE                    | ABUNDANTLY |
| <i>Xenocalamus bicolor</i>         | VARIABLE QUILL-SNOUTED SNAKE       | SECURE                    | ABUNDANTLY |
| <i>Xenocalamus mechowii</i>        | ELONGATED QUILL-SNOUTED SNAKE      | SECURE                    | MARGINALLY |
| <i>Crotaphopeltis hotamboeia</i>   | WHITE-LIPPED SNAKE                 | INADEQUETLY KNOWN         | RARELY     |
| <i>Dasypeltis scabra</i>           | RHOMBIC EGG EATER                  | SECURE                    | ABUNDANTLY |
| <i>Dispholidus typus</i>           | BOOMSLANG                          | SECURE                    | ABUNDANTLY |
| <i>Lamprophis fuliginosus</i>      | BROWN HOUSE SNAKE                  | SECURE                    | ABUNDANTLY |
| <i>Lycophidion capense</i>         | CAPE WOLF SNAKE                    | SECURE                    | ABUNDANTLY |
| <i>Mehelya capensis</i>            | CAPE FILE SNAKE                    | SECURE                    | UNCOMMONLY |
| <i>Mehelya nyassae</i>             | BLACK FILE SNAKE                   | INADEQUETLY KNOWN         | RARELY     |
| <i>Mehelya vernayi</i>             | ANGOLAN FILE SNAKE                 | INADEQUETLY KNOWN         | UNCOMMONLY |
| <i>Philothamnus angolensis</i>     | ANGOLAN GREEN SNAKE                | SECURE                    | UNCOMMONLY |
| <i>Philothamnus semivariegatus</i> | SPOTTED BUSH SNAKE                 | SECURE                    | ABUNDANTLY |
| <i>Prosymna angolensis</i>         | ANGOLA SHOVEL-SNOUT                | SECURE                    | MARGINALLY |
| <i>Prosymna bivittata</i>          | TWIN-STRIPED SHOVELSNOUT           | SECURE                    | MARGINALLY |
| <i>Psammophis angolensis</i>       | DWARF WHIP SNAKE                   | SECURE                    | ABUNDANTLY |
| <i>Psammophis jallae</i>           | JALLA'S SAND SNAKE                 | INADEQUETLY KNOWN         | RARELY     |
| <i>Psammophis leopardinus</i>      | LEOPARD WHIP SNAKE                 | ENDEMIC & SECURE          | UNCOMMONLY |
| <i>Psammophis mossambicus</i>      | OLIVE WHIP SNAKE                   | SECURE                    | ABUNDANTLY |
| <i>Psammophis notostictus</i>      | KAROO WHIP SNAKE                   | SECURE                    | MARGINALLY |
| <i>Psammophis subtaeniatus</i>     | WESTERN STRIPED-BELLIED SAND SNAKE | SECURE                    | ABUNDANTLY |
| <i>Psammophis trigrammus</i>       | WESTERN WHIP SNAKE                 | ENDEMIC & SECURE          | ABUNDANTLY |
| <i>Psammophis trinasalis</i>       | KALAHARI SAND SNAKE                | SECURE                    | UNCOMMONLY |
| <i>Psammophylax tritaeniatus</i>   | STRIPED SKAAPSTEKER                | SECURE                    | ABUNDANTLY |
| <i>Pseudaspis cana</i>             | MOLE SNAKE                         | SECURE                    | ABUNDANTLY |
| <i>Telescopus semiannulatus</i>    | SOUTHERN TIGER SNAKE               | SECURE                    | ABUNDANTLY |
| <i>Thelotornis capensis</i>        | VINE SNAKE                         | SECURE                    | UNCOMMONLY |
| <i>Aspidelaps lubricus</i>         | CORAL SNAKE                        | SECURE                    | UNCOMMONLY |

|                                |                           |                  |            |
|--------------------------------|---------------------------|------------------|------------|
| <i>Aspidelaps scutatus</i>     | SHIELD-NOSE SNAKE         | SECURE           | ABUNDANTLY |
| <i>Dendroaspis polylepis</i>   | BLACK MAMBA               | SECURE           | ABUNDANTLY |
| <i>Elapsoidea semiannulata</i> | ANGOLA GARTER SNAKE       | SECURE           | UNCOMMONLY |
| <i>Elapsoidea sundevallii</i>  | KALAHARI GARTER SNAKE     | SECURE           | UNCOMMONLY |
| <i>Naja anchietae</i>          | ANGOLAN COBRA             | SECURE           | ABUNDANTLY |
| <i>Naja mossambica</i>         | MOZAMBIQUE SPITTING COBRA | SECURE           | RARELY     |
| <i>Naja nigricincta</i>        | ZEBRA SNAKE               | ENDEMIC & SECURE | ABUNDANTLY |
| <i>Bitis caudalis</i>          | HORNED ADDER              | SECURE           | UNCOMMONLY |
| <i>Bitis arietans</i>          | PUFF ADDER                | SECURE           | ABUNDANTLY |

Bird species which are likely to occur within the project area:

| SCIENTIFIC NAME                | COMMON NAME           | STATUS IN NAMIBIA |
|--------------------------------|-----------------------|-------------------|
| <i>Accipiter badius</i>        | Little Banded Goshawk | Secure Secure     |
| <i>Accipiter ovampensis</i>    | Ovambo Sparrowhawk    |                   |
| <i>Actophilornis africanus</i> | African Jacana        | Secure            |
| <i>Agapornis roseicollis</i>   | Rosy faced Lovebird   | Secure            |
| <i>Anastomus lamelligerus</i>  | Openbilled Stork      | Secure            |
| <i>Anthus cinnamomeus</i>      | Richard's Pipit       | Secure            |
| <i>Apus affinis</i>            | Little Swift          | Secure            |
| <i>Apus apus</i>               | European Swift        | Secure            |

|                                 |                           |                   |
|---------------------------------|---------------------------|-------------------|
| <i>Apus caffer</i>              | Whiterumped Swift         | Secure            |
| <i>Apus melba</i>               | Alpine Swift              | Secure            |
| <i>Aquila nipalensis</i>        | Steppe Eagle              | Secure -          |
| <i>Aquila rapax</i>             | Tawny Eagle               | <b>Endangered</b> |
| <i>Aquila wahlbergi</i>         | Wahlberg's Eagle          | Secure            |
| <i>Ardeotis kori</i>            | Kori Bustard              | Secure            |
| <i>Batis molitor</i>            | Chinspot Batis            | Secure            |
| <i>Batis pririt</i>             | Pirit Batis               | Secure            |
| <i>Bubalornis niger</i>         | Redbilled Buffalo Weaver  | Secure            |
| <i>Burhinus capensis</i>        | Spotted Dikkop            | Secure            |
| <i>Buteo buteo</i>              | Steppe Buzzard            | Secure -          |
| <i>Calamonastes fasciolatus</i> | Barred Warbler            | Secure            |
| <i>Calendulauda sabota</i>      | Sabota Lark               | Secure            |
| <i>Camaroptera brevicaudata</i> | Greybacked Camaroptera    | Secure            |
| <i>Caprimulgus pectoralis</i>   | Fierynecked Nightjar      | Secure            |
| <i>Caprimulgus rufigena</i>     | Rufouscheeked Nightjar    | Secure            |
| <i>Ceryle rudis</i>             | Pied Kingfisher           | Secure            |
| <i>Chrysococcyx caprius</i>     | Diederik Cuckoo           | Secure            |
| <i>Chrysococcyx klaas</i>       | Klaas's Cuckoo            | Secure            |
| <i>Ciconia abdimii</i>          | Abdim's Stork             | Secure            |
| <i>Cinnyris mariquensis</i>     | Marico Sunbird            | Secure            |
| <i>Circaetus pectoralis</i>     | Blackbreasted Snake Eagle | Secure            |
| <i>Cisticola chiniana</i>       | Rattling Cisticola        | Secure            |
| <i>Cisticola rufilatus</i>      | Tinkling Cisticola        | Secure            |
| <i>Clamator glandarius</i>      | Great Spotted Cuckoo      | Secure            |
| <i>Coracias caudata</i>         | Lilacbreasted Roller      | Secure            |
| <i>Coracias garrulus</i>        | European Roller           | Secure -          |
| <i>Coracias naevia</i>          | Purple Roller             | Secure            |
| <i>Corvinella melanoleuca</i>   | Longtailed Shrike         | Secure            |
| <i>Corvus capensis</i>          | Black Crow                | Secure            |
| <i>Corythaixoides concolor</i>  | Grey Lourie               | Secure            |
| <i>Creatophora cinerea</i>      | Wattled Starling          | Secure            |

|                                 |                           |                        |
|---------------------------------|---------------------------|------------------------|
| <i>Crithagra flaviventris</i>   | Yellow Canary             | Secure                 |
| <i>Cuculus clamosus</i>         | Black Cuckoo              | Secure                 |
| <i>Cuculus gularis</i>          | African Cuckoo            | Secure                 |
| <i>Cursorius temminckii</i>     | Temminck's Courser        | Secure                 |
| <i>Cypsiurus parvus</i>         | Palm Swift                | Secure                 |
| <i>Delichon urbicum</i>         | House Martin              | Secure -               |
| <i>Dicrurus adsimilis</i>       | Forktailed Drongo         | Secure                 |
| <i>Elanus caeruleus</i>         | Blackshouldered Kite      | Secure                 |
| <i>Emberiza flaviventris</i>    | Goldenbreasted Bunting    | Secure                 |
| <i>Emberiza tahapisis</i>       | Rock Bunting              | Secure                 |
| <i>Eremomela icteropygialis</i> | Yellowbellied Eremomela   | Secure                 |
| <i>Eremopterix verticalis</i>   | Greybacked Finchlark      | Secure                 |
| <i>Erythropygia leucophrys</i>  | Whitebrowed Robin         | Secure                 |
| <i>Erythropygia paena</i>       | Kalahari Robin            | Secure                 |
| <i>Estrilda erythronotos</i>    | Blackcheeked Waxbill      | Secure                 |
| <i>Eupodotis afrooides</i>      | Whitequilled Korhaan      | Secure                 |
| <i>Eupodotis ruficrista</i>     | Redcrested Korhaan        | Secure                 |
| <i>Eurocephalus anguitimens</i> | Whitecrowned Shrike       | Secure                 |
| <i>Falco biarmicus</i>          | Lanner Falcon             | Secure                 |
| <i>Falco chicquera</i>          | Rednecked Falcon          | Secure                 |
| <i>Falco subbuteo</i>           | Hobby Falcon              | Secure -               |
| <i>Falco tinnunculus</i>        | Rock Kestrel              | Secure                 |
| <i>Falco vespertinus</i>        | Western Redfooted Kestrel | Secure                 |
| <i>Francolinus adspersus</i>    | Redbilled Francolin       | Secure                 |
| <i>Francolinus sephaena</i>     | Crested Francolin         | Secure                 |
| <i>Francolinus swainsonii</i>   | Swainson's Francolin      | Secure                 |
| <i>Gallinago nigripennis</i>    | Ethiopian Snipe           | Secure                 |
| <i>Gyps africanus</i>           | Whitebacked Vulture       | <b>Near Threatened</b> |
| <i>Hieraaetus pennatus</i>      | Booted Eagle              | <b>Endangered</b>      |
| <i>Hirundo abyssinica</i>       | Lesser Striped Swallow    | Secure                 |

|                                |                         |          |
|--------------------------------|-------------------------|----------|
| <i>Hirundo cucullata</i>       | Greater Striped Swallow | Secure   |
| <i>Hirundo fuligula</i>        | Rock Martin             | Secure   |
| <i>Hirundo rustica</i>         | European Swallow        | Secure - |
| <i>Hirundo semirufa</i>        | Redbreasted Swallow     | Secure   |
| <i>Lamprotornis australis</i>  | Burchell's Starling     | Secure   |
| <i>Lamprotornis nitens</i>     | Glossy Starling         | Secure   |
| <i>Laniarius atrococcineus</i> | Crimsonbreasted Shrike  | Secure   |
| <i>Lanius collaris</i>         | Fiscal Shrike           | Secure   |
| <i>Lanius collurio</i>         | Redbacked Shrike        | Secure - |
| <i>Lanius minor</i>            | Lesser Grey Shrike      | Secure - |
| <i>Melaenornis infuscatus</i>  | Chat Flycatcher         | Secure   |
| <i>Melaenornis mariquensis</i> | Marico Flycatcher       | Secure   |
| <i>Melierax canorus</i>        | Pale Chanting Goshawk   | Secure   |
| <i>Merops apiaster</i>         | European Bee-Eater      | Secure - |
| <i>Merops hirundineus</i>      | Swallowtailed Bee-Eater | Secure   |
| <i>Micronisus gabar</i>        | Gabar Goshawk           | Secure   |
| <i>Milvus migrans</i>          | Black Kite              | Secure - |
| <i>Milvus parasitus</i>        | Yellowbilled Kite       | Secure   |
| <i>Mirafrapa passerina</i>     | Monotonous Lark         | Secure   |
| <i>Monticola brevipes</i>      | Shorttoed Rock Thrush   | Secure   |
| <i>Muscicapa striata</i>       | Spotted Flycatcher      | Secure - |
| <i>Nectarinia fusca</i>        | Dusky Sunbird           | Secure   |
| <i>Nectarinia talatala</i>     | Whitebellied Sunbird    | Secure   |
| <i>Nilaus afer</i>             | Brubru                  | Secure   |
| <i>Numida meleagris</i>        | Helmeted Guinea fowl    | Secure   |

|                                  |                                |                   |
|----------------------------------|--------------------------------|-------------------|
| <i>Oena capensis</i>             | Namaqua Dove                   | Secure            |
| <i>Onychognathus nabouroup</i>   | Palewinged Starling            | Secure            |
| <i>Parisoma subcaeruleum</i>     | Titbabbler                     | Secure            |
| <i>Parus cinerascens</i>         | Ashy Tit                       | Secure            |
| <i>Passer diffusus</i>           | Southern Grey-headed Sparrow   | Secure            |
| <i>Passer motitensis</i>         | Great Sparrow                  | Secure            |
| <i>Plocepasser mahali</i>        | Whitebrowed Sparrowweaver      | Secure            |
| <i>Ploceus velatus</i>           | Masked Weaver                  | Secure            |
| <i>Polemaetus bellicosus</i>     | Martial Eagle                  | <b>Endangered</b> |
| <i>Polihierax semitorquatus</i>  | Pygmy Falcon                   | Secure            |
| <i>Prinia flavicans</i>          | Blackchested Prinia            | Secure            |
| <i>Psophocichla litsitsirupa</i> | Groundscraper Thrush           | Secure            |
| <i>Pterocles bicinctus</i>       | Doublebanded Sandgrouse        | Secure            |
| <i>Pterocles namaqua</i>         | Namaqua Sandgrouse             | Secure            |
| <i>Pycnonotus nigricans</i>      | Redeyed Bulbul                 | Secure            |
| <i>Pytilia melba</i>             | Melba Finch                    | Secure            |
| <i>Quelea quelea</i>             | Redbilled Quelea               | Secure            |
| <i>Rhinopomastus cyanomelas</i>  | Scimitarbilled Woodhoopoe      | Secure            |
| <i>Rhinoptilus chalcopterus</i>  | Bronzewinged Courser           | Secure            |
| <i>Scopus umbretta</i>           | Hamerkop                       | Secure            |
| <i>Serinus atrogularis</i>       | Blackthroated Canary           | Secure            |
| <i>Smutornis africanus</i>       | Doublebanded Courser           | Secure            |
| <i>Sporopipes squamifrons</i>    | Scalyfeathered Finch           | Secure            |
| <i>Streptopelia capicola</i>     | Cape Turtle Dove               | Secure            |
| <i>Streptopelia senegalensis</i> | Laughing Dove                  | Secure            |
| <i>Struthio camelus</i>          | Ostrich                        | Secure            |
| <i>Sylvietta rufescens</i>       | Longbilled Crombec             | Secure            |
| <i>Tchagra australis</i>         | Threestreaked Tchagra          | Secure            |
| <i>Terathopius ecaudatus</i>     | Bateleur                       | <b>Endangered</b> |
| <i>Thripias namaquus</i>         | Bearded Woodpecker             | Secure            |
| <i>Tockus erythrorhynchus</i>    | Redbilled Hornbill             | Secure            |
| <i>Tockus leucomelas</i>         | Southern Yellowbilled Hornbill | Secure            |
| <i>Tockus nasutus</i>            | Grey Hornbill                  | Secure            |
| <i>Torgos tracheliotus</i>       | Lappetfaced Vulture            | <b>Vulnerable</b> |
| <i>Tricholaema leucomelas</i>    | Pied Barbet                    | Secure            |
| <i>Turdoides bicolor</i>         | Pied Babbler                   | Secure            |
| <i>Turtur chalcospilos</i>       | Greenspotted Dove              | Secure            |
| <i>Upupa epops</i>               | Hoopoe                         | Secure            |
| <i>Uraeginthus angolensis</i>    | Blue Waxbill                   | Secure            |
| <i>Uraeginthus granatinus</i>    | Violeteared Waxbill            | Secure            |
| <i>Urocolius indicus</i>         | Redfaced Mousebird             | Secure            |
| <i>Vanellus armatus</i>          | Blacksmith Plover              | Secure            |
| <i>Vanellus coronatus</i>        | Crowned Plover                 | Secure            |
| <i>Vanellus senegallus</i>       | Wattled Plover                 | Secure            |
| <i>Vidua regia</i>               | Shafttailed Whydah             | Secure            |
| <i>Zosterops senegalensis</i>    | Yellow White-Eye               | Secure            |



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## **Appendix B: Proof of Advertisements, Letters and Notices Appendix of CV's**

LIFESTYLE

# Common signs that you could be suffering from depression

GERRY CUPIDO

**W**hen someone says that they are feeling depressed, many people assume it's just a passing mood and the person will "get over it". However, for many people, it's not just a passing phase and they don't just get over it. What too many people don't know is that depression is in fact a serious mental health condition that can affect anyone. Just like any other illness, it's important to recognise the signs of depression early so that one can seek help and treatment. Here are some common signs that you might be suffering from depression. Persistent sadness It's normal to feel sad when there is a

genuine reason to feel that way. However, if you are feeling sad or down for an extended period, even when there is no apparent reason, it can be a sign of depression. Feelings of worthlessness Feeling worthless, guilty, or blaming yourself for things that are out of your control can be symptoms of depression.

**Social withdrawal** People suffering from depression tend to avoid social interactions. They isolate themselves from friends and family and feel disconnected from others.

**Sleep disturbances** Insomnia or oversleeping can be common symptoms of depression.

You may have trouble falling asleep, staying asleep, or waking up too early.

**Loss of interest in activities** If you have lost interest in activities that you used to enjoy, such as hobbies, socialising, or work, it could be a sign of depression.

**Changes in appetite or weight** Depression can cause changes in appetite, leading to either overeating or not eating at all.

This can result in significant weight gain or weight loss. Fatigue or low energy Feeling tired all the time or lacking the energy to do everyday tasks can be a sign of depression.

**Difficulty concentrating** Depression can affect your ability to concentrate, make decisions, or remember things. Suicidal thoughts or behaviours If you are experiencing thoughts of suicide or self-harm, it is important to seek help immediately. If you are experiencing several of these symptoms for an extended time, it is important to talk to a healthcare professional or mental health provider. Depression is a treatable condition, and getting the right support and treatment can help you feel better and improve your quality of life. If you are suffering from depression or know someone who is, you can contact the South African Depression and Anxiety Group on 0800 567 567. **IOL Lifestyle**



**CALL FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897**

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).

**Location:** The license area is located about 40 km north of Outjo. The proponent intends to explore for Copper. Exploration methods may include geological mapping, geophysical surveys, sampling and drilling.

**Proponent:** Tartisius Gaeseb

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **20/03/2024**. Contact details for registration and further information:

**Impala Environmental Consulting**  
**Mr. S. Andjamba**  
 Email: [public@impalac.com](mailto:public@impalac.com), Tel: 0856630598

**Environmental Impact Assessment (EIA) for the proposed establishment of 90 Agricultural Plots and associated infrastructure**

Notice is hereby given to all Interested and Affected Parties (I&APs), that an application for an Environmental Clearance Certificate will be submitted to the Environmental Commissioner for the following activities.

**Proposed Activities:** The establishment of 90 Agricultural Plots and associated infrastructure

**Project location:** Remainder of Portion B of Swakopmund Townland No.41, Swakopmund, Erongo Region

**Proponent:** Municipality of Swakopmund

**Description:** The Municipality of Swakopmund has demarcated an area within its townlands for urban agricultural activities, primarily horticulture production and poultry farming. The demarcated area will be divided into 90 plots or small allotments to be leased to interested local farmers. The proposed activities will trigger certain activities listed under Schedule 1 of the Environmental Management Act 07 of 20017 as activities that cannot be undertaken without an EIA being undertaken.

All I&APs are hereby invited to register, request the Background Information Document (BID), attend the public meeting, and submit input to [eia@greengain.com.na](mailto:eia@greengain.com.na) or [ikondja@gmail.com](mailto:ikondja@gmail.com) **The last day to submit input is 06 March 2024.**

**I&APs are invited to the public meeting which will take place as follows**

**Date:** Wednesday, 21 February 2024  
**Venue:** Multi-purpose Center (Hall), Mondesa  
**Time:** 18H:00 to 19H:00

**Green Gain Consultants** For more information contact: +264811422927

**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINERAL EXPLORATION ACTIVITIES ON EPL 8586 IN RESPECT TO BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERALS & PRECIOUS METALS, ERONGO & OTJOZONDJUPA REGIONS**

**1. PROJECT SITE AND DESCRIPTION**

Ruungandu Mining cc, intends to apply to obtain an Environmental Clearance Certificate for its proposed prospecting activities in respect to Dimension Stone, Base and Rare Metals, Industrial Minerals, Precious Metals and Nuclear Fuel on EPL 8586 in the Erongo Region. The key component of the proposed activity entails geological mapping and survey and manual sample collection for laboratory analysis. Access to the sampling or survey sites will be by existing tracks and on foot where vehicle access is limited.

**2. PUBLIC PARTICIPATION PROCESS**

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

**3. COMMENTS AND QUERIES**

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **31 July 2023**.

**3. COMMENTS AND QUERIES**

Please register and direct all comments, queries to:  
 Mr. Shadrack Tjiramba, Environmental Assessment Practitioner  
 Email: [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)

EnviroLeap Consulting cc  
 P. O. Box 25874, Windhoek | +264 81 232 6843 | [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)

**EnviroPlan CONSULTING**

**NOTICE OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS: THE PROPOSED COPPER ORE CRUSHER AND SEPARATING PLANT IN EHI-ROVIPUKA CONSERVANCY KUNENE, REGION- NAMIBIA**

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** New Horizon (PVT) ltd  
**Environmental Assessment Practitioner:** EnviroPlan Consulting cc

**Project Description:** New Horizon (PVT) ltd is proposing to set up a copper ore crusher and separating plant in Kowares. Kowares in Ehi-Rovipuka Conservancy which was proclaimed in 2001 and covers 1980 square kilometres of Kunene Region- Namibia. The conservancy has an approximate number of 1346 inhabitants who practise horticulture and mining. Mining is becoming one of the major economic drivers in the region with most of them being on small scale miners.

**Project Location:** The proposed project is in **Kowares -Kunene** region. Kunene's capital Opuwo. (Opuwo) is approximately 122 km away from Kowares. The distance from **Kowares** to Namibia's capital Windhoek is approximately 482 km.

**Public participation process:** Interested and affected parties are hereby notified that public participation meeting will be held as follows:

| Date and Time              | Activity             | Venue - Village                  |
|----------------------------|----------------------|----------------------------------|
| 23.02.24, 10:30 – 11:30 AM | Consultative Meeting | Ehi-Rovipuka Conservancy Offices |

**The participation and commenting period is effective until 17<sup>th</sup> March 2024.**

To register or request for documents submit your details in writing to the Environmental Consultant

**EnviroPlan Consulting Environmental Consultant**  
 Phone: +264 814 087482  
 Email: [info@enviroplanconsult.com](mailto:info@enviroplanconsult.com)



**LIFESTYLE**

From Harry Potter to Taylor Swift

FROM PAGE 14

fantasy worlds respectively. BookTok fans aren't just market followers; they are also market-makers. Romantasy (a portmanteau of "romance" and "fantasy") authors like Sarah J. Maas and Rebecca Yarros have outsourced their merchandising to fans, taking a cut of the royalties. In my research I've found these authors have leveraged the popularity of unofficial merchandise on social media platforms to increase their official merchandise catalogues and revenue. Fan cultures have a range of influences on everyday life, from swapping friendship bracelets at Taylor Swift concerts to attending romantasy-inspired balls. Fandom might be shared online,

but its effects are felt in person. The influence of millennial women in fandom Fans who were girls in the era of Harry Potter, The Hunger Games and Twilight are now the women who have powered the success of Barbie and the Eras Tour. The shift in fandom has been led by adult women who have been honing their fan skills since girlhood. They, in turn, stand on the shoulders of the early female fans who read romance fiction back when it was even more stigmatised and wrote the earliest fan-fiction. Now they buy their daughters tickets to Taylor Swift and cheer them on as their own girls take on new fan roles.



**CALL FOR PUBLIC PARTICIPATION**  
**ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897**

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**Project location:** Remainder of Portion B of Swakopmund Townland No.41, Swakopmund, Erongo Region

**Proponent:** Municipality of Swakopmund

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**ENVIROLEAP CONSULTING cc**  
 ...a leap towards better environmental compliance.  
 Enviro Leap Consulting cc P. O. Box 25874, Windhoek +264 81 232 6843 eap.trigen@gmail.com

**EnviroPlan CONSULTING**

**NOTICE OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS: THE PROPOSED COPPER ORE CRUSHER AND SEPARATING PLANT IN EHI-ROVIPUKA CONSERVANCY KUNENE, REGION- NAMIBIA**

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|----------------------------|----------------------|----------------------------------|
| 23.02.24, 10:30 – 11:30 AM | Consultative Meeting | Ehi-Rovipuka Conservancy Offices |

The participation and commenting period is effective until **17<sup>th</sup> March 2024**.

To register or request for documents submit your details in writing to the Environmental Consultant

**EnviroPlan Consulting**  
 Environmental Consultant  
 Phone: +264 814 087482  
 Email: [info@enviroplanconsult.com](mailto:info@enviroplanconsult.com)



**LIFESTYLE**

# Three Reasons Why Smoke-free Products Will Replace Cigarettes

**The modern age of round-the-clock news feeds and social media influence has become a breeding ground for misinformation and conspiracy theories.**

Audiences are growing weary and overwhelmed by the information overload, making people more susceptible to the attention-grabbing antics of those spreading falsehoods. This is detrimental to society's efforts to combat the many threats facing us, says Branislav Bibic, Managing Director at Philip Morris South Africa. "Disinformation and misinformation have a very real impact on people's perceptions, choices, and behaviours. They erode our trust in facts, leading to confusion and poor decision-making."

He cites smoke-free alternatives to

cigarettes, by way of example. "Even when robust scientific evidence reveals that they can present less risk than continued smoking, these innovations are often at the centre of widespread campaigns designed to skew this core fact."

The outcome, Bibic says, is that adult smokers are likely to be left perplexed, potentially preventing those who would otherwise continue to smoke from switching to a better alternative. "Denying these people access to accurate information about smoke-free products is not only a missed opportunity for them but, more widely, for public health," he explains. "Yet, even among the noise and misleading distractions, the progress of smoke-free products will ultimately prevail."

He says this is due to three key reasons:

1. A better and more widespread understanding of what causes smoking-related diseases has helped pave the way for the development of potentially less harmful alternatives.

Many once wrongly believed nicotine to be the primary cause of smoking-related diseases. In fact, he says, a cigarette, when burned, produces over 6,000 chemicals—around 100 of which have been identified as causes or potential causes of smoking-related diseases.

"Nicotine, although addictive and not risk-free, is NOT one of them," he adds. "There is a ground swell of evidence demonstrating that smoke-free products which don't burn

tobacco are able to deliver nicotine without smoke and, when scientifically substantiated, can significantly reduce the levels of harmful chemicals compared to cigarette smoke."

Of course, he cautions that these products are not risk-free and provide nicotine, which is addictive, but they're demonstrably better than continuing to smoke cigarettes. "Enabling access to these products and accurate information about them will enable adult smokers who do not quit to change to a better alternative," he says.

2. Investment in the technology driving the development of smoke-free products has also intensified as a direct result of this burgeoning support.

"Responding to calls from the likes of

the United Nations and World Health Organization (WHO) to develop less toxic nicotine products, existing industry players and new entrants have invested in developing tobacco and nicotine products that do not burn tobacco," Bibic explains. "With the availability of smoke-free products in many countries that cater to different taste, usage, and affordability needs, adults who would otherwise continue smoking now have a range of feasible options to help them leave cigarettes behind, permanently."

3. More active and widely publicised debates on the merits of tobacco harm reduction and the evidence on smoke-free products are also helping to build unity.

**CALL FOR PUBLIC PARTICIPATION**

**ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897**

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).


**Location:** The license area is located about 40 km north of Outjo. The proponent intends to explore for Copper. Exploration methods may include geological mapping, geophysical surveys, sampling and drilling.

**Proponent:** Tartisius Gaeseb

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **20/03/2024**. Contact details for registration and further information:

**Impala Environmental Consulting**

**Mr. S. Andjamba**  
Email: [public@impalac.com](mailto:public@impalac.com), Tel: 0856630598



**Environmental Impact Assessment (EIA) for the proposed establishment of 90 Agricultural Plots and associated infrastructure**

Notice is hereby given to all Interested and Affected Parties (I&APs), that an application for an Environmental Clearance Certificate will be submitted to the Environmental Commissioner for the following activities.

**Proposed Activities:** The establishment of 90 Agricultural Plots and associated infrastructure

**Project location:** Remainder of Portion B of Swakopmund Townland No.41, Swakopmund, Erongo Region

**Proponent:** Municipality of Swakopmund

**Description:** The Municipality of Swakopmund has demarcated an area within its townlands for urban agricultural activities, primarily horticulture production and poultry farming. The demarcated area will be divided into 90 plots or small allotments to be leased to interested local farmers. The proposed activities will trigger certain activities listed under Schedule 1 of the Environmental Management Act 07 of 2017 as activities that cannot be undertaken without an EIA being undertaken.


All I&APs are hereby invited to register, request the Background Information Document (BID), attend the public meeting, and submit input to [eia@greengain.com.na](mailto:eia@greengain.com.na) or [ikondja@gmail.com](mailto:ikondja@gmail.com). **The last day to submit input is 06 March 2024.**

**I&APs are invited to the public meeting which will take place as follows**


**Date:** Wednesday, 21 February 2024

**Venue:** Multi-purpose Center (Hall), Mondesa

**Time:** 18H:00 to 19H:00



**For more information contact: +264811422927**



**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES**

**ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINERAL EXPLORATION ACTIVITIES ON EPL 8586 IN RESPECT TO BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERALS & PRECIOUS METALS, ERONGO & OTJOZONDJUPA REGIONS**

**1. PROJECT SITE AND DESCRIPTION**

Ruungandu Mining cc, intends to apply to obtain an Environmental Clearance Certificate for its proposed prospecting activities in respect to Dimension Stone, Base and Rare Metals, Industrial Minerals, Precious Metals and Nuclear Fuel on EPL 8586 in the Erongo Region. The key component of the proposed activity entails geological mapping and survey and manual sample collection for laboratory analysis. Access to the sampling or survey sites will be by existing tracks and on foot where vehicle access is limited.

**2. PUBLIC PARTICIPATION PROCESS**

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

**3. COMMENTS AND QUERIES**

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **31 July 2023**.

**3. COMMENTS AND QUERIES**


Please register and direct all comments, queries to:  
Mr. Shadrack Tjiramba, Environmental Assessment Practitioner  
Email: [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)



...a leap towards better environmental compliance.  
P. O. Box 25874, Windhoek | +264 81 232 6843 | [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)

**EnviroPlan CONSULTING**

**NOTICE OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS: THE PROPOSED COPPER ORE CRUSHER AND SEPARATING PLANT IN EHI-ROVIPUKA CONSERVANCY KUNENE, REGION- NAMIBIA**



EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** New Horizon (PVT) Ltd  
**Environmental Assessment Practitioner:** EnviroPlan Consulting cc

**Project Description:** New Horizon (PVT) Ltd is proposing to set up a copper ore crusher and separating plant in Kowares. Kowares in Ehi-Rovipuka Conservancy which was proclaimed in 2001 and covers 1980 square kilometres of Kunene Region- Namibia. The conservancy has an approximate number of 1346 inhabitants who practise horticulture and mining. Mining is becoming one of the major economic drivers in the region with most of them being on small scale miners.

**Project Location:** The proposed project is in **Kowares -Kunene** region. Kunene's capital Opuwo. (Opuwo) is approximately 122 km away from Kowares. The distance from **Kowares** to Namibia's capital Windhoek is approximately 482 km.


**Public participation process:** Interested and affected parties are hereby notified that public participation meeting will be held as follows:

| Date and Time              | Activity             | Venue - Village                  |
|----------------------------|----------------------|----------------------------------|
| 23.02.24, 10:30 – 11:30 AM | Consultative Meeting | Ehi-Rovipuka Conservancy Offices |

**The participation and commenting period is effective until 17<sup>th</sup> March 2024.**

To register or request for documents submit your details in writing to the Environmental Consultant

**EnviroPlan Consulting**  
**Environmental Consultant**  
Phone: +264 814 087482  
Email: [info@enviroplanconsult.com](mailto:info@enviroplanconsult.com)



**LOCALITY MAP**  
PROPOSED COPPER ORE CRUSHER AND SEPARATING PLANT  
NEW HORIZON PVT LTD  
KUNENE REGION  
19 190289, 14 363901

0 0.5 1 Km  
**1 :25,000**

Drawn By: MONTE BLANCO CC  
Prepared for: EnviroPlan Consulting  
Date: February 2024



# CLASSIFIEDS

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## CLASSIFIEDS

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 Death Notices from N\$200.00  
 Tombstone Unveiling from N\$200.00  
 Thank You Messages from N\$200.00

Terms and Conditions Apply.

### FORM 24 RULE 108(2)(a) IN THE HIGH COURT OF NAMIBIA (Main Division – Windhoek)

Case Number: HC-MD-CIV-ACT-CON-2022/01620  
 In the matter between:  
**FIRST NATIONAL BANK OF NAMIBIA LIMITED**  
**APPLICANT**

And

**ANTHEA CAROLA JUANITA MICHELLE KLEIN**  
**RESPONDENT**

### NOTICE BY JUDGMENT CREDITOR TO JUDGMENT DEBTORS

**KINDLY TAKE NOTICE THAT** the Applicant **FIRST NATIONAL BANK OF NAMIBIA LTD.** (hereinafter called the Judgment Creditor) has obtained Judgment against the Respondent, **ANTHEA CAROLA JUANITA MICHELLE KLEIN** (hereinafter called the Judgment Debtor) in this Honourable Court on **04<sup>TH</sup> OF FEBRUARY 2024.**

**TAKE FURTHER NOTICE THAT** the Judgment Creditor shall apply for an Order in terms of Rule 108(1)(b) declaring the following property executable:

A unit consisting of:  
 a) Section No.20 as shown and more fully described on Sectional Plan No.SS55/2019 in the development scheme known as VILHO ELIAS VILLA ESTATE, in respect of the land and building or buildings, situate at ERF NO.60 OSONA VILLAGE, IN THE MUNICIPALITY OF OKAHANDJA, REGISTRATION DIVISION "J", OTJOZONDJUPA Region, of which the floor area, according to the said Sectional Plan is 101 (ONE HUNDRED AND ONE) square metres in extent; and

b) An Undivided share in the common property in the development scheme, apportioned to that section in accordance with the participation quota as endorsed on that Sectional Plan.  
 HELD under Deed of Transfer ST1315/2019 and SUBJECT to the conditions contained therein and specifically the right to extend the aforesaid Development Scheme with further buildings.

**KINDLY TAKE FURTHER NOTICE THAT** the Judgment Debtors or any other person is hereby called to provide reasons to this Honourable Court and/or Judgement Creditor within **10 (TEN)** days from date of service of this notice as to why an Order declaring the property executable may not be granted.

Dated at **WINDHOEK** on this day of **FEBRUARY 2024.**

.....  
**ANGULACO INCORPORATED**  
 Legal Practitioner for Plaintiff  
 11 SCHUSTER STREET  
**WINDHOEK**  
 (Ref: DEB1862/EPH)


TO: THE REGISTRAR  
**HIGH COURT OF NAMIBIA**  
**WINDHOEK**  
 AND: THE RESPONDENT  
**ANTHEA CAROLA JUANITA MICHELLE KLEIN**  
 UNIT 60-20 OSONA VILLAGE  
 OKAHANDJA  
**(TO BE SERVED VIA NEWS PAPERS)**  
 AND  
 TO: ANY LESSEE /TENANT  
 UNIT 60-20 OSONA VILLAGE  
 OKAHANDJA  
**(TO BE SERVED BY DEPUTY SHERIFF)**

### CALL FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8844

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).

**Location:** The license area is located about 52 km southwest of Warmbad. The proponent intends to explore for Lithium and rare earth metals. Exploration methods may include geological mapping, geophysical surveys, sampling and drilling.

**Proponent:** Johan Van der Westhuizen  
 All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **20/03/2024.** Contact details for registration and further information:


**Impala Environmental Consulting**  
**Mr. S. Andjamba**  
**Email: [public@impalac.com](mailto:public@impalac.com), [public@impalac.com](mailto:public@impalac.com)**,   
**Tel: 0856630598**

### CALL FOR PUBLIC PARTICIPATION ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).

**Location:** The license area is located about 40 km north of Outjo. The proponent intends to explore for Copper. Exploration methods may include geological mapping, geophysical surveys, sampling and drilling.

**Proponent:** Tartisius Gaeseb  
 All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **20/03/2024.** Contact details for registration and further information:

**Impala Environmental Consulting**  
**Mr. S. Andjamba**  
**Email: [public@impalac.com](mailto:public@impalac.com), [public@impalac.com](mailto:public@impalac.com)**,   
**Tel: 0856630598**

### NOTICE OF ENVIRONMENTAL SCOPING ASSESSMENT (ESA) FOR: FOR THE PROPOSED EXPLORATION ACTIVITIES ON THE EXCLUSIVE PROSPECTING LICENCES (EPLs) No. 8140, 8141, 8153, 8159, 8161 LOCATED NEAR GOBABS IN THE OMAHEKE REGION, NAMIBIA.

Under the Environmental Management Act No. 7 of 2007 and its 2012 EIA Regulations, the proposed exploration activities on EPLs 8140, 8141, 8153, 8159, 8161 require an Environmental Clearance Certificate (ECC) from the Department of Environmental Affairs and Forestry (DEAF) before commencement.

The public is notified that an ECC application will be submitted to the Environmental Commissioner.

#### Brief Project Description

| EPL (s)               | Proponent          | Coordinates                  |
|-----------------------|--------------------|------------------------------|
| EPLs 8140, 8141, 8161 | Carl Andries Joone | 22° 26' 37" S, 19° 40' 09" E |
| EPL 8153              | GFM Geophysics CC  | 22° 11' 14" S, 19° 09' 50" E |
| EPL 8159              | Carl Andries Joone | 22° 28' 45" S, 18° 32' 04" E |

**Environmental Consultant:** Excel Dynamic Solutions (Pty) Ltd  
 Public members are invited to register as Interested and Affected Parties to comment/raise concerns or receive further information on the Environmental Assessment process.  
**Public Consultation meeting details will be communicated with all the registered I&APs.**

Registration requests should be forwarded to Excel Dynamic Solutions (Pty) Ltd on the contact details below, before or on **29 February 2024.**

**Contact:** Excel Dynamic Solution  
**Email: [public@edsnamibia.com](mailto:public@edsnamibia.com)**  
**Tel: + 264 61 259 530**



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### Vacancy for a General Practice Associate; MEDICAL DOCTOR IN WALVISBAY

**Requirements:**  
**1. Experience:** 10 years of experience as a generalized healthcare practitioner, capable of practicing unsupervised in a busy family practice environment.  
**2. Emergency Care Expertise:** Extensive experience and certification in primary emergency care, including up-to-date ACLS, ATLS, PALS certificates, or a Diploma in Primary Emergency Care. Must be able to handle emergencies 24/7 for practice patients, MVA Fund patients, visiting patients, and work-related injury patients via Welwitschia Hospital Emergency Room.  
**3. Anesthesia Expertise:** Proficiency in providing general and regional anesthesia for obstetric cases, pediatric procedures (e.g., tonsillectomies, circumcisions), and minor procedures like excisions or uterine evacuations.  
**4. Availability:** Willingness to provide after-hours services on the practice call roster, including weeknights and a 1 in 4 weekend rotation. As part of the group practice, being team-oriented and adaptable is essential in handling short-notice roster changes and providing assistance with emergency cesarean cases.  
**5. Commitment to CPD:** Dedication to meeting Continuing Professional Development (CPD) requirements and maintaining high ethical and clinical standards.  
**6. Service to PSEMAS Clientele:** Willingness to serve patients covered by the Public Service Employees Medical Aid Scheme (PSEMAS).  
**7. Age:** 35-50  
**8. Remuneration:** Commission based  
**9. Registered with HPCNA**

Please submit your application if you meet all of the above criteria. We value candidates who are dedicated to providing high-quality care in a busy and diverse practice setting.

**Mail CV to baardmaureen@gmail.com**  
**only shortlisted candidates will be contacted.**  
**Closing date 29 Febr 2024**

**Panam Investment cc** is urgently looking for a machine operator.

**Requirements:**  
 1. Fluent Mandarin both in Spoken and writing. Fluent in spoken English.  
 2. 6+ years relevant working Experience on operating paint mixing machine and its maintenance.  
 3. Basic computer skills  
 4. Conduct of certificate from police station  
 5. Certificate from College or University from Relevant Major.

Please send your CV to [keipaupm@gmail.com](mailto:keipaupm@gmail.com)  
**Close date: 01 March 2024**



**ONDANGWA PRIVATE HOSPITAL**  
 Ondangwa Private Hospital Practitioners cc is an equal opportunity employer and invites proactive, professional, caring, ethical person to apply for the following position:

**Position: Orthopaedic Surgeon**

**Qualifications, Skills, Competencies and Experience Requirements:**  
 • MD/DO Degree and MS in Orthopedics.  
 • 5 years of residency training in Orthopaedic Surgery.  
 • Minimum of 4 years' experience as an Orthopedic Surgeon.  
 • Valid license to practice the profession, must be registered with HPCNA.  
 • Namibian citizen or eligible to work within Namibia.  
 • Fantastic manual dexterity, hand-eye coordination, and visuospatial awareness.  
 • Superb organizational and time management skills.  
 • Emotionally resilient with the ability to make patients feel at ease.

Should you meet the above-mentioned requirements, kindly email your CV and all certified supporting documents to: [recruitment.practices@oph.com.na](mailto:recruitment.practices@oph.com.na)  
**Closing Date: 22 March 2024**



Ondangwa Private Hospital Practitioners cc is an equal opportunity employer and invites proactive, professional, caring, ethical person to apply for the following position:

**Position: Plumber**

**Requirements:**  
 • Matric/Level 3 Plumbing Certificate and Plumbing Trade Certificate.  
 • Minimum of 3 years' experience as a Plumber.  
 • Valid code B driver's license.  
 • Excellent problem-solving skills, physical skills, mechanical and plumber skills.  
 • Must have worked with fluid systems doing design, fabrication, and installation.  
 • Knowledge of building codes, safety regulations, and safety practices.  
 • Attention to detail and ability to perform tasks simultaneously.

Should you meet the above-mentioned requirements, kindly email your CV and all certified supporting documents to: [recruitment.practices@oph.com.na](mailto:recruitment.practices@oph.com.na)  
**Closing Date: 08 March 2024**

**NB! All documents must be in PDF format, maximum 3 attachments.**

### NEPHMED MEDICAL PRACTICE, WINDHOEK

**Job Opportunity: SPECIAL PHYSICIAN & CLINICAL HAEMATOLOGIST**

**KEY RESPONSIBILITIES:**  
 \* Provide exceptional care in clinical haematology and laboratory settings.  
 \* Diagnose and manage benign and malignant haematological conditions.  
 \* Expertly handle the clinical selection and management of bone marrow transplant cases.

**REQUIRED EXPERIENCE:**  
 Minimum of one experience as a clinical haematologist in the private sector.  
 Proven track record in both clinical and laboratory aspects of haematology.

**EDUCATIONAL QUALIFICATIONS:**  
 \* Qualified as a Subspecialist in Clinical Haematology or equivalent qualification.

**APPLICATION:**  
 Interested candidates are invited to submit their CV and cover letter detailing their experience and qualifications to: [kechia.kuiiri@figohealth.com](mailto:kechia.kuiiri@figohealth.com)  
**Closing date: 28 Feb 2024**

### Intromed Investment

Intromed Investment is an equal opportunity employer and invites proactive, professional, caring, ethical person to apply for the following position:

**1. Position: Dentist**

**Qualifications, Skills, Competencies and Experience Requirements:**  
 • Bachelor of Dental Surgery (BDS) Degree  
 • Minimum of 3 years' experience as a Dentist.  
 • Valid license to practice the profession, must be registered with HPCNA.  
 • Namibian citizen or eligible to work within Namibia.  
 • Superb organizational and time management skills.  
 • Emotionally resilient with the ability to make patients feel at ease.

Should you meet the above-mentioned requirements, kindly email your CV and all certified supporting documents to: [recruitment.practices@oph.com.na](mailto:recruitment.practices@oph.com.na)  
**Closing Date: 22 March 2024**

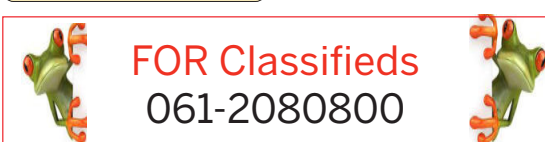
### HEADSPRING INVESTMENTS

**PTY** is seeking for the Chief Technical Officer. The ideal candidate should have a diploma and degree as Mining Engineer in specialty In situ recovery mining or geology or mining. He should work in mining/exploration company over 10 years and has strong experience in mining sector of industry.

The perfect candidate will be responsible for preparation and getting all approvals from board for exploration program and strategy for short, middle and long term period, budgeting, all negotiation with contractors, key ministries and mother company, developing mining aspects of the company's strategy, overseeing all aspects of technology within an organization, manage team of geology, mining and technology specialist. Must be fluent in English and Russian, Computer literate, MS Office, Micromine.

**CV to [svetlana.bauer@uranium1.com](mailto:svetlana.bauer@uranium1.com)**

**Closing date: 1st March 2024**



**FOR Classifieds**  
**061-2080800**



LIFESTYLE

# Wendy Williams diagnosed with aphasia and frontotemporal dementia

**Wendy Williams has been diagnosed with primary progressive aphasia and frontotemporal dementia.**

The 59-year-old TV star was diagnosed with the conditions last year, and according to her care team, the issues have “already presented significant hurdles in Wendy’s life”. Her care team said in a statement: “Over the past few years, questions have been raised at times about Wendy’s ability to process information and many have speculated about Wendy’s condition, particularly when she began to lose words, act erratically at times, and have difficulty understanding financial transactions. “In 2023, after undergoing a battery of medical tests, Wendy was officially diagnosed with primary progressive aphasia and frontotemporal dementia

(FTD). Aphasia, a condition affecting language and communication abilities, and frontotemporal dementia, a progressive disorder impacting behaviour and cognitive functions, have already presented significant hurdles in Wendy’s life. “Wendy would not have received confirmation of these diagnoses were it not for the diligence of her current care team, who she chose, and the extraordinary work of the specialists at Weill Cornell Medicine. Receiving a diagnosis has enabled Wendy to receive the medical care she requires.” The TV star has battled a number of health issues over recent years, including Graves’ disease and lymphedema. However, Williams - who hosted ‘The Wendy Williams Show’ between 2008 and 2021 - hopes to “raise awareness about aphasia and frontotemporal dementia” by sharing the news with the

public. The statement added: “Unfortunately, many individuals diagnosed with aphasia and frontotemporal dementia face stigma and misunderstanding, particularly when they begin to exhibit behavioural changes but have not yet received a diagnosis. “There is hope that with early detection and far more empathy, the stigma associated with dementia will be eliminated, and those affected will receive the understanding, support, and care they deserve and need. “Wendy is still able to do many things for herself. Most importantly, she maintains her trademark sense of humour and is receiving the care she requires to make sure she is protected and that her needs are addressed. She is appreciative of the many kind thoughts and good wishes being sent her way.” BANG Showbiz



Wendy Williams. Picture: Bang Showbiz

**CALL FOR PUBLIC PARTICIPATION**

**ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897**

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).

**Location:** The license area is located about 40 km north of Outjo. The proponent intends to explore for Copper. Exploration methods may include geological mapping, geophysical surveys, sampling and drilling.

**Proponent:** Tartisius Gaeseb

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **20/03/2024**. Contact details for registration and further information:

**Impala Environmental Consulting**  
**Mr. S. Andjamba**  
 Email: [public@impalac.com](mailto:public@impalac.com), Tel: 0856630598

**Environmental Impact Assessment (EIA) for the proposed establishment of 90 Agricultural Plots and associated infrastructure**

Notice is hereby given to all Interested and Affected Parties (I&APs), that an application for an Environmental Clearance Certificate will be submitted to the Environmental Commissioner for the following activities.

**Proposed Activities:** The establishment of 90 Agricultural Plots and associated infrastructure

**Project location:** Remainder of Portion B of Swakopmund Townland No.41, Swakopmund, Erongo Region

**Proponent:** Municipality of Swakopmund

**Description:** The Municipality of Swakopmund has demarcated an area within its townlands for urban agricultural activities, primarily horticulture production and poultry farming. The demarcated area will be divided into 90 plots or small allotments to be leased to interested local farmers. The proposed activities will trigger certain activities listed under Schedule 1 of the Environmental Management Act 07 of 20017 as activities that cannot be undertaken without an EIA being undertaken.

All I&APs are hereby invited to register, request the Background Information Document (BID), attend the public meeting, and submit input to [eia@greengain.com.na](mailto:eia@greengain.com.na) or [jkondja@gmail.com](mailto:jkondja@gmail.com) **The last day to submit input is 06 March 2024.**

**I&APs are invited to the public meeting which will take place as follows**

**Date:** Wednesday, 21 February 2024  
**Venu:** Multi-purpose Center (Hall), Mondesa  
**Time:** 18H:00 to 19H:00

**For more information contact: +264811422927**

**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES**

**ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINERAL EXPLORATION ACTIVITIES ON EPL 8586 IN RESPECT TO BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERALS & PRECIOUS METALS, ERONGO & OTJOZONDJUPA REGIONS**

**1. PROJECT SITE AND DESCRIPTION**

Ruungandu Mining cc, intends to apply to obtain an Environmental Clearance Certificate for its proposed prospecting activities in respect to Dimension Stone, Base and Rare Metals, Industrial Minerals, Precious Metals and Nuclear Fuel on EPL 8586 in the Erongo Region. The key component of the proposed activity entails geological mapping and survey and manual sample collection for laboratory analysis. Access to the sampling or survey sites will be by existing tracks and on foot where vehicle access is limited.

**2. PUBLIC PARTICIPATION PROCESS**

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

**3. COMMENTS AND QUERIES**

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **31 July 2023**.

**3. COMMENTS AND QUERIES**

Please register and direct all comments, queries to:  
 Mr. Shadrack Tjiramba, Environmental Assessment Practitioner  
 Email: [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)

**EnviroPlan CONSULTING**

**NOTICE OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS: THE PROPOSED COPPER ORE CRUSHER AND SEPARATING PLANT IN EHI-ROVIPUKA CONSERVANCY KUNENE, REGION- NAMIBIA**

EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** New Horizon (PVT) Ltd  
**Environmental Assessment Practitioner:** EnviroPlan Consulting cc

**Project Description:** New Horizon (PVT) Ltd is proposing to set up a copper ore crusher and separating plant in Kowares. Kowares in Ehi-Rovipuka Conservancy which was proclaimed in 2001 and covers 1980 square kilometres of Kunene Region- Namibia. The conservancy has an approximate number of 1346 inhabitants who practise horticulture and mining. Mining is becoming one of the major economic drivers in the region with most of them being on small scale miners.

**Project Location:** The proposed project is in Kowares -Kunene region. Kunene's capital Opuwo. (Opuwo) is approximately 122 km away from Kowares. The distance from Kowares to Namibia's capital Windhoek is approximately 482 km.

**Public participation process:** Interested and affected parties are hereby notified that public participation meeting will be held as follows:

| Date and Time              | Activity             | Venue - Village                  |
|----------------------------|----------------------|----------------------------------|
| 23.02.24, 10:30 – 11:30 AM | Consultative Meeting | Ehi-Rovipuka Conservancy Offices |

**The participation and commenting period is effective until 17<sup>th</sup> March 2024.**

To register or request for documents submit your details in writing to the Environmental Consultant

**EnviroPlan Consulting**  
 Environmental Consultant  
 Phone: +264 814 087482  
 Email: [info@enviroplanconsult.com](mailto:info@enviroplanconsult.com)



LIFESTYLE

# Couples need to know about each other's financial health, here's how to navigate those beige flags and grey areas in relationships

**Couples should use the opportunity of February, the month of love, to examine their financial relationships.**

In this month, couples should review their individual relationships with money and also take a closer look at their relationship with money as a couple.

Farzana Botha, the communications manager at Sanlam Risk and Savings, and Lee Hancox, head of channel and segment marketing at Sanlam, have shared advice to help South Africans navigate the challenges of handling money as a couple.

**Navigating beige flags**

We have all heard of grey areas, but what are beige flags?

Beige flags are quirky financial habits or minor issues that are not necessary relationship deal-breakers, but they are areas which may require attention. According to Botha and Hancox, examples of beige flags include:

- a partner who splurges on Uber Eats instead of grocery shopping
- a lack of interest in discussing financial planning
- lies about minor purchases

Botha said that these habits may not pose immediate threats to financial

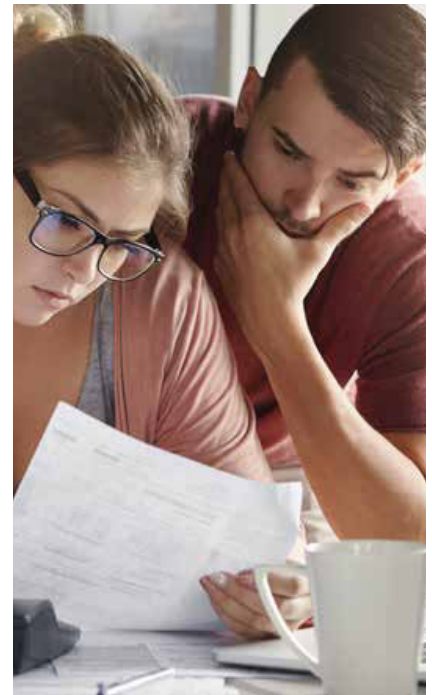
stability, but they do indicate deeper financial attitudes or behaviours that couples need to discuss to prevent potential conflicts down the road. According to Botha, to address beige flags couples need to have honest discussions about financial habits, goals, and expectations. "It's about recognising these subtle signs and understanding how they fit into the broader financial dynamics of the relationship. Discussing these issues early on allows couples to prevent beige flags from escalating into more significant issues," Botha explained.

Sanam Naran, counselling psychologist and founder of Conscious

Psychology, said that there are steps that couples can take to proactively address and navigate the nuances of beige flags to prevent future conflicts.

Naran said that individuals should consider therapy to understand their triggers and feelings towards money so that they have enough self-awareness to know when those issues will come up.

"It's important to have constant communication around these topics, to know yourself and your partner's unique mindset around money so that you can mitigate any issues that may come up in the future," Naran said. IOL Business



**CALL FOR PUBLIC PARTICIPATION**

**ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL EXPLORATION ON EPL 8897**


This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).

**Location:** The license area is located about 40 km north of Outjo. The proponent intends to explore for Copper. Exploration methods may include geological mapping, geophysical surveys, sampling and drilling.

**Proponent:** Tartisius Gaeseb

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before **20/03/2024**. Contact details for registration and further information:

**Impala Environmental Consulting**  
**Mr. S. Andjamba**  
 Email: [public@impalac.com](mailto:public@impalac.com), Tel: 0856630598



**Environmental Impact Assessment (EIA) for the proposed establishment of 90 Agricultural Plots and associated infrastructure**

Notice is hereby given to all Interested and Affected Parties (I&APs), that an application for an Environmental Clearance Certificate will be submitted to the Environmental Commissioner for the following activities.

**Proposed Activities:** The establishment of 90 Agricultural Plots and associated infrastructure

**Project location:** Remainder of Portion B of Swakopmund Townland No.41, Swakopmund, Erongo Region

**Proponent:** Municipality of Swakopmund



**Description:** The Municipality of Swakopmund has demarcated an area within its townlands for urban agricultural activities, primarily horticulture production and poultry farming. The demarcated area will be divided into 90 plots or small allotments to be leased to interested local farmers. The proposed activities will trigger certain activities listed under Schedule 1 of the Environmental Management Act 07 of 20017 as activities that cannot be undertaken without an EIA being undertaken.

All I&APs are hereby invited to register, request the Background Information Document (BID), attend the public meeting, and submit input to [eia@greengain.com.na](mailto:eia@greengain.com.na) or [jkondja@gmail.com](mailto:jkondja@gmail.com) **The last day to submit input is 06 March 2024.**

**I&APs are invited to the public meeting which will take place as follows**

**Date:** Wednesday, 21 February 2024  
**Venu:** Multi-purpose Center (Hall), Mondesa  
**Time:** 18H:00 to 19H:00

**For more information contact: +264811422927**

**CALL FOR REGISTRATION AS INTERESTED AND AFFECTED PARTIES**

**ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINERAL EXPLORATION ACTIVITIES ON EPL 8586 IN RESPECT TO BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERALS & PRECIOUS METALS, ERONGO & OTJOZONDJUPA REGIONS**

**1. PROJECT SITE AND DESCRIPTION**

Ruungandu Mining cc, intends to apply to obtain an Environmental Clearance Certificate for its proposed prospecting activities in respect to Dimension Stone, Base and Rare Metals, Industrial Minerals, Precious Metals and Nuclear Fuel on EPL 8586 in the Erongo Region. The key component of the proposed activity entails geological mapping and survey and manual sample collection for laboratory analysis. Access to the sampling or survey sites will be by existing tracks and on foot where vehicle access is limited.

**2. PUBLIC PARTICIPATION PROCESS**

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input.

**3. COMMENTS AND QUERIES**

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **31 July 2023**.


**3. COMMENTS AND QUERIES**


Please register and direct all comments, queries to:  
 Mr. Shadrack Tjiramba, Environmental Assessment Practitioner  
 Email: [eap.trigen@gmail.com](mailto:eap.trigen@gmail.com)



**EnviroPlan CONSULTING**

**NOTICE OF ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT AND PUBLIC PARTICIPATION PROCESS: THE PROPOSED COPPER ORE CRUSHER AND SEPARATING PLANT IN EHI-ROVIPUKA CONSERVANCY KUNENE, REGION- NAMIBIA**





EnviroPlan Consulting cc hereby gives notice to all potential Interested and Affected Parties (I&APs), that an application for Environmental Clearance certificate will be made to the Environmental Commissioner in terms of the Environmental Management Act (No. 7 of 2007) as follows;

**Proponent:** New Horizon (PVT) Ltd  
**Environmental Assessment Practitioner:** EnviroPlan Consulting cc

**Project Description:** New Horizon (PVT) Ltd is proposing to set up a copper ore crusher and separating plant in Kowares. Kowares in Ehi-Rovipuka Conservancy which was proclaimed in 2001 and covers 1980 square kilometres of Kunene Region- Namibia. The conservancy has an approximate number of 1346 inhabitants who practise horticulture and mining. Mining is becoming one of the major economic drivers in the region with most of them being on small scale miners.

**Project Location:** The proposed project is in **Kowares -Kunene** region. Kunene's capital Opuwo. (Opuwo) is approximately 122 km away from Kowares. The distance from **Kowares** to Namibia's capital Windhoek is approximately 482 km.

**Public participation process:** Interested and affected parties are hereby notified that public participation meeting will be held as follows:

| Date and Time              | Activity             | Venue - Village                  |
|----------------------------|----------------------|----------------------------------|
| 23.02.24, 10:30 – 11:30 AM | Consultative Meeting | Ehi-Rovipuka Conservancy Offices |

**The participation and commenting period is effective until 17<sup>th</sup> March 2024.**

To register or request for documents submit your details in writing to the Environmental Consultant

**EnviroPlan Consulting**  
**Environmental Consultant**  
 Phone: +264 814 087482  
 Email: [info@enviroplanconsult.com](mailto:info@enviroplanconsult.com)



## PROFESSIONAL SUMMARY

A passionate environmentalist with 4+ years of field experience in multiple environmental roles. Expertise in Environmental Impacts Assessments, Data Collection & Analysis, Reports Writing, Environmental Laws, Water Managements and Waste Managements. Self-motivated with the skill to develop and foster creative and innovative solutions.

## CONTACT

PHONE:  
0818861611

EMAIL:  
psevelinho@gmail.com

## REFERENCES

1. Mr Simon Amagulu  
Supervisor (City of Windhoek)  
Cell: +264 81 2306398
2. Mr Riaan Oberholzer  
(Warden at MET Walvisbay)  
Tel: 064 205 971  
Cell: +264 812971780  
Email: Riaan.met@gmail.com

# SEVERINUS ANDJAMBA

Environmentalist

## EDUCATION

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### University of Namibia

03/2020

Bachelor of Science in Integrated Environmental Science (Honours)

### Negumbo Senior Secondary School

11/2012

NSSC Grade 12

## WORK EXPERIENCE

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### Impala Consulting, Environmental Assessment Practitioner

01/01/2021–Current

Roles: Provide environmental impact assessments (EIA), environmental scoping reports, and environmental management plans (EMPs) for any proposed developments. Compiling BID for different projects and engage in public meeting.

### City of Windhoek, Intern for Water Resources Management

01/11/2022–30/06/2023

Roles: Monitoring boreholes - field data collection and entry for the Geohydrology Unit in the section

### Ministry of Environment and Tourism, Intern

03/12/2018–11/01/2019

Role: Law enforcement, patrol of national park, extension work and refuse collection.

### Outapi Town Council, Intern

12/12/2017-19/01/2018

Roles: Monitoring the dumping site to ensure safe waste disposal, educate community on solid & liquid waste management, conduct environmental/hygiene inspections, issues fitness certificates to businesses, extension work.

## SKILLS

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Environmental inspections  
Water management  
Environmental impact assessment  
Field data collection  
Report preparation and presentation

## Mr. Ndaluka Amutenya

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1. **Proposed Position:** Environmental Coordinator
2. **Name of Firm:** Impala Environmental Consulting
3. **Name of Staff:** Ndaluka Amutenya
4. **Nationality:** Namibian
5. **Education:** - Bachelor of Technology, Chemical Engineering,  
University of South Africa, 2020  
- Bachelor of Science, Chemistry Major and Geology Minor,  
University of Namibia, 2012  
- Namibia Senior Secondary Certificate (NSSC),  
Otjikoto Senior Secondary School, 2008
6. **Membership of Professional Associations:**  
- None
7. **Other Training:** - None.
8. **Countries of Work Experience:** Namibia
9. **Languages:**

|           | <i>Speaking</i> | <i>Reading</i> | <i>Writing</i> |
|-----------|-----------------|----------------|----------------|
| English   | Excellent       | Excellent      | Excellent      |
| Afrikaans | Excellent       | Good           | Good           |
| Oshiwambo | Excellent       | Excellent      | Excellent      |
10. **Employment Record:**

|                       |  |
|-----------------------|--|
| From: 2019 to Present |  |
| Employer:             | Impala Environmental Consulting          |
| Positions held:       | Environmental Assessment Practitioner    |
| From: 2015 to 2018    |  |
| Employer:             | Tschudi Copper Mine                      |
| Positions held:       | Chemist                                  |
| From: 2013 to 2015    |  |
| Employer:             | Heat Exchange Products (Water Treatment) |
| Positions held:       | Water Treatment Specialist               |

| 11. Detailed Tasks Assigned  | 12. Past Projects Undertaken   |
|--|--|
| <ul style="list-style-type: none"> <li>Project Local Consultant</li> <li>Client Liaison</li> </ul> | <p><b>Name of assignment or project:</b> Catchment Management Plan for the swakoppoort dam namibia</p> <p><b>Year:</b> 2020</p> <p><b>Location:</b> Okahandja, Namibia.</p> <p><b>Client:</b> Namwater</p> |

|   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Water Sampling and Reporting</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul>   | <p><b>Main project features:</b> Catchment Management Plan for the Swakoppoort Dam.</p> <p><b>Positions held:</b> Local Consultant</p> <p><b>Activities performed:</b> Water Sampling, logistics, site inspections and report writing.</p>   |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for the Development of a Tantalite Mine, Southern Namibia.</p> <p><b>Year:</b> 2020</p> <p><b>Location:</b> Warmbad, Karas Region</p> <p><b>Client:</b> Orange River Pegmatite (Pty) Ltd</p> <p><b>Main project features:</b> Environmental Management</p> <p><b>Positions held:</b> Lead Consultant</p> <p><b>Activities performed:</b> Project Management, Report Writing, Public Participation, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>  |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Proposed Development of A Medical Tourism University Hospital In Henties Bay</p> <p><b>Year:</b> 2020</p> <p><b>Location:</b> Henties Bay, Erongo Region</p> <p><b>Client:</b> Franco Civil Engineering Cc</p> <p><b>Main project features:</b> Environmental Impact Assessment.</p> <p><b>Positions held:</b> Lead Consultant</p> <p><b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>   |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for the Development of a Marble Mine.</p> <p><b>Year:</b> 2020</p> <p><b>Location:</b> 10 km north of Karibib</p> <p><b>Client:</b> Sunsand Investments (Pty) Ltd</p> <p><b>Main project features:</b> Environmental Impact Assessment.</p> <p><b>Positions held:</b> Lead Consultant</p> <p><b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>  |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Dimension Stone Quarrying Activities on Mining Claims 71816, 71817, 71818, 71819, 71820, 71821, 71822, 71823, 71824, And 71825.</p> <p><b>Year:</b> 2020</p> <p><b>Location:</b> 40 km northwest of Arandis</p> <p><b>Client:</b> Rockstar Mining cc</p> <p><b>Main project features:</b> Environmental Impact Assessment.</p> <p><b>Positions held:</b> Lead Consultant</p> <p><b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p> |

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| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Sand Mining Activities on Mining Claim 72027<br/> <b>Year:</b> 2020<br/> <b>Location:</b> 30 km North of Ongwediva<br/> <b>Client:</b> Comitx Investments Group CC<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>              |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Mineral Exploration Activities on EPL 6408<br/> <b>Year:</b> 2020<br/> <b>Location:</b> 5 km south of Karibib<br/> <b>Client:</b> Antler Gold Inc<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>                               |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Dimension Stone Quarrying Activities on Mining Claims 71896-71900<br/> <b>Year:</b> 2020<br/> <b>Location:</b> 15 km north of Karibib<br/> <b>Client:</b> Triple Tas Trading cc<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p> |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Mineral Exploration on EPL 7930<br/> <b>Year:</b> 2020<br/> <b>Location:</b> 40 km northwest of Karibib<br/> <b>Client:</b> Antler Gold Inc<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>                                     |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> </ul>  | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Dimension Stone Quarrying Activities on</p>  |



|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul>   | <p>Mining Claims 72100, 72101, 72102, 72103, 72104, 72105 And 72106<br/> <b>Year:</b> 2020<br/> <b>Location:</b> 40 km northeast of Arandis<br/> <b>Client:</b> Tala Mining cc<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>   |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Mineral Exploration on EPL 5702<br/> <b>Year:</b> 2020<br/> <b>Location:</b> 30 km South of Kamanjab<br/> <b>Client:</b> Emor Mining (Pty) Ltd<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>                                  |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for the Development of a Lodge in the Daures Conservancy Area.<br/> <b>Year:</b> 2019<br/> <b>Location:</b> 50-80 km northwest of UIS<br/> <b>Client:</b> !U-#Gab Ams Investment cc<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p> |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Eia For the Proposed Establishment of a Service Station on Erf 4121, Khorixas<br/> <b>Year:</b> 2019<br/> <b>Location:</b> Khorixas<br/> <b>Client:</b> Noabeb's Trading Enterprises cc<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>                             |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment on dimension stone and industrial mineral quarrying activities on mining claims 71227 and 71228.<br/> <b>Year:</b> 2019<br/> <b>Location:</b> 10 km south of Omaruru<br/> <b>Client:</b> Hiku Poultry and Trading CC<br/> <b>Main project features:</b> Environmental Impact Assessment.</p>   |



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|   | <p><b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>   |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Mineral Exploration Activities on Epl 5818, Central Namibia<br/> <b>Year:</b> 2019<br/> <b>Location:</b> 40 km east of Khorixas<br/> <b>Client:</b> Gravity Empire Investments (Pty) Ltd<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p> |
| <ul style="list-style-type: none"> <li>• Project Leader</li> <li>• Client Liaison</li> <li>• Public Participation</li> <li>• Report Writing</li> <li>• Project Management</li> <li>• Project Supervision</li> </ul> | <p><b>Name of assignment or project:</b> Environmental Impact Assessment for Mineral Exploration on Epl 6374<br/> <b>Year:</b> 2019<br/> <b>Location:</b> 50 km South of Opuwo<br/> <b>Client:</b> Nami Geological Techniques (Pty)<br/> <b>Main project features:</b> Environmental Impact Assessment.<br/> <b>Positions held:</b> Lead Consultant<br/> <b>Activities performed:</b> Project Management, Report Writing, Public Meetings, Site Inspections, Stakeholder Engagement, Specialist Study Inputs and Map production.</p>                                   |