FINAL ENVIRONMENTAL SCOPING AND IMPACT ASSESSMENT

For the proposed minerals exploration for Base and rare metals, industrial minerals, nuclear fuels, and precious metals within EPL 9055

Kunene Region

Date: January 2024

Proponent: KoBold Metals Namibia (Pty) Ltd

APP: 002640



DOCUMENT INFORMATION

Title	Environmental Scoping and Impact Assessment (EIA) for the proposed minerals exploration for base & rare metals, industrial minerals, nuclear fuels and, precious metals within EPL 9055 Kunene Region, Namibia
Principal Author	Lovisa N Amwele
Co Authors	Helena Elago, Constantin Charles
Client	KoBold Metals Namibia (Pty) Ltd
Authorizer	Ministry of Environment Forestry and Tourism (MEFT)
Internal Doc Name	240111-KOB-EIA-V03-LNA
Cite this document as:	Amwele, L.N., 2024. Environmental Scoping and Impact Assessment (EIA) for the proposed minerals exploration for base & rare metals, industrial minerals, nuclear fuel minerals and, precious metals within EPL 9055 Kunene Region, Namibia
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DOCUMENT APPROVAL

Role	Name	Signature	Date
Author	Lovisa N Amwele	Aliance Environmental Consultancy R.O. Box 51006, Bachbrecht Cell: +264 85 772 8929 Email: info@enviro-aec.com	11.01.2024
Reviewer 1	Kaarina Ndalulilwa	KN	30. 12. 2023
Reviewer 2	Fabiana Peek		09.01.2024
Authorizer on behalf of KoBold Metals Namibia	Kaarina Ndalulilwa	KN	15 . 01. 2024

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NON-TECHNICAL SUMMARY

Alliance Environmental Consultancy CC (AEC) (herein referred to as the consultant) has been appointed by KoBold Metals Namibia (Pty) Ltd (herein referred to as the proponent) to act on their behalf in applying for an Environmental Clearance Certificate (ECC) for the proposed minerals exploration for base and rare metals, industrial minerals, nuclear fuels, and precious metals within EPL9055. The project area is located within the Khorixas constituency covering a total area of approximately 75,887 Hectares straddling the Torra and Doro !Nawas Area 1 communal conservancies, Kunene Region. The EPL site is accessible via several tracks that branch through the EPL from the C39/M0065 main road and D2612 district road from Khorixas. The major towns/settlements in and around the project area include Khorixas, De Riet, Bergsig, and Driefontein. FIGURE 1 & FIGURE 2 provides a detailed overview layout of the project area in the Kunene Region and as represented on the Ministry of Mines and Energy (MME) licences Cadastre Portal https://maps.landfolio.com/Namibia/. Table 1 indicates the corner coordinates for the EPL. The land use of the larger area includes agriculture and freehold tourism and it covers farmland (Farm Krone 721) as reflected in **FIGURE 2**.

In terms of the Environmental Management Act No.7 of 2007 and the Environmental Impact Assessment (EIA) Regulations of 2012, the project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). An environmental clearance application will be submitted to the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry, and Tourism (MEFT) for approval before the commencement of the anticipated project activities.

The exploration activities will be executed through a series of stages which may include a desktop review of existing data, regional reconnaissance assessment which includes field-based activities such as soil sampling and analysis, aerial or ground based geophysical surveys (including, but not limited to remote sensing, induced polarization, and magnetics), geological mapping and drilling boreholes for exploration in selected targeted areas.

This Scoping Report (SR) has been compiled in support of an application for an Environmental Clearance Certificate and it includes an Environmental Impact Assessment section. This report describes the baseline bio-physical and socio-economic environment, legal requirements and it also documents the mitigation and control measures which are also carried over into an Environmental Management Plan (EMP), which is bound to this report. The results of this scoping assessment were considered satisfactory and concluded that no further assessment was necessary for this phase of the project.

Generally, the area lies in the region that receives an average precipitation of 56.61mm per year. The climate is classified as Mid-latitude desert climate where the wet season is normally hot whilst the dry

season is warm, windy, and clear. The hot season lasts the longest, from September to February, with an average annual high temperature above 32°C. The study area lies within the Desert vegetation biome. The vegetation within the study site was found to be dominated by lichen species which are endemic to the larger desert regions and the *Psilicoulon salicornioides*. Plant diversity is estimated at >150 species, notwithstanding the fact that terrain and water availability may contribute to local differentiation.

A biodiversity and heritage specialist study/site survey of the physical, chemical, and biological characteristics of the actual site and surroundings was conducted. Additionally, a number of EIA and biodiversity studies have been completed for other projects around the vicinity of the project area and will be a reference to this report. This report represents a reference point for comparing any current and future data collected.

According to the Atlas of Namibia, nationally, the area is regarded as a relative medium to high mammal, reptile, and intermediate amphibian diversity. The soils in this area are broadly categorized as the group of calcisols and defined by a petric calcisols domination soil and lies in the Kunene South Groundwater basin. Groundwater potential in the area is anticipated to be usually low. The area is underlain by the flat lying volcanic rocks of the Cretaceous aged Etendeka Group, consisting of quartz latites, basalts, and dolerite intrusive sills, as well as the Karoo aged sediments consisting largely of shales, siltstones, and sandstones. The company is targeting rare and base metal mineralization.

The mineralization model is that of disseminated to massive sulphide deposits associated with mafic to ultramafic magmatic rocks, which can be associated with precious metals and industrial mineral mineralization. The public was informed of the project via four (4) newspaper advertisements, public notices placed around accessible places near the project area including relevant local office notice boards. Notification letters were sent to the affected landowners in consultation with the Ministry of Lands. Communication was also done through email, telephone calls and text messages with some affected landowners. The consultant hosted two one-on-one face-to-face interactions that were held at Torra Conservancy Field Office and Twyfelfontein Country Lodge in the presence of the proponent's representative. The draft documents will be shared with the public via email for their review and commentary before submission to authorities. The concerns and comments received from the public and the local community members will form the basis for this report as well as the draft EMP.

The identification of potential impacts included impacts that may occur during the planning, operational and decommissioning phases of the project. The following potential impacts on the socio-environment during exploration activities have been identified:

- Dust & Noise
- Health & Safety

- Visual
- Ecological
- Groundwater and surface water
- Heritage & Socio-Economic

The benefits that could arise from the project are:

- Creation of additional employment in the area.
- Generation of export and foreign exchange earnings.
- Skills transfer and training would develop the local workforce.
- Increase in knowledge on the subsurface which then contributes to development, and geoscience research.

Due to the limited scope of the proposed activities and the use of a step-by-step approach in advancing exploration operations, the overall severity of potential environmental impacts of the proposed project activities on the receiving environment will be of low to medium magnitude, temporally and permanent duration, localized extent, and high probability of occurrence. All impacts are provided with mitigation measures in order to minimize or avoid them to acceptable degrees provided that the measures are taken into consideration.

Based on the conclusions of this SR, it is thus recommended that an Environmental Clearance Certificate be provided for the planned project activities. When implementing the proposed program, the Proponent shall consider the following critical requirements:

- Where applicable, the Proponent will negotiate access agreements with landowners/authorities.
- The Proponent is responsible for obtaining all additional permits that may be required to support the prosecting activities.
- In addition to all applicable national rules and laws, the Proponent shall comply with all terms of the EMP.
- In cases where baseline information, national or international guidelines, or mitigation measures
 have not been supplied or do not adequately address the site-specific project effect, the
 Proponent must use the precautionary approach/principles.

LIST OF ABBREVIATIONS

AEC Alliance Environmental Consultancy
BID Background Information Document

CA Competent Authority

CBRM Community Based Resource Management

CV Curriculum Vitae

°C Degree Celsius

Diamond Drill Hole

DEA Directorate of Environmental Affairs

DOF Directorate of Forestry
DWA Directorate of Water Affairs
EA Environmental Assessment

EAP Environmental Assessment Practitioner
ECC Environmental Clearance Certificate
EIA Environmental Impact Assessment

EMA Environmental Management Act No 7 of 2007

EMP Environmental Management Plan Exclusive Prospecting Licence

ESAR Environmental Scoping & Impact Assessment

HSE Health Safety and Environment

IAPs Interested and Affected Parties

km Kilometers

MAWLRMinistry of Agriculture, Water and Land ReformMEFTMinistry of Environment Forestry and Tourism

mps Meters per second

MME Ministry of Mines and EnergyMSDS Material Safety Data SheetNCAA Namibia Civil Aviation Authority

NHCN National Heritage Council of Namibia

NSA Namibia Statistics Agency
WHO World Health Organization

OSHA The Occupational Safety and Health Administration

PPE Personal Protective Equipment
PPP Public Participation Process

RC Reverse Circulation

SOP Standard Operating Procedure

SR Scoping Report
TOR Terms of Reference

pXRF Portable X-Ray Fluorescence

GLOSSARY OF TERMS

Alternatives

A possible course of action, in place of another, that would meet the same purpose and need but which would avoid or minimize negative impacts or enhance project benefits. These can include alternative locations/sites, routes, layouts, processes, designs, schedules and/or inputs. The "no-go" alternative constitutes the 'without project' option and provides a benchmark against which to evaluate changes; development should result in net benefit to society and should avoid undesirable negative impacts.

Competent **Authority**

A body or person empowered under the local authorities act or Environmental Management Act to enforce the rule of law.

Environment

As defined in the Environmental Assessment Policy and Environmental Management Act -"land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, palaeontological or social values".

Environmental Assessment (EA)

Process of assessment of the effects of a development on the environment.

Environmental Management Plan (EMP)

A working document on environmental and socio-economic mitigation measures, which must be implemented by several responsible parties during all the phases of the proposed project.

Evaluation

The process of ascertaining the relative importance or significance of information, the light of people's values, preference and judgements in order to make a decision.

Hazard

Anything that has the potential to cause damage to life, property and/or the environment. The hazard of a particular material or installation is constant; that is, it would present the same hazard wherever it was present.

Interested Affected (I&AP)

and Any person, group of persons or organisation interested in, or affected by an activity; and **Party** any organ of state that may have jurisdiction over any aspect of the activity.

Mitigate

The implementation of practical measures to reduce adverse impacts.

Proponent (Applicant)

Any person who has submitted or intends to submit an application for an authorisation, as legislated by the Environmental Management Act no. 7 of 2007, to undertake an activity or activities identified as a listed activity or listed activities; or in any other notice published by the Minister or Ministry of Environment & Tourism.

Public

Citizens who have diverse cultural, educational, political and socio-economic characteristics. The public is not a homogeneous and unified group of people with a set of agreed common interests and aims. There is no single public. There are a number of publics, some of whom may emerge at any time during the process depending on their particular concerns and the issues involved.

Scoping Process

Process of identifying: issues that will be relevant for consideration of the application; the potential environmental impacts of the proposed activity; and alternatives to the proposed activity that are feasible and reasonable.

Significant Effect/Impact An impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.

Stakeholder Engagement The process of engagement between stakeholders (the proponent, authorities and IAPs) during the planning, assessment, implementation and/or management of proposals or activities. The level of stakeholder engagement varies depending on the nature of the proposal or activity as well as the level of commitment by stakeholders to the process. Stakeholder engagement can therefore be described by a spectrum or continuum of increasing levels of engagement in the decision-making process. The term is considered to be more appropriate than the term "public participation".

Stakeholders

A sub-group of the public whose interests may be positively or negatively affected by a proposal or activity and/or who are concerned with a proposal or activity and its consequences. The term therefore includes the proponent, authorities (both the lead authority and other authorities) and all interested and affected parties (I&APs).

1. INTRODUCTION

1.1. ABOUT THE CONSULTANT

Alliance Environmental Consultancy CC (also referred to as AEC) is a dynamic Namibian independent environmental consulting firm that provides cutting-edge environmental management services. We develop and implement solutions for a variety of projects by combining solid scientific expertise, legislative understanding, and fieldwork to uphold environmental safety and management standards throughout a projects' development, operational and decommissioning phases. We assess and monitor the social and environmental impacts for projects related to minerals exploration and mining, transport, construction, energy, biomass, tourism, and other sectors. Our wide range of capabilities, disciplines, and services are fundamentally based on proactively delivering advice and solutions with the outlook of sustainability.

Our expertise in environmental management for mining projects has been taking dominance in the company. We have been involved in the compilation of Environmental Impact Assessments (EIA) and Environmental Management Plans (EMP) for activities on Exclusive Prospecting Licences (EPLs), Mining Claims and Mining Licenses as lead practitioners and assistant practitioners. We are also involved in projects operational environmental compliance monitoring.

Our reputation is built on our unique techniques, experience, and exceptional client service. We strive to provide high-quality, cost-effective, and responsive environmental solutions for our clients by taking pride and staying current with environmental trends and regulatory changes. The consultant was assisted by Mr. Lester Hacker who was the PPP facilitator, Mr. Charles Adam and Ms. Helena Elago who are interns in the company. The detailed CV of the team is presented in **Appendix A**.

AEC is in no way a direct affiliate of the applicant and has no personal or financial interest in the proposed project other than reasonable compensation for the professional services provided.

1.2. ABOUT THE PROPONENT

KoBold Metals is a mineral exploration company leading one of the world's largest exploration research and development (R&D) effort to advance the frontier of exploration technology with artificial intelligence (AI) and novel hardware, in mineral exploration of the metals needed for the transition to a low-carbon economy. KoBold's business is discovering, defining, expanding, and developing mineral resources, and KoBold's objective is to achieve a step-change improvement in exploration success, whereby the company aims to discover more tier 1 resources, faster, and with fewer failures.

KoBold has a global portfolio of more than 50 exploration properties targeting nickel, copper, cobalt, and lithium, which range from 100%-owned to partnerships with both majors, junior explorers, and prospectors.

The KoBold team includes the best of the industry in exploration geoscience, data science, software engineering, operations, and business personnel. The company's exploration programs are co-led by geoscientists and data scientists, who develop exploration hypotheses, rigorously quantify uncertainty in our understanding of the subsurface, and design data collection programs that most effectively reduce uncertainty, drawing upon a large suite of proprietary exploration technology built by our data scientists and software engineers. Our field programs validate and improve the system and have demonstrated material improvements over conventional exploration methods.

KoBold is prepared to extend its footprint into the Namibian minerals prospecting industry and have applied for several prospecting licences in the country. More details can be accessed via: https://www.koboldmetals.com/.

1.3. PROJECT LOCALITY

The project area is located within the Khorixas constituency covering a total area of approximately 75,887 Hectares within the Torra and Doro !Nawas Area 1 communal conservancies, Kunene Region. The EPL site is accessible via several tracks that branch through the EPL from the C39/M0065 main road and D2612 district road from Khorixas. The major towns/settlements in and around the project area include Khorixas, De Riet, Bergsig, and Driefontein. **FIGURE 1 & FIGURE 2** provides a detailed overview layout of the project area in the Kunene Region and as represented on the Ministry of Mines and Energy (MME) licences Cadastrehttps://maps.landfolio.com/Namibia/.

The land - use of the larger area includes agriculture and freehold tourism and it covers a portion of the farm reflected in **TABLE 1**.

TABLE 1 – FARM OVERLAPPING EPL 9055

FARM NO.	FARM NAME
721	KRONE

The proponent applied for the EPL area through the MME on 12th of October 2022. The proponent was granted a notice of preparedness to grant the EPL on the 09th of October 2023. The physical EPL is pending approval as it is subject to an ECC by MEFT which is the reason for conducting this environmental scoping and impact assessment and other conditions to be met by the proponent.

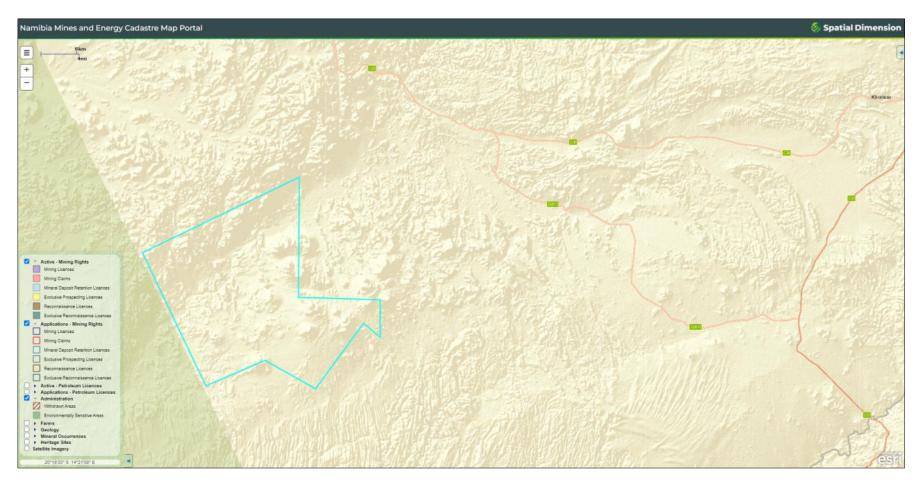


FIGURE 1 - LOCALITY DISPLAY ON THE MINING CADASTRE PORTAL (MME,2023) https://portals.landfolio.com/namibia/.

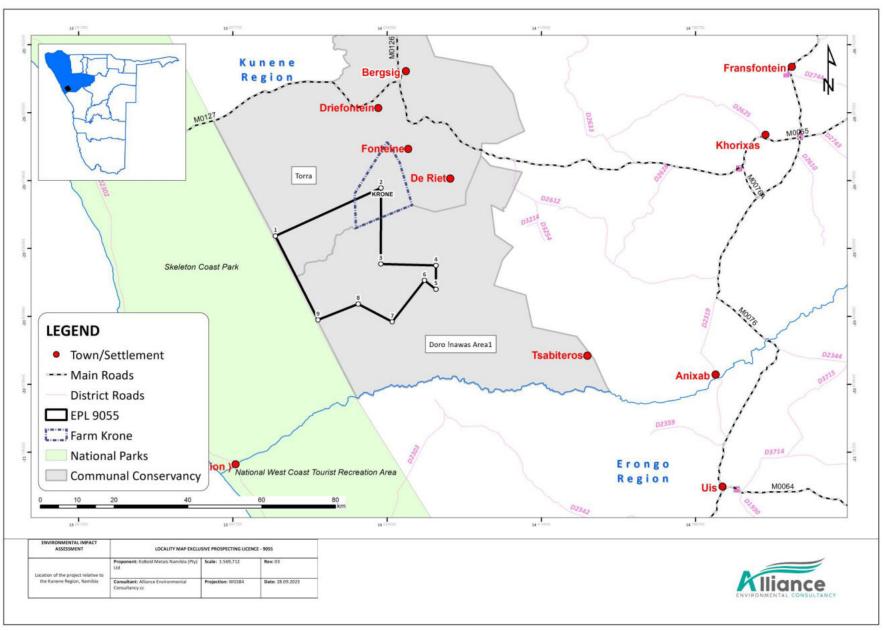


FIGURE 2 – LOCALITY MAP AND INFRASTRUCTURE OF THE PROPOSED PROJECT

TABLE 2 - CORNER COORDINATES FOR THE EPL 9055

Vertex ID	LATITUDE	LONGITUDE
Α	-20.608538	13.761676
В	-20.491699	14.019542
С	-20.676827	14.018844
D	-20.68065	14.153231
Е	-20.738692	14.153243
F	-20.717121	14.125677
G	-20.81798	14.046701
Н	-20.774253	13.963599
I	-20.813331	13.865844

1.4. PURPOSE OF THE DOCUMENT

In terms of the Environmental Management Act No.7 of 2007 and the Environmental Impact Assessment (EIA) Regulations of 2012, the project triggers listed activities that cannot be undertaken without an Environmental Clearance Certificate (ECC). An environmental clearance application will be submitted to the Ministry of Mines and Energy (MME) as the competent authority and the Ministry of Environment, Forestry, and Tourism (MEFT) as the issuing authority for the decision process to issue an environmental clearance certificate, before the commencement of the anticipated project activities.

The environmental scoping assessment report aims to address the following:

- i. Identification of potential positive and negative environmental impacts.
- ii. Evaluation of the nature and extent of potential environmental impacts
- iii. Identify a range of management actions that could mitigate the potential impacts to required levels.
- iv. Consult relevant stakeholders regarding the proposed development.
- v. Provide sufficient information to the MEFT to make an informed decision regarding the proposed project.

The provision of the listed activities are as follows:

WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES

- 2.1 The construction of facilities for waste sites, treatment of waste and disposal of waste.
- 2.3 The import, processing, use and recycling, temporary storage, transit, or export of waste.

MINING AND QUARRYING ACTIVITIES

- 3.1 The construction of facilities for any process or activities which requires a license, right, or other forms of authorization, and the renewal of a license, right, or any other form of authorization in terms of Minerals (Prospecting and Mining Act), 1992.
- 3.2 Other forms of mining or extraction of natural resources whether regulated by law or not.
- 3.3 Resource extraction, manipulation, conservation, and related activities.

FORESTRY ACTIVITIES

4.1 The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorization in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.

WATER RESOURCE DEVELOPMENT

8.1 The abstraction of ground or surface water for industrial or commercial purposes.

HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE

- 9.2 Any process or activity which requires a permit, Licence or other forms of authorization, or the modification of or changes to existing facilities for any process or activity which requires amendment of an existing permit, Licence or authorization or which requires a new permit, Licence or authorization in terms of a governing the generation or release of emissions, pollution, effluent or waste.
- 9.4 The storage and handling of dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location.

1.5. PROJECT MOTIVATION/RATIONALE

Mining activities in Namibia are one of the biggest contributors to the country's revenue and mining is one of the largest economic sectors in the country. Although for exploration activities there are limited social benefits associated with the project, the following are the possible benefits of the proposed project activities:

- Contributions to annual license fees to the government through the MME.
- Payments of lease agreements and services rendered.
- Provision of contractual employment opportunities.
- Increase in knowledge on the subsurface which then contributes to development, and geoscience research.
- Contribute to the socio-economic development of the local area and region,

 Direct capital investment into Kunene Region, and the nation through taxes on goods purchases as required for exploration activities.

Should a feasible resource be located, it could provide social and economic development within the region and the country, subject to a Mining Licence (ML) being issued by MME and a separate, comprehensive (full) Environmental Impact Assessment (EIA) process.

1.6. SCOPING ASSESSMENT LIMITATIONS

AEC assumes that all information and technical data for the Project relevant to the scope of the environmental scoping procedure provided by the Proponent, collected during the public participation process and through visual observation are true and correct, and that all necessary information has been disclosed.

This report is compiled as a scoping assessment, in addition other specialist studies were done as part of this assessment i.e., Heritage/Archeological specialist study and a biodiversity specialist study. This is because the consultants believed that the magnitude of the proposed activities and the existence of similar projects in the vicinity can be used to sufficiently address these potential impacts from the proposed project under the impact assessment section of the SR and mitigation measures provided accordingly. Reviewed literature, and professional experience from similar studies in the Region and elsewhere were also considered when addressing these effects/impacts. The project specific information used in this document is as provided by the Proponent, consultants experience and relevant literature reviewed/research. This report has been compiled on assumption that there will be no substantial changes to the proposed project activities or to the affected biophysical and social environment between the time of compiling this document and execution of the project, that could potentially influence the findings of this document. Where project activities alter new impacts are identified the EMP (Appendix B) should be updated to cater for the new impacts and mitigation measures should be provided therein.

1.7. TERMS OF REFERENCE

The Terms of Reference (ToR) for the proposed project are based on the requirements set out by the Environmental Management Act (EMA) (2007) and its EIA Regulations (2012). The scope of this assessment is to identify and evaluate potential environmental impacts emanating from the proposed activity. Data has been compiled by making use of literature, and the information provided by the proponent, communication with relevant stakeholders and consultant experience.

The process covered the following steps, as divided into the sections below. Each section describes what was undertaken.

1.7.1. SCREENING PHASE (OCTOBER 2023)

This involves project initiation discussions with the proponent to finalize the TOR for the study. The consultants identify potential environmental aspects and potential impacts that may be relevant to the project. Once the screening phase is concluded the scoping process is initiated.

1.7.2. SCOPING PHASE (OCTOBER 2023 TO DECEMBER 2023)

This phase constitutes the identification of further potential environmental issues associated with the proposed project, a description of the receiving environment, assessment of potential environmental impacts, and develop management and mitigation measures.

Other activities that can be conducted at this phase include site visits and identification as well as communication with potential affected parties and the compilation of Scoping Report and EMP. The reports are then distributed to Interested and Affected Parties (I&APs) for comment. This stage is further discussed under **Chapter 2**.

1.7.3. LEGAL FRAMEWORK

All legislation, policies and guidelines that had reference to the proposed project are listed under **Chapter 5**. The activities for which clearance is required for the project were extracted from the EMA Regulations. As per legal requirements, any exploration activity requires the Environmental Commissioner within the Ministry of Environment & Tourism to render an Environmental Clearance Certificate (ECC) in terms of the Environmental Management Act, No 7 of 2007 (EMA).

1.7.4. AIM OF THE REPORT

The aim of this report is to provide details on the proposed planning, operational, decommissioning and closure activities that will enable decision makers to make informed decisions regarding the development from an environmental perspective.

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1.7.5. PUBLIC PARTICIPATION PROCESS

Inform I&APs and relevant authorities of the details of the proposed development and provide them with a reasonable opportunity to participate during the process.

Stakeholder engagement through the public consultation process, is described in a later section of this report (**Chapter 7**).

1.7.6. ENVIRONMENT DESCRIPTION

The 'environment' is defined in the Environmental Assessment Policy and Environmental Management Act as "land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, paleontological or social values".

Relevant environmental data was compiled by making use of secondary information and stakeholder consultation. The report identified existing environmental (both ecological and socio-economic) conditions of the receiving environment in order to determine environmental sensitivities. Information regarding the biophysical and socio-cultural environment was sourced from a number of studies previously done in and around the study area. Furthermore, biodiversity and heritage specialist studies were conducted as part of this assessment. Please refer to **Chapter 6** and the document reference list for the sources of information consulted.

1.7.7. IMPACT ASSESSMENT

The scoping and assessment process aims to guide and promote sustainable and responsible development and not to discourage development. Potential environmental impacts and associated social impacts were identified and addressed in the report (**Chapter 9**). The EAP has assessed likely positive and negative impacts, including environmental and social impacts at the local and regional (Kunene Region) and national (Namibia) levels using the Hacking Assessment Method.

Possible enhancement measures have been listed for those positive impacts while prevention, mitigation and rehabilitation measures have been provided for negative impacts. The environmental assessment was conducted to comply with Namibia's Environmental Management Act, the requirements of Local Authorities and all other legal requirements applicable to the development and Namibia.

The assessment process involved merging various information streams into a description of the environment and the proposed project. If the environmental commissioner finds that the assessment

of potential impacts and the proposed mitigation measures proposed in this report, are acceptable, an ECC may be awarded.

1.7.8. ENVIROMENTAL MANAGEMENT PLAN (EMP)

This task involved the drafting of a standalone document that outlined the management, monitoring and mitigation measures that will avoid, minimise and/or mitigate potentially negative impacts. The ECC should refer to the EMP contained in **Appendix B**, and the conditions stipulated therein, thus rendering the EMP a legally binding document to which the proponent must adhere. The EMP is a live document and can be amended where project activities alter, or new impacts are identified throughout the life of the project.

2. THE EIA APPROACH AND METHODOLOGY

The EIA and EMP methodology applied for this project will take into account the provisions of the Environmental Impact Assessment (EIA) Regulations, 2012, and the Environmental Management Act (EMA) Act No. 7 of 2007. The process followed is detailed below and in **FIGURE 3**.

PHASE 1 - ENVIRONMENTAL SCREENING

Project initiation and registration with the Competent Authority

- This involves meeting with the client and discussing timeframes, logistics and project descriptions.
- Basic desktop site baseline analysis and compilation of a Background Information Document
 (BID)
- Project registration with Department of Environmental Affairs (DEA) to be done on the EIA online portal system.
- After the project is registered, the environmental commissioner will advise whether a full EIA or scoping assessment is required for the project, the required documents are outlined on the online system.

PHASE 2: ENVIRONMENTAL SCOPING ASSESSMENT INCLUDING PUBLIC PARTICIPATION PROCESS (PPP)

- An extensive desktop baseline study and review for the area will be undertaken using remote sensing to identify and describe potential sites that are likely to be impacted by the project before on ground site verification.
- The consultants may conduct a site visit during this stage to form a basis for the assessment and determine the real sensitivity of the surrounding biophysical and socio-economic environment.
- The information obtained during the site visit (if done) will be supplemented by a literature review and will be used by the environmental consultant to: (a) Determine the actual/real risks associated with the project activities, (b) Provide practical mitigation measures to minimize the risks; and (c) Make recommendations for further studies, should it be required.

Public Consultation Process and stakeholder engagement (21 Days)

Public consultation is an important stage of the EIA process as it ensures public involvement. The public consultation process begins with newspaper advertisement (Minimum two (2) local newspapers twice for two consecutive weeks), site notices to be placed at easily accessible places around the project area/town, radio announcements, when necessary, through respective constituency offices (especially in remote areas where newspapers might not reach on time) and then public meetings when critical. This is being done to provide the public with

- the opportunity to be involved in the process, provide their views and input regarding the proposed activities in the area.
- The EAP approaches different organizations and government institutions to gather information on potential stakeholders' contact details.
- During this stage, potential stakeholders (local governments, constituency offices, farmers etc.)
 are identified and made aware of the project as advised in writing. Invitation letters and or emails will be sent to the identified I&APs. All I&APs contact details will be collected for future communications related to the project progress.
- The Background Information Document (BID) prepared in phase 1 will be shared with all identified and registered I&APs during this period. The BID usually contains summarized project information such as the project description of activities, project motivation, potential impacts, and EIA process followed. This document will be shared via email or delivered in hardcopy to the relevant/applicable parties. Other social media platforms such as WhatsApp will also be utilized in this case. During this stage, a focus face to face public engagement and information sharing could be hosted.
- All comments, inputs, issues and/ or concerns raised by I&APs during the process will be recorded for consideration in the environmental assessment report and development of the EMP.

PHASE 3: ENVIRONMENTAL REPORTING – ENVIRONMENTAL SCOPING ASSESSMENT REPORT (ESAR) AND ENVIRONMENTAL MANAGEMENT PLAN (EMP)

- This stage will include data reduction and analysis using appropriate techniques to produce suitable project results for interpretation and discussion. This stage will entail consolidation of the findings in the form of a report that can be presented to the proponent for review and comments. An EMP will be drafted to mitigate and manage all impacts identified in the scoping report.
- After approval of the documents by the Proponent, the draft ESAR and EMP will be prepared for circulation to the public (I&APs) for comments over a period of 7-14 days.
- All comments are consolidated and included in the reports and the ESAR and EMP are finalized for submission to the competent authority MME and issuing authority (MEFT).
- The registered and identified I&APs will be informed that the final documents have been submitted to the authorities for decision making and that for any further comments, they can directly contact the DEA. Furthermore, the DEA provides another 14 days period for public participation on the online portal in this regard.

PHASE 4: FOLLOW-UP WITH THE COMPETENT AUTHORITY UNTIL FEEDBACK IS GRANTED

Should the DEA require further information, the EAP will be alerted.

FIGURE 4: BELOW PROVIDES A SIMPLIFIED EIA PROCESS FLOWCHART

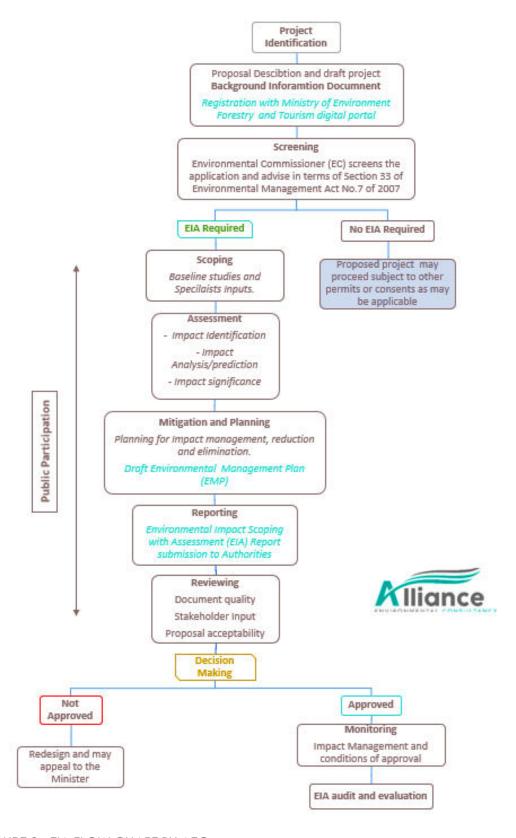


FIGURE 3 - EIA FLOW CHART BY AEC

3. PROJECT DESCRIPTION

3.1. PROJECT PLAN AND ACTIVITIES

The proponent wishes to conduct an exploration program on EPL 9055 for base & rare metals, industrial minerals, nuclear fuels, and precious metals. Once granted by MME, the licence will be valid for three years with possible renewal after this period. The commencement of the project is planned as soon as the environmental clearance certificate and physical EPL licence has been issued. The exploration program will be carried out as outlined in more detail below:

3.1.1. PLANNING PHASE

This will incorporate the procurement of all required permits and agreements with various state and parastatal agencies as well as surface landowners/land custodians. These will result in various agreements to be entered into between the proponent and the respective parties.

Possible parties that will be/are being consulted include the following:

- Ministry of Mines and Energy (MME)
- Ministry of Environment Forestry & Tourism (MEFT, this application)
- Kunene Regional Council
- Ministry of Agriculture, Water & Land Reform (MAWLR)
- Affected Traditional Authorities
- National Heritage Council of Namibia (NHCN)
- Conservancies (Torra and Doro !Nawas (Area 1)
- Landowners/ Land custodians

3.1.2. INITIATION/PRE-OPERATIONAL PHASE

i. Accommodation

During this phase, a provisional field camp is planned with basic infrastructure as required for operations within the boundaries of the EPL, such as providing accommodation for approximately 5 to 10 (depending on the labour needs) on site. Alternatively, the workers can commute from the nearby town/settlement or any accommodation places that may be deemed sufficient by the proponent. There exists a campsite/lodge within the EPL, although currently not operational, this could be considered as an accommodation place for the workforce. Any infrastructure will be erected with the permission of the land custodians in the area. The accommodation area will be demarcated to limit the movement of equipment and personnel beyond the footprint of the camp area, and also to limit the movement of animals onto the site from the surrounding area.

ii. Access

Existing access roads will be utilized and if need be, upgraded to accommodate heavy motor vehicles and operational machines. The selective clearing of vegetation in areas designated for prospecting will be minimal from the foreseen operations. Usually, land is cleared at areas where drilling operations will be conducted or where the camping area will be erected. When lateral expansion is required the removal of vegetation will be done in association with the Directorate of Forestry that issues the relevant permits before any trees could be fallen.

iii. Waste management

Solid waste will be removed off site and taken to the nearest registered dumpsite. The proponent intends to use portable toilets at work sites, when necessary with a possibility of long drop toilets in some locations. Alternatively, toilets may be established when the staff resides at the working area, with septic tanks to be emptied regularly using a tanker truck which removes the sewerage and takes it to the municipal sewerage works. For a longer-term field camp arrangement, a French drain system could be devised and constructed. Noting that there is a camp site/lodge within the EPL area, should existing toilets be available and operational, these could be another option to be utilized.

3.1.3. OPERATIONAL SUPPORT SERVICES

i. Water supply

Water supply sources being considered are either.

- Ground water abstraction; and
- NamWater

The volume of water will depend on the exploration program. Water needs in the initial phases of mineral exploration will be minimal for drinking and ablution facilities. If diamond drilling is required to test a target then larger volumes will be required. The proponent does not expect to use much water, as the main activities are for camp use (approximately 2000L – 2500L or less a month) and for drilling. It is suggested that amounts of water can be sourced from the nearest NamWater supply scheme or from one of the surrounding neighbors or community boreholes and then be trucked to the exploration site and camp, this is the preferred option.

If for any reason more water is required then the proponent suggests abstraction of ground water, which can be done at minimal extraction cost, a borehole can be sunk to augment supply volumes or an existing borehole can be utilized with the owner's permission. However, for this option groundwater exploration would need to be undertaken followed by the required permit application process with the Directorate of Water Affairs (DWA).

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ii. Power supply

The proponent will evaluate what electrical supplies are readily available to the project. Generators may be used in remote locations for short-term work, and a small field of photovoltaic panels is also envisaged for power generation in the medium term in semi-permanent camps and during long-term work. No infrastructure development to get electricity from the national grid has been planned. All mobile equipment is diesel driven and self-propelled. Static equipment will use electricity generated by diesel generators.

iii. Onsite fuel storage

Diesel storage at the site will be only temporary and intermittent during drilling and bulk sampling operations. Approximately 200 litres of diesel will be stored in a bunded fuel tank system, conveniently placed and accessible for deliveries. This facility will be of modern construction, either double-skinned or 110% bunded to ensure spills are prevented.

Delivery systems will use sealed fittings to prevent spillage. The fuel facility is to be actively manned. Standardized spill kits and reporting systems will be in place to deal with any hydrocarbon spills. Contaminated soil will be transferred to a remediation site, which is specifically designed for such treatment.

Although unlikely during the mineral exploration phases, should the company need to store more than 600 litres of fuel at its exploration sites in the rural areas, storage permission will be sought from the MME.

3.1.4. PROSPECTING/OPERATIONAL PHASE ACTIVITIES

The area is underlain by volcanic rocks of the Cretaceous aged Etendeka Group, consisting of quartz latites and basalts, Cretaceous dolerite intrusive sills and Karoo aged sediments consisting largely of shales, siltstones, and sandstones. The exploration targets on the EPL are disseminated to massive sulphide deposits associated with mafic to ultramafic magmatic rocks, and lithium bearing pegmatites.

The exploration team is envisioned to consist of up to fifteen (15) skilled and non-skilled workers. Initially the company may start with 2-3 exploration geologists and 2-3 field technicians. Additional support like logistics, labourers, cooks etc., will likely be needed and will ramp employment up as needed in each phase. Laborers will be sourced from the communities nearest to the projects. Field operations may operate 10 hours a day (7am to 5pm) for up to seven days per week, or as needed. The personnel will be transported to and from the operational site by company transport.

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i. Vehicle, machinery, and associated equipment

At the initial stages of mineral exploration, the company will use 4x4 vehicles. Heavy machinery will be used from drilling stages. The number of vehicles will depend on the work program. Main equipment types to be used will include 4X4 bakkies, drill rigs (Reverse Circulation (RC) or Diamond Drill Hole (DDH)), excavators and front-end loaders to be used if overburden topsoil removal is required, water tankers for the camp site and to support drilling operations, portable geophysical equipment, sampling equipment (bags, sieves, spades etc.). The aforementioned will be stored in designated areas at the exploration camp/accommodation.

The projected mineral exploration activities during prospecting follow a staged approach. The different work aspects and consecutive phases are summarized as follows:

ii. Desktop studies including geological mapping.

High resolution data are purchased from the MME to assist in a desktop review of existing historic geological exploration reports data as well as all past research conducted in the general area to see if there are any prospective targets. The data available is used to understand the background of the area through remote sensing and topographic surveys. This involves a review of geological maps of the area and on-site ground traverses and observations. One of the initial stages in mineral exploration on the EPL would be to ground truth known mineral occurrences and targets generated from the desktop studies. The maps and data will be updated where relevant information has been obtained. This stage is non-invasive.

To map the sub-surface, the company may consider trenching mineralized areas. Trenches may be dug / excavated to a depth of about 5m. The material from the trenches is put on the sides of the trenches for backfilling of the trenches, once the trenches are no longer needed. If the trenches are needed for a longer period they may be fenced off.

iii. Geophysical survey

The geophysical surveys include the collection of information of the substrata, by ground and airborne techniques, through sensors such as radar, magnetic and electromagnetic to detect any mineralization in the area. Ground geophysical surveys would be carried out using sensors mounted on vehicles or carried by hand **FIGURE 4**. Aerial geophysical surveys would be carried out using sensors mounted on low flying aircraft or unmanned drones **FIGURE 5**. The airborne geophysical technique tries to measure electrical conductivity and magnetic variations of the ground using measuring instruments suspended underneath a helicopter, drone or aircraft. During the survey, the magnetometer continuously records the total magnetic field intensity immediately beneath the magnetometer. Where necessary, permits will be obtained from Namibia Civil Aviation Authority (NCAA) to support the airborne geophysical surveys. Generally, these techniques are not intrusive in terms of impacts towards the environment.



FIGURE 4- IILUSTRATIVE IMAGE OF A GROUND-BASED GEOPHYSICAL SURVEY WITH MAGNETOMETER (Photo taken from: https://irsl.ss.ncu.edu.tw/media/course/CI/SIO_9.pdf

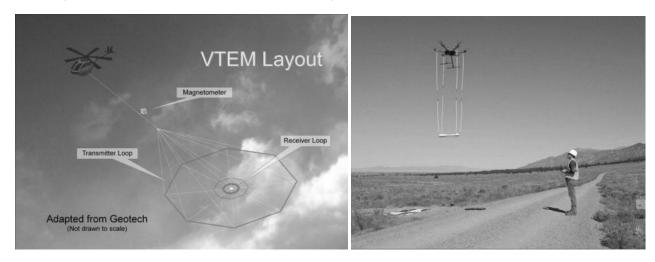


FIGURE 5 – ILLUSTRATIVE IMAGES OF AIRBORNE GEOPHYSICAL TECHNIQUES (Photo credits: https://www.geologyforinvestors.com/airborne-geophysical-methods/)

The airborne geophysical technique could be a nuisance to both people and animals in the area. Therefore, prior communication should be done with the relevant landowners before surveys are conducted.

iv. Geochemical sampling

This stage incorporates geochemical analyses of rocks, drill core or drill chips, and geochemical soil sampling programs **FIGURE 6**. Rock grab samples are collected during ground-truthing/reconnaissance and geological mapping activities.

Soil samples are collected at depths of at least 20 - 30cm, by firstly removing the upper surface of the soil that will be filled back once a sample is collected. The samples are collected into bags of

approximately 500grams to 1kg. Sampling might be carried out in up to 8 teams, each consisting of a field technician or geologist and local field assistants.

The samples collected during field campaigns are sent to an analytical laboratory (as preferred by the proponent) for geochemical trace element and whole rock analysis, mineralogy, or for heavy mineral separates, to determine if the desired mineralization is present, and in which quantities. Mineralogical studies on samples collected will run consecutively to geochemical sampling to determine host mineralogy and any complications that may arise later in the geo-metallurgy process.





FIGURE 6 - EXAMPLES OF GEOCHEMICAL SAMPLING OF SOILS (Photo taken from: https://www.fishereng.com/post/b-understanding-geotechnical-investigations)

v. Exploration Drilling

Exploration drilling (FIGURE 7) is the process of sampling rock below surface, where it is suspected that there may be mineralization. The most commonly used drilling techniques are Reverse Circulation Drilling (RC) or Diamond Drilling. Both methods are applied in exploration, resource evaluation and subsequently in defining an ore reserve. The proponent will store the drill products (rock chips and/or drill core) near the exploration site or the exploration camp or may choose to erect a storage warehouse in proximity to the project or may rent a warehouse near the project area. More work, such as XRF analysis, core cutting and sampling, will be conducted on the drill products at the storage facility.

Drill targets are generated from the analysis of results from the combination of desktop, geological mapping, geophysical, and geochemical studies. It may be necessary to clear tracks and drill platforms/pads in preparation for drilling activities. Efforts will be made to limit or minimize the amount of clearing of trees and shrubs for drilling purposes. Should sensitive/protected species be present in the target area a trees removal and clearing permit is applied for through the Department of Forestry (DoF).



FIGURE 7 - ILLUSTRATIVE IMAGE OF A DRILLING OPERATION (Photo credits: https://www.juniorminingnetwork.com/junior-miner-news/press-releases/394-tsx-venture/sgn/100723-scorpio-gold-commences-exploration-drilling-program-on-manhattan-mine-nevada.html)

During Diamond drilling a solid core (**FIGURE 8**) representing the lithology/rocks below ground, is extracted from depth, for examination at surface. The key technology of the diamond drill is the actual diamond bit itself. It is composed of industrial diamonds set into a soft metallic matrix. The drill produces a "core" which is logged, photographed and which can be split longitudinally for sampling purposes. Half of the split core is assayed while the other half is permanently stored for future use and reference.



FIGURE 8 - IILUSTRATIVE IMAGE OF A DIAMOND DRILL CORE (Photo credits: https://www.istockphoto.com/photos/core-drilling)

RC Drilling uses a pneumatic hammer, which drives a rotating tungsten-steel bit. The technique produces an uncontaminated large volume sample, which is comprised of rock chips (**FIGURE 9**). RC is relatively quick and cheap compared to Diamond Drilling. In mineral exploration RC drilling is commonly used in uncomplicated geology at shallow levels, or for infill drilling, at a much higher density or narrower spacing to allow extrapolations of the rock units. Usually, the drill platform/pad is approximately 15 m x 15 m and during the drill process is off-limits to those not part of the exploration team for safety reasons.

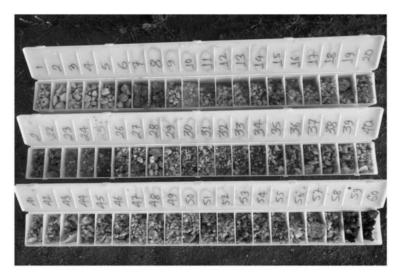


FIGURE 9 -IILUSTRATIVE IMAGE OF RC DRILLING ROCK CHIPS (Photo taken from: https://www.marketindex.com.au/news/aldoros-pegmatite-intersections-at-murchison-look-encouraging)

Once the samples submitted to the laboratories are analysed and the results are received, the results are evaluated, and a decision will be taken whether to continue the phase of mineral exploration on the EPL. If exploration drilling results are positive the information will be used to determine follow-up drilling phases which may lead to resource drilling and modelling..

Initially, drilling would be localized on discrete targets identified through the different stages of mineral exploration, and if the results are positive then more drilling would be planned.

vi. Advanced prospecting/exploration

In the advanced stages of exploration, if an economic mineral deposit is found on the EPL, larger amounts of rock sample material may be required for performing processing trials and for metallurgical testing programs. Ground conditions and geotechnical parameters also need to be established for planning and costing purposes.

Bulk sampling for metallurgical tests and processing trials will be done to complement the material obtained during drilling. A bulk sample can be collected via trenching if weathering of the rocks is not too deep, or from drilling with larger bit sizes, or from localized blasting for bulk sampling/trial mining. The size of the sample required depends on the nature of the mineralization as observed from drilling and sampling.

vii. Pre-feasibility and feasibility studies

If the advanced exploration activities yield positive results, the exploration data will be compiled into a pre-feasibility report, and upon positive results from further work, a detailed feasibility and/or bankable feasibility study will be conducted on the identified site-specific area where an economic mineral deposit is defined.

Additional detailed and site-specific resource or geotechnical drilling, bulk sampling, laboratory and metallurgical testing, and trial mining may be conducted.

viii. Mining Licence Application or End of exploration Program

Only if an economic mineral resource is discovered within the EPL area, the proponent will compile an application for a mining licence, and a separate and detailed environmental impact assessment study will be undertaken. The EIA will comprise of detailed site-specific specialists' studies of different aspects of the project these studies may include the following impact assessments; socio-economic, hydrology and geohydrology, archaeology, air quality, traffic, biodiversity (fauna & flora), visual and soil etc.

Should there be no discovery of any economic mineralization on the EPL during the various stages of prospecting activities, , the proponent can decide at any point to discontinue the activities planned on the EPL, rehabilitate the areas disturbed during their exploration, and relinquish the EPL back to the MME.

3.1.5. DECOMMISSIONING AND FINAL REHABILITATION

In accordance with the EMA, the proponent is required to have funds available and allocated for rehabilitation. This fund should continually be available during the period of the active operation yet also be sufficient to cover all decommissioning activities when required. Decommissioning activities will include the removal of any temporary infrastructure, rehabilitation of roads and other linear infrastructure, drill sites and bulk sampling pits, as necessary. This is done in order to reduce the effects of soil erosion and to re-establish normal ecosystem functionality so as to rehabilitate the environment. Functional water boreholes (if any were drilled by the proponent) and solar panels could be donated to the local communities. Rehabilitation efforts can be expected to be low if economic mineralization is not found on the EPL, because the mineral exploration activities will have minimal impact on the environment or may be limited to non-invasive activities if there is no justification to trench or drill test any of the targets.

4. ALTERNATIVES CONSIDERED

In terms of the Environmental Management Act, No. 7 of 2007 and EIA Regulations, alternatives considered should be analyzed to identify different means of meeting the general purpose and requirements of the activity, which may include alternatives to, location, type of activity, design and layout, technology and operation aspects. This is to ensure that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified. The alternatives considered are tabulated below:

ALTERNATIVE	JUSTIFICATION
Site/Location	Minerals Occurrence Location- Several economic deposits are known to exist in various
	locations of Namibia, some of which have been explored and mined by various companies
	throughout the years. However, mineral occurrence is often highly localized and therefore
	primarily determined by the site geology. As part of the license, the proponent proposes to
	explore and potentially mine for base & rare metals, industrial minerals, nuclear fuels and,
	precious metals economic minerals occurrences in this specific EPL area.
	The proponent has applied for a number of EPLs in the country, some of which were rejected.
	KoBold plans to explore locations where EPLs will be granted or in partnerships with other
	licence holders.
Infrastructure	Access Roads - The access routes to target areas and around the EPL have not been
	determined yet, however the proponent will use the existing external and internal road
	networks during the various phases of the project, should any new access be created, it will
	be done with the permission of landowners/land custodians as well as MEFT. The Proponent
	may need to upgrade some of the farm roads to ensure that they are fit to accommodate
	project vehicles, such as rig bearing trucks, and erect temporary road signs for the duration
	of the project.
	Equipment and infrastructure – The equipment and infrastructure options considered by the
	proponent are deemed sufficient at this stage of the project and were chosen based on
	cost, the environment as well as accuracy in terms of required mineral information. However,
	in the world of revolving technology, the proponent may opt to employ other improved and
	environmentally safe to use equipment/infrastructure in the future when deemed necessary
	in order to maximize the project output.
Water supply	The proponent will use existing water infrastructure. Water may be brought to site from the
	nearest town/settlement and stored in a tank on site. The alternative is to use existing
	boreholes or do a hydro search to drill a new borehole.
Power supply	The first alternative is to use existing power supply sources in the area. If there are no existing
	power infrastructure in the area, power will be sourced from a diesel generator. Another
	alternative is to Install photovoltaic solar panels at a later stage.

5.1. NO GO ALTERNATIVES

Not conducting exploration will deprive the proponent an opportunity to pursue its business and to strive for mineral resource discoveries, and it will also constitute an opportunity loss for the Namibian economy and overall wealth of the Namibian people. As such it will also deny other key stakeholders an opportunity to earn a much-needed income. The local authority and central government agencies will not earn revenue through rates and taxes. Considering the above losses, the "no-action/go" alternative was not considered a viable option in the interest of the directly affected community and the proponent.

5. LEGAL REQUIREMENTS

5.1. LIST OF APPLICABLE LAWS AND LEGISLATIONS

A list of legislation that is applicable to the proposed project is presented in **TABLE 3**.

TABLE 3 - LIST OF APPLICABLE NATIONAL LAWS AND LEGISLATIONS

LAW	SUMMARY DESCRIPTION & APPLICABILITY
	The Constitution is the supreme law in Namibia, providing for the establishment
	of the main organs of state (the Executive, the Legislature, and the Judiciary)
	as well as guaranteeing various fundamental rights and freedoms.
	Provisions relating to the environment are contained in Chapter 11, article 95,
	which is entitled "promotion of the Welfare of the People". This article states
Constitution of the	that the Republic of Namibia shall –
Constitution of the	"Actively promote and maintain the welfare of the people by adopting, inter
Republic of Namibia,	alia, policies aimed at; maintenance of ecosystems, essential ecological
1990	processes and biological diversity of Namibia and utilization of living natural
	resources on a sustainable basis for all Namibians, both present and future. The
	Government shall provide measures against the dumping or recycling of
	foreign nuclear waste on Namibian territory."
Minerals	Minerals (Prospecting and Mining) Act 33 of 1992 and special regulations
(Prospecting and	
Mining) Act, No. 33 of	Sections 50, 52, 54, 57 and 130 of this Act sets out provisions for environmental
1992	management for activities arising from mineral, Exploration, and exploitation
Ministry of Mines and	of mineral resources
Energy	
The Minerals Policy	This policy sets out guiding principles and directions while communicating the
of Namibia, 2003	values of the Namibian people in pursuit of the development of the mining
Ministry of Mines and	and mineral resources beneficiation sector.
Energy	
Charter for	This charter aims to facilitate meaningful participation of historically deprived
Sustainable and	Namibians in the mineral exploration, mining and mineral beneficiation
Broad-Based Economic	industry. It has effectively been developed as an instrument to effect
and Social	transformation and sets specific targets for mineral license holders and
Transformation in the	Operators of mineral processing facilities active in Namibia.
Namibian Mining	
Sector 2014 – 2020 (The	
Namibian Mining	
charter)	

The purpose of the Act is to give effect to Article 95(1) and 91(c) of the Namibian Constitution by establishing general principles for the management Environmental of the environment and natural resources. Management Act - to promote the coordinated and integrated management of the (2007)environment to give statutory effect to Namibia's Environmental Ministry of Assessment Policy. Environment, Forestry - to enable the Minister of Environment, Forestry and Tourism to give effect to and Tourism (MEFT) Namibia's obligations under international conventions. In terms of the legislation, it will be possible to exercise control over certain listed development activities and activities within defined sensitive areas. The listed activities in sensitive areas require an Environmental Assessment to be completed before a decision to permit development can be taken. The legislation describes the circumstances requiring environmental assessments. - Activities listed as per the provisions of the Act will require environmental assessment unless the Ministry of Environment, Forestry and Tourism, in consultation with the relevant Competent Authority, determines otherwise and approves the exception. The provision of listed activities is listed under section 1.4. Environmental This policy aims to promote sustainable development and economic growth Assessment Policy while protecting the environment in the long term by requiring environmental (1994)assessment prior to undertaking of certain activities. Annexure B of the policy contains a schedule of activities that may have significant detrimental effects Ministry of Environment, Forestry on the environment, and which require authorisation prior to undertaking. and Tourism (MEFT) Water Act 54 of 1956 This Act provides for the control, conservation, and use of water for domestic, Water Resources agricultural, urban, and industrial purposes. In terms of Section 6, there is no Management Act right of ownership in public water and its control and use is regulated and (Act No. 11 of 2013) provided for in the Act. In accordance with the Act, the proposed project must ensure that Ministry of Agriculture, Water and Land mechanisms are implemented to prevent water pollution. water permits will reform (MAWLR) also be required to abstract groundwater as well as for "water works." The Act provide for the establishment of a Forestry Council and the appointment of certain officials; to consolidate the laws relating to the Forest Act 12 of 2001 management and use of forests and forest produce; to provide for the Minister of protection of the environment and the control and management of forest Environment, Forestry fires. and Tourism (MEFT)

Section 22 requires a permit for the cutting, destruction or removal of vegetation that are classified under rare and or protected species; clearing the vegetation on more than 15 hectares on any piece of land or several pieces of land situated in the same locality which has predominantly woody vegetation; or cut or remove more than 500 cubic metres of forest produce from any piece of land in a period of one year. Should the above be unavoidable, it will be necessary to obtain a permit from the Ministry. Minimal vegetation clearing will be required to support the project activities. The necessary permit should be obtained from the MEFT, where the application should satisfy that the cutting and removal of vegetation will not interfere with the conservation of soil, water, or forest resources. Hazardous Substance Provisions for hazardous waste are amended in this act as it provides "for the Ordinance 14 of 1974 control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or Ministry of Health and flammable nature or the generation of pressure thereby in certain Social Services (MoHSS) circumstances, to provide for the prohibition and control of the importation, sale, use, operation, application, modification, disposal or dumping of such substance and to provide for matters connected therewith." Petroleum Products Regulation 3(2)(b) states that "No person shall possess or store any fuel except and Energy Act (No. 13 under authority of a licence or a certificate, excluding a person who possesses of 1990) Regulations or stores such fuel in a quantity of 600 litres or less in any container kept at a (2001)place outside a local authority area. Ministry of Mines and The project will require diesel storage for supplying power, and machinery operation. The necessary permits should be acquired in this regard. Energy Atmospheric Pollution This regulation sets out principles for the prevention of the pollution of the Prevention Ordinance 11 atmosphere and for matters incidental thereto. Part III of the Act sets out of 1976. regulations pertaining to atmospheric pollution by smoke. While preventative measures for dust atmospheric pollution are outlined in Part IV and Part V Ministry of Health and outlines provisions for Atmospheric pollution by gases emitted by vehicles. Social Services (MoHSS) WHO guideline on The proposed prospecting activities would not entail the discharge of large quantities of gaseous pollutants into air but may result in increased noise levels, noise levels. dust generation, destruction of in situ soil structure during such operations. Occupational Safety and Health Administration (OSHA) guidelines

The Nature Conservation Ordinance 4 of 1975, Ministry of Environment, Forestry and Tourism (MEFT) Soil Conservation Act,	Care must be taken to ensure that protected plant species and the eggs of protected, and game bird species are not disturbed or destroyed. If such destruction or disturbance is inevitable, a permit must be obtained in this regard from the Minister of Environment, Forestry and Tourism. Should the Proponent operate a nursery to propagate indigenous plant species for rehabilitation purposes, a permit will be required.
No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38	The act makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil and vegetation
Labour Act, 1992, Act No.	
6 of 1992 as amended in	The Labour Act gives effect to the constitutional commitment of Article 95 (11),
the Labour Act, 2007 (Act	to promote and maintain the welfare of the people. This Act is aimed at
No. 11 of 2007	establishing a comprehensive labour law for all employees. to entrench
Ministry of Labour,	fundamental labour rights and protections, to regulate basic terms and
Industrial Relations, and	conditions of employment. To ensure the health, safety and welfare of
Employment Creation	employees under which provisions are made in chapter 4. Chapter 5 of the
(MLIREC)	act improvises on the protection of employees from unfair labour practice.
Affirmative Action	Fair employment practice
(Employment) Act No. 29	
of 1998	
Regional Councils Act	The Regional Councils Act legislates the establishment of Regional Councils
(Act No. 22 of 1992)	that are responsible for the planning and coordination of regional policies
	and development.
	The main objective of this Act is to initiate, supervise, manage, and evaluate
	development in the regions.
Namibia's Environmental	Prescribes Environmental Impact Assessments for any developments with
Assessment Policy for	potential negative impacts on the Environment
Sustainable	
Development and	
Environmental	
Conservation of 1995	
Nature Conservation	To provide for an economically based system of sustainable management
Amendment Act 5 of	and utilization of game in communal areas
1996	

Draft Pollution and Waste	This Bill serves to regulate and prevent the discharge of pollutants to air and
Management Bill (1999)	water as well as providing for general waste management. The Bill repeals the
	Atmospheric Pollution Prevention Ordinance (11 of 1976). In terms of water
	pollution, it will be illegal to discharge of, or dispose of, pollutants into any
	watercourse without a Water Pollution Licence (apart from certain accepted
	discharges).
	Similarly, an Air Quality Licence will be required for any pollution discharged to
	air above a certain threshold. The Bill also provides for noise, dust or odour
	control that may be considered a nuisance. The Bill advocates for duty of care
	with respect to waste management affecting humans and the environment
	and calls for a waste management licence for any activity relating to waste
	or hazardous waste management.
Convention on	Combating desertification and mitigation of the effects of drought
Desertification of 1994	
	This Act provides provisions for the protection and conservation of places and
National Heritage Act 27	objects of heritage significance and the registration of such places and objects.
of 2004	The proposed activities will ensure that if any archaeological or paleontological
Ministry of Education, Arts and Culture (MEAC)	objects, as described in the Act, are found during the implementation of the
	activities, such a find shall be reported to the Ministry immediately. If necessary,
	the relevant permits must be obtained before disturbing or destroying any
	heritage

TABLE 4 - INTERNATIONAL LAW TO WHICH NAMIBIA IS A SIGNATORY

INTERNATIONAL LAW TO WHICH NAMIBIA IS A SIGNATORY

Vienna Convention for the Protection of the Ozone Layer - 1985

Montreal Protocol on substances that deplete the Ozone Layer - 1987

The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal – 1989

The Rotterdam convention on the Prior Informed Consent Procedure for Certain Hazardous chemicals and Pesticides in International Trade – 1989

The Rio de Janeiro Convention on Biological Diversity - 1992

United Nations Framework Convention on Climate Change - 1992

5.2. KEY REGULATORS / COMPETENT AUTHORITIES

The regulatory authorities responsible for environmental protection and management in relation to the proposed project, including their role in regulating environmental protection are listed in **TABLE 5**.

TABLE 5 - AGENCIES REGULATING ENVIRONMENTAL PROTECTION IN NAMIBIA.

AGENCY	RESPONSIBILITY
	Issuance of Environmental Clearance Certificate (ECC) based on the review
Ministry of Environment,	and approval of the Environmental Assessments (EA) reports comprising
Forestry and Tourism	Environmental Scoping and Environmental Management Plan (EMP) prepared
(MEFT)	in accordance with the Environmental Management Act (2007) and the
	Environmental Impact Assessment Regulations, 2012
Ministry of Mines and	Competent authority. The national legislation governing minerals prospecting
Energy (MME)	and mining activities in Namibia fall within the jurisdiction of the Ministry of Mines
	and Energy (MME) as the Competent Authority (CA) responsible for granting
	authorisations. 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.

5.3. PERMITS

Some permits related to exploration activities are listed in **TABLE 6**.

TABLE 6 - APPLICABLE PERMITS TO THE PROPOSED PROJECT

PERMITS/CERTIFICATES	ACTIVITY	VALIDITY
Exclusive Prospecting Licence	Issued once the mining commissioner is	3- Years
- MME	satisfied if all requirements outlined in the	
	preparedness to grant are met.	
Environmental Clearance	Issued once the environmental	3-Years
Certificate - MEFT	commissioner is satisfied with the EMP	
	submitted in support of the project. The	
	EMP will be the legally binding document	
	between the MEFT and the proponent.	
Fuel Consumer Installation	Regulates the amount of fuel product in	Temporary/ permanent
Certificate - (MME)	possession	
Notice of intention to drill –	This is submitted to the mining	Valid for the drilling period in
(MME)	commissioner prior to drilling operation.	notice
Water abstraction permit –	This is applied for at the Directorate of	Permit dependent
(DWA)	Water Affairs to outline the borehole	
	locations and the quantities of water you	
	intend to abstract and for what sort of	
	activities	
Forestry Permits – (DOF)	Regulates the forest species to be	Temporary.
	cleared.	

BASELINE ENVIRONMENT/ STUDY AREA

This section lists the most important environmental characteristics of the study area. This provides a baseline where changes that occur as a result of the proposed project can be measured. The data was gathered through desktop analysis of existing data, through spatial analysis and site observations. The spatial data used for mapping under this section was obtained from various sources including the https://digitalnamibia.nsa.org.na/ of Namibia Statistics Agency (NSA) as well as the MME minerals Cadastre portal https://maps.landfolio.com/Namibia/ and The Environmental Information Services website at http://www.the-eis.com/. Archeological and biodiversity site-specific specialist studies were conducted for this project Appendix E and https://www

6.1. SITE AND SURROUNDING LAND USE

Generally, the region lacks extensive modernization compared to other regions in the country. Tourism is a key economic sector for this region, as it has ancient traditional diversity and practices, wildlife and also its phenomenal landscape. Major attractions in this region include Ovahimba and Ovaherero settlements, Epupa Falls, the ancient rock engravings (White lady) of Twyfelfontein, the World heritage site of the Petrified Forest (Imalwa, 2019). The area around the EPL is considered a high tourist destination due to the presence of wildlife such as desert dwelling elephants that moves around the vicinity of the EPL. There exists a number of lodges in the area that contributes towards the economic welfare of the surrounding communities and the country at large.

In theory communal grazing of livestock benefits from rangeland management practices which protect and enhance the grazing resource. This fits very well with Namibia's Community Based Resource Management (CBRM) programme of conservancies which has enabled communities to manage the natural resources in their areas and use them for community benefits and improvement of individual livelihoods. The high number of conservancies and community forests in the Kunene is largely a reflection of the remoteness of many areas and the divisions within communities, often along ethnic lines. The EPL falls within the Torra and Doro !Nawas (Area1) communal conservancies and there exists a commercial campsite within the EPL area, however it is not operational during the period of conducting this EIA.

The EPL overlaps with one farmland (Farm Krone 721). The EPL borders the Skeleton Coast Park to the West. The importance of proactive communication between the proponent, farmers, and owners of nearby properties is emphasized. Excellent relationships should be maintained throughout the life of the project. Figure 10 below indicates the different land use zones in the surrounding area.

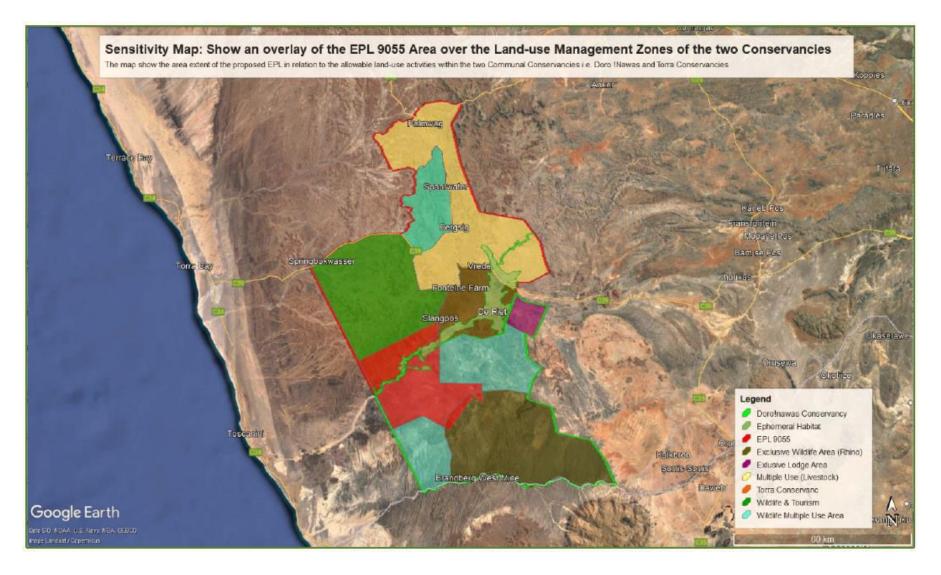


FIGURE 10 - DISTRIBUTION OF THE DIFFERENT LAND-USE ZONES WITHIN AROUND THE AREA (Enviro Leap, 2023).

6.2. CLIMATE

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °C (°F)	42.33	41.27	39.16	35.98	33.87	30.69	31.75	37.04	41.27	44.45	46.57	41.27	46.57
	(108.19)	(106.29)	(102.49)	(96.76)	(92.97)	(87.24)	(89.15)	(98.67)	(106.29)	(112.01)	(115.83)	(106.29)	(115.83)
Average high °C (°F)	34.21	33.68	32.49	31.34	29.66	26.84	27.15	31.24	35.47	37.57	35.92	34.81	32.53
	(93.58)	(92.62)	(90.48)	(88.41)	(85.39)	(80.31)	(80.87)	(88.23)	(95,85)	(99.63)	(96.66)	(94.66)	(90.55)
Daily mean °C (°F)	30.31	29.43	28.6	27.15	24.76	21.22	21.18	25.17	29.82	32.67	32.06	31.1	27.79
	(86.56)	(84.97)	(83.48)	(80.87)	(76.57)	(70.2)	(70.12)	(77.31)	(85.68)	(90.81)	(89.71)	(87.98)	(82.02)
Average low °C (°F)	23.32	22.35	22.05	20.36	17.0	12.42	11.92	15.37	19.54	22.26	23.92	23.83	19.53
	(73.98)	(72.23)	(71.69)	(68.65)	(62.6)	(54.36)	(53.46)	(59.67)	(67.17)	(72.07)	(75.06)	(74.89)	(67.15)
Record low °C (°F)	16.93	16.93	16.93	13.76	10.58	5.29	5.29	7.41	9.52	12.7	15.87	15.87	5.29
	(62.47)	(62.47)	(62.47)	(56.77)	(51.04)	(41.52)	(41.52)	(45.34)	(49.14)	(54.86)	(60.57)	(60.57)	(41.52)
Average precipitation mm (inches)	153.62 (6.05)	131.97 (5.2)	136.4 (5.37)	31.36 (1.23)	1.11 (0.04)	0.0	0.0	0.22 (0.01)	1.66 (0.07)	15.08 (0.59)	74.24 (2.92)	133.58 (5.26)	56.61 (2.23)
Average precipitation days (≥ 1.0 mm)	17.12	15.59	17.31	6.64	0.19	0.0	0.0	0.19	0.48	4.71	11.93	15.4	7.46
Average relative humidity (%)	46.9	50.53	55.48	47.07	32.55	30.15	28.4	20.53	17.22	19.66	31.27	40.23	35.0
Mean monthly sunshine hours	12.1	11.96	11.98	11.95	11.75	11.64	11.69	11.94	12.21	12.23	12.16	12.11	11.98

FIGURE 11 - BERGSIG WEATHER BY MONTH (www.weather-and-climate.com)

6.2.1. TEMPERATURE

The climate data presented in this report is referenced to Bergsig which is the nearest settlement to the project area with a weather recording data found online. The Bergsig climate is classified as Midlatitude desert climate where the wet season is normally hot whilst the dry season is warm, windy, and clear (EIS, 2023). The hot season lasts the longest, from September to February, with an average annual high temperature above 32°C. The hottest month of the year in Bergsig is October, with an average high of 37.57°C and low of 22.26°C (FIGURE 11). The cool season lasts for 3 months, from May to July, with an average high temperature below 26°C. The coldest month of the year in Bergsig is July, with an average low of 11.92°C and high of 27.15°C (FIGURE 11).

6.2.2. RAINFALL

Bergsig receives an average precipitation of 56.61mm per year. Only 8% of the Namibian land surface receives more than approximately 500mm of annual rainfall. Most rainy season is seen in January and March, the dry period in the area starts from April up to September. On average, January is the wettest month with 153.62 mm of precipitation whilst June and July are the driest month with 0 mm of precipitation (**FIGURE 11**).

6.2.3. CLOUD COVER

The average percentage of cloud cover near the EPL surrounding area fluctuates seasonally over the course of the year. The clearer part of the year in the EPL's surrounding area begins around May and lasts for about 5 months, ending around September. The clearest month of the year is July. The cloudier part of the year begins around September and lasts for 7 months, ending around April, the same period has the most humidity with February being the highest. The cloudiest month of the year in Khorixas is February (FIGURE 12) (www.worldweatheronline.com).

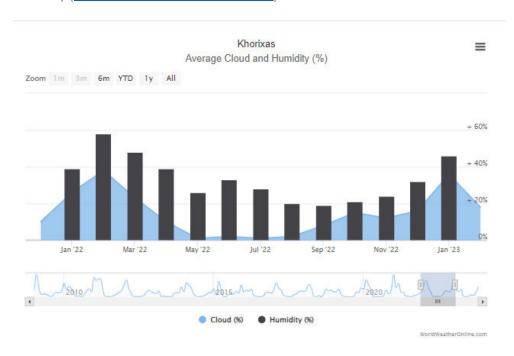


FIGURE 12 - AVERAGE CLOUD AND HUMIDITY FOR KHORIXAS (wordweatheronline.com)

6.2.4. SUNSHINE AND WIND

The number of hours of sunshine refers to the time when the sun is visible. That is, without any obstruction of visibility by clouds, fog, or mountains. The sun hours data is reference to Khorixas town which has the closest recording station to the EPL area. May, July and August are the sunniest month in the area whilst in February, the sun shines the least (**FIGURE 13**).

The maximum windspeed recorded for areas around Khorixas in the Error! Reference source not found. below ranges from 10 - 11.9 mps southeastern wind with an average of 2.4mps (lowa weather, 2023).

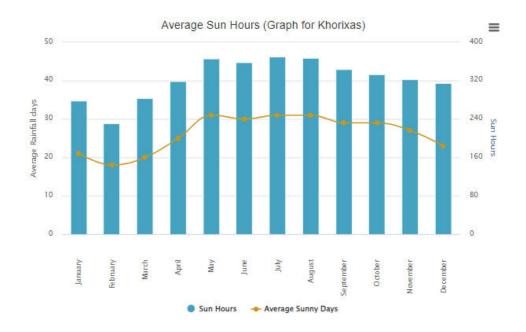


FIGURE 13 - AVERAGE MONTHLY SUN HOURS IN KHORIXAS (wordweatheronline.com)

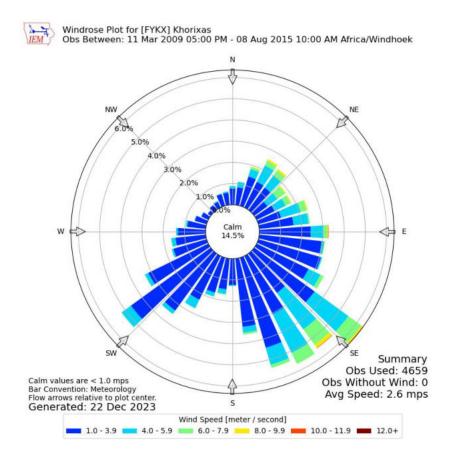


FIGURE 14 - WINDROSE FOR KHORIXAS FROM 2009 TO AUGUST 2015 (lowa weather, 2023)

6.3. BIOPHYSICAL ENVIRONMENT

6.3.1. FLORA

The majority part of Namibia is arid to semi-arid. Hence livestock farming is the most prevalent land use activity, while dryland and irrigated crop agriculture are minor sectors in the Namibian economy (Burke, 2000). Namibia's vegetation is strongly influenced by rainfall patterns. The study area lies within the Desert vegetation biome refer to **FIGURE 16**. This biome stretches all the way towards the Southwestern regions of Namibia and encroaches slightly into the "Desert biome" and thus the fauna and flora are key receptors of potential environmental impact particularly in case of trampling and vehicle tracks, potential poaching and ground contamination resulting from the project activities.

The most dominant species in the desert biome are the lichen species which are endemic to the larger desert regions and the *Psilicoulon salicornioides* **FIGURE 16**. Plant diversity is estimated at >150 species (Mendelsohn et al, 2002), notwithstanding the fact that terrain and water availability may contribute to local differentiation. A number of indigenous trees could be observed around and within the EPL, some of which will deserve protection, with most not "Protected". According to the Forestry Act, some species are protected, making it necessary to obtain a permit before removing them. This may include the Welwitschia mirabilis species (**FIGURE 15**).



FIGURE 15 - A SITING OF A WELWITCHIA SEEN DURING THE FIELD ASSESSMENT WITHIN EPL 9055. (Photo. C Nekare, 2023)

Some bush clearing may be required during exploration where access roads, drill pads and bulk sample sites are chosen. The clearing of any vegetation would not be on the scale, which triggers a full EIA, but permits to fell trees and clear bush for exploration will require a Forestry Permit. In addition to this, vegetation clearing restrictions within 100m of rivers must be taken into account as outlined in the draft regulations of the Water Resource Management Act. Any relaxation of this rule needs to be confirmed and approved by the Ministry of Agriculture, Water and Land Reform. Also refer to the biodiversity specialist report contained in **Appendix F.**

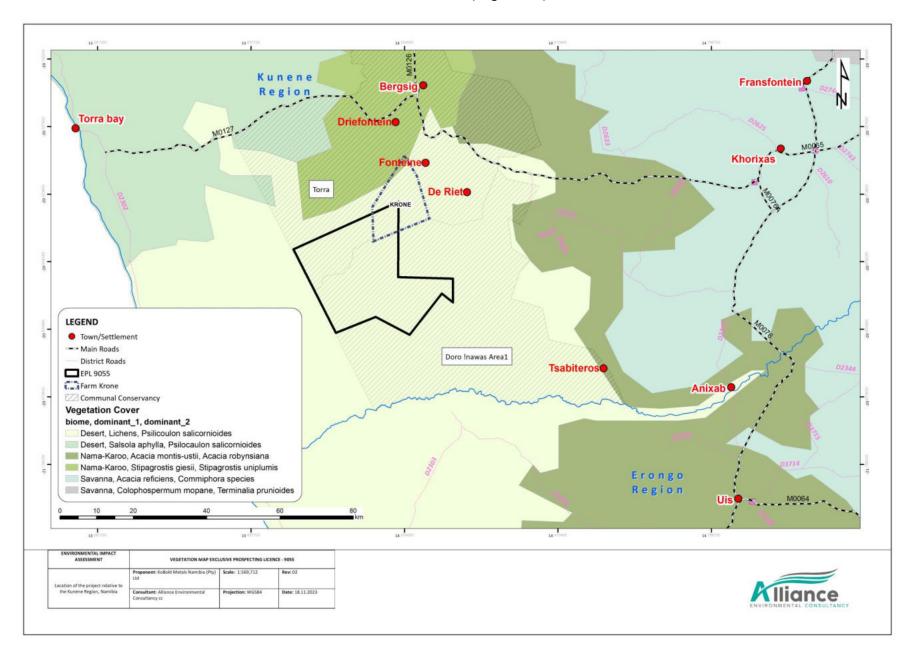


FIGURE 16 - VEGETATION COVER OF THE SURROUNDING AREA.

6.3.2. FAUNA

This section is mostly taken from the book of Mendelsohn et al. 2002.

Nationally, the area is regarded as a relative medium - high mammal, reptile and intermediate amphibian diverse. Although many endemic species are known to occur from the general area, it cannot be determined if any of these are expected within the EPL area.

Between 22 and 50 species can be found in the larger area around the EPL. According to the information that is currently available, this region is home to 6 of the 8 large herbivores and 5 of Namibia's native large carnivores. With 71 to 80 different species recorded, the research region contains a very high diversity of reptile species. Frog diversity is not very high in the study area; approximately 12 to 15 of the 35 listed species may be observed.

Mammals classified as rare (Rare and endangered species that can be found in the proposed development area, include the elephant and black rhino are viewed as the most important although they may not occur in the area throughout the year. There exists a rhino sanctuary to the south of the EPL referred to the biodiversity specialist report in **Appendix F**.

Species most likely to be adversely affected by exploration would be the variety of reptiles and ground nesting birds specifically associated with this area. Mitigation measures aimed to prevent any serious or lasting damage to this diversity including limiting damage to habitat in general and prohibiting poaching is detailed in the EMP. Generally, in the area of EPL 9055, there are numerous anthropomorphic influences – e.g., long term farming activities and tourism affecting the general natural landscape.

6.4. **SOIL**

The soils in the majority area of the EPL are broadly categorized to the group of calcisols and defined by a petric calcisols domination soil as indicated in **FIGURE 17**. The southern parts of EPL are covered by lithic leptosols. Lithic Leptosols have a low water-holding capacity due to their shallowness and gravelly nature, which also renders them with very limited agricultural potential. Their depth is restricted by continuous hard dolomite or limestone or a petro-calcic horizon. Leptosols can only be used for extensive grazing in Namibia. Petric means soils with a solid layer at a shallow depth that remains hard even when wet. In general, the soils are nutrient poor with relatively low fertility due to minimal organic matter that is returned to the soil. The soils are also thin and lacks the ability to hold water.

The petro-calcic horizon becomes extremely hard when dry, forming a barrier to coarse and medium roots. Only fine roots can penetrate between the rock spaces and take advantage of the (relative to the study area) more favorable moisture-retention properties. Most importantly, in the sandy

Omiramba this is reflected by the presence of a dense grass layer and sparse to absent tree and shrub layer. The establishment of crops on these soils will only be possible with costly irrigation and frequent application of nutrients such as nitrogen and phosphorus, but also micronutrients such as iron and zinc (Strohbach, 2014).

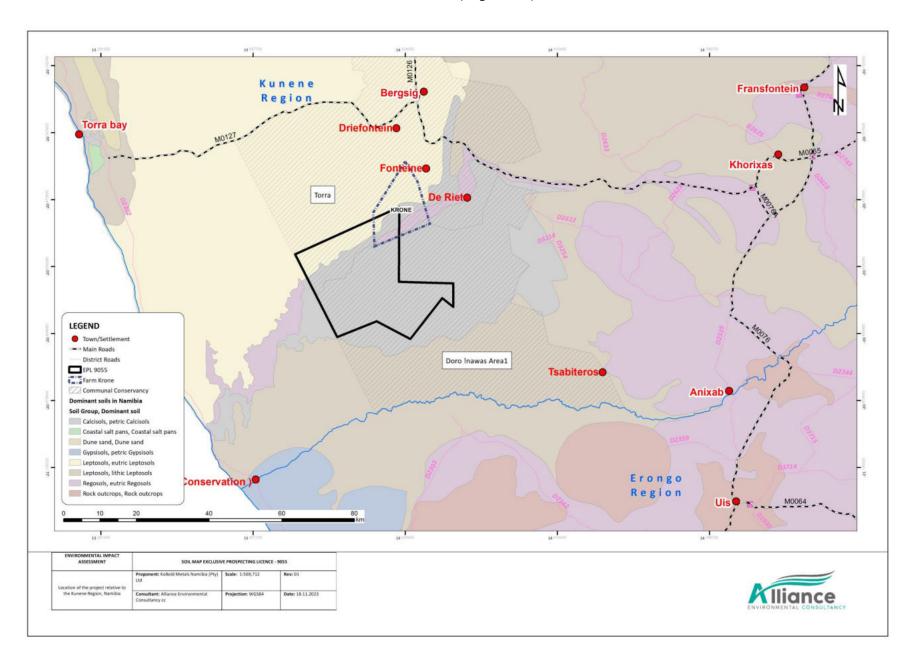


FIGURE 17 - DOMINANT SOIL AROUND THE STUDY AREA

6.5. GEOLOGY

The area is underlain by the flat lying volcanic rocks of the Cretaceous aged Etendeka group rocks, consisting of quartz latites and basalts; north and eastern parts of the EPL. The central and western areas are underlain by the Cretaceous Dolerite intrusive sills and Karoo aged sediments consisting largely of shales, siltstones, and sandstones. The primary exploration target in the lithologies on the EPL is disseminated to massive sulphide deposits of nickel-copper-platinum group elements, associated with mafic to ultramafic magmatic rocks, which can also be associated with precious metals and industrial minerals. The secondary exploration target is that of Lithium bearing pegmatites.

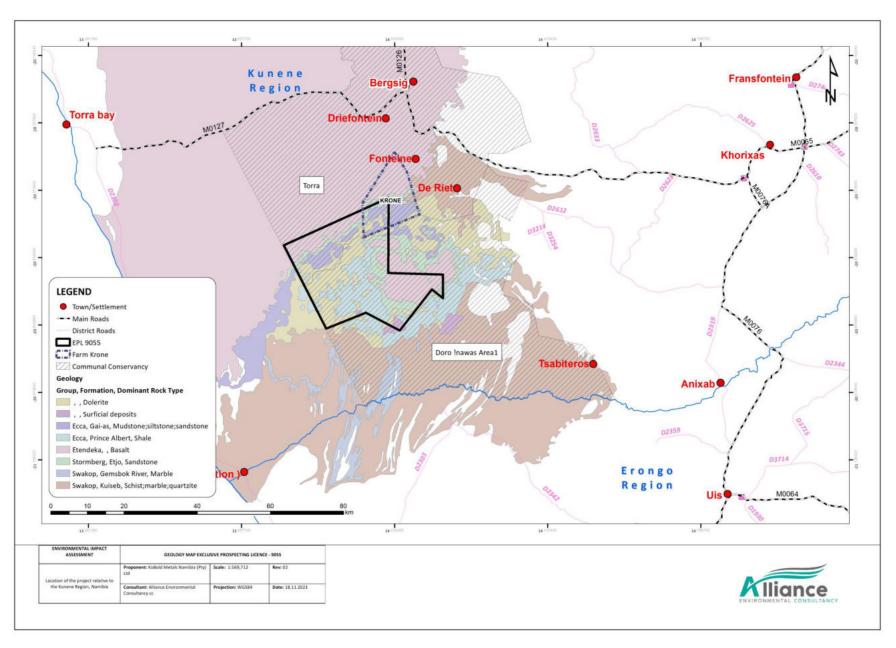


FIGURE 18 - GEOLOGY OF THE SURROUNDING AREAS.

6.6. HYDROLOGY

Due to the infrequent rainfall in Namibia, surface water is scarce and quickly evaporates, seeps into the ground, or is drained by ephemeral rivers. The proposed EPL lies in the Kunene south Groundwater basin (FIGURE 19). Most of the surrounding area is covered by the Etendeka Group, where groundwater is rarely directly recharged by rainfall unless the basalts are broken. As such, groundwater potential is anticipated to be usually low. Groundwater is more accessible along fractures, especially along dry drainage lines. The cracked basalt of the Cretaceous Etendeka Formation, for instance, provides water to the Bergsig settlement's water supply system.

There are about 3 boreholes situated within and around the EPL area and communities around the area predominantly use water from borehole abstraction (FIGURE 19) (shapefile obtained from the DWA). Provided that the boreholes within the area are operational, it is assumed that water will be obtained from some of these existing boreholes during the exploration activities. As need be, appropriate permits should be obtained from the DWA should borehole water use be realized. Accounting the nature and scale of the proposed exploration, drilling is unlikely to impact groundwater.

Considering the non-shallowness of the groundwater basin, this does not pose risk of contamination. Nonetheless, storage of any material substance that may cause pollution to water sources should be handled and stored in accordance with appropriate legislation.

pg. 54

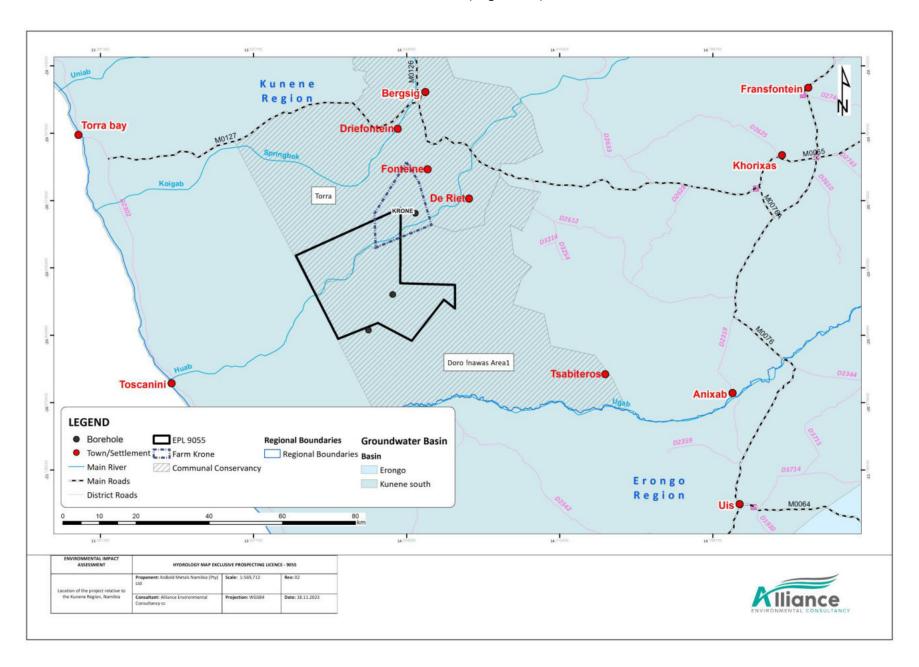


FIGURE 19 – HYDROLOGY SETTING OF THE SURROUNDING AREA.

6.7. SOCIO-ECONOMIC SETTING

6.7.1. REGIONAL AND LOCAL PROFILE

The EPL 9055 is located within the Kunene Region which is geographically located in the Northwestern part of Namibia and covers a range of biomass or landscapes; this region is very mountainous. The name Kunene is derived from the Kunene River that boarders Namibia and Angola. The region's administrative capital is Opuwo.

6.7.2. DEMOGRAPHY

The Kunene region covers an approximate area of 115,293km² (approx. 14%) of the total Namibian land. After the //Karas region, Kunene is the second largest region in Namibia and is home to roughly 86,856 residents (43 234 females and 43 603 males) which signifies 4% of the Namibian population (Census, 2011). The region has 6 constituencies namely the Kamanjab, Outjo, Khorixas, Epupa, Opuwo and Sesfontein (Census, 2011). This region is also classified as the least beneficiary from resource distribution in the country.

6.7.3. EDUCATION AND EMPLOYMENT

Any region's socioeconomic growth can be greatly accelerated by education because it significantly increases the literacy, knowledge, and competency that people and communities require to function on a daily basis. The education sector in these regions covers Pre-primary education, Primary education, Secondary education and adult education.

According to Census (2011), the most commonly spoken languages at home in the Kunene region are Otjiherero (42% of households) and Nama/Damara (36%). Literacy rate is 65% for those who are 15 years and older, literacy rate is low in rural Opuwo due to a high number of indigenous residents who are not exposed to any education. However, in the urban part of the town, literacy rate increases to 75% (females 72,5%, males 76,4%). People living with disability make up 4% of the population. The main sources of income in households are farming 32%, wages and salaries 41%, cash remittance 5%, business (non-farming) 8% and pensions. Many households in this region also highly rely on drought relief assistance (15%) (NSA, 2017). A few communities also rely on incomes from conservancies they formed, through good wildlife management that attracts tourists and other activities such as trophy hunting. (about 12%). 67% of households have safe drinking water, 63% have no toilet facilities and 32% use wood/charcoal for cooking (Census, 2011).

Opuwo is the capital of the Kunene Region in northwestern Namibia and heads the majority of the administrative offices in the region which provides services to its people. This town is located about 720km north-northwest from Namibia's capital city, Windhoek, and has a population of approximately

27 272 inhabitants (13 896 female and 13 376 males) (Census, 2011). Opuwo is situated at the intersection of the C41 and C43. There is a small untarred airfield in town (airport), for small domestic private flights. This town holds the Regional Health Directorate office, a state hospital, and a health center situated in the NW settlement of Okangwati. Opuwo has a vocational training center (COSDEC) which provides vocational training to locals and schools. The unemployment rate is 36% and the employed make up 64% of the population (Census, 2011).

6.7.4. LAND USE AND ECONOMIC ACTIVITIES

According to the National Planning Commission 2015 reporting (Ashby, 2019) the Kunene Region has the second highest proportion of people classified as materially deprived (63.4% compared to the national average of 48%), reflecting the relatively high proportion of semi-nomadic pastoralist Himba people in the region with few material possessions.

Main sources of income in the Kunene region households are farming 32%, wages and salaries 41%, cash remittance 5%, business (non-farming) 8% and pension. Many households in this region also highly rely on drought relief assistance 15%. A few communities also rely on incomes from conservancies they formed, through good wildlife management that attracts tourists and other activities such as trophy hunting (NSA, 2011).

According to the 2014 national statistics data summarized by Ashby (2019) 84% of people in the Kunene Region live in inadequate housing conditions which lack basic services to the home, compared to the national average of 76%. In the Epupa Constituency, only 29% of households had access to safe water and 92% of households had no toilet facility. Only 8% of households used electricity for lighting and 92% had no decent lighting (critical for improving school performance).

Tourism is a key economic sector for this region, as it has ancient traditional diversity and practices. Wildlife and its phenomenal landscapes are the aspects that play a major role in tourism. The area around the EPL is considered a high tourist destination due to the presence of wildlife such as desert dwelling elephants that moves around the vicinity of the EPL. There exists a number of lodges in the area that contributes towards the economic welfare of the surrounding communities and the country at large. Other major attractions in this region include Ovahimba and Ovaherero settlements, Epupa Falls, the ancient rock engravings (White lady) of Twyfelfontein, the World heritage site of the Petrified Forest (Moilanen, 2015).

Other than tourism, there is a diverse platform of economic activities, inclusive of agriculture which primarily focuses on communal livestock farming and trade. Subsistence farming is the most common type of agricultural activity seen in this region. The Ovahimba community subsequently rely on their livestock, they are predominantly livestock farmers who breed cattle, sheep, and goats. They also grow

and farm rain-fed crops such as maize and millet. The constituency is also known to be rich in minerals (gems/precious natural stones, copper and iron ore, and precious metals), which will hopefully be exploited and processed in order to create jobs for locals.

6.7.5. ARCHAEOLOGICAL AND HERITAGE

The EPL and surrounding areas were previously disturbed through tourism and farming practices in the past. A site-specific heritage assessment was carried out for this project **Appendix E**. The findings were compiled through ground survey, following standard and accepted archaeological procedures. The surface was assessed for possible Stone Age scatters as well as exposed Iron Age implements and other archaeological resources. The survey followed investigation of the cultural resources onsite using the best possible technologies for archaeological field surveys. The EPL area was surveyed, and findings of graves heritage were documented through photographs. A Samsung GPS Logger (2018) was used to record heritage finds on site. The TABLE 7 below provides a summary of findings within EPL 9055.

TABLE 7 - SUMMARY OF THE IDENTIFIED HERITAGE RESOURCES/ SITES INSIDE AND OUTSIDE THE EPL AREA. (Nekare, 2023). Table 1 of the Heritage report in Appendix E.

Heritage Resources	Coordinate GPS	Status	Protection Afforded
Site 1: Krone- Main panel of the rock art site. Is the panel with the highest concentration of animal track engravings, amounting to almost 300 in number.	S 20.48627° E 14.02714°	Known to the conservancy, noted by the NHC and yet to feature on its NHR. Inside the EPL area.	Inactive, no statutory protection.
Site 2: Eager Rock-, with engravings inside exfoliated rock face; from the position of the photographer at the entrance.	S 20.48942° E 14.02714°	Known to the conservancy, noted by the NHC and yet to feature on its NHR. Inside the EPL area. Vandalized and fire inside the rock that contain the art.	Inactive, no statutory protection.
Site 3, Stone ruins probably belonged to a nomadic band of san people.	S 20.49419° E 14.12096°	Known to the conservancy, noted by the NHC and yet to feature on its NHR. Stone removed and displaced from original position. On top of a hill	Inactive, no statutory protection.

		that allowed them to	
		spot danger.	
	S 20.57813°	Known to the	Inactive, no
	E 13.96133°	conservancy, noted by	statutory protection.
Site 4 Stone ruins probably belonged to a		the NHC and yet to	
Site 4, Stone ruins probably belonged to a		feature on its NHR.	
nomadic band of san people.		Overlooking over Huab	
		river. Stone ruins still	
		intact in	
	S 20.46711°	Known to the local	Inactive, no
Site F. Crayovard since 1974	E 14.19428°	community and the	statutory protection.
Site 5, Graveyard since 1974.		Traditional Authority.	
		Still in active use.	
	S 20. 49419°	Known to the	Inactive, no
Site 6, Jan Snel memorial area.	E 14.12096°	conservancy.	statutory protection
			but annually visited.
	S 20.49979°	Known to the	Inactive, no
Site 7, Rhino rubbing rock.	E 14.09209°	conservancy.	statutory protection
			but annually visited.
Site 8, Many contemporary villages as this	S 20. 46969°	Known to the	Inactive, no
one is featuring within the EPL area,	E 14. 18625°	conservancy.	statutory protection
probably more than 10.			but annually visited.

Additionally, a review of the National Heritage Council and the environmental information services database was conducted, and some known heritage sites were identified in the project area. In cases where heritage sites are discovered, the chance finds procedure will be used where appropriate measures will be undertaken upon discovering sites of archaeological importance. All archaeological remains are protected under the National Heritage Act (2004) and will not be destroyed, disturbed, or removed.

7. STAKEHOLDER ENGAGEMENT

7.1. PUBLIC PARTICIPATION

Public participation is the cornerstone of the Environmental Impact Assessment process. These include the ongoing provision of sufficient information (in a transparent manner) to Interested and Affected Parties (I&APs). During the public participation process, I&APs are given the opportunity to comment on the findings of the reports, over the specified comment periods.

Good consultation helps foster genuine and positive relationships with mutual respect, shared concerns and objectives between the company pursuing development and the community. The public participation facilitator's role is to facilitate that process of dialogue to ensure there is transparency and accountability in decision-making and public confidence in the proposed project and its management. The following approaches were employed in an attempt to get in contact with the potential affected and interested parties around the project area.

7.1.1. BACKGROUND INFORMATION DOCUMENT

A Background Information Document (BID) was provided to the various I&APs through the public participation process. This document gives an overview and non-technical summary of the proposed development and acts as an ease of reference to the proposed project. The BID is included in **Appendix C**. The draft SR and EMP is circulated to the registered stakeholders in order to provide their further input and comments before submission to the authorities.

7.1.2. NEWSPAPER ADVERTS

Public notices/invitations were placed in the following newspapers for two consecutive weeks (23rd, 25th & 30th of October and 1st of November 2023): Appendix D provides Tear sheets of the adverts.

- The Republikein newspaper
- The Allgemeine Zeitung
- The Sun newspaper and;
- The Windhoek Observer newspaper (23rd and 30th of October)

7.1.3. SITE NOTICE AND VISIT

Site notices were placed around accessible places around the project area which is the closest town to the EPL and where the community could easily access. The notices are included in **Appendix D**. The locations include notice boards at:

- Doro !Nawas Conservancy Office Bloemhof
- Doro !Nawas Conservancy field officers

- Henties Bay Shell SS One Stop Shop
- Khorixas Constituency Office Khorixas
- Springbokwasser Skeleton Coast Gate
- Springbokwasser Campsite Torra conservancy
- Swakopmund Municipality Notice Board
- Torra Conservancy Office Bergsig

7.1.4. STAKEHOLDER ENGAGEMENT

Written notices/invitations were sent to several stakeholders including organizations/institutions in order to inform them about the proposed project and extend an invitation to the public engagement meetings. AEC visited the Directorate of Lands and Resettlement offices for the same purpose of obtaining details to communicate with landowners. The proof of notice communication is attached under **Appendix D**. Two public engagement and information sharing meetings were held for this project as follows:

- Torra Conservancy Field Office and;
- Twyfelfontein Country Lodge

The draft scoping report and EMP will be shared with the identified and registered stakeholders for a period of 7-14 days to provide their further input and comments regarding the proposed exploration project.

In the event that the ECC is granted the proponent shall ensure ongoing consultation with all relevant affected parties for access to land and other resources.

7.1.5. STAKEHOLDER ENGAGEMENT OUTCOMES

Issues received were regarding the heritage sites in the area, benefits to the community that will emanate from the proposed project, transport and water issues currently faced by the community and legal provisions pertaining to prospecting permits. The engagement trails can be found in **Appendix D** which contains the minutes of the meetings. Other correspondences are also included **Appendix D**.

8. EVALUATION OF IMPACTS

8.1. ASSESSMENT PROCEDURE

The purpose of this section is to assess and identify the most pertinent environmental impacts by describing certain quantifiable aspects of these impacts and to provide possible mitigation measures to minimize the magnitude of the impacts that are possibly deriving from the various activities that constitute the proposed prospecting and exploration activities on EPL 9055 by the proponent.

The identification of potential impacts included impacts that may occur during the pre-operational, operational, and decommissioning phases of the project. The assessment of impacts includes direct, indirect as well as cumulative impacts. In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed projects is well understood so that the impacts associated with the projects can be assessed.

The process of identification and assessment of impacts includes:

- Determining the current environmental conditions in sufficient detail to establish a baseline against which impacts can be identified and measured.
- Determining future changes to the environment that will occur in a case where the activity does not proceed.
- Develop an understanding of the activity in detail to understand its consequences; and
- The identification of significant impacts which are likely to occur if the activity is undertaken.

The following potential impacts on the environment during the different stages of the project have been identified:

Possible Positive Impacts

- Contributions to annual license fees to the government through the MME.
- Payments of lease agreements and services rendered.
- Provision of contractual employment opportunities and skills transfer.
- Increase in knowledge on the subsurface which then contributes to development, and geoscience research.
- Contribute to the socio-economic development of the local area and region,
- Direct capital investment into the Kunene Region, and the country via rates and taxes.

Possible Negative Impacts

Ecological disturbances

Potential removal of vegetation to allow project activities and erect temporary site shade structures during field work and exploration operations. Habitat disturbance, especially reptile habitats due to drilling, and increased flow of traffic. Loss of wildlife to poaching due to presence of exploration personnel.

Dust & Noise

Dust emanating from the increased movement of vehicles, trucks and other operational machinery may degrade the ambient air quality in the area. Potential increase in noise levels from project vehicles and machinery may be a nuisance to the locals.

Visual

Changes to the aesthetic appeal of the area due to the presence of people, vehicles and machinery. Visible changes to habitats due to human activities.

Health & Safety

From the handling of equipment and use of machinery as well as potential risks of contracting diseases linked to prolonged exposure to dust.

Waste

Resulting from maintenance work performed on the machinery as well as littering in the area include packaging from food or other products and consumables.

Soil pollution includes petrochemical spills from vehicles (bakkies), water trucks, diesel operated generator as well as the trailer mounted diesel tank for fuel storage.

Groundwater and surface water

Due to inadequate management of waste, discharge, and infiltration of non-contained wastewater as well as potential spillages of drill fluid, lubrication or drilling that penetrates the ground water table. This may also be influenced by site operations such as maintenance activities or accidental fuel spills.

Topography

Disturbance of the topography due to clearing drill pads, camp sites and removal of samples during exploration.

Heritage & Socio-Economic

Potential disturbance and damage to unforeseen archaeological or heritage sites during project activities and movements in the area.

Impact of poor communication

Miscommunication may lead to negative reception of the project or frustration of the community towards the project. Increased movement in the surrounding area and inadequate delivery of notice for exploration and or operational activities in the community may result in conflicts with landowners and the affected community.

The following methodology is applied to the prediction and assessment of impacts and risks. Potential impacts and risks have been rated in terms of the direct, indirect, and cumulative where:

	Whether the impact/risk on the overall environment will be
Status	Positive - Environment overall will benefit from the impact/risk.
310103	Negative - Environment overall will be adversely affected by the impact/risk.
	Neutral - Environment overall not be affected.

	Impacts are directly caused by the activity and usually occur at the same time and place
Direct impacts	of the activity. These impacts are often related to the construction, operation or
	maintenance of an operation and are often obvious and quantifiable.
Indica et impa etc	These types of impacts include all the potential impacts that are not evident immediately
Indirect impacts	when the activity is carried out, or which occur at a different place due to the activity.
Cumulative	Impacts that result from the incremental impact of the proposed activity on a common
	resource when added to the impacts of other past, present, or reasonably foreseeable
impacts	future activities.

In addition to the above, the impact assessment methodology includes the following aspects:

	The size of the area that will be affected by the impact:
Spatial Extent	Site specific - Only within the site boundaries Local - limited to within 15 km of the area. Regional - limited to ~100 km radius National - limited to within the borders of Namibia. International - extending beyond Namibia's borders

	The anticipated consequence of the impact:
	• Extreme - Environmental functions and processes are altered such that they
	permanently cease;
	<u>Severe</u> - Environmental functions and processes are altered such that they temporarily
Consequence	or permanently cease.
	• <u>Substantial</u> - environmental functions and processes are altered such that they
	temporarily cease.
	Moderate - Environment continues to function but in a modified manner; or
	• <u>Slight</u> - No natural systems/environmental functions, patterns, or processes are affected.

	The timeframe during which the impact/risk will be experienced
	Very short term - Less than a month
Duration	Short term - less than 1 year.
Doranon	Medium term - 1 to 10 years.
	Long term - The impact will occur for the project duration.
	Permanent - The impact will occur beyond the project decommissioning.

	The extent to which the impacts/risks are reversible assuming that the project has reached		
Reversibility of	the end of its life cycle (decommissioning phase)		
the Impacts	Yes - High reversibility of impacts (impact is highly reversible at end of project life);		
me impacis	Partially - Moderate reversibility of impacts; or		
	No - Impacts are non-reversible (impact is permanent).		

Using the criteria above, the impacts will further be assessed in terms of the following:

	The probability of the impact/risk occurring
	Very likely.
Probability	• Likely.
TODGOMITY	Unlikely.
	Very unlikely; and
	Extremely unlikely.

To determine the significance of the identified impact/risk, the consequence is multiplied by probability. This approach incorporates internationally recognized methods from the IPCC (2014) assessment of the effects of climate change and is based on an interpretation of existing information in relation to the proposed activity. The significance is then rated qualitatively as follows against a predefined set of criteria (i.e., probability and consequence) as indicated below:

	IMPACT = CONSEQUENCE X PROBABILITY					
	Very Likely					Very High Impact
	Likely				High Impact	
BILITY	Unlikely			Moderate Impact		
PROBABILITY	Very Unlikely		Low Impact			
	Extremely Unlikely	Very Low Impact				
		Slight	Moderate	Substantial	Severe	Extreme

Where:

Will the impact cause a notable alteration of the environment? • Very low (5) - The risk/impact may result in very minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures and will not have an influence on decision-making. • Low (4) - The risk/impact may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures and will not have an influence on decision making. • Moderate (3) - The risk/impact will result in moderate alteration of the environment and Significance can be reduced or avoided by implementing the appropriate mitigation measures and will only have an influence on the decision-making if not mitigated. • High (2) - The risk/impact will result in major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision making; and • Very high (1) - The risk/impact will result in very major alteration to the environment even with the implementation on the appropriate mitigation measures and will have an influence on decision making.

The degree of confidence in predictions based on available information and specialist knowledge • Low - Based on the availability of specialist knowledge and other information. • Medium - Based on the availability of specialist knowledge and other information. • High - Based on the availability of specialist knowledge and other information

Impacts are evaluated for the different phases of the proposed project. Impacts have been evaluated with and without mitigation in order to determine the effectiveness of mitigation measures on reducing the significance of a particular impact. The Assessment is presented in the following section and further in the Environmental Management Plan (EMP).

9. IMPACTS ASSESSMENT

The purpose of this section is to assess and identify the most pertinent environmental impacts by describing certain quantifiable aspects of these impacts and to provide possible mitigation measures to minimize the magnitude of the impacts that are possibly deriving from the various activities that constitute the proposed minerals prospecting and exploration activities within EPL 9055. Comments and concerns raised during the public consultation process have been considered and included.

TABLE 8 - ECOLOGICAL/BIODIVERSITY IMPACT ASSESSMENT TABLE

Impact	Generally, minerals exploration activities such as drilling operations and advanced prospecting (as described in 3.1.4) pose impacts towards the diversity of species within the various habitats by reducing population numbers of certain species.
Nature of impact	Loss of Habitat and species during exploration activities such as drill rig preparation, tracks creation and general movement in the area. The most vulnerable species are reptiles and birds. Some exploration activities such as tracks creation, drill site preparations and, camping area preparation require removal of some plants to a small extent therefore affecting the flora status of the area. Taking into account that there exists a Rhino sanctuary on the southern part of the EPL, the presence of project personnel and vehicles may disturb the animals and possibly increase the threat of poaching. The presence of people in the area could also influence livestock theft, and illegal hunting. A specialist fauna & flora study was commissioned for the EIA. Exploration may occur at designated sites throughout the EPL but the total activity footprint as a percentage of the total areas of each habitat is estimated to be very low.
Status	Negative
Spatial Extent	Local
Duration	Short term – If the exploration does not reach the advanced stages. Long term – If the exploration reaches the advance stages

Consequence	Moderate
Probability	Very Likely
Reversibility	Partially
Mitigation Measures	 Though the habitats will remain relatively undisturbed due to the very low percentage footprint of activities planned, without prior knowledge of the whereabouts of the vulnerable, threatened and critically endangered species and their preferred habitat, it may not be possible to prevent an impact, regardless of how small it might be. The planning of the activity's layout must endeavor to reduce the footprint to a minimum without compromising the realistic needs of the business operation and making decisions that will safeguard against indiscriminate habitat alteration. If any topsoil or grass exists, when removal is required then this should be stockpiled for use during rehabilitation. Engage interested stakeholders to participate on site in the rescue and relocation of indigenous and protected flora. Undertake plant/tree surveys prior to the commencement of drilling operations in areas with dense trees population. Driving only on existing roads (national roads and existing tracks) as far as practically possible. Habitat loss for fauna and flora species should be kept to a minimum with footprint areas being restricted to the direct operational areas only. In addition, where possible, activities are to be aligned along previously disturbed areas. No wandering around the site, collecting of plant species or hunting should be allowed. Rehabilitation must restore the disturbed sites, as far as is possible to their prior state to mitigate the visual impact and to allow for the best possible re-colonization of the site, by plants and animals. If targeted rock units have protected or special plants, the proponent should seek a specialist opinion on how to preserve that plant species, with possible relocation. Notice should be given at least two (2) weeks in advance to indicate the flying times for geophysical surveys, so that these surveys do not coincide with hunting seasons to scare away the animals. <li< th=""></li<>

		– Working sites should be fenced off to keep wild and domestic animals out.
		– Environmental awareness on the importance of biodiversity preservation should be provided to the workers and
		contractors.
		– Further recommendations are provided in the biodiversity report presented in Appendix F
Significance of Impact	Without Mitigation	Moderate (3)
Consequence	With Mitigation	Low (4)
Ranking of Impact		3
Confidence Level		Medium

TABLE 9 - NOISE IMPACT ASSESSMENT TABLE

Impact	Noise cause by project activities (drilling operations, machineries, and vehicular movements)
	Disturbance of sense of place and the effect on tranquil ambient noise levels.
	Hearing problems to operators if noise generation is prolonged and not managed.
Nature of impact	ricaling problems to operators in hoise generation is prolonged and not managed.
	Potential noise sources during the exploration activities could originate from vehicles, hammers, powered hand tools, excavators, and drill rigs. The nuisance factor of these noise sources will depend on the proximity of the activities to the national road, homesteads and sensitive animal habitats.
Status	Negative
Spatial Extent	Local
Spanar Extern	Local
Duration	Temporary/ Permanent
_	
Consequence	Substantial/Severe Substantial/Severe
Probability	Likely
Reversibility	Partially
	- The Occupational Safety and Health Administration (OSHA) guidelines set legal limits on noise exposure in the
	workplace. These limits are based on a worker's time weighted average over an 8-hour day. With noise, OSHA's
	permissible exposure limit (PEL) is 90dBA for all workers for an 8-hour day. The OSHA standard uses a 5dBA exchange
	rate. This means that when the noise level is increased by 5dBA, the amount of time a person can be exposed to a
	certain noise level to receive the same dose is cut in half.
Mitigation Measures	
	dBA over a 24-hour period with maximum noise levels not exceeding 110 dBA during the period. These latter limits
	would apply if the daytime shift were prolonged beyond the 8-hour day.
	- The nuisance factor of these noise sources will depend on the proximity of the exploration activities to the national
	road, homesteads, and sensitive animal habitats.
	PPE is considered an acceptable mitigation, but a less desirable option to control exposures to noise.

	Limiting the amount of time, a person spends at a noise source.
	- Monitoring personnels' hearing, before, during (each year if employed longer than one year) and after employment,
	as a minimum.
	Machineries and vehicles (moving and stationed) should be serviced regularly.
	A noise management standard operating procedure (SOP) for the activities happening on-site should be developed.
	- Avoid generating unnecessary noise by making sure that equipment that are not in use are always turned off and by
	avoiding operations during odd hours.
	- Landowners should be informed prior drilling over the weekends or at other times not outlined in this document.
	- It is recommended that any complaints regarding noise be recorded and included in the environmental reports.
	Should complaints persist then a survey by a suitably qualified and independent hygienist will be required.
	- Transportation routes should be planned for trucks such that they pass as far away as possible from noise sensitive
	receivers, a restriction of the hours of movement, e.g., not allowing the transport of material during the noise sensitive
	hours of the night can mitigate noise impacts.
Significance of Impact Mitigation	Moderate (c)
Consequence x Probability With Mitigation	Low (4)
Ranking of Impact	3
Confidence Level	Medium

TABLE 10 - DUST IMPACT ASSESSMENT TABLE

Impact	Dust generation during exploration activities (e.g., vehicular movement, drilling operation, drill rig preparation) may result in dusty conditions.
Nature of impact	Tempering of the ambient air quality in the surrounding area Fauna and flora alike could be impacted as ecosystem functioning is possibly affected. Negative effects of dust on personnel working at the drilling site are likely to occur if dust suppression techniques are not employed and personal protection equipment is not used to safeguard the health of personnel.
Status	Negative
Spatial Extent	Local
Duration	Medium term
Consequence	Moderate
Probability	Very Likely
Reversibility	Partially
Mitigation Measures	 Natural weather conditions can create very dusty atmospheric conditions. The exploration activities contribute very little to the widespread ambient conditions that often prevail. Cars travelling on the access roads can create dust plumes trailing behind them. Dust suppression techniques should be employed. However, this scarce resource cannot be applied continuously and indiscriminately. Avoid activities that create excessive dust on extremely windy days. Personnel are required to wear personal protection equipment if excessive dust is created for prolonged working periods. Employees should be made aware of negative effects of dust inhalation. Water spays at the various components will effectively keep dust from blowing into the atmosphere.

		 The road network within the EPL site can be sprayed with water and other dust suppressants during dry dusty conditions. To mitigate gaseous pollutants released from the combustion of hydrocarbons, use of high-quality fuels will ensure quantities released per unit weight of product are at levels within environmental limits.
Significance of Impact	Without Mitigation	Moderate (3)
Consequence x Probability	With Mitigation	Low (4)
Ranking of Impact		3
Confidence Level		Medium

TABLE 11 - WATER IMPACT ASSESSMENT TABLE

Impact	Potential water resource pollution and over use during the proposed project activities.
	Although the general area does not have economic water resources and is not a protected water resources area, the area could have potential for groundwater occurrences associated with the solutions holes.
	The general area has a number of river channels which could be potential pathways for pollution migration especially during the rainy season.
Nature of impact	Discharge of liquid or solid wastes including wastewater, chemical, fuels or oils into any public stream is prohibited and the Proponent must implement the provisions of the EMP on water and waste management.
	It is hereby recommended that a detailed site-specific hydrogeological specialist study including groundwater modelling, water sampling and testing must be undertaken as part of the EIA and EMP that may be implemented to support the feasibility study for any viable mining project that may be development within the EPL area, if economic resources are discovered.
Status	Negative
Spatial Extent	Local
Duration	Long term
Consequence	Moderate
Probability	Unlikely
Reversibility	No
Mitigation Measures	 Groundwater is a scarce and valuable resource in Namibia and must be protected at all costs. It must still be protected from pollutants since it can act as a conduit for the transfer of pollutants to secondary receptors such as the ocean. Additional boreholes are to be drilled to generate data about the groundwater quality and quantity when exploration intensifies. The proponent must follow the provisions of the Water Act so that they do not in any way damage the susceptible water resources.
	water resources.

- Sewerage created at the camp or management offices either needs to be deposited directly into approved and permitted French drains or removed offsite. If the latter is to be done, then sealed sewerage tanks are required. The regulations under the Water Resource Management Act need to be consulted with regards to the erection of French drains near water courses. They cannot be constructed within 100m of the banks of a water course.
- Storage of hazardous liquid waste must by law follow industry standards. These standards will be communicated in fuller details by the fuel supplier. Ideally, self-110% bunded containers should be brought to site and placed upon sealed surfaces with waste collection sumps.
- Training and awareness for company personnel and the public will inform them of those wastes that may cause harm, pollute the soil, groundwater, or air (if particulate).
- Practice reusing, recycling of products. Always use as little water as possible. Reduce, reuse and re-cycle water where
 possible.
- All leaking pipes / taps must be repaired immediately as they are noticed.
- Never leave taps running. Close taps after you have finished using them.
- The Proponent must obtain permission of the landowners before utilizing any water resources or any associated infrastructure.
- Accidental spills that occur outside of the bund area must be contained and prevented from entering the stormwater system.
- Spills must be treated with the appropriate spill absorbent.
- Any significant spills or leak incidents must be reported in terms of the National Environmental Management Act and the Water Act.
- If there is a need to drill a water borehole to support the proposed exploration programme the Proponent (Proponent) must obtain permission from the landowner and Department of Water Affairs in the Ministry of Agriculture Water and Land Reforms.
- In an event of discovery of economic minerals resources, the sources of water supply for the mining related operations
 will be supplied by NamWater and the Proponent is advised to contact NamWater at the earliest stages of the
 development of any possible mining project, and.
- If there are any further (larger scale) exploration/drilling activities and/or mining activities to follow from the initial planned drill holes, groundwater monitoring must be implemented to include water level monitoring and also water

		sampling on a bi-annual basis. In order to have greater transparency on the water monitoring activities, the affected landowners / farmers must be given full access to the results of the water monitoring analyses.
Significance of Impact	Without Mitigation	Moderate (3)
Consequence x Probability	With Mitigation	Very low (5)
Ranking of Impact		3
Confidence Level		Medium

TABLE 12 - WASTE IMPACT ASSESSMENT TABLE

Impact	Generation of waste during the proposed project activities.
Nature of impact	Domestic waste and waste from maintenance work performed on the machinery can potentially cause unpleasant odor, sight for the people in the surrounding as well as disturbance to surface and ground water. The dumping of general waste within the camp, drilling sites and surrounding areas could prove hazardous to wildlife and livestock. This could also lead to general environmental degradation.
Status	Negative
Spatial Extent	Local
Duration	Medium term
Consequence	Moderate
Probability	Likely
Reversibility	Partially
Mitigation Measures	 Waste generation is likely to be limited on site and will primarily be domestic waste. This material will be stored properly until safe disposal off-site. The domestic waste, which is separated from all paper and organic materials, is taken to the nearest official dumpsite. Collection and disposal of waste must be effective enough to not impact any of the receptors. Oil from the servicing of the vehicles and machines is collected in drums and is taken together with all other industrial waste that is generated on site to the nearest hazardous waste site. A certificate of disposal needs to be kept on file. Personal protection equipment (PPE) can protect personnel from exposure to disease or toxic chemicals. Groundwater is a scarce and valuable resource in Namibia and must be protected at all costs. It must still be protected from pollutants since it can act as a conduit for the transfer of pollutants to secondary receptors such as the ocean. Additional boreholes are to be drilled to generate data about the groundwater quality and quantity when exploration intensifies.

	- The proponent must follow the provisions of the Water Act so that they do not in any way damage the susceptible
	water resources.
	- Sewerage created at the camp or management offices either needs to be deposited directly into approved and
	permitted French drains or removed offsite. If the latter is to be done, then sealed sewerage tanks are required. The
	regulations under the Water Resource Management Act need to be consulted with regards to the erection of French
	drains near water courses. They cannot be constructed within 100m of the banks of a water course.
	– Some wastes are dangerous to fauna and flora; Animals should not be able to access the waste management area;
	waste must be contained so that it cannot enter the naturally vegetated areas beyond the accessory works area.
	– Storage of hazardous liquid waste must by law follow industry standards. These standards will be communicated in
	fuller details by the fuel supplier. Ideally, self-110% bunded containers should be brought to site and placed upon
	sealed surfaces with waste collection sumps.
	- Soil which is contaminated by used hydrocarbons needs to be relocated to a remediation cell where the addition of
	fertilizer, air and water will within a year be suitable for re-use.
	- Good housekeeping
	- Training and awareness for company personnel and the public will inform them of those wastes that may cause harm,
	pollute the soil, groundwater, or air (if particulate).
	- Practice reusing, recycling of products.
Significance Without	
of Impact Mitigation	Moderate (3)
= Consequence With	
x Probability Mitigation	Very low (5)
Beet to a florida	
Ranking of Impact	
Confidence Level	Medium

TABLE 13 - VISUAL IMPACT ASSESSMENT TABLE

Impact	Visual impact caused by the operational activities
Nature of impact	Impact on visual resources would be considered unfavorable if the landscape were significantly degraded or modified. Changes to the aesthetic appeal of the area due to the presence of people, vehicles, and machinery. Visible changes to habitats due to human activities
Status	Negative
Spatial Extent	Local
Duration	Temporary
Consequence	Moderate
Probability	Very Likely
Reversibility	Yes
Mitigation Measures	 The domestic waste, which is separated from all paper and organic materials, is taken to the nearest official dumpsite. As far as is possible existing roads and tracks are used during exploration to access target sites for drilling. Personnel to be trained regarding the observable signs of faunal and floral biodiversity and the avoidance of habitat disturbance. Minimize the footprint of personnel, vehicles, and machinery. Where new roads are constructed, the methods should be low intensive and possibly use manpower and not machines. The remains of all structures that may have been erected at the EPL shall be demolished and removed on completion of the project.

		- Care must be taken to ensure that all rehabilitated areas are similar to the immediate environment in terms of visual
		character, vegetation cover and topography and any negative visual impacts will be rectified to the satisfaction of
		the MEFT officials.
		Overburden topsoil will be placed back into excavation as part of the rehabilitation programme.
		Rehabilitate habitats through the removal of obvious signs of human presence.
		Remove all waste daily and dispose of it in the appropriate manner.
		Removal of machinery from the sites if periods of inactivity are protracted.
Significance of Impact	Without Mitigation	Moderate (3)
=		
Consequence x Probability	With Mitigation	Low (2)
X 110DGDIIIIy	winganon	
Ranking of Impact		3
Confidence Level		Medium

TABLE 14 - HERITAGE IMPACT ASSESSMENT TABLE

Impact	Heritage sites destruction during prospecting and exploration activities
Nature of impact	Possible destruction to heritage sites. A Heritage Impact Assessment was conducted for this project and is presented in Appendix E .
Status	Neutral
Spatial Extent	Local
Duration	Long term
Consequence	Substantial
Probability	Unlikely
Reversibility	Partially
Mitigation Measures	 A 'chance find' of any potential heritage site should be communicated to the police and the National Heritage Council of Namibia. If activities occur at the location where a 'chance find' has been made, then the activities should cease until the necessary authorities have visited the site and provided the go ahead to proceed with activities. A holistic precautionary measure be taken to protect the identified heritage resources within the EPL area and promote documentation of all heritage resources and dissemination to relevant stakeholders. The identified grave and built heritage resources should be mapped on the development map to reflect their existence. Recorded heritage finds should be avoided with a 30 m buffer. The EPL area should be monitored by a heritage specialist during all phases of the development and before prospecting/exploration drilling commencing, the final layout should be subjected to a heritage walkthrough.
Significance of Impact Without Mitigation	Moderate (3)

= Consequence x Probability	With Mitigation	Low (4)
Ranking of Impact		4
Confidence Level		Medium

TABLE 15 - LANDUSE IMPACT ASSESSMENT TABLE

Impact		Conflict with lands use of the area
Nature of impact		Possible conflict with community during the implementation of the project (e.g., issues related to access and security)
Status		Negative
Spatial Extent		Local
Duration		Short term
Consequence		Substantial
Probability		Unlikely
Reversibility		Partially
Mitigation Measures		 The EMA requires that permission be provided by the competent authorities for the listed activity. Update stakeholders register regularly. Actively engage landowners regularly to maintain open channels of communication. The proponent is subservient to the conditions laid down by the guidelines / conditions and the law that upholds it. The implementation of the exploration programme will be in accordance with the approved Environmental Management Plan (EMP). The communities or neighboring farms may have a claim to the grazing rights of the area. Good communications for example may prevent livestock injury where excavations are present during exploration.
Significance of Impact	Without Mitigation	Moderate (3)
Consequence x Probability	With Mitigation	Low (4)
Ranking of Impo	act	3
Confidence Level		Medium

TABLE 16 - SOCIO ECONOMIC IMPACT ASSESSMENT TABLE

Impact	Socio economic activities related to the exploration project
Nature of impact	- Employment creation - Skills Transfer
Status	Positive
Spatial Extent	National
Duration	Long term
Consequence	Slight
Probability	Very Likely
Reversibility	Yes
	Priority should be given to the locals when employment opportunities arises
Mitigation Measures	- Where possible, local persons should be employed depending on the level of skills they have.
7111194110111111111111111111111111111111	Employment will result should the project be permitted.
	 Promote local procurement of goods and services.
Significance of Impact Mitigation	Low + (4)
Consequence x Probability With Mitigation	Very low + (5)
Ranking of Impact	5
Confidence Level	Medium

10. DECOMMISSIONING AND REHABILITATION

Disturbance of the earth's surface by exploration activities may result in removal of existing vegetation and ecosystems within the disturbed area. The impacts are significant, but localized to the disturbed area, and the overall extent of the impact is determined by the concentration of the activity and the sensitivity of the disturbed ecosystems. The impact on the environment can be lessened by planning with future closure in mind. When an exploration area is abandoned the infrastructure and altered landscape can affect the safe access of wildlife and public if not rehabilitated. The altered habitat may or may not promote the re-establishment of organisms once found there. Visual rehabilitation to the original state is not always practical due to economic factors.

The objectives of the closure and decommissioning are to:

- Provide a safe and stable landform compatible with the intended final use.
- Comply with relevant regulatory requirements and attain regulatory consensus on the successful closure and rehabilitation of the Project area.
- Complete the closure, decommissioning and rehabilitation works as quickly and cost effectively as possible whilst achieving primary objectives
- Produce a final "walk away" landform that is stable and that blends aesthetically into the surrounding landforms, yet as far as possible does not limit possible future land uses

10.1. SITE REHABILITATION

Proponent should keep the disturbed areas to a minimum, plants should not be removed unless necessary; selective exploration should be adopted so that the entire site is not cleared and affected at once; backfilling the topsoil should be done as soon as possible where soil was removed, therefore topsoil should not be piled up for a long time as it will lose its natural nutrient content.

10.2. PLANNING FOR REHABILITATION

The proposed post exploration land-use will also influence the procedure and the plant species used for rehabilitation.

The following are the basic rehabilitation practices as summarized after the Minerals Council of Australia (Allan, 1998), which with appropriate modifications, will apply to most disturbed areas.

- 1. <u>Making Safe</u>: After planning for rehabilitation, the first step is to clean up and make the area rehabilitated, safe. This involves the following:
 - Removal of infrastructure and unused or unwanted equipment. No facilities or equipment should remain on site unless with the written approval of the landowner or relevant authority.

- Removal of rubbish for disposal at approved sites. Care is required with residual toxic or hazardous materials including contaminated packaging and containers.
- Restricting or preventing public access by removal or closure of access roads and tracks leading to high-risk explored areas until such a time that the area is clear of exploration activities induced "risk or danger"
- 2. <u>Erosion Control:</u> Progressive rehabilitation will be undertaken to stabilize disturbed areas as quickly as practical and to limit erosion.
 - Restrict clearing to areas essential for the works.
 - Minimize length of time soil is exposed.
 - Divert run-off from undisturbed areas away from the works.
- 3. <u>Topsoil Management:</u> The rehabilitation strategy may include the following measures which are designed to minimize the loss of topsoil material, respread on rehabilitated areas and promote successful vegetation establishment.
 - Minimize the length of time that topsoil material is to be stockpiled.
 - Respread topsoil material in even layers at a thickness appropriate for the landform and land capability of the area to be rehabilitated.
 - Topsoil stockpiles are located in areas away from drainage lines or windy areas in order to minimise the risk of soil and wind erosion.
 - Rehabilitation areas of returned topsoil will be ripped, with care taken not to bring subsurface materials to the surface (e.g., large rocks). Ripping should only be sufficient to allow equipment to work efficiently. Ripping along slopes should be along contour.

It is anticipated that rehabilitation works will be marginal as most of the techniques to be employed in this exploration are minimally to non-invasive.

11. CONCLUSION AND RECOMMENDATION

The aim of this environmental scoping assessment was to identify the potential impacts associated with the proposed exploration activities on EPL 9055, to assess their significance and recommend practical mitigation measures. The public and all directly affected stakeholders are consulted as required by the EMA and its 2012 EIA Regulations (Section 21 to 24). The public is informed via the four (4) newspapers advertisement used for this assessment. Notices and emails were also shared with some identified stakeholders and general public.

Due to the limited scope of the proposed activities and the use of a step-by-step approach in advancing operations, the overall severity of potential environmental impacts of the proposed project activities on the receiving environment will be of medium magnitude, temporary duration, localized extent, and high probability of occurrence.

All impacts are provided with mitigation measures, minimized, or avoided to acceptable degrees provided that the measures are taken into consideration.

Overall, the following are the primary sensitivities in the area: The area is home to a wide variety of indigenous and protected floral species, as well as native fauna.

Based on the conclusions of this EIA Report, it is thus recommended that an Environmental Clearance Certificate be provided for the planned project activities (ECC). When implementing the proposed program, the Proponent shall consider the following critical requirements:

- If applicable, the Proponent will negotiate Access Agreements with landowners.
- The Proponent is responsible for obtaining all additional permits that may be required.
- In accordance with all applicable national rules, the Proponent shall comply with all terms of the EMP and conditions of the Access Agreement to be signed between the Proponent and the landowner/s.
- In cases where baseline information, national or international guidelines, or mitigation measures have not been supplied or do not adequately address the site-specific project effect, the Proponent must use the precautionary approach/principles.

Finally, there is little chance that the project's planned operations will significantly harm the area's social and biophysical surroundings. To preserve the environment and advance environmental sustainability, it is crucial that the Proponent and any contractors they may have hired carry out and oversee the appropriate management procedures.

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APPENDIX A – ENVIRONMENTAL CONSULTANTS CV

APPENDIX B - ENVIRONMENTAL MANAGEMENT PLAN (EMP)

APPENDIX C - BACKGROUND INFORMATION DOCUMENT

APPENDIX D – ADVERTS, SITE NOTICES, STAKEHOLDER LIST, COMMUNICATION, MEETINGS MINUTES AND PRESENTATIONS

NEWSPAPER ADVERTS

The Republikein newspaper, The Allgemeine Zeitung, and The Sun newspaper, Wednesday 25th of October 2023



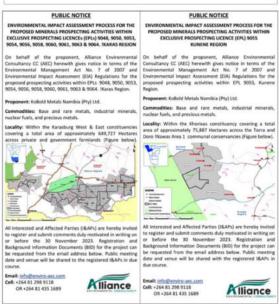
The Republikein newspaper, The Allgemeine Zeitung, and The Sun newspaper, Wednesday 01st of November 2023



The Windhoek Observer, Monday, 23rd of October 2023







The Windhoek Observer, Monday, 30th of October 2023



CLASSIFIEDS

www.observer.com.na

CALL FOR PUBLIC PARTICIPATION

ENVIRONMENTAL IMPACT ASSESSMENT FOR MINING CLAIMS 72850, 72851 and 72852 in the vicinity of Khorixas, Kunene Region

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).

Project: The license area is located 35 kilometers south east of Khorixas. Kunene Region, accessible along the D2743, gravel road which connects to the C39 tarred road. The proponent intends to mine on a small scale for industrial metals. Mining methods may include digging small pits, trenching and sampling.

Proponent: Kairanderua Katjari

All interested and affected parties are hereby invited to register and submit their ments regarding the proposed project on or before 25/11/2023. Contact details for registration and further information:

Augite Environmental Consulting

Email: kkanguechi@gmuil.com, Cell number: 0817069027



A Call for Public Participation & Engagement on the Environmental Impact Assessment (EIA) Study: The Existing and Proposed Groundwater Abstraction and Use within the Omaruru Townlands of Omaruru Town in the Erongo Region

public is hereby notified that an application for an Environmental Clearance Certificate (ECC) will be entitled to the Environmental Commissioner as per the Environmental Management Act No. 7 of 2007 in the 2012 Eta Regulations. Water resources development are lated activities in the Eta Regulations connot be undertaken without an ECC. Thus, the Eta Study is required to apply for and obtain the

Project Nature (Activities): The project activities entail the abstraction and use of groundwater from the Ornarum (Municipality bencholes to supply water to its growing population (residents and business community). The Municipality currently abstracts water from iner production benched. To meet the water demands of the Town, the Municipality proposes to add two more boreholes to the abstraction scheme.

Proponent: Municipality of Omaruru

Appointed Environmental Consultant: Popeli Investment CC

A Public Consultation Meeting will be held in Omaruru and meeting details will be shared in due time with all registered I&APsistakeholders.

Contact Person: Ms. Fredrika Shagama

Mobile No.: +264 (0) 81 749 9223

Email: popetieias@gmail.com



- Popell

CALL FOR PUBLIC PARTICIPATION

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED DEVELOPMENT OF NEW HOSTEL BLOCKS, KITCHEN AND DINING HALL AT OMAGALANGA VILLAGE, OSHIKUKU CONSTITUENCY

This notice serves to inform all interested and affected parties that ar 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).

Project: The proponent intends to build new hostel blocks, kitchen and dining hall at the Millenium Vocational Training Institute.

Proponent: Millenium Vocational Digital Training Institute (Pty) Ltd

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before 30/10/2023. Contact details for registration and further information:

Impala Environmental Consulting Mr. S. Andjamba

Email: eia@impalac.com, Tel: 0856630598



PROJECT NAMES:

PROJECT LOCATION: The EPL 8852 is situated approximately 65 Km North-west of Heuries Bay, H

Proponent: Valuet Tendars CC

REGISTRATION OF IMAPS AND SUBMISSION OF COMMENTS. In line with Number's 7 of 200°, and ElA negations (GN 30 of 6 February 2012), sli IMAPs are berefer arrived to negation.



PUBLIC NOTICE

ONMENTAL IMPACT ASSESSMENT PROCESS FOR THE OSED MINERALS PROSPECTING ACTIVITIES WITHIN INVERPOSPECTING LICENCES (EPLs) 9048, 9050, 9053, 906, 9058, 9061, 9061, 9063 & 9064, IKARAS REGION

on behalf of the proponent, Alliance Environmental consultancy CC (AIC) herewith gives notice in terms of the invironmental Management Act. No. 7 of 2007 and nirronmental impact Assessment (EIA) Regulations for the reposed prospering activities without PEIs 5048, 9050, 9053, 904, 9056, 9058, 9060, 9061, 9063 & 9064. Karas Region.

onent: Kolloid Metals Namibia (Pty) Ltd.





PUBLIC NOTICE

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THI PROPOSED MINERALS PROSPECTING ACTIVITIES WITHIN EXCLUSIVE PROSPECTING (LICENCE (EPL) 9055 KUNENE REGION

Commodities: Base and rare metals, industructear fuels, and precious metals.

Locality: Within the Khorixas cor area of approximately 75,887 Her Doro INawas Area 1 communal co





SITE NOTICES PLACED AT DIFFERENT PLACES AROUND THE EPL AREA

<u>Doro !Nawas Conservancy Office – Bloemhof</u>



Henties Bay Shell SS One Stop Shop



<u>Doro !Nawas Conservancy field officers</u>



Khorixas Constituency Office – Khorixas



<u>Springbokwasser Skeleton Coast Gate</u>



<u>Swakopmund Municipality Notice Board</u>



<u>Springbokwasser Campsite - Torra conservancy</u>



<u>Torra Conservancy Office - Bergsig</u>



FORMAL INVITATION LETTER TO IDENTIFIED I&APS



Postal Address: P. O. Box 51006, Bachbretcht, Windhoek, Namibia

15 of November 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: EIA NOTIFICATION & INVITATION TO PUBLIC CONSULTATIVE MEETINGS - ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) No. 9055, KUNENE REGION, NAMIBIA

Alliance Environmental Consultancy CC hereby gives notice on behalf of KoBold Metals Namibia (Pty) Ltd ("The Proponent") about the Environmental Impact Assessment (EIA) process for the proposed exploration activities for base and rare metals, industrial minerals, precious metals and, nuclear fuels on Exclusive Prospective License (EPL) 9055 within the Khorixas constituency in the Kunene Region (Figure 1).

The proposed prospecting activities fall under several categorical groups of activities listed in the Environmental Management Act, 2007, (Act No. 7 of 2007) and the EIA Regulations 30 of 2012 and cannot be undertaken without an Environmental Clearance Certificate (ECC). In fulfillment of these environmental requirements, an Environmental Scoping and Assessment Report (ESAR) and Environmental Management Plan (EMP) will be submitted to the Ministry of Mines Energy (MME) and Ministry of Environment Forestry and Tourism in support of the application for an ECC.

As a landowner and or potentially interested affected party (1&AP), we hereby inform you that the Proponent holds subsurface mineral rights under the EPL No. 9055. Therefore, the Proponent wishes to conduct prospecting activities which entails the following:

- a) Desktop studies which include the processing and interpretation of the existing geophysical data sets;
- b) Regional field-based reconnaissance activities and if the results are positive, implement detailed site-specific field-based activities using techniques such as geological mapping, geophysical surveys, possible trenching, drilling, and sampling for laboratory testing. (Detailed explanation will be contained in the ESAR).
- c) Continuous rehabilitation of disturbed areas throughout the exploration program.

Should exploration yield successful results and the Proponent confidently decides to proceed with mining a full environmental impact assessment and a detailed feasibility study will be carried out with appropriate site-specific specialist studies i.e., Hydrology and Geohydrology, Biodiversity, Soil and more that may be deemed necessary.

pg. 100

On behalf of our client, we hereby extend an invitation to you as an identified stakeholder and or I&AP for this project. You are hereby requested to register yourself as an affected party to receive the Background Information Document (BID) and subsequently, the draft ESAR as well as the EMP to provide your input/comments/concerns regarding the proposed activities as the process unfolds.

The BID is attached to this letter to acquaint yourself with the project scope. Should you have any comments on the details contained therein, please forward the same with your Name, Farm Name/Organization, Contact Details, to the following email addresses: ppp2@enviro-aec.com / info@enviro-aec.com

DEADLINE FOR REGISTARTION OF NEW I&AP's AND WRITTEN SUBMISSIONS: 24 NOVEMBER 2023

Furthermore, the work that will be conducted on this EPL is only prospecting activities and not mining, and no mineral deposits have been discovered yet. In the same light there is no guarantee that the prospecting will result in any economic mineral discoveries.

Should there be a need to conduct fieldwork on your land, the Proponent or their representative will contact you prior to, to request for permission to access your property and any future access or related agreements can be negotiated. Issues and conditions related to any agreements to be signed between the Proponent and the affected party are beyond our scope of work and are not part of the ECC application process.

We aspire to build open communication with you, and we value your input and participation.

Consequently, we have scheduled two meetings wherein information relating to the ongoing EIA process will be shared and inputs from the participants will be gathered. Please save the dates provided and we look forward to meeting with you.

- 29 November 2023 @ 12:00PM (noon): Twyfelfontein Country Lodge (Farm Twyfelfontein, Kunene Region).
- 30 November 2023 @ 11:00AM: Torra Conservancy Office (Farm Bergsig, Kunene Region).

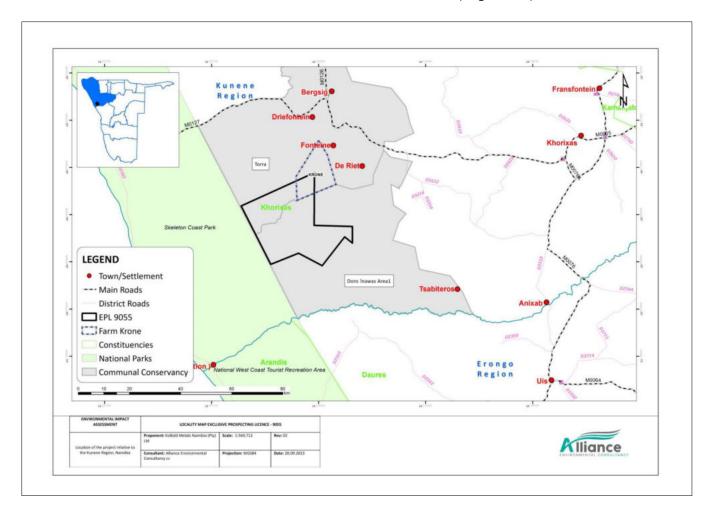
Both farms are accessed via the C39 Gravel Road between Khorixas and Springbokwasser (Skeleton Coast Park Gate).

Should you require any further information, please do not hesitate to contact us.

Yours Sincerely,

Alliance Environmental Consultancy
P.O. Box 51999 Bachbrecht
261 +264 85 772 8929
Email: info@enviro-aec.com

Mr. Lester Harker Associate Environmental Consultant Alliance Environmental Consultancy CC



EIA NOTIFICATION & INVITATION TO PUBLIC CONSULTATIVE MEETINGS -ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) No. 9055, KUNENE REGION, NAMIBIA



From <ppp2@enviro-aec.com>

To <info@enviro-aec.com>

Cc <lovisa@enviro-aec.com>

Bcc <gpkamseb@yahoo.com>, <golttineawases@gmail.com>, <Doronawas1999@gmail.com>,

<torraconservancy@gmail.com>, <tomiadams71@gmail.com>, <euphrasiusflorentius@gmail.com>,

<vvihanga@swkmun.com.na>, <ndeliimonachox@gmail.com>, <jason@ultimatesafaris.na>,

<sorrisorrisculturalvillage@gmail.com>, <andrew@rhino-trust.org.na>, <Andre.Burger@meft.gov.na>,

<apollinaris.kannyinga@met.gov.na>

Date 2023-11-15 09:40

231114_Background Information Document_Final.pdf (~790 KB)

231115_Stakeholder Invitation Letter.pdf (~420 KB)

Dear I&AP

Alliance Environmental Consultancy hereby submit to you as a registered I&AP on this Project, the Background Information Document (BID) for your perusal. The BID provides the initial scope and scale of the Project and details on how you can become involved in the consultation process.

Furthermore, you will find a stakeholder / I&AP invitation letter to scheduled public meetings to be hosted by AEC for the Project. Please familiarise yourself with the dates and times provided therein.

We look forward to meeting with you.

Should you have any questions, please do not hesitate to contact us.

Yours Sincerely,

Mr. Lester Harker Associate Environmental Consultant

Alliance Environmental Consultancy CC

Fwd: EIA NOTIFICATION & INVITATION TO PUBLIC CONSULTATIVE MEETINGS - ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) No. 9055, KUNENE REGION, NAMIBIA



From <ppp2@enviro-aec.com>

To <doronawas1999@gmail.com>

Date 2023-11-22 10:52

231114_Background Information Document_Final.pdf (~790 KB)

231115_Stakeholder Invitation Letter.pdf (~420 KB)

Dear Mrs. Morien Aebes,

As per our telephone conversation earlier, please see the original email sent and the invitation letter and Background Information Document for your perusal.

----- Original Message -----

Subject: EIA NOTIFICATION & INVITATION TO PUBLIC CONSULTATIVE MEETINGS - ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) No. 9055, KUNENE REGION. NAMIBIA

Date: 2023-11-15 09:40 From: ppp2@enviro-aec.com

To: info@enviro-aec.com
Cc: lovisa@enviro-aec.com

Fwd: EIA NOTIFICATION & INVITATION TO PUBLIC CONSULTATIVE MEETINGS - ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) No. 9055, KUNENE REGION, NAMIBIA



From <ppp2@enviro-aec.com>

To <christopher.munwela@meft.gov.na>

Date 2023-11-22 14:02

231114_Background Information Document_Final.pdf (~790 KB)

231115_Stakeholder Invitation Letter.pdf(~420 KB)

Dear Mr.Munwela

Kindly receive the Invitation Letter and the Background Information Document for your reference.

The meeting details are contained within the attached letter.

Please do let us know, who you will be nominating to attend either one of the two scheduled meetings on your behalf.

Kind regards

Mr. Lester Harker

Associate Environmental Consultant Alliance Environmental Consultancy CC

----- Original Message -----

Subject: EIA NOTIFICATION & INVITATION TO PUBLIC CONSULTATIVE MEETINGS - ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) No. 9055, KUNENE

REGION, NAMIBIA
Date: 2023-11-15 09:40
From: ppp2@enviro-aec.com
To: info@enviro-aec.com
Cc: lovisa@enviro-aec.com

REGISTRATION EMAILS FROM TO THE PUBLIC

From: lipinge Ndelimona <ndelimonachox@gmail.com>

Sent: Wednesday, November 1, 2023 09:02

To: info@enviro-aec.com

Subject: Environmental Impact Assessment process for the proposed minerals prospecting activities within Exclusive Prospecting License (EPL) 9055

Dear AEC

I hereby request to be registered as an I&AP for the EIA:

-Environmental Impact Assessment process for the proposed minerals prospecting activities within Exclusive Prospecting License (EPL) 9055, as issued in your public notice in the Namibian Sun newspaper on the 25th of October 2023. Kindly forward me the Background Information Documents (BID) and the site coordinates if not stated in the BID.

Regards

1

Ndelimona lipinge

EIA Tracking and Monitoring in Namibia (EIA Tracker)

Namibian Environment and Wildlife Society

0814138822

The EIA Tracker Project keeps track and maps all EIAs countrywide with the aim of enhancing public access to EIA information and promoting transparency within the EIA sector. The information collected is only used for the public to access and the EIA Tracker has no intention and will not use these for financial or any other benefits.

From: Andrew Malherbe <andrew@rhino-trust.org.na>

Sent: Monday, October 30, 2023 09:50

To: info@enviro-aec.com

Cc: Simson Uri-Khob <simson@rhino-trust.org.na>; Andre Burger <Andre.Burger@meft.gov.na>

Subject: Registration as an I&AP

Good Day Sir/Madam,

We are hereby formally registering as an Interested and Affected Party for the proposed exploration within the EPL 9055 in the Kunene region. Please send through the BID and public consultation dates as soon as these become available.

Thank you,

Andrew.

Andrew Malherbe Chief Operating Officer

Email: andrew@rhino-trust.org.na

Tel: +264 64 403829 / Cell: +264 81 698 7631 Website: <u>www.savetherhinotrust.org</u>



pg. 105

From: sorris sorris <sorrissorris.conservancy1@gmail.com>

Sent: Sunday, October 29, 2023 13:39

To: info@enviro-aec.com Subject: I & A party

Good Day,

Herewith the Sorris Conservancy registers as an affected party by EPL 9055, Kunene Region.

- 1. The Proposed area falls within our Joint Management Area(JMA) which is core to our indigenous Rhino populations (Rhino sanctuary).
- 2. The area host our JV campsite, namely Camp Doros which is a remarkable source of income including our Joint Conservancies Doro Nawas and Uibasen Twyfelfontein conservancy.

We thus request that a proper meeting be host before commencement of EIA on the proposed EPL.

For any enquiries please do not hesitate to contact us on 0816777697.

Best regards

Mr. Judah-Lion Operi Tsaraeb

Manager

SORRIS-SORRIS CONSERVANCY

From: Jeven Tsaraeb <sorrisorrisculturalvillage@gmail.com>

Sent: Sunday, October 29, 2023 13:37

To: info@enviro-aec.com Subject: I & A Party

Good Day,

Herewith the Sorris Sorris Conservancy registers as an affected party by EPL 9055, Kunene Region.

- 1. The Proposed area falls within our Joint Management Area(JMA) which is core to our indigenous Rhino populations (Rhino sanctuary).
- 2. The area host our JV campsite, namely Camp Doros which is a remarkable source of income including our Joint Conservancies Doro Nawas and Uibasen Twyfelfontein conservancy.

We thus request that a proper meeting be host before commencement of EIA on the proposed EPL.

For any enquiries please do not hesitate to contact us on 0816777697.

Best regards

Mr. Judah-Lion Operi Tsaraeb

Manager

SORRIS-SORRIS CONSERVANCY

From: Jason - ULTIMATE SAFARIS < jason@ultimatesafaris.na>

Sent: Thursday, October 26, 2023 11:50

To: info@enviro-aec.com Subject: I&AP's EPL 9055

Good Day,

I would like to register Ultimate Safaris as an interested and affected party.

Please confirm receipt?

Thanks, Jason



EIA of EPL 9055 Z



From André Schoeman

ppp2@enviro-aec.com

SkeletonCoastSafaris@Cloud007.com.na Cc

Date 2023-12-08 06:24

Dear Sir

AFFECTED PARTY IN EPL 9055

I am Andre Schoeman of Skeleton Coast Safaris operating a Safari Camp on a leasehold inside EPL 9055. The leasehold is registered under the name of registered affected party Torra Conservancy.

Our telephonic conversation this afternoon has reference.

Please send me the information documents regarding EPL 9055 for my perusal and for comment if necessary. As discussed, please also include me in the emailing list of the minutes of the respected public consulting meetings when they become available.

Thank you kindly

Andre Schoeman.

Dear Mr. Schoeman

Thank you for your email.

We take note of your registration through this media as an I&AP on the Project. We shall keep included in all further communication throughout the process.

As a starting point for you, please receive the attached Background Information Document (BID) containing the project information. Feel free to provide us with your comments.

Once the draft assessment report becomes available, we will share that with you as well for further input.

I trust the above is in order.

Kind regards

Mr. Lester Harker Associate Environmental Consultant Alliance Environmental Consultancy CC

Bcc

×

andre@scs.go.na, SkeletonCoastSafaris@Cloud007.com.na, gpkamseb@yahoo.com, golttineawases@gmail.com, doronawas1999@gmail.com, torraconservancy@gmail.com, tomiadams71@gmail.com, euphrasiusflorentius@gmail.com, vvihanga@swkmun.com.na, ndeliimonachox@gmail.com, jason@ultimatesafaris.na, sorrisorrisculturalvillage@gmail.com, sorrissorris.conservancy1@gmail.com, andrew@rhino-trust.org.na, simson@rhino-trust.org.na, Andre.Burger@meft.gov.na, christopher.munwela@meft.gov.na, priescaauchas@gmail.com, torraconservancy@gmail.com, andre.burger@MEFT.gov.na, monabeukes25@gmail.com



SUBMISSION OF DRAFT REPORT - ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED MINERALS PROSPECTING WITHIN EXCLUSIVE PROSPECTING LICENSE (EPL) №. 9055, KUNENE REGION, NAMIBIA ☑



From ppp2@enviro-aec.com

To Lovisa, Info

Bcc andre@scs.go.na, SkeletonCoastSafaris@Cloud007.com.na, gpkamseb@yahoo.com, golttineawases@gmail.com, doronawas1999@gmail.com, torraconservancy@gmail.com, tomiadams71@gmail.com, euphrasiusflorentius@gmail.com, vvihanga@swkmun.com.na, ndeliimonachox@gmail.com, 11 more...

☐ HIA KUNENE 9055 (1).pdf (~1.1 MB) ▼ ☐ Biodiversity for Kunene_Ko-Bold Pty_20231206_Final_024107.pdf (~2.3 MB) ▼

240103_EPL9055_Draft V3 EMP Report.pdf (~2.2 MB)

Dear I&AP's

Alliance Environmental Consultancy hereby submit the draft environmental scoping report via the link provided (https://we.tl/t-iCmPtntpt5) to you - please use the link provided to access the scoping report, for your review and input. The EMP and specialist reports are attached.

As per the Environmental Management Act's, Regulations of 2012, you are afforded 7 days to review the attached documentation, ending the 12th of January 2024. The documentation attached will be used as the application for an Environmental Clearance Certificate application to the Ministry of Environment, Forestry and Tourism (MEFT).

Please note that in addition to the 7 days review period granted on the draft scoping report and EMP, the MEFT will provide you as an I&AP with an additional 14 days review period of the final documentation after submission to the Directorate of Environmental Affairs within the MEFT.

Kind regards
Mr. Lester Harker
Associate Environmental Consultant
Alliance Environmental Consultancy CC

pg. 109

ISSUE/ CONCERN OR SUGGESTION

Dear Lester,

Trust this email finds you well. Please note that Ultimate Safaris (Pty) Ltd. operates 3 properties in the greater landscape, Onduli Ridge, Onduli Enclave and Camp Doros near the Doros crater. We are planning a fourth property in the vicinity of the Doros Crater, and with that our investment into the area will exceed N\$ 100 million and directly employ 75 people on a full-time basis, and this is excluding our conservation and development investments done through our own non-profit, the Conservation Travel Foundation (www.conservationtravelfoundation.org). The properties contribution to GDP on an annual basis exceed N\$ 70 million and all our activities are sustainable!

Please find comments from Ultimate Safaris with reference to the Draft EIA for the above Proposed EPL: Draft EMP Report we picked up the following:

- 1. On page 12, Section 1.4 Summary of the Receiving Environment: You address tourism as an important aspect to the area and the region and touch on a small number of the lodges in the area but never highlight the importance of the river basin as an area where many tourism activities take place due to the movement of elephants and other wildlife into this area. For a period of over 10 months the Desert dwelling elephants move in the area west of Deriet and over 10 establishments including ours utilize this area to take guests see the elephants. In this EMP you do not mention the high volume of tourism that could have easily been gathered, but rather choose to focus on areas such Epupa, Twyfelfontein and the Skelton Coast, rather than the main tourism activity in the core area of the EPL. This section is also flawed in the aspect that it has incorrect reference of White Lady been at Twyfelfontein, so not accurate. The value of tourism operations reliant on the lower Huab basin for their product is easily valued at over N\$ 500 million and employs more than 500 people.
- 2. Page 17 section 8.1 Water resource Development: This is an arid area that already has high pressure on it's underground water and there is a growing fear that any more pressure will affect the water adversely and in turn have a negative impact on the communities and wildlife that rely on water form underground for survival and in turn reduce the number of tourists visiting the area, not to

EAP'S RESPONSE

- 1. Thank you for the valuable information provided on the tourism landscape in the Region with specific references. This will be added to the report's baseline section and updated further in the scoping assessment chapter. Please note that should the exploration work by KoBold Metals Namibia show prospects for a viable mining operation, a full environmental and social impact assessment process must be conducted based in part on the aspects and features highlighted through the scoping phase for exploration, including the need for a full socioeconomic assessment of the area.
- 2. The proposed exploration project will use minimal quantities of water that will be externally sourced. Once and if the need arises to tap into groundwater sources should drilling be required, this will be subject to sustainable yield tests with all mandatory permits and agreements to be in place.
- 3. Thank you for confirming this detail pertaining to black rhino land use. We will update the relevant section in the scoping report.
- 4. Noted and considered.
- 5. Please refer to the email attachments in Appendix D

- mention the compromise on the tourism investment in the area. The same flaw in the EMP is repeated on page 42 Section 6.1.
- 3. Page 49 Section 6.3.2 Fauna: You make reference to large mammals such as elephant and rhino as only passing through the area, which is incorrect as these areas are actually their home range and might only seem that way as they utilize a larger area than normal. This EPL covers the species entire home range in the area.
- 4. Page 57 Section 6.7.4 Land Use and Economic Activities: In this section you make mention of tourism being a major economic sector but then refer to tourism in the Kunene Region and not the specific area, as you make reference to Epupa and Twyfelfontein. You then go on to list livestock and agriculture as other economic avenues but in the specific area that is not true and the only major economic sector is tourism, and everything else subsistence at best.
- 5. Page 60 Section 7.1.4 Stakeholder Engagement: As a Joint Venture Partner with Doro Nawas Conservancy and the Joint Management Area, where the EPL overlaps and neighbors, neither of our conservancy partners were invited to the meetings held at Torra and Twyfelfontain; as land custodians they should have been awarded the benefit of a direct invite. Please can you provide us with this
- 6. As a major force operating three, and soon four, tourism establishments in this area and national safaris through area (with an added annually economic value of N\$ 250 million), with our guides active in this valley on a daily basis, we find it disappointing that the reference to tourism and the key wildlife species we rely on, is made out to be so insignificant. The fact that we as a company, where in the area we have a positive impact through employment and direct payments to conservancies which is in the millions, have not been properly consulted and made out to be insignificant, suggests a flawed process during your EIA work. One undermines the importance of tourism in this area and the proposed activities will directly impact this and the communities at large that rely on tourism.

We registered as an I&AP, although we were registered as I&AP we never received these documentations to make comment on, and as a result we are only writing this as one of our conservation partners flagged this. In your Draft EIA we are listed at number 11 Ultimate Safaris?

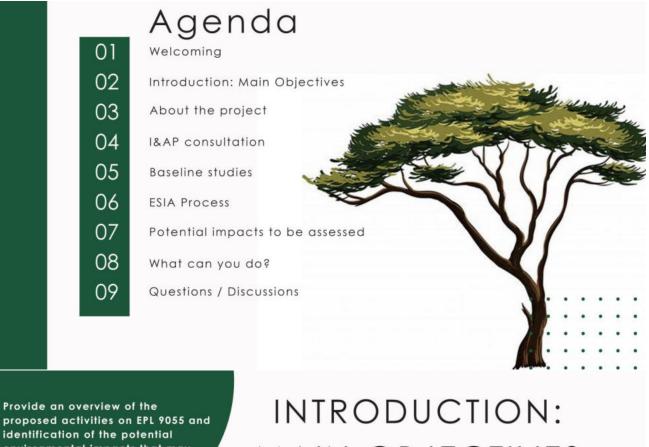
6. Please refer to the email attachments in Appendix D

- 1. Page 49 section 6.3.2. states that: 'Although many endemic species are known to occur from the general area, it cannot be determined if any of these are expected within the EPL area'.
 - The report further states that 'the elephant and black rhino are viewed as the most important although they do not necessarily occur in the area throughout the year, but rather pass through occasionally depending on environmental conditions'.
 - From SRT's perspective these statements are not grounded in any proof or evidence. Black rhino movements are strictly confidential, shared with MEFT rhino management team only. Any statement alluding to the movement of black rhinos in the landscape as noted above would be unfounded as neither your consulting firm nor the consultant who developed the report on biodiversity is privy to this information.
- 2. The biodiversity report (page 12) highlights a suggested no-go zone in the southern end of Doro Inawas and Sorris Sorris conservancy with Ugab river as the boundary as the area has the most potential to support biodiversity. This may be true but the area around EPL9055 is in our opinion equally as important as wildlife in this area is free ranging. This means that animals will move from the southern 'no-go' zone into the footprint area of EPL9055 should vegetation be available. This movement usually occurs after rainfall in one or the other area.
- 3. As with other wildlife in the conservancy area critically endangered black rhinos are free roaming. Although they tend to remain within loosely defined home ranges they are able to move freely in this area. According to the SRT database there are a number of rhinos using the western Huab river and surrounds as a home range (within the EPL9055). These animals are likely to be disturbed during exploration drilling. The extent of this disturbance cannot as yet be quantified.
- 4. Finally, the public engagement and information sharing meeting which took place on 29th November at Twyfelfontein Country Lodge only consulted 2 members of the Doro !nawas conservancy. This is despite the majority of the EPL falling within the Doro !nawas conservancy. It would be good to have proof of the meeting invitation for Doro !nawas members. This would help us to understand why the Torra (Bergsig) meeting was so well attended but the Doro !nawas meeting was very poorly attended.

- Thank you for raising the concern on rhino movements, this will be removed from the report.
- 2. Noted and considered.
- 3. Noted and considered.
- 4. Please refer to the email attachments in Appendix D

PRESENTATION - PUBLIC ENGAGEMENT & INFORMATION SHARING MEETINGS





environmental impacts that may arise from the proposed Phase 1exploration activities.

MAIN OBJECTIVES

Provide an independent environmental and social assessment of the activities associated with the proposed exploration project; and Develop management and mitigation measures

Provide information describing the proposed Phase 1 exploration project and associated activities;

associated with any identified potential impacts where necessary.



About the project:

The project area is located within the Khorixas constituency covering a total area of approximately 75,887 Hectares across the Torra and Doro !Nawas Area 1 communal conservancies, Kunene Region.

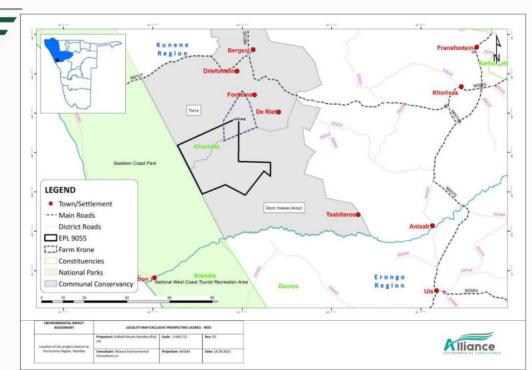
Alliance Environmental Consultancy CC (AEC) (the consultant) has been appointed by KoBold Metals Namibia (Pty) Ltd (the proponent) to act on their behalf in obtaining an Environmental Clearance Certificate (ECC) for their proposed minerals exploration on Exclusive Prospecting License (EPL) 9055.

The EPL site is accessible via several tracks that branch through the EPL from the C39/M0065 main road and D2612 district road from Khorixas. The major towns/settlements in and around the project area include Khorixas, De Riet, Bergsig, and Driefontein

The envisaged project development process outline:

- Planning and permitting.
- Site preparation for the exploration team if required (temporary camps).
- Supporting infrastructure, access, energy, and water supply.
- Preparation of drill sites and drilling operations.
- · Decommissioning, final rehabilitation.









Exploration methodology:

- Step 1: Desktop review of existing data as well as past research.
- Step 2: Regional reconnaissance assessment.
 - Regional mapping and sampling
- Step 3: Geological mapping, sampling, geo-physical surveying, and
 potentially widely spaced trenching and drilling to verify the feasibility
 of any identified local target based on the regional data acquired in
 step 2 above.
- Step 4: Exploration resource evaluation and defining the ore body through localized site-specific detailed geology mapping, trenching, bulk sample, surveying, and detailed drilling are carried out.
- **Step 5**: Pre-feasibility level. Activities include detailed site-specific drilling, bulk sampling, and laboratory testing/test mining.



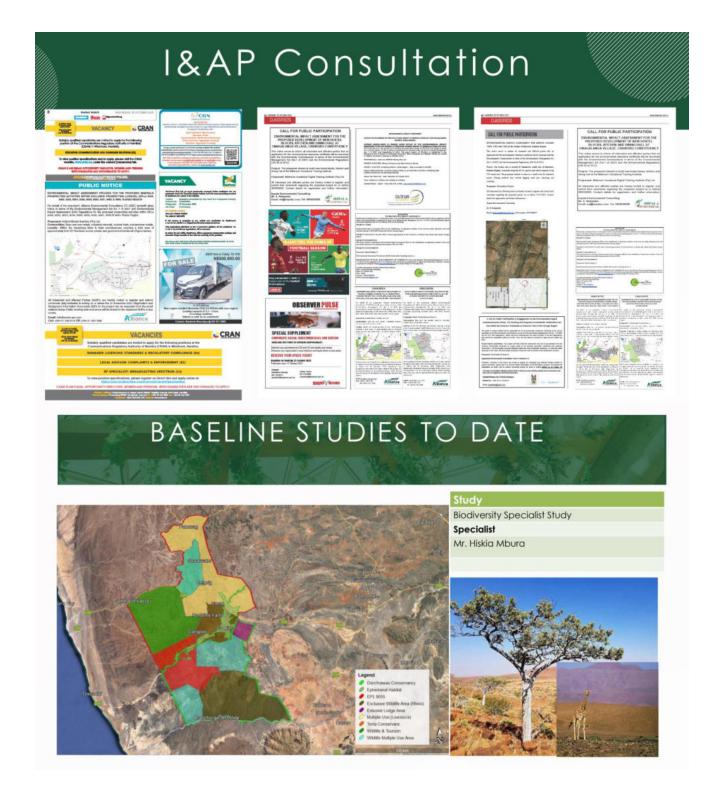


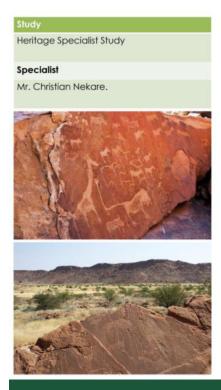
Support services:

- Access and transport: The EPL can be accessed via several tracks that branch through it from the C39/ M0065 and the D2612 district road from Khorixas.
- Water: Initial stages, water will be brought to the site. As the project evolves into drilling and the establishment of a campsite, underground water will be used from either existing boreholes in the area or a new hole sunk. All permits from DWA will be applied for. Farm owner's agreements (if needed) will be entered into.
- Electricity: A combination of diesel-powered generators and solar energy sources.
- Accommodation: initially to rent farmhouses during the initial exploration phases (less than 5 personnel members).
 - Thereafter, as the labour component expands a site camp may be established with temporary and semi-permanent infrastructure placements and the necessary controlled ablution facilities.



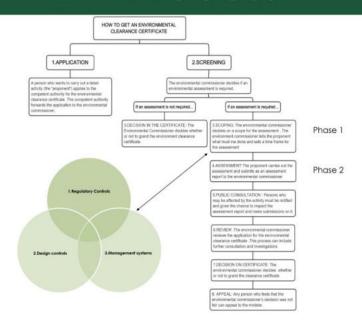






Heritage Resources	Coordinates GPS	Status	Protection Afforded
Site I: Krone-Main panel of the rock art site. Is the panel with the highest concentration of animal track engravings, amounting to almost 300 in number.	S 20.48627 ° E 14.02714 °	Known to the conservancy, noted by the NHC and yet to feature on its NHR. Inside the EPL area.	lauctive, no statutory protection.
Site 2: Eager Rock-, with engravings inside exfediated rock face; from the position of the photographer at the entrance.	\$ 29.48942 ° E 14.02714 °	Known in the conservancy, noted by the NHC and yet to feature on its NHR. Inside the EPL area. Vandalized and fire inside the rock that contain the art.	Inactive, no statutory protection.
Site 3, Stone ruins probably belonged to a normadic band of san people.	S 20.49419° E 14.12096°	Known to the conservancy, noted by the NHC and yet to feature on its NHR. Stone removed and displaced from original position. On top of a hill the allowed them to spot dancer.	Inactive, no statutery protection.
Site 4, Stone ruiss probably belonged to a nomadic band of san people.	S 20.57813" E 13.96133"	Known to the conservency, noted by the NHC and yet so feature on its NHR. Overlooking over Huab river. Stone rains still intact in original position.	Inactive, no statutory protection.
Site 5, Graveyard since 1974.	S 20.46711° E 14.19428°	Known to the local community and the Traditional Authority, Still in active use.	Inactive, no statutory protection.
Site 6, Jan Snel memorial area.	8 20, 49419° E 14.12096°	Known to the conservancy.	Inactive, no statutory prefection but annually visited.
Site 7, Rhino robbing rock.	S 20.49979° E. 14.09209°	Known to the conservancy.	Inactive, no statutory protection but annually visited.
Site 8, Many contemporary village as this one are featuring within the EPL area, probably more than 10.	S 20. 46969* E 14. 18625°	Known to the conservancy.	Inactive, so statutory protection but annually visited.

EIA Process



Potential Impacts to be assessed









The following potential impacts were drawn out from the sensitivities identified from the baseline conditions of the receiving environment, legal environment in relation to the proposed mining activities. These potential impacts are subject to amendment as the assessment process evolves, therefore the list is not exhaustive. These impacts are grouped below according to their nature.

Biophysical Impacts

- A. Land disturbance
- B. Vegetation disturbance
- C. Poaching of protected fauna species
- D. Air quality
- E. Groundwater and surface water

Health Impacts

- F. Noise proliferation
- G. High summer temperatures

Anthropogenic Impacts

- H. Waste proliferation
- 1. Socioeconomic positive impacts
- J. Heritage impacts

What you can do!

- Provide in writing, any issues and suggestions regarding the proposed development. This
 correspondence must include:
 - ✓ Name & Surname;
 - ✓ Organization represented;
 - ✓ Position in the organisation;
 - ✓ Contact details and;
 - ✓ Any direct business, financial, personal or other interest which you may have in the approval or refusal of the application.
- Send written submissions to info@enviro-aec.com or ppp2@enviro-aec.com



Questions / Discussions ?



THANK YOU

Inquiries:

Mr. Lester Harker

+264 81 602-2082

ppp2@enviro-aec.com / info@enviro-aec.com



MINUTES - PUBLIC ENGAGEMENT & INFORMATION SHARING MEETINGS (29.12.23)



MEETING MINUTES

Project Code	KOB/KNN
Project Name	KoBold Metals Namibia (Pty) Ltd – Environmental Impact Assessment (EIA) Process
Date	29 November 2023
Time	13:00 PM - 15:00 PM
Location/Venue	Twyfelfontein Country Lodge, Kunene Region, Namibia
Meeting Objectives	 Provide information describing the proposed Phase 1 exploration project and associated activities; Provide an overview of the independent environmental and social assessment of the activities associated with the proposed exploration project; and Explain the development of management and mitigation measures associated with any identified potential impacts where necessary.
Attendees	Mr. E. Gaoseb representing the Doro !Nawas Conservancy. Mr. Ulrich Howoseb representing the Doro!Nawas Conservancy. Ms. Kaarina Ndalulilwa representing KoBold Metals Namibia (Pty) Ltd Mr. Lester Harker representing Alliance Environmental Consultancy Cc
Proceedings	The meeting opened with a word of welcome from Mr. Harker and introductions of the hosting group were made. Thereafter the presentation commenced with an overview provided of the project in terms of the EPL size, location and general setting within the Khorixas Constituency. Ms. Ndalulilwa then took the floor to explain to the meeting the proposed exploration methodology envisioned by KoBold Metals Namibia for EPL 9055. The presentation continued with a showcase of the public consultation steps
	followed to date with the site notice boards put up at various locations along the C39 road up to Henties Baai and Swakopmund and the adverts published in The Republikein, Windhoek Observer, Allgemeine Zeitung and The Sun newspapers. An explanation of the baseline studies commissioned by Alliance Environmenta Consultancy (AEC) was provided as well as the potential impacts expected to be addressed in the ensuing assessment process. The development of an environmental management plan as a product of the assessment was explained in the meeting.
	The meeting closed at 15:00PM.

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Compiled by Lester Harker	29 November 2023
Authorized by Lovisa Amwele	Page 1 of 4



🚡 +264 81 435 1689 / +264 85 772 8929 🎽 info@enviro-aec.com

Postal Address: P. O. Box 51006, Bachbretcht, Windhoek, Namibia

DISCUSSIONS

The Khorixas location label (in green) on the map.

- Mr. Howoseb questioned the accuracy of this label saying it's in the wrong position on the map.
- Mr. Harker explained that the map is a consolidation of various data layers superimposed onto
 each other to create a map showing various features. Therefore, there is a Khorixas population
 node layer, and a Khorixas constituency name layer are on the map as two separate entities.
- The green labelled Khorixas name represents the constituency name of the general area within which the project lies, and the red labelled Khorixas name represents the physical location of the town Khorixas.

What benefit does an exploration and/or mining project have for us as a community?

- Mr. Howoseb stated the lack of benefits trickling down to grass roots level within the Doro! Nawas
 Conservancy Area from other exploration and mining operations already established in it are a shared sentiment within the community.
- o Ms. Ndalulilwa took the opportunity to share with the meeting her past experience on the CSR front with previous mining operations in the area (I.e., the Lofdal Project). She explained that tangible contributions to the local communities through various organized channels with local representatives were initiated and followed through on. Financial and in-kind benefits were provided by the Lofdal Project to the communities through their representatives. However, she noted that not all the communities were proactive enough to engage with the Lofdal Project through established channels, including the Doro !Nawas traditional authorities and the conservancy despite various requests to submit their "needs and request" in writing.
- o The intention of the KoBold Metals project, once approved to go ahead by the MEFT will ensure that their CSR platform will engage widely with the local communities to foster a spirit and dedicated channel of mutual engagement (I.e., stakeholder engagement community workshops, roadshows, etc.) with all relevant parties on the ground. KoBold aims to invest in two pillars under their CSR umbrella which is education and infrastructure upliftment (I.e., water infrastructure).

Secondary permitting requirements.

• Water use: If it becomes necessary and viable to abstract water from underground resources in the area, KoBold Metals will first consider existing boreholes and enter into an agreement with the local custodians of such infrastructure, bearing in mind to seek the necessary permit to abstract water for commercial purposes from the MAWLR. Should it become necessary to drill for water specifically this will also be supported by the necessary abstraction permit application from the same Ministry.

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by Hydrocarbon storage on-site: Mr. Harker explained that the storage of fuel on site is a regulated activity that requires a Consumer Installation Certificate issued by the Ministry of Mines and Energy for volumes 600litres and more. Should the volume be 30 cubic meters and more, it would require inclusion into the EIA and subjected to an assessment of it impacts.

When will mining happen?

o Mining will only happen if a viable ore reserve can be established within the actual footprint of the EPL. Should this be the case then a separate EIA process will be followed including public consultation again. For now, only exploration activities will be carried out on the site on targeted areas which will be identified.

What are anthropological impacts?

o Mr. Howoseb requested an explanation of this term, to which Mr. Harker responded stating that these are impacts experienced by humans from a project I.e., bad air quality or positive socioeconomic benefits that may be experienced as a result of a project's operations.

Way Forward	The meeting minutes will be shared with the attendees.	
Meeting Tone	Formal and co-operative.	
Meeting Adjourned	15:00 PM	

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APPENDIX A: Gallery



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MINUTES - PUBLIC ENGAGEMENT & INFORMATION SHARING MEETINGS (30.12.23)



MEETING MINUTES

Project Code	KOB/KNN
Project Name	KoBold Metals Namibia (Pty) Ltd – Environmental Impact Assessment (EIA) Process
Date	30 November 2023
Time	11:00 AM - 12:35 PM
Location/Venue	Torra Conservancy Field Office, Kunene Region, Namibia
Meeting Objectives	 Provide information describing the proposed Phase 1 exploration project and associated activities; Provide an overview of the independent environmental and social assessment of the activities associated with the proposed exploration project; and Explain the development of management and mitigation measures associated with any identified potential impacts where necessary.
Attendees	1. Ms. Daphne Beukes representing the Torra Conservancy.
(As per the register	2. Mr. Martin Basson - community member.
attached)	3. Ms. Francina Dewids - community member.
	4. Mr. Mohammed Ganuseb - community member.
	5. Mr. Reinhard !Auchab - community member.
	6. Mr. Ivan Colin Oreb - community member.
	7. Mr. Ronald James Beukes - community member.
	8. Mr. Markus Dawids - community member.
	9, Mr. Denzel Coetzee - community member.
	10. Mr. Gert Isaks - community member.
	11. Mr. Rivaldo Simon - community member.
	12. Ms. Laundika Jonnes - community member.
	13. Mr. Andre Burger representing MEFT (Kunene Region)
	14. Ms. Andrea M. Beukes - community member.
	15. Ms. Naomi Mapanka - community member.
	16. Ms. Chantel So-aobes - community member.
	17. Ms. Cyndrella Beukes - community member.
	18. Mr. Joel Somseb - Torra Conservancy ranger

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19. Mr. Jimmy Haoseb - community member.

20. Mr. Remetius Beukes - community member.

21. Mr. Peter Khosmas - community member.

22. Mr. Shikunda Kambonde - community member.

23. Ms. Lina Tsanes - community member.

24. Ms. Theresia M. Gerwuses representing the Torra Conservancy

25. Ms. Alexia Awaras - community member.

26. Mr. Mubasen Dawids representing the Torra Conservancy

27. Ms. Kaarina Ndalulilwa representing KoBold Metals Namibia (Pty) Ltd

28. Mr. Lester Harker representing Alliance Environmental Consultancy Cc

Proceedings

The meeting opened with a word of welcome from Mr. Harker and introductions of the hosting group were made. Thereafter the presentation commenced with an overview provided of the project in terms of the EPL size, location, and general setting within the Khorixas Constituency. Because of the large size of the group, Mr. Harker took a few minutes to explain this part of the presentation to individual smaller groups using a laptop.

Ms. Ndalulilwa then took the floor to explain to the meeting the proposed exploration methodology envisioned by KoBold Metals Namibia for EPL 9055. Present in the meeting were individuals who were not proficient in conversational English, therefore Mr. Harker translated Ms. Ndalulilwa's presentation to Afrikaans.

The presentation continued with a showcase of the public consultation steps followed to date with the site notice boards put up at various locations along the C39 road up to Henties Baai and Swakopmund and the adverts published in The Republikein and the Namibian newspapers. An explanation of the baseline studies commissioned by Alliance Environmental Consultancy was provided as well as the potential impacts expected to be addressed in the ensuing assessment process. The development of an environmental management plan as a product of the assessment was explained in the meeting.

The meeting concluded with a spokesperson (Mr. Markus Dawids) being nominated by the meeting to act as contact point for the community for this EIA process.

The meeting closed at 12:35PM.

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Compiled by Lester Harker	29 November 2023
Authorized by Lovisa Amwele	Page 2 of 6



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DISCUSSIONS

The Khorixas location label (in green) on the map.

- A community member questioned the accuracy of this label saying it's in the wrong position on the map.
- Mr. Harker explained that the map is a consolidation of various data layers superimposed onto
 each other to create a map showing various features. Therefore, there is a Khorixas population
 node layer, and a Khorixas constituency name layer are on the map as two separate entities.
- The green labelled Khorixas name represents the constituency name of the general area within which the project lies, and the red labelled Khorixas name represents the physical location of the town Khorixas.

Mikberg as a historical site of value to the local people.

o Mr. Dawids indicated on the locality map directly north of the EPL boundary a mountain called "Mikberg" is located that has acted as a reference point (directional beacon) for both locals and the MEFT personnel operating in the area. The specific location of this mountain is not available at the time of the meeting.

Different land use areas

o The community requested clarity on the different land use areas delineated on the biodiversity baseline map contained within the power point presentation. It was explained to them what the different color graded areas meant. The general interest from the audience landed on the Exclusive Wildlife Area (Rhino) therefore posing the question of this area will be off limits to the exploration activities. Mr. Harker responded saying that a small portion of the EPL area overlaps this rhino sanctuary area and that KoBold Metals will be avoiding this area due to the known sensitivities surrounding Rhino conservation areas.

Heritage objects within the EPL area.

A discussion ensued about heritage objects and their presence on the EPL. Mr. Harker explained to the meeting the different types of heritage objects found on the EPL during the heritage survey conducted by the heritage specialist, Mr. Christian Nekare and that these are subject to the assessment process as well to determine a significance value and proper mitigation measures to ensure protection. Mr. Harker also explained that independent scientific research into heritage objects through EIA processes within Namibia aids the government greatly to grow their

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database of known heritage objects. The procedure to inform the National Heritage Council of heritage finds on a site was also explained.

Public consultation and the application process for an environmental clearance certificate

o The process required to obtain an EPL licence, and an Environmental Clearance Certificate was explained in the meeting. The importance of public consultation during an EIA process was explained as well and the types of public consultative activities prescribed under the Environmental management Act's regulations (2012). Thereafter the steps prescribed under the regulations mentioned above was also discussed with the audience.

What benefit does an exploration and/or mining project have for us as a community?

- Mr. Basson asked how the current project will benefit them as a community.
- o Ms. Ndalulilwa took the opportunity to share with the meeting her past experience on the CSR front with previous mining operations in the area (I.e., the Lofdal Project). She explained that tangible contributions to the local communities through various organized channels with local representatives were initiated and followed through on. Financial and in-kind benefits were provided by the Lofdal Project to the communities through their representatives. However, she noted that not all the communities were proactive enough to engage with the Lofdal Project through established channels, and that the KoBold Project will aim to achieve more success in this area but will require concerted effort on both sides.
- The intention of the KoBold Metals project, once approved to go ahead by the MEFT will ensure that their CSR platform will engage widely with the local communities to foster a spirit and dedicated channel of mutual engagement (I.e., stakeholder engagement community workshops, road shows, etc.) with all relevant parties on the ground. KoBold aims to invest in two pillars under their CSR umbrella which is education and infrastructure upliftment (I.e., water infrastructure).
- o KoBold will also tap into the local pool of knowledge during their exploration activities in terms of hiring local guides to direct them within the area using known tracks, etc. Employment will not be on a large scale with any exploration project and therefore the community should not expect a large-scale intake of people from the start of the Project, but continuous engagement will take place to inform the local people of skills required throughout the exploration program.

Current shortcomings faced by the Bergsig community.

• Water supply: If it becomes necessary and viable to abstract water from underground resources in the area, KoBold Metals will first consider existing boreholes and enter into an agreement with the local custodians of such infrastructure, bearing in mind to seek the necessary permit to abstract water for commercial purposes from the MAWLR. Should it become necessary to drill for

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water specifically this will also be supported by the necessary abstraction permit application from the same Ministry.

- o Community water infrastructure in disrepair: The community asked if KoBold would be willing to assist them to fix their water borehole infrastructure. Ms. Ndalulilwa indicated that that is something that can be pursued through the CSR portfolio of KoBold Metals and stressed that requests of that nature be submitted in writing.
- Transport issues: The community stated that transport for them especially the elderly to other
 population nodes I.e., Khorixas is too expensive and the available vehicles within the community
 (privately owned) are often in a state of disrepair.
- Miscellaneous: Another example of aid that may potentially be requested from KoBold Metals
 from the community would be to fight poaching of animals and plants in the area. To this Ms.
 Ndalulilwa again stressed the importance of submitting such requests to KoBold in writing for
 consideration.

When will mining happen?

o Mining will only happen, if a viable ore reserve can be established within the actual footprint of the EPL. Should this be the case then a separate EIA process will be followed including public consultation again. For now, only exploration activities will be carried out on the site on targeted areas which will be identified.

Way Forward	The minutes of this meeting will be circulated within the community.
Meeting Tone	Neutral and inquisitive.
Meeting Adjourned	12:35 PM

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APPENDIX A: Gallery



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REGISTERED AND IDENTIFIED STAKEHOLDER LIST

STAKEHOLDER REGISTER



Postal Address: P. O. Box 51006, Bachbretcht, Windhoek, Namibia

PROJECT: Environmental Impact Assessment for EPL 9055, Kunene Region

	NAME & SURNAME	ORGANIZATION	TEL/CELL NUMBER	EMAIL ADDRESS
1	Mr. GP Kamseb	Chief Regional Officer.	081 127 9733	gpkamseb@yahoo.com
2	Mrs. Golttine //Awases	Admin Officer – Khorixas Constituency Office.	0814191617	golttineawases@gmail.com
3	Mr. Ulrich Howoseb	Vice Chairperson – Doro Nawas Conservancy	081349304	
4	Mrs. Morien Aebes	Manager – Doro Nawas Conservancy	0812165329	doronawas1999@gmail.com
5	Mr. Emil Roman	Manager – Torra Conservancy	0813345308	torraconservancy@gmail.com/ tomiadams71@gmail.com
6	Mrs. Paula Tawises	Springbokwasser Campsite - Torra Conservancy	0817291957	torraconservancy@gmail.com / tomiadams71@gmail.com
7	Ms. Eupharsius Dawids	Springbokwasser Campsite - Torra Conservancy	0813311445	euphrasiusflorentius@gmail.com
8	Ms. Nicolene	Springbokwasser Gate (Skeleton Coast entry/exit)	067684947/684048	- no email was provided
9	Mr. Roman Vihanga	Swakopmund Municipality - Marketing	0644104219	vvihanga@swkmun.com.na

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Postal Address: P. O. Box 51006, Bachbretcht, Windhoek, Namibia

10	Ndelimona lipinge	EIA Tracking and Monitoring in Namibia (EIA Tracker) Namibian Environment and Wildlife Society	0814138822	ndeliimonachox@gmail.com
11	Jason	Ultimate Safaris	+264 (0) 61 248137	jason@ultimatesafaris.na
12	Mr. Judah-Lion Operi Tsaraeb	Manager SORRIS-SORRIS CONSERVANCY	+264 816777697	sorrisorrisculturalvillage@gmail.com / sorrissorris.conservancy1@gmail.com
13	Mr. Andrew Malherbe	Chief Operating Officer (SRT)	+264 64 403829 / +264 81 698 7631	andrew@rhino-trust.org.na / simson@rhino-trust.org.na / Andre.Burger@meft.gov.na
14	Mr. Christopher Munwela	Directorate of wildlife and National Parks (north-west)	+264 811223350	christopher.munwela@meft.gov.na
15	Daphne Beukes	Torra Conservancy	081 451 3244	torraconservancy@gmail.com
16	Martin Basson	Torra Conservancy	081 239 8300	-
17	Francina Dawids	Torra Conservancy	081 346 8773	-
18	Mohammed Ganuseb	Torra Conservancy	-	-

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Postal Address: P. O. Box 51006, Bachbretcht, Windhoek, Namibia

19	Rheinhard Auchab	Torra Conservancy	081 367 0466	priescaauchas@gmail.com
20	Ivan Colin Oreb	Torra Conservancy	081 277 6095	
21	Ronald James Beukes	Torra Conservancy	-	¥ .
22	Markus Dawids	Bergzig	081 606 3375 081 548 6834	
23	Denzel Coetzee	VredeBergzig	081 401 8383	-
24	Gerrit Isaks	-	081 606 0514	-
25	Rivaldo Simon	-	081 407 5889	
26	Laundika Jonnes	Bergsig	081 407 5889	-
27	Andre burger	MEFT	081 242 2909	andre.burger@MEFT.gov.na
28	Andrea M Beukes	Bergsig	081 673 0317	monabeukes25@gmail.com
29	Naomi Mapanka	Bergsig	081 673 0317	- 1
30	Chantel So-aobes	Bergsig	081 210 1647	andileso-oab@37.gmail.com

STAKEHOLDER REGISTER

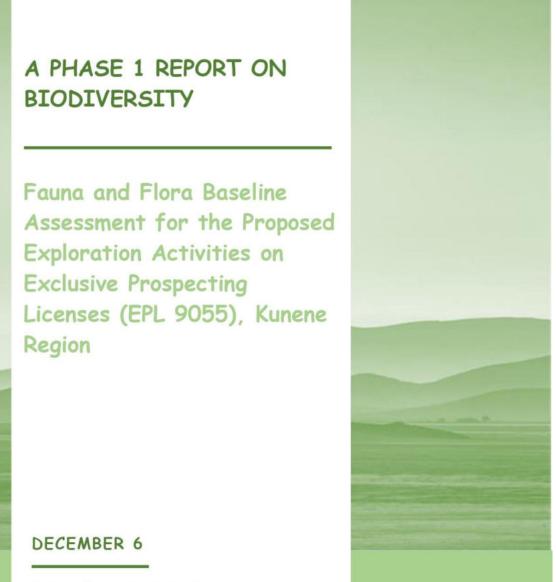


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Joel Somseb	T C		
	Torra Conservancy	081 280 4508	Bergsig
Jimmy Haoseb	Bergsig	081 498 9321	2
Remetius Beukes	Bergsig	-	-
Peter Khosmas	Bersig	081 481 4147	-
Shikunda Kambonde	Bergsig	081 804 4073	-
Lina Tsanes	Bergsig	081 277 6095	-
Theresia M Gawusas	Torra Conservancy	081 783 1981	-
Alexia Awaras	Bergsig	081 202 1905	-
Mubasen Dawids	Torra Conservancy	081 744 1592	-
	Remetius Beukes Peter Khosmas Shikunda Kambonde Lina Tsanes Theresia M Gawusas Alexia Awaras	Remetius Beukes Bergsig Peter Khosmas Bersig Shikunda Kambonde Bergsig Lina Tsanes Bergsig Theresia M Gawusas Torra Conservancy Alexia Awaras Bergsig	Remetius Beukes Bergsig - Peter Khosmas Bersig 081 481 4147 Shikunda Kambonde Bergsig 081 804 4073 Lina Tsanes Bergsig 081 277 6095 Theresia M Gawusas Torra Conservancy 081 783 1981 Alexia Awaras Bergsig 081 202 1905

APPENDIX E - HERITAGE IMPACT ASSESSMENT

APPENDIX F - BIODIVERSITY MPACT ASSESSMENT



Authored by: Mr. Hiskia Mbura

Associate and Environmental Specialist

Enviro-Leap Consulting cc

Prepared For: KoBold Metals Namibia (Pty) Ltd

P. O. Box 3300 Windhoek, 9000



executive summary

Study Overview

The Proponent, is a fully Namibian registered entity that ventures in minerals exploration and mining. Their aim is to take advantage of the opportunity for self-employment and job creation that exist in the mining sector of Namibia.

The Proponent seeks to operate their business activities within their proposed Exclusive Prospecting License (EPL 9055) that overlay the Doro !nawas and Torra Conservancies in Kunene Region. Principally, Dove Exploration proposes to explore (desktop geological study, collection of bulk and or geological samples and identification of previous activity in the area where similar mineral mining were conducted) and to obtain bulk-samples for further laboratory analysis by use of hand-held equipment and to small degree drilling.

While the proposed prospecting activity may present an opportunity for the proponent to uncover the potential for Namibia's mineral development, the license is situated in two of Namibia's 86 communal conservancies. These are part of a globally recognised success story in respect to the recovery, protection and sustainable utilization of the natural ecosystem services. Furthermore, many areas in Namibia are internationally recognised as special in one way or another, often because of the wildlife or ecosystems they support.

Hence, while the mining industry may offer economic benefits, it may present potential negative impacts on the biodiversity and rural communities that are dependent on these pristine environments.

It is against this background that prior to undertaking any development, the proponents are required through Environmental Management Act No. 7 of 2007, that a baseline is established and potential impacts of the proposed development identified. In this particular study, we seek to document the biodiversity baseline in the area of the proposed The Proponent's mineral exploration licenses taking a landscape-level assessment approach and taking into account the fact that at this stage the proposed activities are limited to non-invasive / non-consumptive practices.

Objective of the Study

In determining the best way to approach this biodiversity study, the following important differences between working with invertebrates in Namibia, compared to vertebrates and plants, were considered:

- The difference in overall numbers. The most complete available listing of Namibian life forms (Namibian Biodiversity Database 2009) lists 4468 plants and 2037 vertebrates.
 These lists are 99%+ complete. A total of 10470 invertebrates are also listed. This is considered to represent < 50% of described Namibian invertebrates.
- The proportion of known species. Most species of vertebrates and plants are already known, but most species of invertebrates remain unknown. New invertebrate species are continuously being described from Namibia: the 10470 species mentioned above is considered to be < 10% of the actual number occurring.

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The reality of limits to expertise. Even non-experts can know most key vertebrate or
plant species, but even invertebrate specialists can know only a small part of this
overwhelming diversity.

The aims of this study were to:

- Conduct an assessment in the designated EPL 9055 area (approximately 75 722 Hectares)
- Given that the EPL 9055 overlies communal conservancies, the study shall Illustrate primary land-use objectives and management frameworks
- Compile a sensitivity map that indicate potential vulnerability and threats to biodiversity to the zones with the proposed exploration license area
- Compile a report that describes the basic ecosystem dynamics of these communities and outlines why some areas are more sensitive to disturbance than others.

Findings and Conclusions

The threat to the habitat extends beyond the area of immediate habitat destruction. Anything that is detrimental to groundwater flow will also be detrimental to tree survival, and hence habitat survival. The groundwater draw down cone associated with excessive water abstraction will cause water stress, and possible death, in trees at a distance from the actual workings as well. Downstream, this effect will be total, and no trees are expected to survive.

The recommended management measures at this stage are subject to the most practically suitable measure of the hierarchy i.e. "1. Avoidance, 2. Mitigation, 3. Restoration and where all else measures fails 4. Off-Set". Thus recommendation is that appropriate management measures be associated to the respective sensitivity category listed below:

- 1. Least sensitive or of least concern enhance potential positive impacts as much as practically possible while maintaining minimum disturbance.
- sensitive mitigation measures to be implemented to reduce potential negative impacts e.g. creation of awareness on sensitivity of sites, rehabilitation of surface scars, and or restriction against harvesting of poaching of natural resources such firewood / wildlife respectively
- highly sensitive minimise disturbance as far as possible e.g. prior identification and clear marking of these sites and reducing activity on them
- 4. NO GO area very high conservation and ecological value, by strictly avoiding unauthorized access or entry to these area

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1. INTRODUCTION

Namibia recognises the value of its wildlife, flora and landscapes and strives to protect them through its constitution, a range of environmental legislation, 21 state-protected areas, 86 communal conservancies and several transboundary initiatives. Furthermore, many areas in Namibia are internationally recognised as special in one way or another, often because of the wildlife or ecosystems they support; these designated areas include four Ramsar sites, two world heritage sites, nineteen important bird areas, four endemic bird areas and seven ecologically or biologically significant marine areas.

Terrestrial wildlife contributes significantly to Namibia's economy through its contribution to the tourism, hunting and farming sectors, in addition to providing obvious direct benefits such as meat. Wildlife also provides a variety of important indirect benefits to people – known as ecosystem services – which are less easy to quantify, such as the role of vultures in consuming carrion and preventing the spread of diseases; or the cultural and spiritual values gained by experiencing beautiful natural environments.

Equally, there would be little life without plants as plants convert solar energy into chemical energy, which they and all animals then use to grow and reproduce. They absorb nutrients from the soil and air, which are then used to make wood, leaves, flowers and fruit. Plants are thus the primary producers of energy and nutrients for life on Earth.

Often patterns of diversity in different animal groups are similar, and many show similarities to the patterns of diversity of plant groups. For instance, northern areas generally have the greatest numbers of species of mammals and birds because of the higher rainfall there and the presence of wetland and forest habitats not found elsewhere in Namibia.

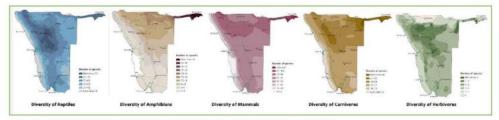


Figure 1: Illustration of Biodiversity / various species diversity across Namibia

The greatest diversity is found in north-eastern Namibia where there is the combination of wetlands, high rainfall and dense vegetation, and where a few tropical species find suitable habitat not available elsewhere in Namibia.

In this particular study, we seek to document the biodiversity baseline in the area of the proposed The Proponent's mineral exploration license EPL 9055 taking a into account the conservancies management zonation plans (where available) and considering that at this stage the proposed activities are limited to non-invasive / non-consumptive practices.

1.1. OBJECTIVES OF THE BIODIVERSITY ASSESSMENT

The aims of this study were to:

- Conduct landscape-level assessment in the designated study area (approximately 75 722 Hectares)
- Develop a Habitats map made up of landscape types / broad habitat map and at description of the relevant habitats within the study area
- Compile a habitats sensitivity map that indicate potential vulnerability and threats to each habitats in respect to the proposed exploration activities
- Compile a report that describes the basic ecosystem dynamics of these communities and outlines why some areas are more sensitive to disturbance than others.

1.2. STUDY AREA

The assessment for this study landscape level scale (the two communal conservancies in which the proposed EPL 9055, herein referred to as the identified study area, falls) core proposed exclusive prospecting licenses (**Figure 2**). The study area stretches across a landscape level that extent over land area of 75 722 Hectares in the Kunene Region.

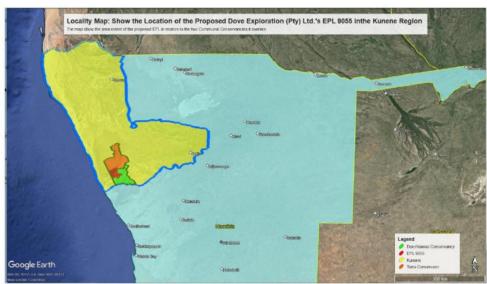
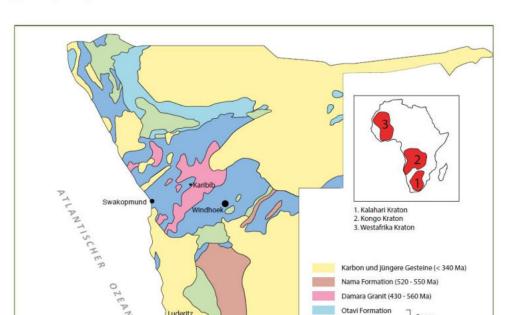


Figure 2: Outline of the study area (EPL 9055, Red polygon) overlaid across the two communal conservancies.

About one third of Namibia is covered in sand, most of which was deposited within the last few million years. What lies beneath the sand is generally poorly known. By contrast, geologists have done much to map, analyse, drill and understand the nature and history of the remainder of Namibia's land surface. Although the formation of Earth began over 4.5 billion years ago, events in Namibia are only traceable for the most recent half of this time.

What is known of Namibian geological history begins with material and evidence from about 2,650 million years ago (Gray et al., 2006). The oldest rocks are a mixture of both

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metamorphosed igneous and sedimentary rocks from about 2,650 million years ago (Figure 3, Miller, 2008).

Figure 3: Simplified geology of Simplified geological map of Namibia. Modified after Clifford (2008).

Swakop Formation Garlep Formation

Mesoproterozolkum und ältere Gesteine (2000 - 1000 Ma)

The Doro !nawas environment is a geological wonderland lying between the Huab and Ugab Rivers, two of Namibia's largest ephemeral river systems. Prior to the start of the break-up of the supercontinent of Gondwanaland some 120 million years ago, Lake Gai-As, an immense inland water body, covered portions of what are now Southern Africa and South America (Miller and Frimmel, 2009). 250 million year old fossils from the sediment deposits found in the Doro !nawas area include ancient invertebrates and fish, some of which have also been found in Brazil.

In the east of the conservancy, the Petrified Forest, a proclaimed national monument, is the largest accumulation of petrified logs known in southern Africa. Many other sites in the vicinity offer further collections of petrified wood. To the north, the landscapes of the Huab valley are similarly spectacular, but geologically quite different, being dominated by flattopped mountains on the southern fringes of the Etendeka Plateau, a massive volcanic deposit related to the forces that separated Gondwana.

Torra rises from gravel plains close to sea level in the west to an escarpment of basalts in the east where altitudes reach 1,600 metres. These basalts underlie much of the conservancy,

and were deposited during a series of volcanic eruptions which occurred about 125 to 132 million years ago when the old continent of Gondwana split apart. The hard basalt layers cap the nearby Etendeka Mountains and litter the landscape with red rocks, after which the conservancy (Torra = red rock) is named. In the wet season, seepage from the flat-topped Etendekas form pools of water, attracting wildlife from across the arid north-west.

1.3. MATERIALS AND METHODS

1.3.1 Mapping and GIS

Google-earth and other images (The Namibian Atlas Data) for the area from April 2000 and April 2013 were both segmented into polygons with similar reflectance. Next, the locations of all survey sites were projected onto these segments, assigning each site to its respective association or community.

To map the approximate outline of the communities studied, a high resolution aerial photograph was used. The survey sites were projected onto this image. Based on observations during the survey, approximate outlines of the plant communities were digitised by hand, using Google-earth. This approach was only possible due to the small size of the study area and the relatively detailed survey thereof, it will not be possible to map a larger area with such methodology.

1.3.2 Data analysis

Biodiversity units are most commonly described as associations, which can be further divided into communities. Such associations and communities are defined based on a group of species of which at least 50% occur in every ecology belonging to that community or association (Irish, 1990). It may, however, also occur that within an association a community is defined in which a group of species it is totally absent. Associations usually contain one to several differential species that are either totally absent or at the most present in low numbers in less than 20% of the ecology not allocated to that association (Barbour et al. 1999).

Sensitivity ratings:

- 1. least sensitive or of least concern
- 2. sensitive mitigation measures to be implemented
- 3. highly sensitive minimise disturbance as far as possible
- 4. NO GO area very high conservation and ecological value

Four sensitivity categories have been used, and are defined as follows:

1: Least sensitive or of least concern

Criteria: relatively low availability of niches that are favourable for plant persistence, overall low species diversity, dominated by ephemeral plants, few or no perennial plants, and the habitat or growth conditions can be re-created to some degree, low conservation status. In addition, loss of such areas will not have a major detrimental impact on the functionality of surrounding ecosystem components.

Management implications: It may be possible to re-create some ecological functionality of such access tracks and temporary lodging (base-camps) by landscaping and matching soil surface conditions to resemble the original. The area will need to be scouted prior to preparation for setting-up, to remove perennial plants where necessary, possibly also look for bulbous plants on lower-lying areas by searching through topsoil.

2: Sensitive - mitigation measures need to be implemented

<u>Criteria</u>: moderate but patchy availability of niches suitable for plant persistence, moderate species diversity, may be very patchy due to a localised amount of suitable niches, low conservation status, but the available niches will be difficult or impossible to re-create.

Management implications: most of the areas where such communities occur are adjacent to areas that are more sensitive. Should such area be needed for exploration operations such drilling or trenching, efforts should be made to utilise only some of these areas so that similar areas are made available as habitat for transplanted plants. Ideally, planning should be done for the entire life-of-mine, before such areas are sacrificed. This will ensure that the smallest area possible is sacrificed.

3: Highly sensitive - minimise disturbance as far as possible

Criteria: high diversity and number of plant-favourable niches, moderate to high species diversity, moderate conservation status. Many very slow-growing trees and shrubs are present in these areas. Habitat difficult to recreate once disturbed unless properly planned. Further, some aspects of this community play a central role within the entire Nama-Karoo ecosystem.

Management implications: Disturbance should only be allowed in these areas, where absolutely necessary, in this case only if sufficient ore has been identified below such communities. Even then, disturbance should be kept to a minimum. Key areas, e.g. patches of relatively dense trees should be demarcated as definite no-go areas, which should also not be disturbed by vehicle tracks or other side-line mining activities (e.g. construction of buildings). If these areas are disturbed, some patches must be left intact and sufficient amounts of topsoil should be stored from disturbed areas. Research on the regeneration and establishment potential of plants species affected shall need to be initiated as soon as possible to assist with restoration planning.

4: NO GO area - very high conservation and ecological value

Criteria: high species diversity, high conservation status, availability of many diverse niches for fauna and flora, habitat difficult or impossible to re-create once disturbed.

Management implications: areas where these communities are found occur on the absolute fringes of ore body and outside the ore deposits. There is thus no justification to disturb these sites. This also means that vehicle tracks and any kind of pollution must be prevented and possible impacts from slow-falling dust after blasts are minimised.

2. DESCRIPTION OF THE BIODIVERSITY BASELINE

In determining the best way to approach the current study, the following important differences between working with invertebrates in Namibia, compared to vertebrates and plants, were considered:

- The difference in overall numbers. The most complete available listing of Namibian life forms (Namibian Biodiversity Database 2009) lists 4468 plants and 2037 vertebrates. These lists are 99%+ complete. A total of 10470 invertebrates are also listed. This is considered to represent < 50% of described Namibian invertebrates.
- The proportion of known species. Most species of vertebrates and plants are already known, but most species of invertebrates remain unknown. New invertebrate species are continuously being described from Namibia: the 10470 species mentioned above is considered to be < 10% of the actual number occurring.
- The reality of limits to expertise. Even non-experts can know most key vertebrate or
 plant species, but even invertebrate specialists can know only a small part of this
 overwhelming diversity.

Hence in this study, Enviro-Leap opts to rather approach the Proponent's biodiversity study by concentrating on ecosystem processes instead of species list. Consequently, we start by defining aggregates of species that share similar trophic resources, i.e. depend on the same food sources within a particular habitat. This seems to be an appropriate level to work at for current purposes, because:

 Food availability is a key determinant of diversity in most communities, therefore trophic guilds will reflect fundamental information about that community.

The following vertebrate trophic guilds were identified in the exploration licenses area:

- · Herbivores eating live plant matter
- · Recyclers eating dead plant or animal remains or products
- Predators killing and eating other animals

The presence of a food source in a particular habitat can be used to infer the presence of the relevant trophic guild in that habitat, and vice versa. The results from the rapid assessment (determining the presence of different food sources in different habitats) and the subsequent desktop review of the previous work provides guidance in respect to management zones which were delineated in response to primary conservation objectives.

2.1. DESCRIPTION OF AREA DELINIATION AND MANAGEMENT FRAMEWORK

Experience has shown that biodiversity communities in the Nama-Karoo Biome are largely determined by substrate differences. Therefore, during the field assessment of the study area, substrate were used as the initial basis for management zone delineation. Four main crosscutting zones were identified, investigated and are listed as follows, the approximate delineation of the communities is shown in *Figure 4* and *Table 1*:

- Exclusive Wildlife Wildlife and Rhino sanctuary
- Farming, Livestock & General Wildlife (Figure 5)
- · Multiple Land-use Wildlife and Hunting
- · Wildlife and Tourism Wilderness lodge

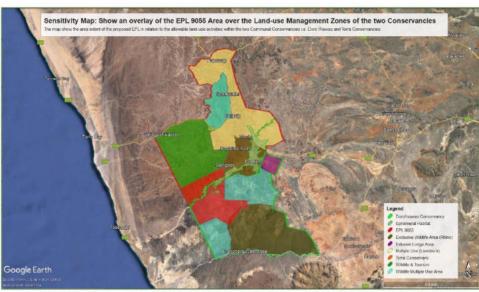


Figure 4: Distribution of the different land-use zones within the proposed licenses area /Study area.

Table 1: Elaboration of the identified Management Zones across the two communal conservancies

ZONE		ACTIVITIES	
		ALLOWED	DISCOURAGED
1.	Exclusive Wildlife – Wildlife and Rhino sanctuary	Tourism; wildlife capture & introductions	Hunting, settlement, farming; lodges; camp sites
2.	Farming, livestock & general wildlife	Settlement; livestock; wildlife; lodges; camp sites; dam; tourism; own-use hunting	Introduction of dangerous game; trophy hunting
3.	Multiple use – wildlife & tourism area	Tourism; hunting; camp sites; trophy hunting; own-use hunting	Settlement; farming; lodges
4.	Wilderness lodge zone	Lodges; camp sites; wildlife; tourism	Hunting; settlement; farming



Figure 5: In the foreground is a member of the Torra Conservancy herding their small stock out for browsing in one of the zones designated for Farming, and the background shows the common landscape

2.2. TERRESTRIAL ECOLOGY BASELINE

Namibia's vegetation and biomes are classified into five major types, these are, the Namib Desert, Nama Karoo, Succulent Karoo and the Trees and Shrub savannah. The proposed project area fall mainly within the "Nama-Karoo biome" which stretches all the way towards the South-western regions of Namibia, and encroaches slightly into the "Desert biome" and thus the fauna and flora are key receptors of potential environmental impact particularly in case of trampling and vehicle tracks, potential poaching and ground contamination resulting from the project activities.

Overall terrestrial diversity of plants and animals is highest in the north-eastern parts of Namibia (Figure 6, green map indicator), because of the higher rainfall and presence of wetlands and forest habitats that are not found elsewhere in the country. Many species in the north are also more tropical, with ranges that extend into neighbouring countries to the north and north-east. Species richness is highest in Namibia's mesic wetlands and woodlands in the vertebrate classes particularly (Barnard 1998).

However, due to its low productivity, the western desert arid zone is endowed with modest diversity of species compared to more mesic habitats. What is most distinctive about Namibian biodiversity is its high degree of endemism within the western (Erongo, within which the proposed project location falls) region (Barnard 1998).

Unlike the concentration of biodiversity in the north-east, the great majority of Namibia's endemic species are found in the dry western and north-western regions (*Figure 6*, brown map indicator) (Barnard 1998, Mendelsohn et al. 2002). The patterns of endemism reflect the importance of arid habitats in supporting unique and specially adapted species.

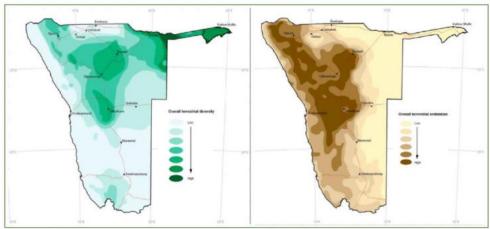


Figure 6: Shows a comparison of overall terrestrial species diversity (green) against overall endemism (brown), with the most endemism observed within the central to north western region (including the EPL area) which may be classified as a "Red Flag" zone in terms of environmental risks.

The vegetation in the study area is diverse and includes a number of species endemic to the central and northern Namib (Figure 7) as well as various protected species (see Table 2) such as Gomphocarpus fruticosus (milkweed), Zygophyllum simplex (simple Zygophyllum),

Zygophyllum stapffii (dollar-bush), Arthraerua leubnitziae (pencil bush), Monechma cleomoides (Namib perdebos) and Kleinia longiflora (sjambok bush).



Figure 7: Shows a general composition of vegetation species types consisting mainly of annual grass and shrubs Euphorbia damarana shrubland, and in semi-mountainous gravel plains of the Namib Desert in proximity of the Uis Settlement in Erongo

Euphorbia damarana

Zygophyllum simplex (simple Zygophyllum)

Zygophyllum stapffii (dollar-bush)

Group of young Acacia erioloba (camel thom)

Equus zebra hartmannae (Hartmann's mountain)

Giraffa giraffa (southern giraffe)

Every vegetation type supports at least one, more often several endemic or protected species. As a result of this, as well as the low recovery potential of the vegetation, there are no vegetation types of low sensitivity. Classified as highly sensitive are the granite and dolerite outcrop shrublands and their associated vegetation types in the vicinity, the Acacia erioloba (camel thorn) shrubland along the ephemeral rivers and Colophospermum mopane (Damara mopane) in the north-east of the study area, the tamarisk shrubland of the Erongo mountain landscape.

In the Namib, endemics are associated with the dunes, rocky inselbergs and hills, and the gravel plains. For instance, approximately 60 reptile species (50% of all Namibian endemic Euphorbia damarana shrubland) are endemic to, or found mainly in, Namibia's Namib Desert (Griffin 1998). One of the endemic mammal species found along the escarpment is the Equus zebra hartmannae (Hartmann's mountain zebra).

In respect to the Proponent's operations, habitats of special ecological importance and therefore requiring special care for both richness of species and of endemic species including Welwitschia Mirabilis (Figure 8) are the Namib gravel plains and winter-rainfall desert zone (Barnard 1998).



Figure 8: Shows a siting (seen during the field assessment) of one of the endemic plant species within the EPL 9055 area. Photo C. Nekare

2.3. PROTECTED TERRESTRIAL AREAS

Ecologically, the project area falls within the Doro !nawas and Torra Conservancies, one of the earliest registered (1999 and 1998 respectively) communal conservancies in the Kunene Region.

The Huab and Ugab ephemeral rivers are linear oases that create an important refuge for wildlife (*Figure 9*), providing water and supporting a variety of flora, including large camel thorn and Anna trees, and salvadora thickets. Doro !nawas is home to a great variety of game. The area is an important refuge for black rhino and is home to desert-adapted elephant, giraffe, leopard and cheetah. Other mammals include kudu, mountain zebra (*Figure 10*), gemsbok, hartebeest, springbok, duiker, klipspringer, steenbok, spotted and brown hyaena, caracal, jackal and baboon.



Figure 9: Shows a siting of Elephants in tributary leading to the Ephemeral Ugab River in the South-eastern section of the EPL 9055 in the Doro!nawas conservancy, in the background is the a treeline of Acacia erioloba.



Figure 10: Shows a siting of a group of the endemic Hartmann's mountain zebra

Many of Namibia's near endemic bird species occur in the conservancy, including bare-cheeked babbler, Carp's tit, rosy-faced lovebird, Rüppell's parrot, Hartlaub's francolin, violet wood-hoopoe, Rüppell's korhaan, Damara hornbill, Monteiro's hornbill, white-tailed shrike, Herero chat and rock-runner.

The varied topography and habitats provides home to a diverse assemblage of animals and plants. The western lowlands are characterised by species of the Namib, while the eastern mountainous landscape has particularly high concentrations of endemic species. These are species that occur only, or very largely in Namibia, making the conservancy important for their conservation. Many other species occur there as well, but their numbers are harder to estimate. These include black rhino, elephant, lion, cheetah, leopard, brown and spotted hyaena, steenbok and klipspringer.

3. FINDINGS AND RECOMMENDATIONS

FINDINGS OF THE ASSESSMENT 3.1.1 Overall habitat sensitivity index

The sensitivity rankings described in Sections 1 above were assigned to the different management zone in relation to species diversity and endemism. The three rankings were summed, and expressed representation of percentile proportion of the maximum possible sensitivity score, which is 100 across the EPL 9055 area for each zone. The sensitivity index gives an indication of how close the sensitivity a particular habitat is to this hypothetical maximum sensitivity level.

The habitats subsequently split into four groups (in order of risk factor) on the basis of their sensitivity indices as follows (Figure 11), and an additional group representing the buffers:

- No-go Areas: sensitivity indices 12%, represents the Exclusive Wildlife Zone / Rhino Sanctuary, this is so due to security reason.
- High sensitivity: sensitivity indices 18% represents the Ephemeral River ecosystem
 habitats commonly inhabited mostly by the Herbivores vertebrate trophic guilds
- Medium sensitivity: sensitivity indices 20% represents the Gravel Plains habitat.
- Least sensitivity: sensitivity indices 60% represents the Quartzite and Granite Hilly habitats

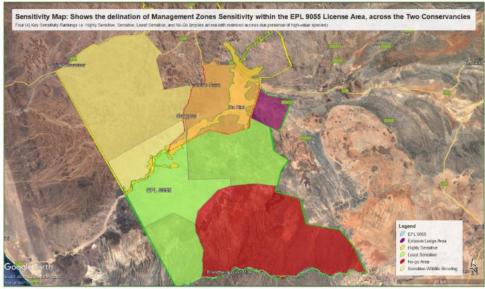


Figure 11: Habitats / Biodiversity sensitivity map for the proposed licenses Area

The Riparian and Valley Grass plains habitats has the highest overall sensitivity index, these are also the most vulnerable habitats. Critically, these habitats has the potential to support the most biodiversity in that's they host the most resources i.e. water and browse material as well as the most suitable shelter.

Although, it doesn't attain an absolute uniqueness rating any excessive disturbance to these habitats may result in greater ecosystem disruption and subsequently the greatest potential impacts on the biodiversity. Therefore, it is highly recommended that priority mitigation measures aimed at particularly enforcing the primary component of the mitigation hierarchy which is "Avoidance" is adopted at any possible cost.

3.1.2 Exploration implications

The threat to the habitat extends beyond the area of immediate habitat destruction. Anything that is detrimental to groundwater flow will also be detrimental to tree survival, and hence habitat survival. The groundwater draw down cone associated with excessive water abstraction will cause water stress, and possible death, in trees at a distance from the actual workings as well. Downstream, this effect will be total, and no trees are expected to survive.

The destruction of this habitat is all the more lamentable given the fact that some of the Acacia erioloba (camel thom) trees in the Nama-Karoo biome have trunks up to 3 m in diameter. These are large old trees on a national level. Elsewhere in Namibia, camel thom trees of < 1 m in diameter have been dated as being up to 400 years old (Vogel 2003).

One cannot speculate how old the trees in this area may be, but what is certain is that they will not be naturally replaced quickly. Each one that is destroyed will have a very long-lasting effect on the entire habitat. They are unique examples of Namibian natural heritage that are in danger of being permanently lost.

Considerations of corridors are less relevant at this stage as activity tend to be limited in duration – because we are working at the level of trophic guilds, not species, the emphasis in planning for exploration impacts should be on habitat preservation. Habitat preservation automatically facilitates the survival of trophic guilds and hence individual species.

3.2 MANAGEMENT RECOMMENDATIONS

The recommended management measures at this stage are subject to the most practically suitable measure of the hierarchy i.e. "1. Avoidance, 2. Mitigation, 3. Restoration and where all else measures fails 4. Off-Set". Thus recommendation is that appropriate management measures be associated to the respective sensitivity category listed below:

- 5. least sensitive or of least concern
- 6. sensitive mitigation measures to be implemented
- 7. highly sensitive minimise disturbance as far as possible
- 8. NO GO area very high conservation and ecological value

1: Least sensitive or of least concern: Since, it may be possible to re-create some ecological functionality of such access tracks and temporary lodging (base-camps) by landscaping and matching soil surface conditions to resemble the original. The area will need to be scouted prior to preparation for setting-up, to remove perennial plants where necessary, possibly also look for bulbous plants on lower-lying areas by searching through topsoil.

- 2: Sensitive mitigation measures need to be implemented: most of the areas where such communities occur are adjacent to areas that are more sensitive. Should such area be needed for exploration operations such drilling or trenching, efforts should be made to utilise only some of these areas so that similar areas are made available as habitat for transplanted plants. Ideally, planning should be done for the entire life-of-mine, before such areas are sacrificed. This will ensure that the smallest area possible is sacrificed.
- 3: Highly sensitive minimise disturbance as far as possible: disturbance should only be allowed in these areas, where absolutely necessary, in this case only if sufficient ore has been identified below such communities. Even then, disturbance should be kept to a minimum. Key areas, e.g. patches of relatively dense trees should be demarcated as definite no-go areas, which should also not be disturbed by vehicle tracks or other side-line mining activities (e.g. construction of buildings). If these areas are disturbed, some patches must be left intact and sufficient amounts of topsoil should be stored from disturbed areas. Research on the regeneration and establishment potential of plants species affected shall need to be initiated as soon as possible to assist with restoration planning.
- 4: NO GO area very high conservation and ecological value: areas where these communities are found occur on the absolute fringes of ore body and outside the ore deposits. There is thus no justification to disturb these sites. This also means that vehicle tracks and any kind of pollution must be prevented and possible impacts from slow-falling dust after blasts are minimised.

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