ENVIRONMENTAL SCOPING REPORT FOR MINERAL EXPLORATION ON EPL9983 IN THE #GAINGU CONSERVANCY IN USAKOS AREA – ERONGO REGION.

New Application number:
250805006200

outrun consultants cc

BEST DEVELOPMENT PARTNER

PREPARED FOR ELDONPAN MINERALS CC

AUGUST 2025

PURPOSE OF THE DOCUMENT

The Environmental Scoping Report (ESR) was compiled as part of the Environmental & Social Impact Assessment (ESIA) for the proposed mineral exploration activities on EPL9983 in the ǂGaingu Conservancy in Erongo Region. It describes the proposed studies and / or terms of reference of what will be assessed in the ESIA study for this project if necessary and the methodology to be followed. The ESR will be submitted to the Ministry of Mines and Energy (MME), Competent Authority and the Ministry of Environment, Forestry and Tourism (MEFT) for approval.

DOCUMENT TYPE	ENVIRONMENTAL SCOPING REPORT
DOCUMENT VERSION	FINAL
CONSULTANT'S DETAILS	PROPONENT'S DETAILS
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Declaration of authorship

APPLICATION NUMBER: 250805006200

Project Title: APPLICATION FOR ENVIRONMNETAL CLEARANCE CERTIFICATE FOR THE PROPOSED MINERAL EXPLORATION ACTIVITIES ON EPL9983 IN THE ╪GAINGU CONSERVANCY IN ERONGO REGION.

I **JOSIAH TONDERAI MUKUTIRI** (full name of Environmental Assessment Practitioner - EAP) understand and agree that the information I have furnished in this submission will be reviewed by the Office of the Environmental Commissioner (OEC). I accept that the Environmental Commissioner, will hold me accountable in terms of Section 43(1)(b) of the Environmental Management Act, Act No. 7 of 2007 for any inaccurate or misleading information knowingly provided in the following documentation.

Tick the box (es) applicable to your submission:

Pro Forma Environmental Contract for Exploration Claim(s) **Environmental Questionnaire For Exploration**

√ **Scoping report**

√ **Environmental Impact Assessment (EIA)**

√ **Environmental & Social Management Plan (ESMP),**

√ **Consent from Relevant Authority**

I certify, and acknowledge that the provision of such information will impede the lawful carrying out of the duties, responsibilities and functions of the Environmental Commissioner. I declare that the information submitted is my own work. All direct or indirect sources used are acknowledged as references.

Consultancy Name: **OUTRUN CONSULTANTS CC.**

LEAD EAP Signature: 

Date: 15 AUGUST 2025.

NB- To be submitted jointly with Scoping Report, EIA, EMP documents to the Office of the Environmental Commissioner

DOCUMENT STRUCTURE / ROAD MAP

The Scoping Report is intended to meet all requirements as stipulated in environmental management Act (2007) and its Regulations of 2012. The document roadmap is provided in terms of the regulatory requirements (Table 1) to guide the Reader.

Table 1: Document structure / Road map.

CHAPTER	TITLE	OVERVIEW
	Purpose of the Environmental Scoping Report	N / A
	Executive Summary	N / A
	Document Road Map	N / A
1	Introduction	This section contains project background information about the proposed exploration project, ESIA process followed, details of the Proponent and the Consultant.
2	Legislative and Policy Framework	Highlights both international and domestic laws and policies that govern the planned project.
3	Public Consultation	Details the public and stakeholder consultation process followed and its findings.
4	Assessment of Alternatives	An analysis of various alternatives on the project.
5	Description of the Receiving Environment	Presents baseline environmental description of the project area against which project impacts will be evaluated in the future.

6	Identification and Evaluation of Potential Impacts	Presents both non-significant and significant impacts identified during the scoping phase of the ESIA.
10	Conclusion and Way Forward	Deductions and recommendations from the study
11	List of References	List of references quoted in the document

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LIST OF ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
BID	Background Information Document
DEA	Directorate of Environmental Affairs
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
ESMP	Environmental and Social Management Plan
HIV	Human Immunodeficiency Virus
IAPs	Interested and Affected Parties
MAFWLR	Ministry of Agriculture, Fisheries, Water and Land Reform
MEFT	Ministry of Environment, Forestry & Tourism
MIME	Ministry of Industries, Mines & Energy
SPM	Suspended Particulate Matter

EXECUTIVE SUMMARY

This scoping study was undertaken for the proposed **MINERAL EXPLORATION ACTIVITIES ON EPL 9983 IN THE ǂGAINGU CONSERVANCY IN ERONGO REGION, NAMIBIA.** It was done in accordance with the requirements of the Environmental Impact Assessment Regulation, No. 30 of 2012, gazetted under the Environmental Management Act, No. 7 of 2007. Furthermore, it determines the potential need and structure of further environmental and social impact assessment, if any. The planned scope of this project comprises the desk study, electromagnetic survey, trenching, drilling and bulk sampling phases of the exploration activities for industrial and base metals and rare earth metals. The scoping process was initialized by compiling a Background Information and invitation to participate Document (BID) followed by publishing notices of the Environmental and Social Impact Assessment (ESIA) in the national print media and posters pinned in public places in the Usakos Area. Advertisements were published in the Confidente (9 – 15 May 2025 and 16 – 22 May 2025) and the Windhoek Observer newspapers (9 May and 12 May 2025). The major issues identified for consideration in the ESIA and ESMP relate to short to medium term employment benefits linked to the exploration phase. Through the scoping process, it was found that there were no significant impacts emanating from this project that warrant conducting specialist studies except the Archaeological and Heritage Impact Assessment to comply with the National Heritage Act. Most of the potential negative impacts identified were short term and minor while a few major impacts related to poaching and that due care must be taken not to disrupt wildlife breeding areas since the project is located in a conservancy. It is recommended that site specific subsidiary Environmental Management Plans (EMPs) are prepared by the Consultant as the exploration progresses when locations, number of holes and depths become known. However, these can be managed through implementation of the proposed mitigation measures presented herein. It is thus the opinion of the EAP that this Environmental Scoping Report (ESR) and the accompanying Environmental and Social Management Plan (ESMP) are sufficient to issue an Environmental Clearance Certificate ECC).

Eldonpan Minerals CC is planning to embark on mineral exploration activities on EPL9983 which have been legally applied for at the Ministry of Industries, Mines and Energy (MIME). The EPL is located in the ǂGaingu Conservancy in Erongo Region. The outcomes of this EIA are as follows:

- Assessment of the proposed mineral exploration activities.
- Addressing water issues in relation to mineral exploration activities

- Compilation of a scoping report

PROJECT DESCRIPTION

The Proponent, Eldonpan Minerals CC is the applicant for EPL9983 presented to the Ministry of Industries, Mines and Energy (MIME).

LEGAL AND BASELINE ENVIRONMENT

A thorough review of relevant legal instruments was conducted. The most important legal provisions are those from the Forestry Act concerning the removal and transport of protected plant species. A concise description of the baseline conditions of the receiving environment has been provided. Key sensitivities and potential impacts for relevant aspects of both the socio-economic and biophysical environment have been highlighted. These most significant sensitivities relate to fauna, landscape and air quality.

IMPORTANT ENVIRONMENTAL ISSUES IDENTITIFIED

THEME	ISSUE
FLORA	Cutting or any other form of vegetation destruction.
FAUNA	The migration of mammals and disturbance of reptile species habitats. The project is in a conservancy and no poaching nor hunting will be allowed as well as destruction of habitats.
LANDSCAPE	Change and disturbances of the natural landscape during exploration.
AIR POLLUTION	Cutting solid rock material using diamond tip blades and wires will release fine particles into the air, hence contaminating the air. This is exacerbated by heavy machinery movements onsite.

PUBLIC PARTICIPATION

According to the Environmental Management Act (2007), public participation forms an integral part of the EIA process. Adequate public consultation is important to identify issues relevant to the project and thus evaluating their significance and deciding measures to mitigate or minimise these impacts. A public consultation plan was developed in line with the Environmental Management Act (2007) and aimed to achieve the following objectives:

- To ensure all stakeholders are included in the consultation and disclosure process;
- To ensure initial information disclosure about the project is appropriate and understandable to the non-technical stakeholders and the local population;
- To ensure that adequate and timely information is provided to the public;
- To ensure that all stakeholders are given sufficient opportunity to express their issues, concerns and opinions;
- To ensure that stakeholders' opinions and concerns influence project decisions;
- To ensure regular feedback is given to the public;
- To ensure that effective communication will continue during the construction and operational phases of the project;

Eldonpan Minerals CC and the Outrun Team are committed to active and ongoing communication and consultation of all members of the public with regards to the marble exploration project. No formal meeting was conducted as there were no interested and affected parties registered during the public call for meetings in the national newspapers. However, identified key stakeholders neighbouring farm Owners were engaged formally through mail. Important findings are presented below:

Interested and Affected Party	Comment
Farm Owners	They would like to meet the Proponent and concerns raised are: 1. Small-scale miners from the area were disallowed to register exploration claims.

IMPACT ASSESSMENT

The issues identified in the environmental baseline and during the public participation process are assessed using a range of assessment criteria. The application of these criteria uses a balanced consideration of duration, extent, and intensity/ magnitude, modified by probability, cumulative effects, and confidence to determine significance. Mitigation measures were outlined for each impact.

RECOMMEDATIONS AND CONCLUSIONS

The key impacts and their mitigation measures are summarized below:

- **Vegetation impacts**: The impact significance rating for the clearing of vegetation in the project area is medium, owing the moderately disturbed nature of the area and relatively low vegetation species diversity due to aridity and bare rock outcrops. To minimise the loss of valuable resources, it is recommended, when removing vegetation, that all trees should be felled using appropriate mechanical devices. Bulldozing (during exploration) and the injudicious application of herbicides (during prospective and operations) may result in the aggressive encroachment by certain species (Bush encroachment). Herbicides, if applied, should only be done through the use of foliar spray and not via soil or aerial application.

- Disturbance of breeding reptiles and bird mortalities due to removal of trees pose a threat to biodiversity and thus have been assigned a medium pre-mitigation impact significance rating and the following is therefore recommended to mitigate these impacts:
    - Before exploration starts, inspect proposed exploration area for any signs of nests and avoid the disturbance of breeding birds and reptiles by relocating them to the nearest areas. Where possible, avoid the unnecessary destruction of nesting habitat (i.e. large trees or shrubs); and
    - Monitoring of the proposed exploration activities should be conducted according to the specialist's recommendation.
- **Air quality & Noise Pollution:** The particulate matter (dust) that produced by exploration represent a moderate percentage and its impact on the air quality should not be overlooked. Air quality monitoring (dust count) has to be incorporated in the planning. The exploration produces noise of low to medium level and has small impact due to the location of the EPL and hence the pre-mitigation impact significance rating is low to medium. Sound monitoring is recommended and employees should be protected from noise exposure beyond WHO limits during work activities.
- **Impacts on Landscape, Underground water and Waste Dumps:** The potential loss of land represent a small percentage of a typical large-scale area and hence the pre-mitigation impact significance rating is low to medium. No chemicals are used during the exploration activities. It therefore represents a small impacts level.

To conclude, most of the impacts identified during this environmental inquiry and assessment can be addressed through the recommended mitigation and management actions for both the prospecting, exploration and exploration phases of this project. Should the recommendations within this report be applied, the significance of the environmental impacts can be minimised.

1. INTRODUCTION

1.1 PROJECT BACKGROUND

The proponent, Eldonpan Minerals CC (EM) is planning to embark on exploration of nuclear fuels, industrial minerals, base & rare earth metals and dimension stone from EPL 9983 located in the Namib Naukluft National Park - Usakos District in Erongo Region. The planned work will progressively include geophysical surveying, geological mapping and sediment geochemical sampling and testing, drilling, bulk sampling and test cuts for Dimension stone. Mineral exploration activities are listed activities that require an Environmental Clearance Certificate (ECC) from the Ministry of Environment, Forestry & Tourism (MEFT). It is against this background that the Proponent appointed an independent consultant, Outrun Consultants to conduct the Environmental Impact Assessment (EIA) to comply with the requirements of the Environmental Management Act (2007).

Due to increased awareness of environmental issues being no longer limited to biophysical components, this led to the introduction of Social Impact Assessment (SIA) as a component of the EIA and over time an Environmental and Social Impact Assessment (ESIA) was introduced. An ESIA is now widely used for assessing potential project impacts during the planning phase of listed projects. An Environmental and Social Impact Assessment tool is an integrated process that captures the interrelationships between land and society. Outrun Consultants CC was tasked to conduct the Environmental and Social Impact Assessment for the mineral exploration activities on EPL 9983 by the Proponent, TG.

1.1. Project Location

The proposed project is in the Erongo region, in Usakos Area predominantly mixed agriculture comprising mostly livestock farming with limited crop production and tourism in the ǂGaingu Conservancy (GC) in Erongo Region. The locality map of the proposed project is shown in Figure 1 below.

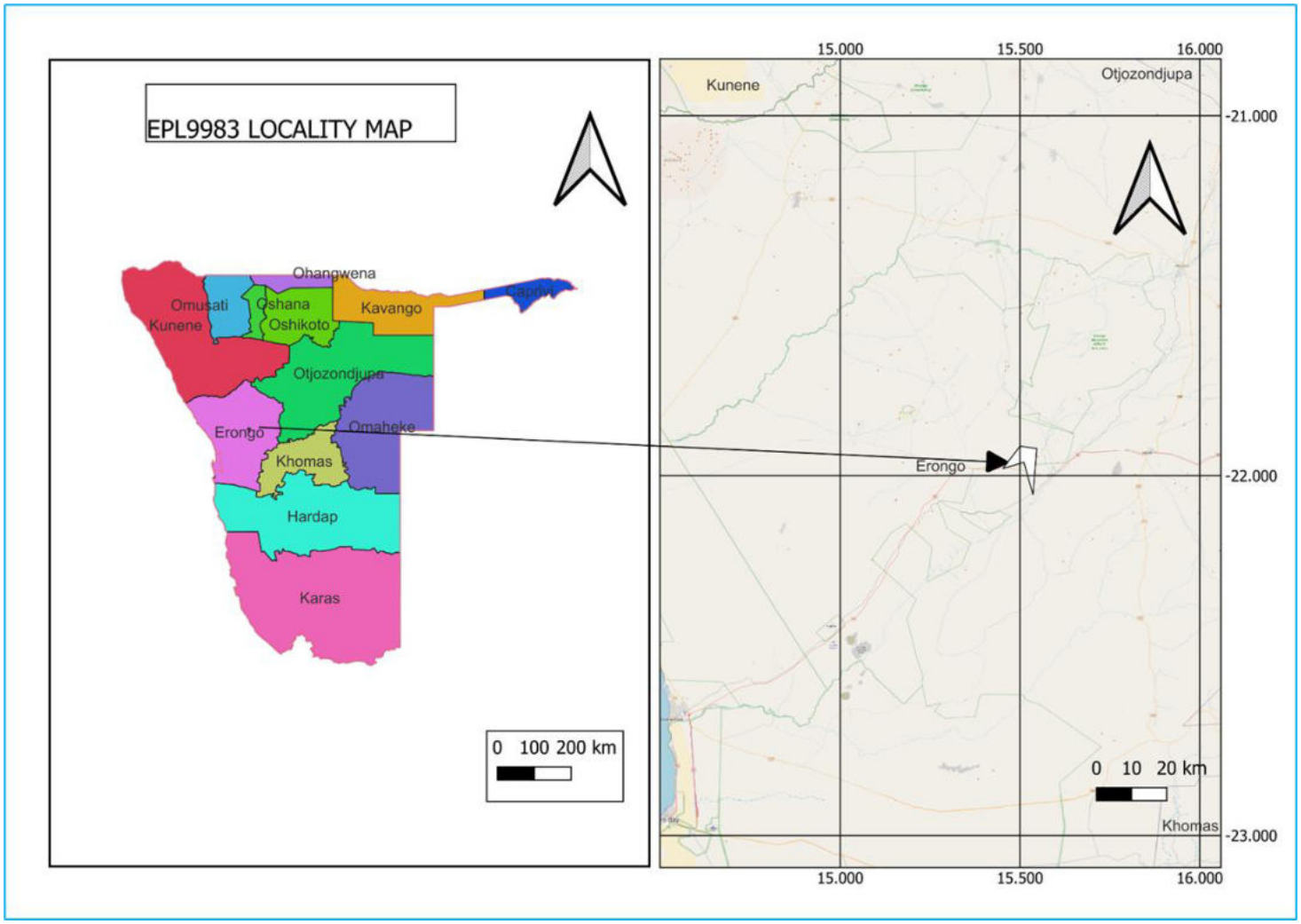


Figure 1: EPL9983 Locality Map.

1.2 TERMS OF REFERENCE

The Terms of Reference for the proposed project are based on the requirements set out by the Environmental Management Act (2007) and its Regulations (February 2012). The process covered the following steps, which are reported in this document as follows:

- Provide a detailed description of the proposed activity (PROJECT DESCRIPTION);
- Identify and review legislation, policies and guidelines that have reference to the proposed project (POLICIES AND LEGISLATIONS);
- Identify existing environmental (both ecological and socio-economic) conditions of the receiving environment to determine environmental sensitivities (THE STUDY AREA/ ENVIRONMENT);
- Inform Interested and Affected Parties (I&APs) and relevant authorities of the details of the proposed development and provide them with a reasonable opportunity to participate during the process (PUBLIC CONSULTATION)
- Consider the potential environmental impacts of the development and assess the significance of the identified impacts (IMPACT ASSESSMENT).
- Outline management and mitigation measures in a Specific EMP to minimize and/or mitigate potentially negative impacts, which cannot be avoided.

1.3 ADDITIONAL STUDIES

No additional and / or specialist studies were identified and considered at the scoping level. Sufficient information was / is available for the impacts identified to date.

2. PROJECT DESCRIPTION

The planned exploration program is based on the geological conditions of the concerned license area, EPL 9983, and the Proponent plans to explore industrial minerals, base metals and rare earth metals. The planned activities are as follows:

1.1.1. Setting-up a work area on EPL9983

A work area will be established within the EPL covering and area of 1HA to accommodate domestic water tank, containerized offices, equipment storage, sample preparation, fuel storage tank, toilet and kitchen.

1.1.2. Planned Exploration activities for industrial minerals, base and rare earth metals

1.1.2.1. Desk Study

The exploration program will commence with a review of existing geological maps, existing geological reports, analysis of existing geophysical data (such as electromagnetic and radiometric data from the geological Survey of Namibia, GSN), and any other relevant existing data and information from the project area. Based on this desktop review, a refined exploration program for subsequent investigation will be formulated.

1.1.2.2. Non-invasive exploration

Non-invasive exploration will be conducted through geophysical surveying and geological mapping followed by a holistic analysis of such data. Once the information gathered through these processes have been processed, analyzed and evaluated, target areas will be selected for invasive exploration such as soil and sediment sampling, trenching and drilling.

The main geophysical techniques to be used will include a combination of:

- Airborne magnetic survey. The airborne magnetic data can be of importance in geophysical mapping when searching for suitable stratigraphy hosting base, rare and industrial minerals. The Proponent intends to make use of Unmanned Aerial Vehicles fitted with appropriate sensors to conduct the geophysical surveys as and when required.
- High-resolution drone radiometric survey at between 50m and 100m line spacing and 15 to 25m terrain clearance, and subsequent mapping to complement the existing 200m spaced fixed wing survey of the Geological Survey of Namibia.
- Localised information will be generated in selected areas using Natural Source Audio Magneto-Tellurics (NSAMT) technique and detailed geological mapping. NSAMT has the advantages of not needing a transmitter, good depth of penetration as well as being able to pick up resistive and conductive targets.

1.1.2.3. Invasive exploration

During geological mapping, soil and stream sediment sampling as well as rock chirp sampling will be carried out. All ground geophysical surveys will not require land clearing since the project area has very minimal vegetation cover. As a result, cables and equipment can be laid down easily without interfering with vegetation. The geophysical targets will be drilled using systematic Reverse Circulation (RC) drilling, followed by diamond tails (diamond core drilling) coupled with down-the-hole spectral logging, informed by geophysical and geological data from the non-invasive exploration phase. Water will be required to fill sumps for diamond drilling and will be supplied using a bowser tank mounted on wheels and towed by a truck. A sample for every 1 meter of RC drilling will be captured and stored at a dedicated sample storage place onsite. Rock core samples from selected zones where mineralization is intercepted will also be taken and subsequently sent to an accredited laboratory for geochemical analysis for the targeted metals. Additionally, transverse trenching will be executed perpendicular to the strikes of mineralized zones to evaluate and assess the possible thickness and longitudinal strike of the potential ore bodies. If the results from the above exploration efforts are positive, a target is identified to extract a bulk sample of the material to be mined. The bulk sample will be approximately 40 to 80 tonnes. The bulk sample will be subjected to metallurgical tests at existing mines in Namibia or South Africa. No processing plant will be constructed onsite at this stage for the project.

1.1.1.1.1 Data processing and analysis

This is a non-invasive activity and based on all the data collected from the preceding techniques, and if results are positive, a 2D and 3D model will be developed for selected zones within the license area, and subsequently, resource estimates will be derived.

2.1 NEED FOR THE PROJECT

Namibia produces a wide variety of industrial minerals including marbles, granites and fluorspars but all these only contribute a small part of overall exploration input. For decades, Namibia has been an exporter of marble and granite, uranium, diamonds and manganese just to mention a few. Globally many other industrial minerals demand has increased tremendously, and this offers a developmental opportunity for the Namibian Exploration sector.
The benefits of conducting comprehensive exploration activities are among others:

- Avoid unwarranted waste generation since no excavation onsite will be done without confirmatory quality tests.
- Employment creation and thus improve the well-being of the local people.
- Upgrading of roads and water infrastructure in the project area will benefit the local people.
- The exploration exercise may potentially lead to discovery of other mineral resources which would otherwise not be known to occur in the project area.

- Transfer of technology, knowledge and skills during the exploration.

Employment preference will be afforded to previously disadvantaged Namibians.

1.3. The Proponent of the Proposed Project

The proposed project is being undertaken by a Namibian company, 100 % owned by previously disadvantaged Namibians. The ownership structure is as follows:

Table 2: The Project Proponent's details.

Proponent	Eldonpan Minerals CC
Country of Registration & Registration Number	Namibia CC / 2023 / 04871
Fax number	NONE
Contact number	+264 816 000 381
Postal Address	P. O. Box 24544 Windhoek, Namibia.

1.4. The Consultant

Outrun Consultants CC is a Namibian privately owned consulting company developing various projects in Southern Africa Development Community (SADC) countries. Our core services are:

- Environmental Impact Assessment,
- Strategic Environmental Assessment,
- Environmental Investigations,
- Research and Training,
- Feasibility Studies,
- Agronomy, and
- Monitoring and Evaluation of Development projects.

Outrun Consultants draw its experts from regional and international universities such as University of Zimbabwe (Zimbabwe), National University of Science and Technology (Namibia) and University of Namibia (Namibia). Outrun declares that we have no interest in this project and are independent and will act as such during the EIA process as required by the EIA regulations. The key team members carrying out this EIA are presented in Table 3 below:

Table 3: Outrun Team of Experts and the Roles and Responsibilities in the ESIA Study.

ORGANIZATION	**AREA OF RESPONSIBILITY / FIELD OF EXPERTISE**	**TEAM MEMBERS**
OUTRUN Consultants	Project management EIA coordination	Josiah T. Mukutiri

OUTRUN Consultants	EIA process	Josiah T. Mukutiri
OUTRUN Consultants	Literature review / Desk study	Josiah T. Mukutiri Emmerencia Montzinger
OUTRUN Consultants	Legislation & Policy Review	Josiah T. Mukutiri

1.5. Process and Methodology

Given that proposed project development triggers listed/ prescribed activities under the Environmental Management Act No of (2007) and the Environmental Assessment Regulations of 2012, the process started with the appointment of the consulting company as presented above. The Consultant conducted the ESIA study as required, and this chapter describes the EIA process followed during the study. The EIA study was guided by the Namibian Environmental Impact Assessment Policy of 1994 and the Namibian Environmental Management Act of 2007. Various methodologies were implemented to fulfill the requirements of each step in the EIA / ESIA process list as shown below.

1.5.1. The Environmental and Social Impact Assessment (ESIA) Process

The ESIA study was conducted as follows:

- Preliminary Activities setting terms of reference for the ESIA, selecting consultant (agent who would prepare the ESIA) to do the ESIA,
- Literature review of all relevant information,
- Field work to capture the baseline situation. This included bio-physical environment and socio-economic conditions.
- An analysis of the potential environmental impacts. This included impact prediction and significance assessment,
- Public participation and finally,
- The preparation of an environmental management plan for the project.

The description of the ESIA process phases and stages mentioned above are provided under the following subheadings. It should be noted that the description is only a bird's view of the various phases followed by the assumptions and limitations derived from study of situation and discussions with the Proponent.

1.5.2. Clarification of the Terms of Reference and Levelling of Expectations

Leveling of expectations – an opening meeting was held between the consultancy team and the Proponent. The purpose of the meeting was to clarify the methodology, communication process between the Consultants and the

Proponent, time frame and expected outcomes of the EIA study and establishing a common understanding of the TOR:

- Identify and describe legal and policy instruments relevant to the proposed project.
- Identifying existing infrastructure and services available in the project area.
- Identify existing environmental (both bio-physical and socio-economic) conditions of the area to determine their environmental sensitivity.
- Inform Interested and Affected Parties (I&APs) and relevant authorities of the project details and invite them to participate in the consultation process.
- Identify potential environmental and social impacts of the proposed project and assess the significance of the identified impacts.
- Compile an Environmental Scoping Report in line with the requirements of the Environmental Policy.
- Describe management and mitigation measures in an Environmental & Social Management Plan (ESMP) to minimize and/or mitigate potentially negative impacts.
- Share the draft ESR AND ESMP reports with registered IAPs for commenting over a period of 2 weeks.
- Incorporate and / or moderate IAPs comments and finalise the reports for submission.
- Submit the final ESR and ESMP reports to the competent authority and the Environmental Commissioner.

Various related documents were reviewed to gather information on the potential impacts, the alternatives, how to mitigate the impacts, decommissioning and rehabilitation plan. The literature included maps, publications, and reports on topography, climate, land use, and socio-economic setup of the project area where the project site is located. The literature review helped in undertaking components and areas that would deserve attention during field assessment. The literature review which was mainly based on the desk study method included the following:

- Information search from internet, journals, books and stakeholders

Examples of similar projects, i.e., nuclear fuels and dimension stone exploration and EPLing projects were reviewed including their merits and demerits.

- Analysis of the potential environmental impacts of the project activities from typical data and research

The three major environmental compartments which are land, air and water were chosen to be observed and discussed in detail. These environmental features had been chosen because they are the main receiving environmental compartments that should be considered before implementing the project. Environmental data was analyzed to determine potential environmental impacts of the project activities. The potential impacts were ranked for impact significance as presented later in this report.

- Field Survey

Field surveys were carried out to verify some facts obtained from the literature review. A more informed assessment was however the main objective of the field studies. This was done to confirm the condition of the area in terms of climate, soils, land use, topography and socio-economic set up of the area. It also involved surveys to identify the different environmental components and their state to determine the most likely impacts.

- Stakeholder Engagement

A wide range of key stakeholders were invited to participate and express their views through various media communication. The consultations were done mainly to get a view of the affected parties as well as how they think the project should be carried out for minimum impacts on human health, environment, tourism sector and the well-being of the people. Issues which were highlighted by stakeholders were incorporated into the EIA process, the project exploration programme and the Proponent has committed the same during project implementation.

- Identification and analysis of impacts in terms of magnitude and significance

Mineral exploration projects have both potential positive and negative impacts on the environment. Impacts will depend on the sensitivity of the environment and the stress already imposed on it. To accurately predict the various impacts caused by the above mentioned, the ecological and socio-economic impacts were delineated. Potential environmental impacts were identified, and an analysis criterion shown in the chapter on impact prediction and analysis was used to rank the impacts.

- Recommended mitigation measures for identified impacts

Mitigation measures were developed based on practical measures supported by research and scientific evidence. Extensive literature reviews of reputable publications and journals helped the formulation of mitigation measures.

- Analysis of alternatives of the project – location, routes, technological, economic and environmental alternatives were considered.

The analysis of alternatives was done to ensure that resources were used efficiently and that decisions were made environmentally sound.

- Development of an Environmental & Social Management Plan

An Environmental & Social Management Plan (ESMP) will be prepared to give a guideline base to the project Proponent on how the identified impacts could be mitigated and managed. The Plan will be presented in a tabular format indicating the impact, indicator, monitoring frequency and the responsible agent. When all the important information is derived from the impacts' prediction and analysis section, all the important aspects will be noted down and responsibilities assigned to monitor the different aspects.

- Preparation of the Environmental Scoping Report (ESR) and the Environmental and Social Management Plan (ESMP).

The completion of the various tasks assigned to the team members during the environmental scoping study gave rise to separate individual reports which were collated to give this ESR. The ESIA process followed is provided under the flow chart shown in Figure 2.

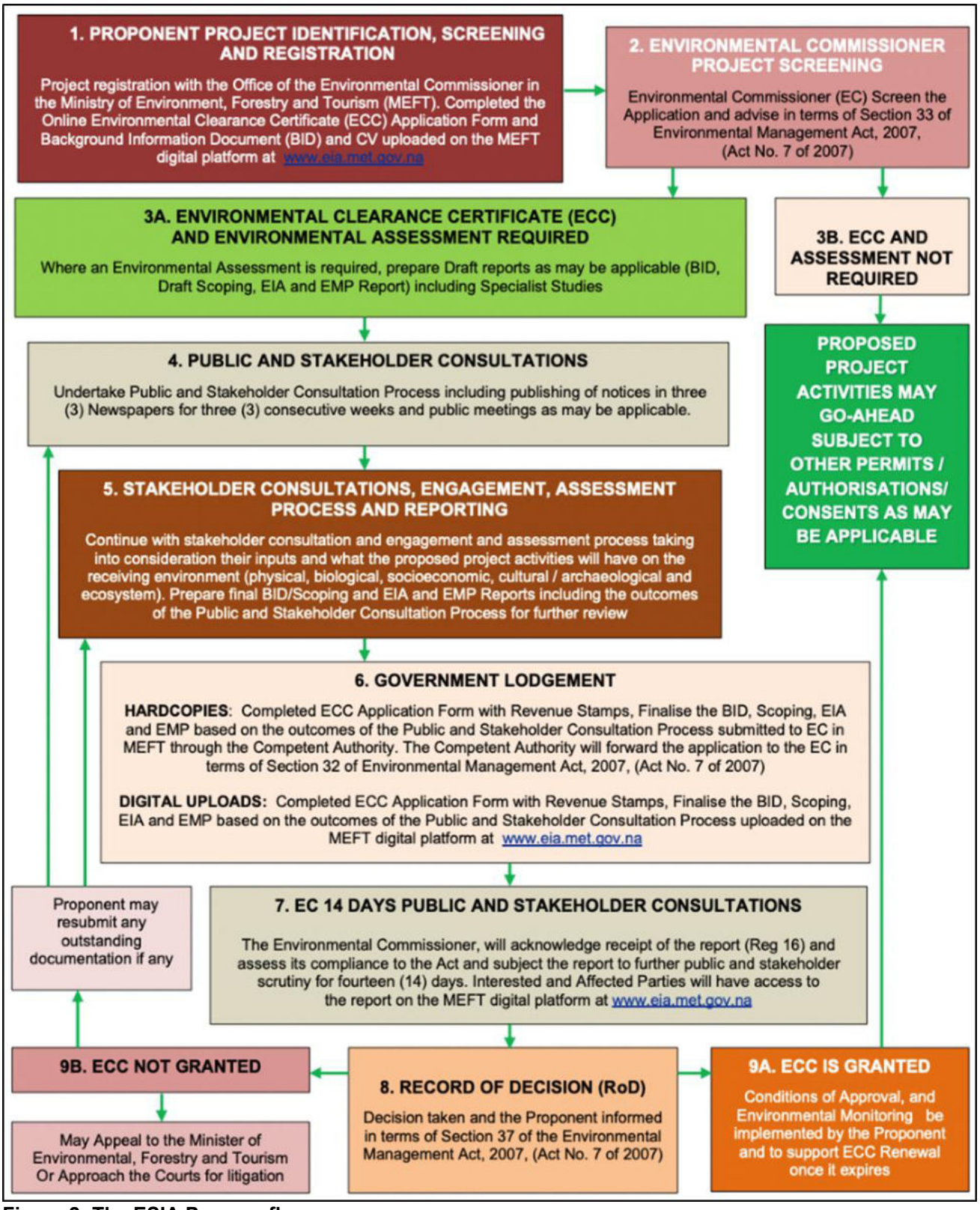


Figure 2: The ESIA Process flow.

2.2. ASSESSMENT OF PROJECT ALTERNATIVES

3.1. Assessment of Alternatives

3.1.1. Assessment of Alternatives

According to the EMA EIA Regulations, alternatives must be considered during the ESIA process. The Regulations state that “an alternative, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity.

3.1.2. The “No – Go” Alternative

Given that the “No-go” option is the best option for the environment since it means maintaining the status quo in which no project is implemented. However, given the developmental need of the project, this option cannot be considered because potential positive economic benefits will be lost.

3.1.3. Routing Alternatives

The main ways routing alternatives were considered are that:

a. The main access route is via B2 road which cuts through EPL9983 and is connected to farm access roads into Goabeb Post 5 and Usakos West Farms. The EPL can also be accessed through farm access roads branching from the D1935 which links Usakos and Okombahe. The exploration contractors will utilize existing roads or tracks to access the site as opposed to opening / clearing new routes.
b. The project area is near Usakos and exploration team can reside in the town during the exploration period.

3.1.4. Location Alternatives

No assessment of alternative sites was done for the proposed exploration activities since this is the licenced area for the project registered by the MIME as EPL9983. Therefore, no other site was considered. This aspect becomes more relevant during preparation for the exploration exercise as viz a vis location of preferred exploration targets and location of environmentally sensitive targets.

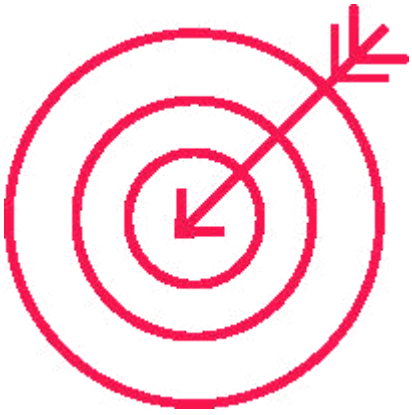
3.1.5. Technical Alternatives

The assessment of technical alternatives focused mainly on the use of Unmanned Aerial Vehicle (UAV) borne geophysical mapping as compared to aeroplanes.

In comparison with aircrafts, UAVs are much faster, precise, environmentally friendly and more cost effective:

- Fast

Drone can survey the area faster.

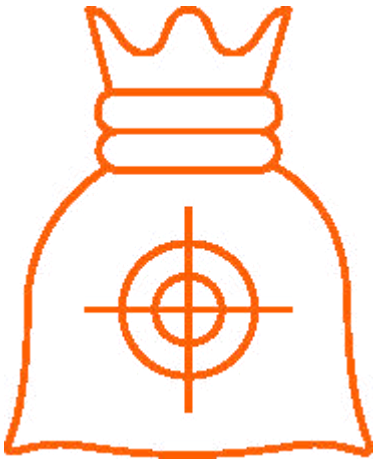


- Precise

Drone can fly lower and explore more difficult survey areas.

- Environment friendly

Drone can survey areas with significantly smaller environmental impact and without using fossil fuels.



- Cost effective

Drone surveys consume less time and fuel.

As a result, drones are preferred to airplanes and will be used for geophysical surveys.

2.3. EXISTING INFRASTRUCTURE

2.3.1. Roads

Existing roads are described under section 2.2.3 above.

2.3.2. Water

No water infrastructure exists on-site although there are existing Namwater lines running through the farms. Water will be supplied using a bowser and will be used mainly for suppressing dust when drilling and for human consumption.

2.3.3. Energy

All the electrical equipment planned for use in this project will be powered by diesel generated electricity. Diesel will be stored on-site using a mobile self-contained above ground storage tank.

2.3.4. Accommodation and Toilet Facility

A satellite camp site will be setup onsite to accommodate the exploration Team during their shift hours only. Their main residence will be in Usakos town.

2.2.4. Waste Dumps

Besides some waste rocks and various other residuals, normal domestic waste such as plastic bags, tins, bottles, paper, and packaging waste will also be generated. Waste generation is an obvious impact of any project and needs to be managed in an appropriate manner. All domestic waste should be disposed at the Usakos Town landfill and prior arrangements and fees should be made and agreed upon.

2.3. EMPLOYMENT CREATION

Employment opportunities in such a project come in phases. The proposed exploration project requires unskilled, semi-skilled and specialized operations, of which can be managed by a local or foreign contractor who will provide specialist services and may come from areas outside the project area.

2. LEGISLATIVE AND POLICY FRAMEWORK REVIEW

2.1. Proposed Project Authorization Requirements

The Environmental Management Act, No. 7 of 2007 stipulates that an environmental clearance certificate is required to undertake Listed Activities under the act, and its supporting regulations of 2012. Listed activities triggered by the proposed project in accordance with the Environmental Management Act, No. 7 of 2007 and regulations are falls under the Mineral Resources Exploration part of the EIA Regulations:

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

2.2. Overview of Legislation

This Section is aimed at presenting a concise description of the policy and legal context within which the mineral exploration project is proposed including an identification of all legal instruments, policies and guidelines that are applicable to this activity and are to be considered in the assessment process. Some of the pertinent environmental legislation that has bearing on mineral exploration is presented in Table 2 which describes the linkage between project activities and relevance of the various legal and policy instruments. The legislation outlined in this document is for the local (institutional), regional, national and international perspectives.

2.3. International treaties and protocols

The following international treaties and protocols have been ratified by the Namibian Government:

- Convention on International Trade and Endangered Species of Wild Fauna and Flora (CITES) (1973).
- Vienna Convention for the Protection of the Ozone Layer (1985).
- Montreal Protocol on Substances that Deplete the Ozone Layer (1987).
- Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (1989).
- Convention on Biological Diversity (1992).
- United Nations Framework Convention on Climate Change (1992).
- Kyoto Protocol on the Framework Convention on Climate Change (1998).
- World Heritage Convention (1972).
- Convention to Combat Desertification (1994).
- Stockholm Convention on Persistent Organic Pollutants (2001).

2.4. Namibian laws and policies relevant to the proposed project

Table 4: National Legal and Policy Instruments Relevant to the proposed mineral exploration activities on EPL 9983

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
The Constitution	Namibian Constitution First Amendment Act 34 of 1998.	"The State shall actively promote and maintain the welfare of the people by adopting policies that are aimed at maintaining ecosystems, essential ecological processes and the biological diversity of Namibia. It further promotes the sustainable utilisation of living natural resources basis for the benefit of all Namibians, both present and future." (Article 95(l)).	Ecological sustainability concepts within the constitution should guide all projects. Protect the environment and ensure citizens enjoy their right to a safe environment. Mineral exploration and exploration are known to be very destructive to the environment and to comply with the Namibian Constitution, it is important for the Proponent to embrace environmental principles in its policies and management throughout the project life cycle stages to comply.
Environmental Protection and Sustainability	National Policy on Prospecting and Exploration in Protected Areas	This policy outlines the guidelines and restrictions on exploration activities within Namibia's protected areas. Its primary aim is to ensure that prospecting and exploration do not compromise the ecological integrity of protected environments. By regulating such activities, the policy seeks to find a balance between harnessing mineral resources for economic development and preserving Namibia's rich natural heritage.	Exploration projects have been known in the past to leave a legacy of environmental destruction without rehabilitation. In response and in line with the National Policy on Prospecting and Exploration in Protecetd Areas the proposed project is subject to rigorous environmental assessment and must comply with sustainable practices to minimize environmental impacts.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
	Nature Conservation Ordinance 4 of 1975.	This Ordinance is a cornerstone of Namibia's legislative framework for conservation. It regulates the protection of wildlife, control of hunting activities, and conservation of natural resources. The legislation sets the groundwork for establishing nature reserves, national parks, and wildlife sanctuaries, ensuring biodiversity protection and sustainable use of natural resources.	In the context, this Ordinance is crucial for balancing economic activities like exploration, prospecting and tourism with environmental preservation given that EPL9983 is in a National Park. **Regulation of Activities:** The Ordinance regulates various activities within protected areas, and exploration falls under the type of activity needing explicit regulation to minimize ecological impacts. **Environmental Protection Measures:** The Ordinance requires measures to protect sensitive ecosystems from the potentially harmful effects of exploration. This includes rehabilitation of disturbed areas and strategies to prevent pollution and habitat degradation. **Conservation Oversight** Conservation officers and other authorities are typically empowered to oversee and enforce compliance with regulations within protected areas, ensuring that exploration projects adhere to conservation standards.
	The Namib Naukluft National Park Management Plan	The management plan for Namib Naukluft National Park provides strategic guidance for the conservation of the Namib Naukluft National Park. It includes specific strategies for managing biodiversity, promoting eco-friendly tourism, and involving local communities in conservation efforts.	The plan aims to protect the park's unique landscapes and ecosystems, including the famous dunes of Sossusvlei, while fostering sustainable tourism that benefits local economies. Additionally, the plan addresses challenges like climate change and human-wildlife conflict, ensuring the park remains a vital conservation and tourism asset for Namibia. In relation to the proposed project the following key aspects are worthwhile for the Proponent to note:

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
			Strict Zoning Regulations: The management plan designates specific zones within the park where different activities are permitted or restricted. Exploration activities may be limited to areas where they will have minimal impact on sensitive ecosystems. **Environmental Impact Assessments (EIA):** Before any exploration activities can commence, they are subject to rigorous environmental impact assessments and community consultations to make sure their interests are harmonised with the proposed project. **Permits and Licensing:** Obtaining the necessary permits and licenses is mandatory for any exploration activities. This process ensures that only compliant and responsible projects can proceed. **Monitoring and Compliance:** There are provisions for ongoing monitoring of exploration activities to ensure compliance with environmental standards and regulations. Regular reporting and inspections are required to track the project's impact on the environment. **Restrictions on Disturbance:**

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
			Specific regulations may restrict certain methods of exploration that could cause significant disturbance to the park's flora, fauna, and landscapes. This might include restrictions on drilling, use of heavy machinery, or other intrusive methods. **Conservation Prioritization:** The plan prioritizes conservation objectives, and any exploration proposals are evaluated against these objectives to ensure that they do not undermine the park's primary conservation goals.
Climate Change	National Policy on Climate Change for Namibia (2011)	The National Policy on Climate Change supports constitutional obligations of the Government of the Republic of Namibia, namely for "the state to promote the welfare of its people and protection of Namibia's environment for both present and future generation." The goal of the National Policy on Climate Change is to contribute to the attainment of sustainable development in line with Namibia's Vision 2030 through strengthening of national capacities to reduce climate change risk and build resilience for any climate change shocks. The policy reckons that Namibia has limited capacity to adapt to climate change impacts. The policy projected that Namibia would become drier with	The project by virtue of being an exploration project making use of water during the various activities and interacting with ground water resources needs, it is paramount to recognize the stress on water resources and do everything necessary to preserve, minimize unwarranted loss, prevent any form of pollution and contribute towards sustainable development.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
		more variability in rainfall and developed strategies and action plan to cope with adverse climate change impacts, (Namibia, 2010).	
Environment	Environmental Assessment Policy of Namibia 1994.	The policy narrates guidelines to environmental management its principles as well as the EIA process to be followed for listed projects that requires environmental clearance.	The project implementation should follow the requirements of the policy starting with the guidelines for EIA for which this is the process underway. As one of the long-term key objectives, protection of resources including water should be embraced in the Proponent modus operandi.
	Environmental Management Act, (Act No. 7 of 2007)	The Act gives general principles for the management of the environment and natural resources. Requires that projects with significant environmental impact are subjected to an environmental assessment process (Section 27). Requires for adequate public participation during the environmental assessment process for interested and affected parties to voice their opinions about a project (Section 2(b-c)).	The EMA and its regulations should inform and guide this EIA / ESIA process.
	EIA Regulations Government Notice (GN)	According to Section 5(4) a person may not discard waste as defined in Section 5(1)(b) in any way other	

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
	57/2007 (Government Gazette (GG) 3812).	than at a disposal site declared by the Minister of Environment and Tourism or in a manner prescribed by the Minister. Details principles which guide the EIA process. Details requirements for public consultation within a given environmental assessment process (GN No 30 Section 21). Section 3 (2) (e) states that "assessments must be undertaken for activities which may have a significant effect on the environment or the use of natural resources". Details the requirements for what should be included in a Scoping Report (GN No 30 S8) an EIA report (GN No 30 S15).	
Vegetation	Forestry Act 13 of 2005 & Forestry Regulations (GN 170 of 2015.	Section 10 (1) set out the aim of the forest management as to: The purpose for which forest resources are managed and developed, including the planting of trees where necessary, in Namibia is to conserve soil and water resources, maintain biological diversity and to use forest produce in a way which is	The clearing of vegetation is prohibited (subject to a permit) 100m either side of a river. Certain vegetation species occurring in the area are protected under this Act and require a permit from the Directorate of Forestry for removal.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
		compatible with the forest's primary role as the protector and enhancer of the natural environment. Section 22. (1) (Protection of Natural vegetation) Unless otherwise authorised by this Act, or by a licence issued under subsection (3), no person shall on any land which is not part of a surveyed erven of a local authority area as defined in section 1 of the Local Authorities Act, 1992 (Act No. 23 of 1992) cut, destroy or remove - Republic of Namibia 20 Annotated Statutes Forest Act 12 of 2001 (a) vegetation which is on a sand dune or drifting sand or on a gully unless the cutting, destruction or removal is done for the purpose of stabilising the sand or gully; or (b) any living tree, bush or shrub growing within 100 metres of a river, stream or watercourse. (2) A person who wishes to obtain a licence to cut and remove the vegetation referred to in subsection (1) shall, in the prescribed form and manner, apply for the licence to a licensing officer who has been designated or appointed for the area where the protected area is situated.	

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
Health and Safety	Labour Act 11 of 2007.	Empowers the minister responsible for labour to publish regulations pertaining to health and safety of labourers (S135). Details requirements regarding minimum wage and working conditions (S39-47).	All contractors involved in the exploration activities for this project are required to comply with this Act and its regulations.
	Health and Safety Regulations GN 156/1997 (GG 1617)	Details various requirements regarding health and safety of labourers.	Potential nuisances (e.g. dust generation) should be considered during the exploration phase and avoided.
	Public Health Act 36 of 1919.	Section 119 states that "no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	
	Public and Environmental Health Act No. 1 of 2015	The Act serves to protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.	The Proponent and all its employees and contractors should ensure compliance with the provisions of these legal instruments.
	Pollution Control and Waste Management Bill	The bill aims to "prevent and regulate the discharge of pollutants to the air, water and land" Of particular reference to the Project is: Section 21 "(1) Subject to	The project activities trigger section 21 and 22 of the bill, this so because mineral exploration activities can potentially directly pollute the water sources.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
		sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse." Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	Exploration contractors should make it mandatory that they manage their waste in a manner that does not cause environmental threat and risk both to the surroundings and the local communities.
Water	Water Act 54 of 1956	The Water Resources Management Act 24 of 2004 is presently without regulations; therefore, the Water Act No 54 of 1956 is still in force: -Prohibits the pollution of underground and surface water bodies (S23 (1)). -Liability of clean-up costs after closure/ abandonment of an activity (S23 (2)). -Protection from surface and underground water pollution	The protection of ground and surface water resources should be a priority. The main threats will most likely be hydrocarbon spills during drilling of cores and equipment / machinery maintenance.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
	The Water Resources Management Act No. 11 of 2013.	The aim of the Act is to provide for the management, protection, development, use and conservation of water resources; to provide for the regulation and monitoring of water services and to provide for incidental matters.	The protection (both quality and quantity/abstraction) of water resources should be a priority. Relevant permits and or agreements to abstract and use water should be applied for and obtained from the Ministry of Agriculture, Water and Land Reform's Directorate of Water Resources Management.
Natural Resources Conservation	Soil Conservation Act 76 of 1969	The Act established to consolidate and amend the law relating to the combating and prevention of soil erosion, the conservation, improvement and manner of use of the soil and vegetation and the protection of the water sources in the Republic of Namibia. The Act give powers to the Minister in section 3 (d) the powers to gazette activities that relate to the run-off or drainage of rainwater, the withdrawal from cultivation, the protection and stabilizing of natural water courses and the establishment, maintenance and protection of artificial water courses	Duty of care must be applied to soil conservation and management measures must be implemented during the mineral exploration stages of the project.
Social and Human Environment	Labour Act 11 of 2007.	Empowers the minister responsible for labour to publish regulations pertaining to health and safety of labourers (S135). Details requirements regarding minimum wage and working conditions (S39- 47).	All employees hired to work for the proposed project should be compensated fairly in line with the labour laws of the country as required.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
	Public Health Act 36 of 1919 Health and Safety	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	Provision of community labour, the input of the local communities is usually in the form of labour for the excavation, backfill and compaction of the pipeline trenches. The safety of these people is crucial particularly women, who do not have prior knowledge of handling dangerous, risk and strenuous jobs.
	Regulations GN 156/1997 (GG 1617)	Details various requirements regarding health and safety of labourers.	
	Public and Environmental Health Act No. 1 of 2015	The Act serves to protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health. The public and environmental health should be preserved and remain uncompromised.	The Proponent should ensure that the project infrastructure, vehicles, equipment, and machinery are designed and operated in a way that is safe, or not injurious or dangerous to public health and that the noise and dust emissions which could be considered a nuisance remain at acceptable levels.
Heritage	National Heritage Act 27 of 2004	Section 48(1) states that “A person may apply to the (Heritage) Council for a permit to carry out works or activities in relation to a protected place or protected object” Protects and conserves cultural heritage and	Mineral exploration has a potential to pass through heritage sites, graveyards or unearth heritage resources (e.g. human remains etc.). Heritage resources discovered during excavations would require a permit from the National Heritage Council of Namibia for relocation.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
		cultural resources with special emphasis on places and sources of National heritage including graves, artefacts and any objects older than 50 years.	
Flying of Unamanned Aerial Vehicles or Drones during Geophysical Surveying	Civil Aviation Act 6 of 2016	To consolidate the laws relating to civil aviation and civil aviation offences; to provide for the powers and functions of the Minister in relation to civil aviation; to establish the Namibia Civil Aviation Authority and to provide for its powers and functions; to establish the Air Navigation Services in the Authority; to provide for a civil aviation regulatory and control framework for maintaining, enhancing and promoting the safety and security of civil aviation for ensuring the implementation of international aviation agreements; to establish the Directorate of Aircraft Accident and Incident Investigations and to provide for its powers and functions; to provide for the establishment of Namibia Register of Aircraft and the Civil Aviation Registry. It is under the same Act that the NCAA having been established pubslished the Aviation Directive **(AD 1-2-1-6)** on the 1st May 2022 to provide the legal framework for the issuance of RPAS licences to qualifying persons and was enforced from the 1st of August 2022. This was meant to	The Proponent should ensure that relevant permits are applied for and approved to fly drones during geophysical surveying by Namibia Civil Aviation Authority (NCAA) and the MEFT.

Theme	Legislation Instrument	Relevance Provisions	Relevance to Project
		enable RPAS operators to fly safe and legally, they are required to obtain an RPAS Letter of Approval (RLA) from the Flight Operations (OPS) section of the Namibian Civil Aviation Authority (NCAA) for Visual Line of Sight (VLOS) operations. For Drones, in addition, Air Navigation Services Safety Oversight (ANSSO) CAUA Application form for flying in restricted airspace should be completed because of the location of EPL9983 being in a high risk area.	

3. PUBLIC CONSULTATION AND STAKHOLDER ENGAGEMENT

3.1. Introduction

Public and stakeholder consultation and participation form an important component of an EIA process as required by Section 21 to 24 of the EIA Regulations. The consultation process afforded the stakeholders and potential Interested and Affected Parties (I&APs) an opportunity to comment on and raise any issues relevant to the proposed development for consideration in the assessment documents (Environmental & Social Impact Assessment (ESIA) Report) and Environmental & Social Management Plan (ESMP)). The comments, issues and suggestions raised and submitted to the Environmental Consultant greatly aid and influence the planning of the proposed exploration activities in the early stages.

Furthermore, the public and stakeholder' consultation and engagement process also assists the Environmental Consultant to thoroughly identify and record potential impacts that they may have missed and determine to what extent further investigations are necessary. This process can also aid in identifying possible mitigation measures to some potential adverse impacts or to maximize the benefits of the development in the environment. The public and stakeholder consultation for this mineral exploration project has therefore been conducted in accordance with the EMA and its EIA Regulations. The consultation activities done for this development are presented under the next subsections and as per the associated Proof Public Consultation Document (Appendices).

3.2. Pre-identified and Registered Interested and Affected Parties (I&APs)

The relevant and applicable national, regional and other interested members of the public were identified and registered in the list of stakeholders and I&APs. The list was updated throughout the ESIA consultation process. The completed Attendance Register and list of registered I&APs and stakeholders are provided in **Annexure 3.**

Table 5: Preidentified stakeholders.

Institution	Representative
ǂGaingu Conservancy	Chairperson and Conservancy Committee Members
Ministry of Fisheries, Agriculture, Water and Land Reform	Ms. Amakali – Directorate of Water Resources Management
Ministry of Industries, Mines and Energy	Exploration Commissioner

3.3. Means of Notification and Communication for Consultation

The steps taken that guided this public consultation process are as detailed under section 21 to 24 of the EIA Regulations. The notifications and communication with I&APs and stakeholders with regards to the proposed development were facilitated through the following means and order:

- The Background Information Document (BID): A Summary of the proposed Project and ESIA Process

A non-technical summary or Background Information Document (BID) containing brief information about the proposed project was compiled and shared with registered I&APs – **the BID was shared as an accompanying document, (Annexure 1)**.

- Public Notification (Newspaper Advertisements) and Communications

The notice of the ESIA Study for the proposed project activities were published in the following newspapers while notices were posted at various points close to the project area, as presented below.

Table 6: Environmental scoping announcements published.

Communication channel used	Date (s)
Confidente	9 to 15 May 2025
Confidente	16 to 22 May 2025
The Windhoek Observer	9 May 2025
The Windhoek Observer	12 May 2025

3.3.1. Public and Stakeholders' Consultation Meetings

- Consultation Meetings

The newspaper adverts briefly explained the proposed mineral exploration activities, its locality, consultation meeting details and public invitation to register as I&APs as well as submit their comments/concerns to the Environmental Assessment Practitioner using the contact details provided. Minutes that narrate the proceedings of the public meeting held onsite and the preceding email correspondences with IA&Ps are contained in the *"Proof of Public Consultation Document",* **Annexure 2.**

Figure 3: Some of the attendees of the public meeting conducted at Goabeb Farm. Source: Own photograph taken during the meeting.

3.3.2. Feedback from Stakeholders and Interested & Affected Parties

Various issues were raised by I&APs during the consultations. These issues have been recorded and form the basis of the ESR and ESMP documents. The summary of key issues and how they were managed is presented below:

Table 7: Summary of issues raised during the stakeholders' consultations and responses.

Issues / Concerns Raised by Stakeholders	Responses
The Headman of the area was unhappy that the meeting with the Community Members should have been held first without the presence or in the absence of the Conservancy Committee members.	The EIA Consultation process provides for consultation of all Interested and Affected Parties irrespective of their interests and holding individual consultation groups not only increases costs but lengthen the process.
Community members unhappy because the meeting started late and that the notices of the meeting was only announced on the radio station the previous day. Announcements for meetings should be done continuously for a week.	The radio announcement made the previous day before the meeting was a second announcement as a reminder following the first announcement made by the Headman 2 weeks before the meeting.
Attendees complained that they are hungry and will not talk if food is not provided.	Food was ordered from OK Supermarket in Usakos and served during the meeting.
Community requested to have a meeting with the Proponent involved to understand their benefits.	The project is only at the exploration phase which is a costly exercise, and it is too early to engage on discussions of benefits.
In what ways will the project benefit the community?	Employment creation.
Community wants locals to be employed and not outsiders.	Employment opportunities are for all Namibians, but locals will be given first preference.
If minerals are not found, what is next? In the past people have closed the holes they dug, will it be the same in this regard?	Affirmative if, no minerals are found that are economically viable to develop and mine, then the area will be rehabilitated and closed off.
Community members do not want people to just come and start drilling, what are the benefits of the community?	At exploration stage we can only talk of the obvious benefit of employment creation.

Community wants assurance that their heritage will not be damaged in the process.	The Archaeologist will document both the tangible and intangible heritage of the area.
Once the report is compiled, we would like to see the final version.	The final version of the report was submitted to MEFT and will be accessible to all stakeholders for comments on the MEFT Web Portal.
Concern about the grazing land how the process and how the exploration will affect the farmers in the area?	The Consultant explained the whole exploration process amd possible mitigation measure that will be implemented during the exploration phases.

3.4. Review of Draft Environmental Scoping Report and Management Plan

The draft reports (ESR and ESMP) were shared with Proponent to endorse proposed mitigation measures before it was publicized to stakeholders for commenting. The stakeholders were given 14 days from the day of the first publication to comment on the draft reports.

3.5. Public Participation: Way Forward

Comments on the reports were incorporated to generate the final reports before submission to the Competent Authority: MEFT and the decision will be published.

4. THE STUDY AREA / ENVIRONMENT

This chapter provides an overview of the baseline social and ecological environmental conditions, with which the proposed project will interact. This information was sourced from literature review and observations made during a site visit to the project area.

4.1. CLIMATE

The EPL fall in an area with climate which is mostly semi-arid to arid, analogous to a hot desert climate where annual rainfall rarely exceeds 200 mm. The greatest amount of precipitation occurs in February, whereas the least amount of rainfall occurs in July. The area is characterized by hot dry summers with day time temperature in excess of 31ºC whereas the night time temperatures can go as low as below zero, due to the desert climate.

4.1.1. Wind

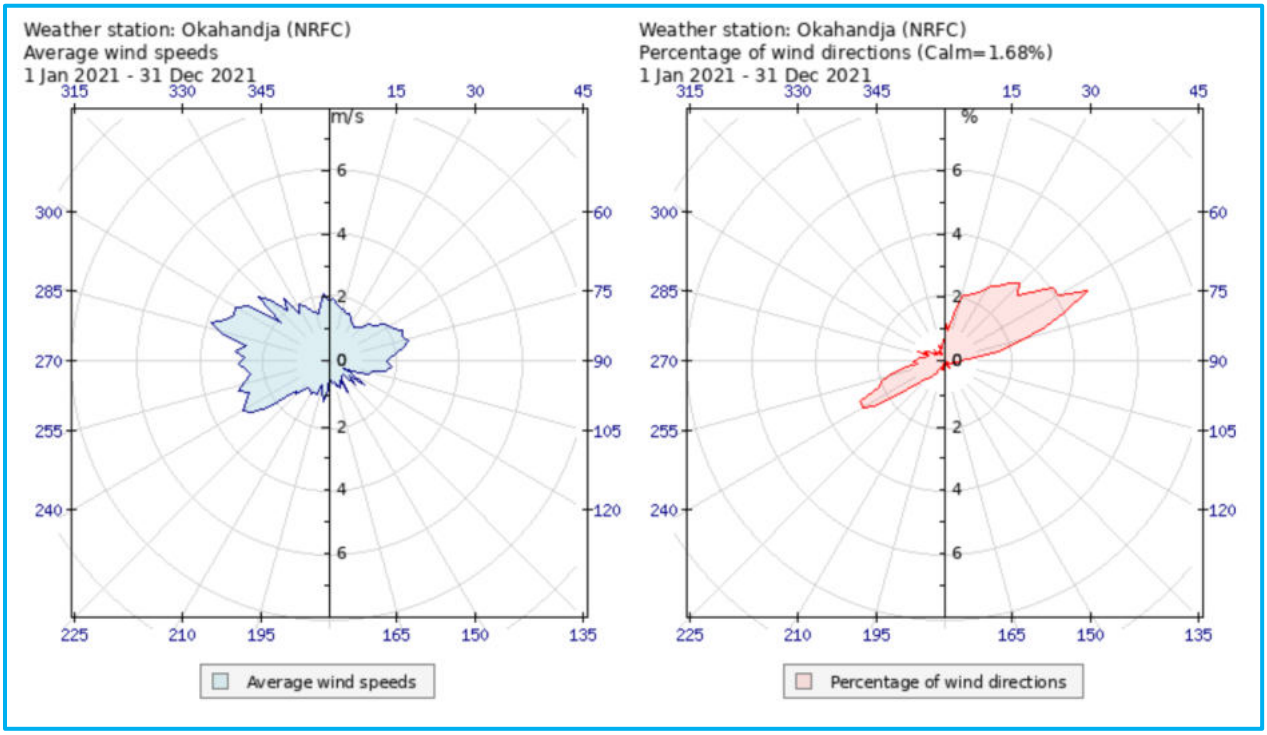


Figure 4: Average wind speeds and directions from the nearest station to the project site.

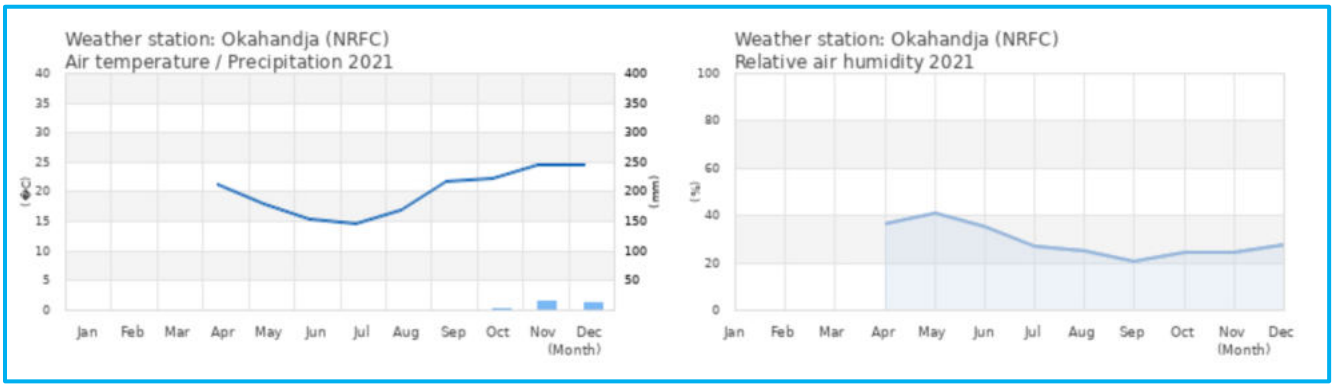


Figure 5: Average temperature and precipitation from the nearest station to the project site.

4.2. FLORA

Namibia's western highlands, are characterized by grasslands with sparse shrubs and small trees, forming a highland savanna. Vegetation varies, featuring species like the kudu bush and wild pear, alongside Acacia species and buffalo thorn, particularly in bush encroached areas. The rugged terrain and diverse microhabitats create a high botanical diversity, including endemic species.

Besides fulfilling many ecological functions, the vegetation in the study area can be considered as a highly valuable resource for farmers. About 88% of farmers in the surrounding areas depends on the grazing areas such as this one, as such this area is considered a commercial farming area. A field survey has been carried out on the project site to determine the impact on vegetation because of exploration activity. The findings are presented below in summary form.

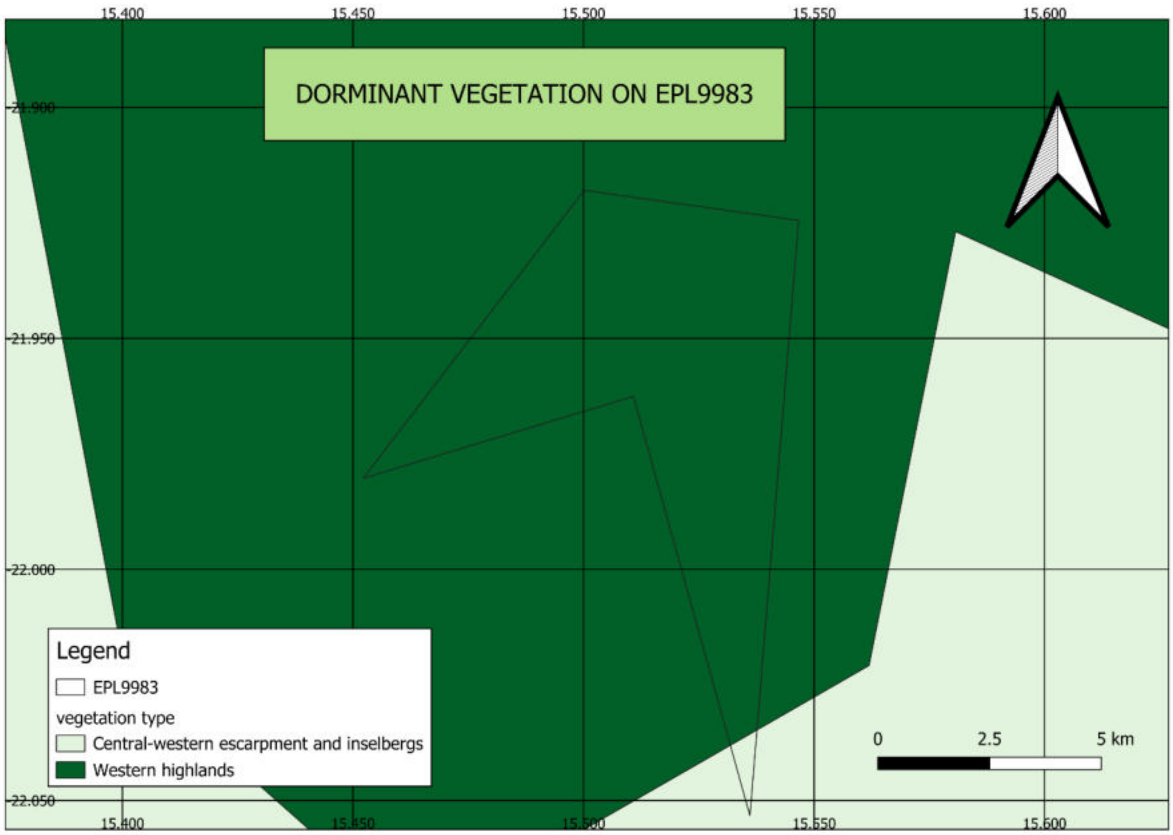


Figure 6: EPL9983 is dominated by Western Highlands type of vegetation.

Vegetation units provided in Mendelsohn and Roberts (1997) were used as a baseline and were ground-truthed during the field survey. The identified unit provides a good indication of the types of vegetation occurring along the proposed exploration area. The project area is moderately disturbed, with a sparse shrub layer, evidence of frequent grazing patterns. The area displays relatively low levels of vegetation species diversity, with only a few protected species present.

Table 8: Plant species expected to occur in the project area and their conservation status.

Expected Plant	Conservation Status
Aloe dichotoma	**NC; CII; nE**
Aloe littoralis	**NC; CII**
Acacia erioloba	
Acacia erubescens	
Acacia hebeclada	
Acacia karoo	

Acacia luederitzii	
Acacia mellifera Subsp. detinens	
Acacia reficiens	
Acacia senegal	
Acacia tortilis	
Albizia anthelmintica	
Boscia albitrunca	**F**
Boscia foetida	
Catophractes alexandri	
Commiphora angolensis	
Commiphora glaucescens	
Commiphora glandulosa	
Commiphora pyracanthoides	
Commiphora tenuipetiolata	
Commiphora virgata	
Cyphostemma currorii	**NC**
Dychrostachys cinerea	
Elephantorrhiza suffruticosa	
Ehretia alba	
Erythrina decora	**F; E**
Euphorbia avasmontana	
Euphorbia guerichiana	**CII**
Euphorbia virosa	**CII**
Gymnosporia senegalensis	
Grewia flava	
Grewia tenax	
Ficus cordata	**F**
Ficus ilicina	
Ficus sycomorus	**F**
Lycium bosciifolium	

Lycium eenii	
Maerua juncea	
Maerua schinzii	**F**
Manuleopsis deinteri	**E**
Montinia caryophyllacea	
Obetia carruthersiana	**nE**
Osyris lanceolata	
Ozoroa crassinervia	**F**
Pechuel-loeschea leubnitziae	
Phaeoptilum spinosum	
Rhigozum brevispinosum	
Rhigozum trichotomum	
Searsia lancea	
Searsia marlothii	
Searsia pyroides	
Tarchonanthus camphoratus	
Ziziphus mucronata	**F**

KEY: NC – Protected in Namibia **; CII –** CITES Appendix 2 **; nE –** Near endemic, plants that occur largely only within political boundaries of Namibia or just beyond; **F –** Protected in Namibia under the Preservation of trees and forests Ordinance of 1952 and the proclamation of the SWA Administration No. 486 in 1972; **NC –** Protected in Namibia under the Nature Conservation Ordinance 4 of 1975 & 247 of 1977 & **E –** Endemic plants believed only to occur within Namibian boundaries.

4.3. FAUNA

ǂǂGaingu Conservancy supports a moderate variety of wildlife but the aridity of the area prevents populations from reaching very high numbers. Nevertheless, there is a high diversity of endemic species of birds and reptiles. A list of the larger species known to occur in the area, with estimates by conservancy members of the numbers are presented in the following table, ((NACSO), 2009).

Table 9: Wildlife population estimate in the #Gaingu Conservancy area.

SPECIES	APPROXIMATE NUMBER
Baboon	Numerous
Springbok	± 11000
Oryx	± 100
Kudu	± 80
Zebra (Hartmann's)	± 150
Zebra (Burchell's)	± 70

Other species include smaller antelopes (klipspringer, duiker, steenbok), carnivores (leopard, cheetah, brown hyaena and black-backed jackal as well as several species of small cats and viverrids. Game birds (guinea fowl, sandgrouse and francolins) and ostrich are potentially valuable assets for the conservancy. For bird-watchers endemic birds such as Herero Chat and Ludwig's Bustard are an attraction, ((NACSO), 2009).

4.4. GEOLOGY OF THE AREA

The project area is dominated by the late Proterozoic Damara Orogen, featuring metamorphosed sedimentary and volcanic rocks, a pre-Damaran basement, and significant granitoid intrusions and pegmatites, which are economically important for minerals like lithium, beryllium, and bismuth. The area also exhibits features from the Karoo Supergroup and later Cretaceous volcanic activity, including mafic dykes and sills, related to the breakup of Gondwanaland, with younger sediments from the Namib Group also present.

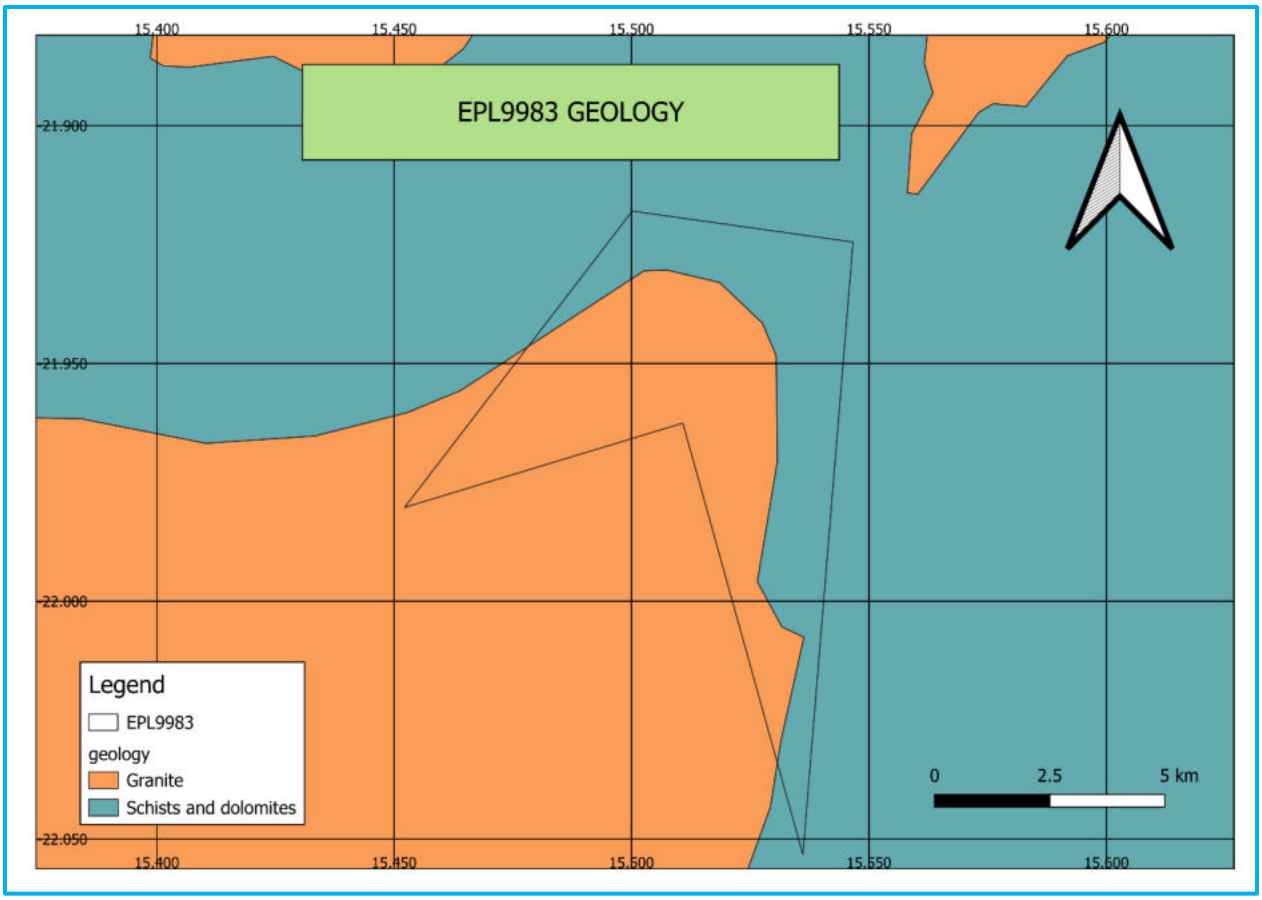


Figure 7: The geology of EPL9983.

4.5. AIR QUALITY

Dust is the main source of air pollution in the mineral exploration and mining industry. The extent of pollution by dust depends on the local microclimate conditions, the concentration of dust particles in the ambient air, the size of the dust particles and their chemistry. Predictions of air pollution can be made using meteorological data, information on various exploration activity and their associated emission factor, baseline air quality and a validated model condition. It can be noted that vehicle movements, trenching and drilling are the major sources of suspended particulate matter (SPM) emissions. The emission rates of other air pollutants are considerably insignificant since the work areas are not unconfined with low carbon footprint. Therefore, the impact of exploration activities on the local air quality would be acceptable.

4.6. SOCIO-ECONOMIC ENVIRONMENT

4.4.1. LAND USE

The land uses surrounding the project area include large farming area for the stock farming population (see Figure 3 below). The land falls under the Erongo Region and mostly dominated by exploration activities through EPLs for exploration companies and individuals. The sensitivities relating to the socio-economic environment are contained in Table 3 Below.

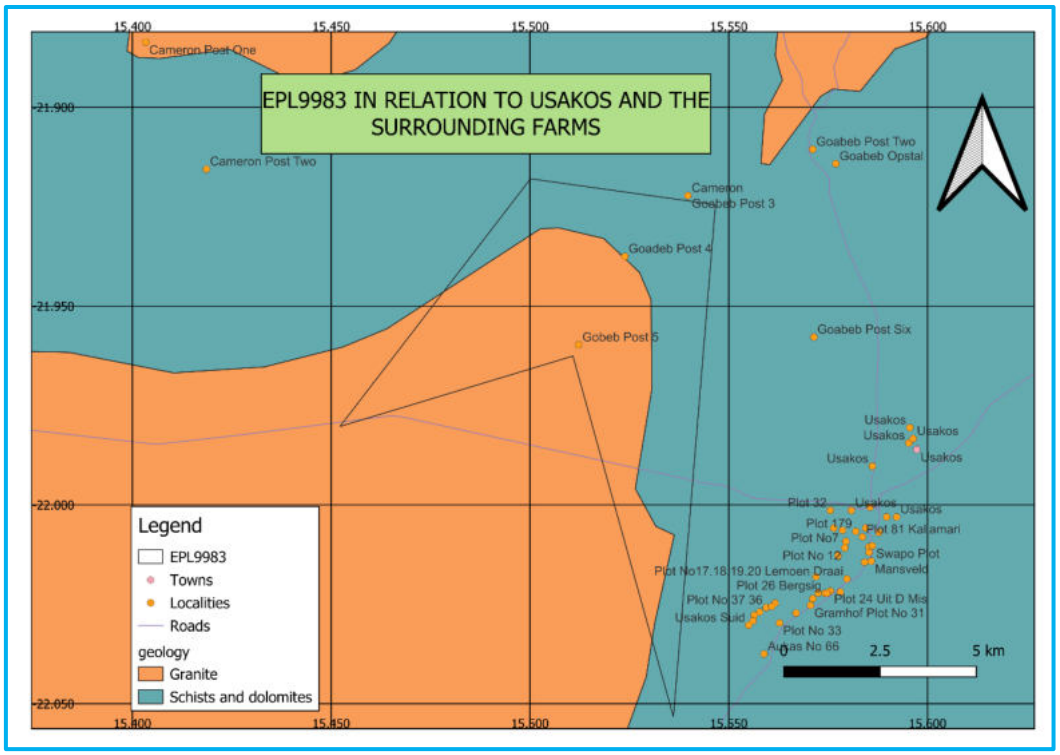


Figure 8: The location of EPL9983 in relation to current land uses.

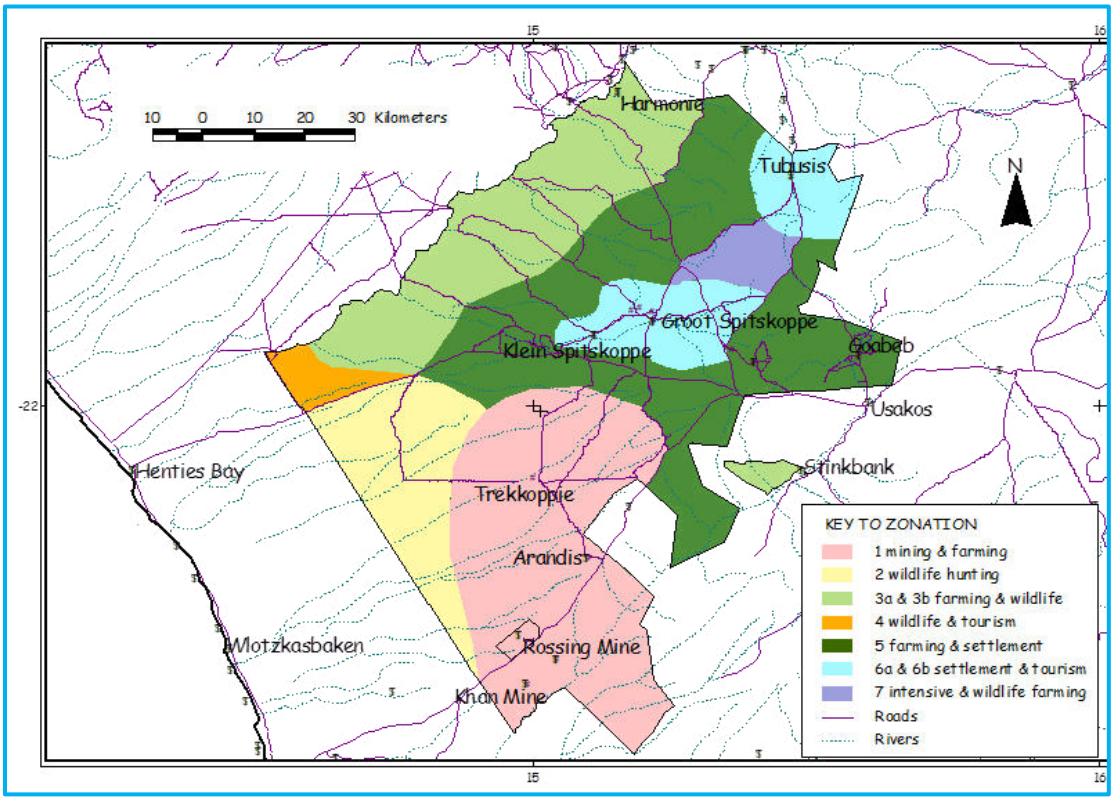


Figure 9: #Gaingu Conservancy Wildlife Management and Utilization zonation.

Table 10: Sensitivities relating to socio-economic conditions.

SOCIAL FEATURE	DESCRIPTION	SENSITIVITY	POTENTIAL IMPACTS
Health impacts	High HIV/Aids prevalence in the region. Influx of migrant workers during exploration phase.	Potential increase in HIV/AIDS infection rate owing to risky sexual behavior during exploration phase in the event of an influx of migrant labour.	Increased HIV/AIDS during exploration phase.
Unemployment	Low mean annual household income.	The local community are in need of employment opportunities	Limited job opportunities (mostly unskilled)

Land use	The proposed area of land allocated for exploration activities is currently designated as commercial farming land and a conservancy focused on sustainable utilization of wildlife for tourism and trophy hunting.	The proposed development may conflict with the current land use of the area of farming	Loss of arable land

6.1. DISCUSSION

Mitigation of exploration impacts involves siting issues, technological solutions to eliminate contamination, and restoration programs. Most important for invasive exploration operations it is critical to avoid habitats of concern, wetlands, riparian areas, and recharge areas. Specific mitigation measures depend on the type of exploration and the specific process causing impacts. It is generally best to minimize the area affected as it is unlikely that even the disrupted soils and sediments can be restored. In addition to minimizing the area disturbed, activities should be timed to avoid disturbing nearby plants and animals during crucial periods of their life cycle since this is key to sustainability of the Conservancy operations. Access to work areas should make use of old existing roads as much as possible.

Having screened all potential impacts and having subjected those applicable to the criteria outlined in Table 2 the following should be noted regarding the key impacts and their corresponding mitigation.

- Impacts on Flora & Fauna: The impact significance rating for the clearing of vegetation in the project area is low, owing the moderately disturbed nature of the area and relatively low vegetation species diversity (no high value tree species were observed on site). To minimise the loss of valuable resources, it is recommended, to follow the footprint of the previous operations. Bulldozing (during exploration) and the injudicious application of herbicides (during prospecting and exploration) may result in the aggressive encroachment by certain species. Disturbance of breeding reptiles and bird mortalities due to removal of trees pose a threat to biodiversity and thus have been assigned a medium pre-mitigation impact significance rating and the following is therefore recommended to mitigate these impacts:
- Monitoring of the proposed exploration activities should be conducted according to the specialist's recommendation.
- Air quality & Noise Pollution: The particulate matter (dust) that is generated by exploration represents a moderate percentage and its impact on the air quality should not be overlooked. Air quality measurement must be incorporated in the planning. The exploration produces noise of low to medium level and has small

impact due to the location of the EPL and hence the pre-mitigation impact significance rating is low to medium. However, it should be monitored for the health of the employees.

- ❖ Impacts on Landscape, Underground water: The potential loss of land represents a small percentage of a typical large-scale area and hence the pre-mitigation impact significance rating is low to medium. No potentially significant underground water resources in the area are exposed due to drilling. It therefore represents a small impacts level.
- ➢ Potential increase in HIV/AIDS infection local/regional: The impact HIV/AIDS has had (and though reduced still has) on the Namibian population is significant. HIV/AIDS poses a significant threat to livelihoods, health and social structures. Even though the size and scale of this project is relatively small and hence the potential for increased infections is relatively small each life is regarded as infinitely valuable and thus constitutes an impact of high significance. The mitigation measures prescribed can aid in reducing the potential significance of this impact, however the effectiveness of these measures is uncertain and difficult measure and as such the impact significance will remain medium.
    - ➢ New areas should be cleared and opened only when absolutely necessary;
  - ❖ Impacts on Landscape,
    - ➢ No mining must be done at this stage.
    - ➢ Strict measure must be taken so that the exploration is taking place within the designated EPL area.
  - ➢ It is concluded that most of the impacts identified during this assessment can be addressed through the recommended mitigation and management actions for both the prospecting and operation phases of this project. Should the recommendations included in this report be implemented, the significance of the impacts can be reduced to reasonably acceptable standards and duration.

5. ENVIRONMENTAL ASPECTS AND IMPACTS ASSESSMENT

5.1. Introduction

A key part of the Scoping Process is the preliminary identification and consideration of issues and concerns that may impact (positively and/or negatively) with the biophysical and socio-economic environments. The issues that were identified as potentially significant during the Scoping Phase for the basis on which further studies, if necessary, will be conducted during the EIA Phase. The identified potential impacts are assessed following a recognized methodology to determine the magnitude of impact and whether the impact was considered significant and thus warrant further investigation. The assessment considered all stages of the proposed mineral exploration for the target minerals.

5.2. Evaluation of identified Potential Impacts

The evaluation of the significance of the impacts was determined using the standard criteria presented below and was guided by Namibia's legal requirements and international best practice.

5.3. Description of Potential Impacts

The potential impacts on environmental and social resources arising from the proposed development include direct and indirect impacts. The table below presents the overview of likely aspects arising from each of the key project activities and considers their likely interaction with socio-economic and environmental resources and receptors.

Table 11: Identified potential negative and / or positive impacts emanating from the proposed project.

Inception / Levelling of Expectations				
Project activity	**Environmental aspect**	**Identified impact**	**Nature of impact (Positive / Negative)**	**Assessment finding (s)**
Poor communication / misinterpretation of project requirements / Client's needs	Economic	Rework / time loss	Negative	If the project requirements are misunderstood, there will be rework and loss of time which impacts negatively on project costs. This phase was successfully completed and the ESIA study conducted.
SITE ESTABLISHMENT				
Project activity	**Environmental aspect**	**Identified impact**	**Nature of impact (Positive / Negative)**	**Assessment finding (s)**
Mobilization and work area setup	Biophysical	Loss of vegetation or land clearing	Negative	Trees and shrubs will be cleared to make way for temporary canteen; offices; workshop and sample preparation room. Domestic waste will be generated at the work site. There is potential to hazardous products from the storage facilities or from the workshop area during maintenance of machinery or equipment which can cause soil and ground water contamination. Further to that petroleum products are highly inflammable making them hazardous to the workers.

	Waste management	Indiscriminate dumping of solid and discharge of liquid waste	Negative	Some of the materials are supplied wrapped from the suppliers resulting in generation of waste onsite. Hazardous substances are stored onsite and all employees should be inducted on how to handle such issues. Occupational hazards are common when there is lack of proper induction.
	Occupational hazard	Storage of hazardous substances or materials	Negative	
	Biophysical	Soil and ground water contamination	Negative	
Recruitment of workers or employees	Socio-economic	Influx of people looking for jobs	Negative	High influx of people looking for jobs is usually driven by recruitment of workers onsite and as a result people are motivated to visit in the morning to try their luck. Influx from communities further away from project area disrupts normal social set up of communities living in the project area causing possible decay of morality possible child labour and increased HIV/AIDS incidence and communicable diseases. This improbable given the remoteness of the project area.
	Gender	Sexual exploitation and abuse	Negative	This refers to sexual abuse of local community members by project employees especially when there is lack of awareness of prohibition of sexual abuse.
Trenching, Drilling, Bulk Sampling	Air quality	Dust emissions	Negative	Excavation activities during the exploration phase results in dust emissions when soil is dry.
	Biophysical	Noise and vibrations	Negative	Heavy machinery, generators and other equipment and machinery used onsite will

				generate localised noise and vibrations at the area of work.
	Biophysical	Loss of vegetation / land clearing	Negative	Trees may be cut during the exploration phase to make way for the exploration equipment although we have minimal trees and mitigation measures can be put in place to manage the impacts.
Decommissioning Phase				
The exploration programme on EPL9983 is planned over a period of three years and the decommissioning should planned during the last quarter of the exploration phase.				

Table 12: Impact Assessment Criteria employed

Duration – What is the length of the negative impact?	
None	No Effect
Short	Less than one year
Moderate	One to ten years
Permanent	Irreversible
Magnitude – What is the effect on the resource within the study area?	
None	No Effect
Small	Affecting less than 1% of the resource
Moderate	Affecting 1-10% of the resource
Great	Affecting greater than 10% of the resource
Spatial Extent – what is the scale of the impact in terms of area, considering cumulative impacts and international importance?	
Local	In the immediate area of the impact
Regional / National	Having large scale impacts
International	Having international importance
Type – What is the impact	
Direct	Caused by the project and occur simultaneously with project activities
Indirect	Associated with the project and may occur at a later time or wider area
Cumulative	Combined effects of the project with other existing / planned activities
Probability	
Low	<25%
Medium	25-75%
High	>75%

5.3.1. Impact Significance

Impact significance is determined through a synthesis of the above impact characteristics. The significance of the impact "without mitigation" is the main determinant of the nature and degree of mitigation required. Once the above factors (in **Table 12**) have been ranked for each potential impact, the impact significance of each is assessed using the criteria in **Table 13**. The impact significance will then be rated according to the significance classes (also presented in **Table 13**).

Table 13: Impact significance (IFC, 2012)

Class	Significance	Descriptions
1	Major Impact	Impacts are expected to be permanent and non-reversible on a national scale and/or have international significance or result in a legislative non- compliance.
2	Moderate Impact	Impacts are long term, but reversible and/or have regional significance.
3	Minor	Impacts are considered short term, reversible and/or localized in extent.
4	Insignificant	No impact is expected.
5	Unknown	There are insufficient data on which to assess significance.
6	Positive	Impacts are beneficial

Table 14: Environmental Impacts Identification and Evaluation.

IMPACT	AFFECTED ENVIRONMENTAL AND SOCIAL COMPONENTS														Project phase	Duration	Magnitude with project	Extent / Spatial scale	Type	Probability	Significance without mitigation
	FAUNA AND FLORA	WATER QUALITY	WATER QUANTITY	LAND USE	SOIL AND SLOPE STABILITY	VISUAL INTRUSION	AIR QUALITY	HUMAN SETTLEMENTS	PUBLIC NUISANCE	INFRASTRUCTURE & SERVICES	TOURISM	ARCHAEOLOGY	PUBLIC HEALTH & SAFETY	SOURCE OF INCOME	CULTURE & HERITAGE							
Vegetation Clearing	√	√	√	√	√	√	√		√		√		√	√	√	TDBS	Short	Small	Local	Direct	Medium >75%	Major (-)
Air pollution	√	√	√	√			√		√		√		√	√		TDBS	Short	Moderate	Local	Direct	Medium 25 - 75%	Minor (-)
Soil pollution	√	√	√	√	√	√	√		√	√			√	√		TDBS	Short	Small	Local	Direct	Medium 25 - 75%	Minor (-)
Ground water pollution	√	√	√	√	√					√	√		√	√		TDB	Moderate	Moderate	Local	Direct	Medium 25 - 75%	Major (-)
Solid waste Generation	√	√	√	√		√	√		√	√	√		√	√		TDB	Permanent	Moderate	Local	Direct	Medium 25 - 75%	Major (-)
Vehicular Movements	√			√	√	√	√		√		√		√			TDBS	Short	Small	Local	Direct	Medium 25 - 75%	Minor (-)
Visual impact				√		√	√		√	√			√	√		TDBS	Short	Small	Local	Direct	Medium 25 - 75%	Minor (-)
Dimension stone test cuts	√	√	√	√	√	√	√		√	√	√	√	√	√		DTC	Short	Moderate	Local	Direct	Medium 25 - 75%	Major
Employment Creation								√		√			√	√	√	TD	Temporary	High	Regional	Direct	High >75%	Moderate (+)
Land Use change	√	√	√	√	√	√		√	√		√	√	√	√	√	TDBS	Permanent	Medium	Local	Direct	Medium 25 - 75%	Minor (-)
Occupational Hazards													√			TDBS	Short	Small	Local	Direct	Medium 25 - 75%	Minor (-)

IMPACT	AFFECTED ENVIRONMENTAL AND SOCIAL COMPONENTS															Project phase	Duration	Magnitude with project	Extent / Spatial scale	Type	Probability	Significance without mitigation
	FAUNA AND FLORA	WATER QUALITY	WATER QUANTITY	LAND USE	SOIL AND SLOPE STABILITY	VISUAL INTRUSION	AIR QUALITY	HUMAN SETTLEMENTS	PUBLIC NUISANCE	INFRASTRUCTURE & SERVICES	TOURISM	ARCHAEOLOGY	PUBLIC HEALTH & SAFETY	SOURCE OF INCOME	CULTURE & HERITAGE							
Drone Flights	√			√					√		√					G	Short	Medium	Local	Direct	Medium 25 - 75%	Major

Key: T – Trenching phase, D – Drilling phase, C – Dimension Stone Test Cutting, S – Site Establishment phase, Geophysical survey

5.4. Potential Impacts considered insignificant

Environmental / Social Aspect	*Project phase*	*Nature of Impact (Positive / Negative)*	*Potential Impact*	*Assessment findings*
Impact on Fauna	Invasive exploration	Negative	Movement of equipment and noise	The exploration activities are not expected to affect actively mobile animals that can easily migrate to other places within the NNNP.
Noise	Mobilization and site establishment, Trenching, Drilling, Bulk sampling.	Negative	Noise from operation of machinery and equipment	Minor given that there are no sensitive receptors in the vicinity.
Cultural heritage	Invasive exploration	Negative	Potential to uncover heritage remains during project activities.	Findings are unlikely, as no known heritage sites are mapped and protected in the project area. The chance find procedure will be employed and protects culture and heritage of the project area should there be any findings during the project lifecycle.
Climate change adaptation	Invasive exploration	Negative	The potential for the project to induce climate change.	The proposed project is unlikely to be affected by potential climate change impacts in the short to medium term, but in the long term.

Environmental / Social Aspect	***Project phase***	***Nature of Impact (Positive / Negative)***	***Potential Impact***	***Assessment findings***
Climate change cause / contribution	Invasive exploration	Negative	The proposed project contributing to climate change through the emissions of Green House Gasses.	The proposed project is of a medium term, with exploration envisioned to be completed after a few years and contribution is insignificant.

5.5. Potentially Significant Impacts scoped into the ESMP.

The following section describes potentially significant issues based on the findings from the site visit and consultations held with IAP's. Many of these impacts can be adequately addressed through the implementation of appropriate mitigation and management measures.

Table 15: Identified potential significant impacts scoped into the ESMP.

Environmental / Social Aspect	***Project Activities***	***Nature of Impact (+ve / -ve)***	***Potential Impact***	***Assessment findings***	***Proposed Mitigation Measures***
Vegetation clearing	Site establishment, Trenching, Drilling and Bulk sampling	-ve	Loss of vegetation, Loss of habitats, Reduced aesthetic value	Vegetation has ecological and conservation significance, providing habitat for wildlife, contributing to ecosystem resilience. It is mainly found on the gravel plains, along ephemeral rivers and rocky outcrops or hills. Some of the vegetation is endemic and protected and it is important to avoid these areas as much as possible. Impacts may arise from direct damage by motor vehicles driving over them, drill rigs,	No removal or collection of plants allowed. Driving on existing tracks. Identify and mark special plants and arrange relocation if they cannot be avoided. Avoid working in areas with special plants or arrange for relocation as above.

				excavations or clearing to make way for equipment.	
Impacts on reptiles	Site establishment, Trenching, Drilling and Bulk sampling	-ve	Reptiles and slow-moving terrestrial animals may be affected during exploration activities.	Some of these animals may be destroyed or their habitats damaged.	Driving should be restricted to existing tracks only. Drive slowly. Avoid driving over burrows and mounds etc.
Social Economic Benefits	Site establishment, Trenching, Drilling and Bulk sampling	+ve	Capital injection to fund the exploration activities and employment creation	The jobs created during the exploration phase are significant at the local level and will stimulate local economy indirectly. The data generated will add on to the pool of knowledge for future developments.	Capitalize on blending expatriates with locals for skills transfer.
Soil and Ground water pollution	Site establishment, Trenching, Drilling and Bulk sampling	-ve	Ground water pollution due to: 1. Point source ground water pollution from refueling point. 2. Point source pollution from hazardous chemical spills.	Servicing of equipment and machinery can result in spillages. Spillages may also occur during fueling.	Fuel storage tank should be erected on, and impermeable bund walled surface with a volume of twice the size of the tank.
Occupational Hazards	Work site establishment, Trenching,	-ve	Occupational health and safety hazards in	Moving machinery and parts of equipment are a safety hazard to the	Contractors to have SHE policy in place and enforced by a SHE Officer. Machinery

	Drilling and Bulk sampling		the exploration industry are common.	employees including dust generated by the work activities.	should be well serviced and maintained.
Solid waste generation	Site establishment, Trenching, Drilling and Bulk sampling	-ve	The exploration team is expected to generate domestic solid waste from their work site area during exploration.	Waste will be generated by employees ranging from office materials to kitchen waste all of which comprises general waste.	The proponent will develop a waste management plan to counter the impact of waste generation and dispersal on the project footprint area. Provide adequate number of bins to contain domestic waste. All litter should be disposed of at the nearest designated disposal site (Proponent should arrange with Usakos Municipality).
Waste management (liquid)	Site establishment, Trenching, Drilling and Bulk sampling	-ve	Liquid waste management should conform to standards to alleviate potential ground water contamination.	Waste will be generated from sanitation facilities on the work site area.	Proponent should make use of Dixy toilets which should be emptied at a designated sewer system.
Noise pollution	Trenching, Drilling and Bulk sampling	-ve	Noise from equipment and machinery during exploration	Noise generated by machinery and equipment especially during drilling.	Noise can be a nuisance to the employees. Power efficient tools/machinery should be used. Workers

					should be given protective equipment when operating noisy equipment while noisy operations can be done during the day.
Land Use change	Trenching, Drilling and Bulk sampling	+ve	Land use change may be triggered by discovery of economic mineral deposits resulting in increased economic activity.	The project area will be restricted from the public and tourists during exploration.	Reduced access to the tourism sites / activities in the project area depending on the preliminary exploration results. Create awareness and formulate implementation plans that harmonize exploration and existing status quo especially tourism. Create new tourism products and sites.
Air quality	Site establishment, Trenching, Drilling and Bulk sampling	-ve	The exploration activities generate dust and other particulate matter. While scrapping of the soil during site establishment also	Excavation, drilling and bulk sampling activities will discharge some form of air pollution into the atmosphere and marginally affect the ambient air quality of the vicinity.	Dust can be suppressed during drilling activities and scraping of land surfaces using water.

			creates dust particulate matter.		
Drone flying	Geophysical Survey	-ve	Drone flying negatively affects wildlife.	Drones can potentially collide with manned aircrafts flying tourists over the Namib Naukluft National Park endangering passengers and crew. Flying drones induce stress to many animal species especially nesting birds and breeding animals. They also cause noise and visual impact.	Follow fly regulations prescribed by NCAA and approval by NNNP Management.
Dimension stone Test Cuts	Sample Block Extraction	-ve	Sample block extraction generate dust and visual impact.	The extraction of a sample block potentially has a major visual impact when in the field of view of the tourist route along the C28 road and near to see by eye.	Test cuts should be done on the blind side of the hillside or very far from the NNNP access roads where its not visible.

5.6. Mitigation Measures

Mitigation measures will focus on reducing the effects of the potential environmental and social impacts identified and to ensure that an acceptable measure of mitigation options during exploration can be maintained when an impact cannot be avoided completely. An ESMP will be developed and will set out the management and mitigation measures for the project, responsible parties for implementation, monitoring and enforcement, monitoring indicators and indicators for the respective impacts.

6. CONCLUSION AND WAY FOWARD

6.1. Conclusion

Through the scoping process, it was found that there were no significant impacts emanating from this project that warrant conducting specialist studies. This is mainly because the project is at the exploration phase and predominantly making use of non-invasive methods (desktop, electromagnetic surveys) while trenching, drilling and bulk sampling will be target specific as dictated by the survey results. This spares non-target areas from unnecessary destruction or disturbances. The impacts are also short term and minor and can be management by the proposed mitigation measures. As a result, we can conclude that this ESR and accompanying ESMP can suffice and forms the basis upon which an ECC can be granted for the exploration activities planned on EPL 9983.

6.2. Way Forward

The ESR was submitted to MME being the competent authority for issuing of consent to allow MEFT to conduct the necessary review as required before issuing an ECC. The decision from MEFT will be communicated registered I&APs as required under the EMA Act.

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