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REPORT:

SCOPING REPORT AND IMPACT ASSESSMENT FOR EXPLORATION ACTIVITIES ON EPL 8571, KUNENE REGION, NAMIBIA

PROJECT NUMBER: ECC-99-387-REP-08-D

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on EPL 8571, Kunene Region, Namibia

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Client Representatives: Mr Westley Price

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EXECUTIVE SUMMARY

Skorpion Mining Company (Pty) Ltd (The Proponent) to conduct an environmental and social impact assessment (ESIA) for exploration of base, rare and precious metals and industrial minerals within the proposed exclusive prospecting licence area located on (EPL) 8571. EPL 8571 is located within the Opuwo District, in the Kunene Region and is accessible via the main tar road C41 and gravel roads such as the D3705 and D3707.

The proposed Project triggers listed activities in terms of the Environmental Management Act, No. 7 of 2007 and its regulations, No. 30 of 2012. Therefore, an environmental clearance certificate is required. As part of the environmental clearance certificate application, an Environmental Impact Assessment (EIA) has been undertaken to satisfy the requirements of the Environmental Management Act, No. 7 of 2007. This environmental report and environmental management plan (EMP) shall be submitted to the competent authority as part of the application for the environmental clearance certificate.

The proposed activities on EPL 8571 include extremely low impact exploration such as remote sensing from satellites and electromagnetic surveys to detect any mineralization in the area to more invasive methods such as RC and diamond drilling. Existing tracks shall be used as far as reasonably practicable. If new tracks are required, they will be developed by hand or by use of a bulldozer, terrain-dependent. Vegetation clearing will be limited to clearing for access tracks and site camps. Access agreements will be entered into with all farmers or holders of private ground which may be accessed.

The exploration activities will commence as soon as an environmental clearance certificate has been granted and activities are expected to be conducted over 3 years, or the duration of the exploration licence.

EPL 8571 is situated in the north-western part of Namibia in the Kunene Region where it falls over two communal conservancies namely Ongongo and Otjiu-West. The regional geology of this area consists mainly of the Otavi Group and a small narrow section of the Swakop Group to the western side of the EPL. The EPL area is largely covered by Petric Calcisols (River areas) and smaller sections of rock outcrops. The groundwater vulnerability in this area is considered to be high and smaller sections very high and very low (Porous aquifer) and groundwater recharge within this area is considered to be low (>0.5 to 1 % of the total average rainfall). In this part of Namibia, the following tree and shrub species are either protected under national legislation, endemic, near-endemic or listed in the CITES appendices. The overall terrestrial diversity for this area is low to moderate compared to other parts of the country. The locals of these communities are mainly employed by lodges, camps, or the locals farm with livestock in the area. Tourism and consumptive wildlife use are the main benefit contributor to these local communities, in addition, income generated from plant products and local crafts.

The impacts of exploration activities related to airborne dust are expected to be limited to vehicular traffic. There will be some release of exhaust fumes from machinery that will impact the immediate vicinity but will be of short duration and limited distance from the source.

Additionally, there will be associated drilling and machinery noise, which could be a disturbance to immediate neighbours and possibly wildlife, but this will be of short duration. Through further investigation, it was determined that the effects from noise are considered to be of minor significance, however with additional mitigation, the significance is reduced to low. The additional mitigation measures include:

- Residents shall be provided at least two weeks' notice of drilling operations within 1km of their property;
- Activities will be minimized to allocated daylight working hours;
- Continual engagement with residents and management of the national park shall be undertaken by the Proponent to identify any concerns or issues, and appropriate mitigation and management measures shall be further agreed upon; and
- Noise suppression measures shall be applied if drilling occurs in locations that may affect residents.

The overall potential impact of this proposed Project is not considered significant as it does not widely exceed recognised levels of acceptable change, does not threaten the integrity of the receptors, and is not material to the decision-making process. The assessment is considered to be comprehensive and sufficient to identify impacts, and it is concluded that no further assessment is required.

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TERMS AND ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
AEM	Aerial electromagnetic survey
BID	Background Information Document
CITES	The Convention on International Trade in Endangered Species
DEA	Directorate of Environmental Affairs
EC	Environmental Commissioner
ECC	Environmental Compliance Consultancy
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
EMA	Environmental Management Act, No.7 of 2007
EMP	environmental management plan
ENE	East-Northeast
EPL	Exclusive Prospecting Licence
ESIA	Environmental and Social Impact Assessment
GDP	Gross Domestic Produce
I&APs	Interested and Affected Parties
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
LDVs	Light Duty Vehicles
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
NDP	National Development Plan
NPC	National Planning Committee
NSA	National Statistics Agency
RC	Reverse Circulation
RH	Relative Humidity
SSW	South-Southwest
SW	Southwest

1 INTRODUCTION

1.1 COMPANY BACKGROUND

Environmental Compliance Consultancy (ECC) has been retained Skorpion Mining Company (Pty) Ltd (The Proponent) to conduct an environmental and social impact assessment (ESIA) for exploration of base, rare and precious metals and industrial minerals within the proposed exclusive prospecting licence area located on (EPL) 8571. EPL 8571 is located within the Opuwo District, in the Kunene Region and is accessible via the main tar road C41 and gravel roads such as the D3705 and D3707. The location of EPL 8571 is shown in Figure 1.

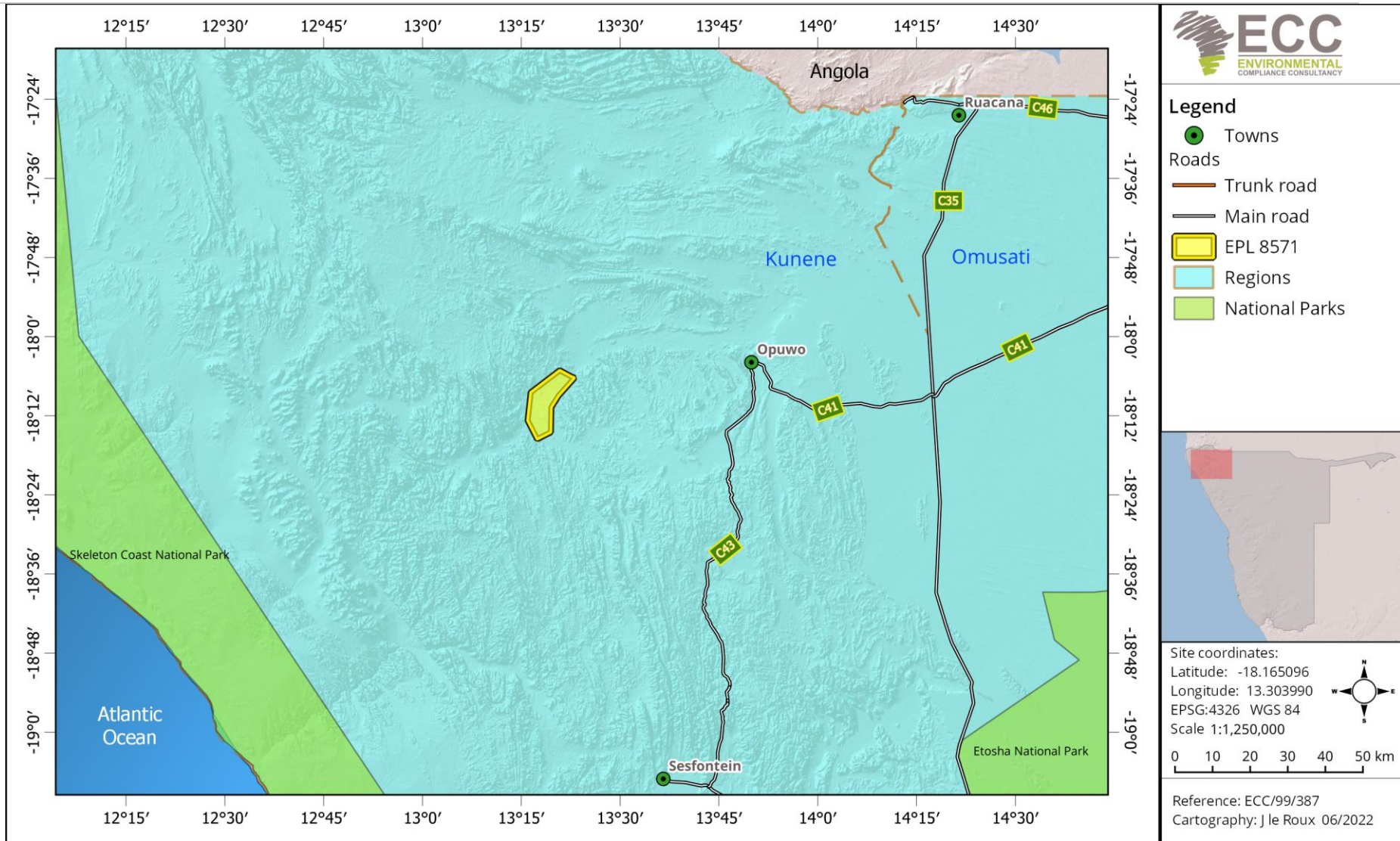


Figure 1 - Locality map of EPL 8571, Kunene Region

1.2 PURPOSE OF THE SCOPING REPORT

An environmental and social impact assessment (ESIA) has commenced in terms of the requirements of the Environmental Management Act, No.7 of 2007 (EMA 2007) and its regulations. The purpose of this report is to present the findings of the scoping study phase that forms part of the larger ESIA process.

The scoping report summarises the prescribed ESIA process followed; provides information on the baseline biophysical and socioeconomic environments; project description details; assesses the identified impacts and presents an environmental management plan (EMP), which is provided.

ECC's terms of reference for the assessment is strictly to address potential effects, whether positive or negative and their relative significance, explore alternatives for technical recommendations and identify appropriate mitigation measures.

This report provides information to the public and stakeholders to aid in the decision-making process for the proposed Project. The objectives are to:

- Provide a description of the proposed activity and the site on which the activity is to be undertaken, and the location of the activity on the site;
- Provide a description of the environment that may be affected by the activity;
- Identify the laws and guidelines that have been considered in the assessment and preparation of this report;
- Provide details of the public consultation process;
- Describe the need and desirability of the activity;
- Provide a high level environmental and social impact assessment on feasible alternatives that were considered; and
- Report the assessment findings, identifying the significance of effects, including cumulative effects, and effective and feasible mitigation measures.

In addition to the environmental assessment, an EMP (Appendix A) is also required in terms of the Environmental Management Act, No. 7 of 2007. An EMP has been developed to provide a management framework for the planning and implementation of exploration activities. The EMP provides exploration standards and arrangements to ensure that the potential environmental and social impacts are mitigated, prevented and/or minimised as far as reasonably practicable, and that statutory requirements and other legal obligations are fulfilled.

1.3 PROPONENT DETAILS

Table 1 - Proponent's details

Contact Person	Contact Details
Skorpion Mining Company (Pty) Ltd Mr Westley Price (Deputy Head of Exploration)	wprice@vedantaresources.co.za +27 54 983 9241 C13 Road Rosh Pinah, 9000 Namibia

1.4 ENVIRONMENTAL COMPLIANCE CONSULTANCY

ECC, a Namibian consultancy (registration number Close Corporation 2013/11401), has prepared this scoping report and impact assessment on behalf of the Proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across southern Africa, in both the public and private sectors. ECC is independent of the Proponent and has no vested or financial interest in the proposed Project, except for fair remuneration for professional services rendered. All compliance and regulatory requirements regarding this ESIA report should be forwarded by email or posted to the following address:

Environmental Compliance Consultancy
PO BOX 91193
Klein Windhoek, Namibia
Tel: +264 81 669 7608
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1.5 ENVIRONMENTAL LEGAL REQUIREMENTS

The Environmental Management Act, No.7 of 2007 stipulates that an environmental clearance certificate is required to undertake listed activities in terms of the Act and its regulations. Listed activities triggered by the Project in terms of the Environmental Management Act, No. 7 of 2007 and its regulations are as follows:

Table 2 - Listed activities triggered by the project

Listed Activity	ESIA Screening Finding
<p>WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES</p> <p>(2.1) The construction of facilities for waste sites, treatment of waste and disposal of waste.</p> <p>(2.3) The import, processing, use and recycling, temporary storage, transit or export of waste.</p>	<ul style="list-style-type: none"> Waste generated which will be mainly solid waste and general waste during the exploration phase will be removed by a skip and will be disposed of at the nearest landfill site. Waste will be recycled, where possible. A portable chemical toilet, long drop hole for a toilet or chemical toilets will be used during exploration activities by the diamond drill crew.
<p>MINING AND QUARRYING ACTIVITIES</p> <p>(3.1) The construction of facilities for any process or activities which requires a license, right or other forms of authorisation, and the renewal of a license, right or other forms of authorisation, in terms of the Minerals (Prospecting and Mining Act), 1992.</p> <p>(3.2) Other forms of mining or extraction of any natural resources whether regulated by law or not.</p> <p>(3.3) Resource extraction, manipulation, conservation, and related activities</p>	<ul style="list-style-type: none"> The proposed project has obtained an EPL from MME; now requires an environmental clearance from DEA/MEFT for the search of base and rare metals, industrial minerals and precious metals. The proponent will be undertaking exploration activities on EPL 8571, which will include: remote sensing, electromagnetic surveys, soil sampling, airborne geophysics, RC drilling and diamond drilling.

Listed Activity	ESIA Screening Finding
<p>FORESTRY ACTIVITIES (4.) The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.</p>	<ul style="list-style-type: none"> Limited vegetation clearing may be required for tracks and survey access creation, and possibly for the set up for survey and drilling teams' field camps. Clearing of large trees will be avoided.
<p>WATER RESOURCE DEVELOPMENTS (8.1) The abstraction of ground or surface water for industrial or commercial purposes.</p>	<ul style="list-style-type: none"> For the drilling of exploration boreholes, groundwater may need to be abstracted, or water will be sourced.
<p>HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE (9.2) Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste.</p>	<ul style="list-style-type: none"> Portable chemical toilets, long drop hole for toilet will be used during the exploration activities.

2 APPROACH TO THE ASSESSMENT

2.1 Purpose and scope of the assessment

This assessment aims to determine which impacts are likely to be significant; to scope the available data and identify any gaps that need to be filled; to determine the spatial and temporal scope and to identify the assessment methodology.

The scope of the assessment was determined through undertaking a preliminary assessment of the proposed Project against the receiving environment, obtained through a desktop review and available site-specific literature.

2.2 The assessment process

The ESIA methodology applied to this assessment has been developed using the International Finance Corporation (IFC) standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012), which establishes the importance of:

- Integrated assessment to identify the environmental and social impacts, risks, and opportunities of Projects;
- Effective community engagement through disclosure of Project -related information and consultation with local communities on matters that directly affect them and
- The client's management of environmental and social performance throughout the life of the Project

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and EMP (Republic of Namibia, 2008) as well as the international and national best practice; and over 25 years of combined EIA experience, were also drawn upon in the assessment process. This impact assessment is a formal process in which the potential effects of the Project on the biophysical, social, and economic environments are identified, assessed, and reported so that the significance of potential impacts can be taken into account when considering whether to grant approval, consent or support for the proposed Project.

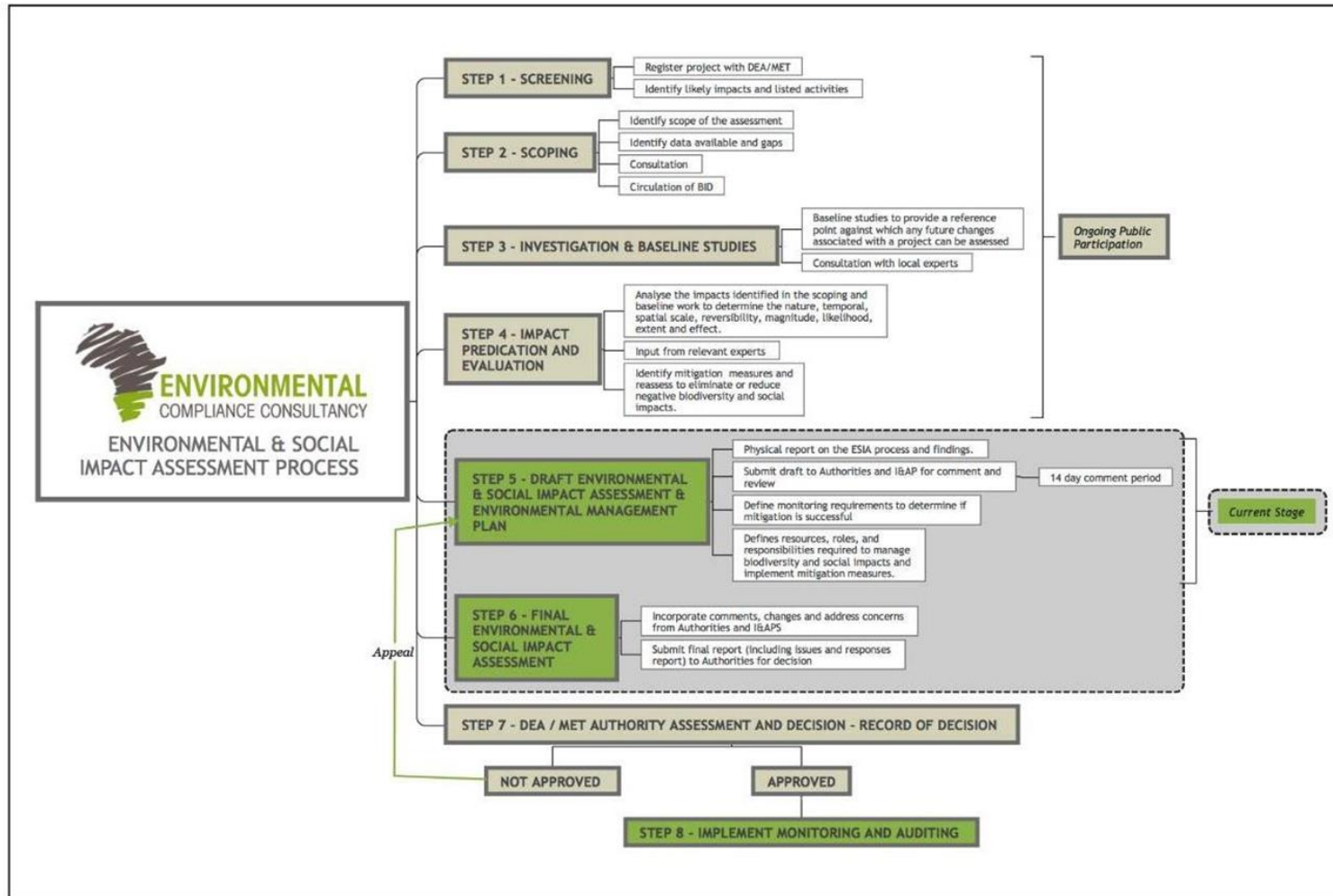


Figure 2 - ESIA Process

2.3 SCREENING OF THE PROJECT

The first stages in the ESIA process are to register the Project with the DEA / MEFT (completed) and undertake a screening exercise to determine whether it is considered as a listed activity under the Environmental Management Act, No. 7 of 2007 and associated regulations and if significant impacts may arise from the Project. The location, scale, and duration of Project activities will be considered against the receiving environment.

It was concluded that an ESIA (e.g. scoping report and EMP) is required, as the proposed Project is considered as a listed activity and there may be potential for significant impacts to occur.

2.4 SCOPING AND THE ENVIRONMENTAL ASSESSMENT

Where an ESIA is required, the second stage is to scope the assessment. The main aims of this stage are to determine which impacts are likely to be significant (the main focus of the assessment); scope the available data and any gaps which need to be filled; determine the spatial and temporal scope; and identify the assessment methodology.

The screening phase of the Project is a preliminary analysis to determine ways in which the Project interact with the biophysical, social, and economic environment. Impacts that are identified as potentially significant during the screening and scoping phases are taken forward for further assessment in the ESIA. The details and outcome of the screening process are discussed further in sections 6 and 7.

Feedback from consultation with the client and stakeholders are also informed in this process.

The following environmental and social topics and subtopics were scoped into the assessment:

SOCIO-ECONOMIC ENVIRONMENT

- Limited goods and services procurement within the local economy.

BIOPHYSICAL ENVIRONMENT

- Dust emissions
- Soil and geology
- Terrestrial ecology
- Terrestrial biodiversity (including fauna and flora)
- Groundwater (potential cumulative impact). Water management suggestions are contained in the EMP.

The following topic was scoped out of the ESIA, as no likely significant impacts are predicted as the proposed Project poses little to no change from the current baseline, therefore are not discussed further in this report.

2.5 BASELINE STUDIES

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed Project can be measured. For the proposed Project, baseline information was obtained through a desktop study, consultation, and engagement with stakeholders (Appendix B), focussing on environmental receptors that could be affected by the proposed Project, verified through site-specific information. The baseline information is covered in Section 5.

2.6 PUBLIC CONSULTATION

Public participation and consultation are a requirement as stipulated in the Environmental Impact Assessment Regulations (Regulations 21 and 23) of the EMA, No.7 of 2007, for a project undertaking a listed activity and requires an environmental clearance certificate. Consultation is a compulsory and critical component of the ESIA process for achieving transparent decision-making and can provide many benefits. Consultation is ongoing during the ESIA process. The objectives of the public participation and consultation process are to:

- Provide information on the Project, introducing the overall project concept and planning in the form of a background information document (BID)
- Determine the relevant government, regional and local regulating authorities
- Listen to and understand community issues, record concerns and questions
- Explain the process of the ESIA and timeframes involved and establish a platform for ongoing consultation

2.6.1 IDENTIFICATION OF KEY STAKEHOLDER AND INTERESTED OR AFFECTED PARTIES

A stakeholder mapping exercise was undertaken to identify individuals or groups of stakeholders, and the method in which they will be engaged during the ESIA process.

Stakeholders were approached through direct communication (letters and phone calls), the national press, or directly by email. A summarized list of stakeholders for this project is given below:

- The general public with an interest in the Project;
- Ministry of Environment, Forestry and Tourism (MEFT);
- Ministry of Mines and Energy (MME);
- Kunene Regional Council
- Opuwo Town Council
- Conservancy leaders

- Traditional Authorities

The records of the public consultation process in the form of a summary report will provide a list of interested and affected parties (I&AP's), evidence of consultation, including minutes of public meetings, advertisements in national newspapers, and a summary of the comments or questions raised by the public.

The draft scoping report was submitted to the competent authority, and all interested and affected parties for their review on the 55 August 2022. The public review period was open for a period of 7 days from the 55 August 2022 to 31 August 2022

2.6.2 NON-TECHNICAL SUMMARY

The Background Information Document (BID) presents a high-level description of the proposed Project; sets out the ESIA process and when and how consultation is undertaken; and provides contact details for further Project -specific inquiries to all registered I&APs. The BID was distributed to registered I&APs and the BID can be found in Appendix B.

2.6.3 NEWSPAPERS AND ADVERTISEMENTS

Notices regarding the proposed Project and associated activities were circulated in three newspapers namely the 'Republikein, Sun, and Allgemeine Zeitung' on the 27 June 2022 and 4 July 2022 (see Appendix C). The purpose of this was to commence the consultation process by informing the public about the Project and enabling I&APs to register any comments and interest raised for the Project.

2.6.4 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of the proposed Project. The notice was set up at the boundary of the EPL as illustrated in Appendix C.

2.6.5 PUBLIC MEETING

In terms of Section 22 of the Environmental Management Act, No. 7 of 2007 and its regulations, for the purpose of registering I&APs. An official public meeting wasn't held however, public consultation took place on various occasions during the scoping and impact assessment phase of compiling this report. The first round of consultation took place in February 2022 and the second round of consultation took place in July of 2022.

Figure 3, Figure 4 and Figure 5 below show the consultative process that took place with the traditional leaders, community members and Kunene Regional Town Council in Opuwo.



Figure 3 - ECC stakeholder consultation with the Kunene Regional Council



Figure 4 - ECC public consultation with community members



Figure 5 - ECC consultation with Traditional Authorities

2.6.6 SUMMARY OF ISSUES RAISED

The I&APs were encouraged to provide constructive input during the consultation periods. Matters of concern raised during the initial round of consultation are presented in Appendix C.

Table 3 - Concerns and comments raised by stakeholder and I&APs during the public consultation process

<p style="text-align: center;">Friday 15th July 2022 Address: Ongongo Village, Ongongo Conservancy Kunene Region</p>		
Stakeholder name and details	Comments/Questions Received	Response/Clarification
<p>Stephanus Tjavera Member of the community</p>	<p>In a scenario when mineral deposits are discovered within our grazing lands of which are already governed by the conservancy constitution, will the Proponent force us to vacate these precious sites of ours and our animals?</p>	<p>The process of converting an exclusive prospecting right (EPL) to a mining license is an incredibly lengthy and tedious one, and all community needs/concerns are taken into account. There will be numerous public consultations during this process, so the community must not feel that this is their only/last opportunity to be heard. Also, the conversion from EPL to ML is at the sole discretion of the MME; If the MME feels the social negative impacts outweigh the positive impacts, the ML will not be issued.</p>
<p>Pangii Muharukua Member of the community</p>	<p>How many of our local people will be employed during the exploration period?</p>	<p>This number will depend on the phase and success rate of exploration. For early-stage exploration (soil sampling) this will likely be 4-6 people. Unfortunately, the employment would not be permanent, as exploration phases are intermittent, normally 2-6</p>

Friday 15th July 2022

Address: Ongongo Village, Ongongo Conservancy
Kunene Region

Stakeholder name and details	Comments/Questions Received	Response/Clarification
		months at a time. For example, in South Africa we have deposits that we are drilling out that employs 14 x unskilled locals on 12 month contracts. This number is only in the event of a successful discovery.
Ms Innovadu Muhurukua Chairlady for Ongongo Conservancy	Why is it necessary to erect site notices on our land if the majority of our local people cannot read and write?	It is a statutory requirement and due to the fact that so many people cannot read/write, a public meeting was held. The EMA Act unfortunately does not make provision for site notices to be printed in any other local language. The EAP and the Proponent fully understand that community members may find it difficult to interpret these site notices and for this public meeting were meant to fill this gap.
Member of the community	There were exploration companies in our village before and never gave us feedback, will we expect the same in this case?	Exploration is quite a “cut-throat” business, so people tend not to announce their results to avoid competitors applying for ground around them. The lack of feedback should not be considered malicious. The companies are simply trying to protect their interests. As an example, we have 3 licenses spread quite far apart. If we make a discovery, we would most certainly want to apply for more licenses in the area. If

Friday 15th July 2022

Address: Ongongo Village, Ongongo Conservancy
Kunene Region

Stakeholder name and details	Comments/Questions Received	Response/Clarification
		<p>the positive results are shared too widely, competitors can apply for these licenses before us, causing major losses. What we do normally share with the community is information relating to water. If we drill holes that have particularly strong water, we share this with the community to ensure this gets utilised. On a side note, it is a legal requirement to submit all exploration data to the MME once a license is relinquished/abandoned, so if there is an urgent need to see the data, it should be accessible through the MME in Windhoek.</p>
<p>Vehimba Muhurukua Headman of Ongongo Village</p>	<p>Why are we not given food and drinks when we attend meetings of this nature? Previous companies that have called us for meetings always gave us food and drinks.</p>	<p>Concern noted. This unfortunately is not a requirement of the EMA Act 2007. Additionally, allegations could be drawn that the EAP is bribing communities with food and drinks.</p>

The public is further being provided an opportunity to send any comments on the draft scoping report and the EMP to be included and addressed, where applicable, in the final documentation.

2.7 DRAFT EIA AND EMP

The draft report and EMP for the Project 's environmental clearance includes an assessment of the biophysical and social environment, which satisfies the requirements of Step 5 (Figure 3).

The EIA report documents the findings of the assessment process, provides stakeholders with the opportunity to comment and continue to engage in consultation and forms part of the environmental clearance application. The EMP provides measures to manage the environmental and social impacts of the proposed Project and outlines specific roles and responsibilities to fulfil the plan.

This EIA report focuses on the significant impacts that may arise from the proposed Project as described in Step 4 (Figure 2). These impacts are discussed in Chapter 7.

2.8 FINAL EIA AND EMP

This EIA report and associated appendices will be available to all stakeholders on the ECC website www.eccenvironmental.com and MEFT portal. All I&APs will be informed via email.

The EIA report and appendices are formally submitted to the Office of the Environmental Commissioner, DEA department as part of the application for an environmental clearance certificate.

2.9 AUTHORITY ASSESSMENT AND DECISION MAKING

The Environmental Commissioner in consultation with other relevant authorities will assess if the findings of the EIA presented in the EIA report is acceptable. If deemed acceptable, the Environmental Commissioner will revert back to the Proponent with a record of decision and any recommendations.

2.10 MONITORING AND AUDITING

In addition to the EMP being implemented by the Proponent, a monitoring strategy and audit procedure will be determined by the Proponent and competent authority. This will ensure key environmental receptors are monitored over time to establish any significant changes from the baseline environmental conditions caused by Project activities.

3 REVIEW OF THE LEGAL ENVIRONMENT

As stated in Section 1, an environmental clearance certificate is required for any activity listed in the Government Notice No. 29 of 2012 of the EMA 2007. The Project area is located outside of any protected areas or heritage listed areas.

A thorough review of relevant legislation has been conducted for the proposed Project. Table 4 below identifies relevant legal requirements specific to the Project, Table 5 provides the national policies and plans and Table 6 specifies permits relevant for the Project. This chapter outlines the regulatory framework applicable to the proposed Project.

3.1 NATIONAL REGULATORY FRAMEWORK

Table 4 - Details of the regulatory framework as it applied to the proposed project

National Regulatory Regime	Summary	Applicability to the Project
Constitution of the Republic of Namibia (1990)	<p>The constitution defines the country's position in relation to sustainable development and environmental management.</p> <p>The constitution refers that the State shall actively promote and maintain the welfare of the people by adopting policies aimed at the following:</p> <p>"Maintenance of ecosystems, essential ecological processes and biological diversity of Namibia, and the utilisation of living, natural resources on a sustainable basis for the benefit of all Namibians, both present, and future."</p>	<p>The Proponent is committed to the sustainable use of the environment, and has aligned its corporate mission, vision, and objectives within the ambit of the Constitution of the Republic of Namibia (1990).</p>
Minerals (Prospecting and Mining) Act No. 33 of 1992	<p>The Act provides for the granting of various licences related to mining and exploration.</p> <p>Section 50 (i) requires: "An environmental impact assessment indicating the extent of any pollution of the environment before any prospecting operations or mining operations are being carried out, and an estimate of any pollution, if any, likely to be caused by such prospecting operations or mining operations."</p> <p>The Act sets out the requirements associated with licence terms and conditions, such that the holder of a mineral licence shall comply with.</p> <p>The Act also contains relevant provisions for pollution control related to mining activities and land access</p>	<p>The proponent is still awaiting the Exclusive Prospecting Licence EPL 8571 preparedness to grant from MME which when issued to the Proponent is valid for a period of 3 years. The proposed prospecting activity on EPL 8571 requires an EIA to be carried out, as it triggers listed activities as defined in Government notice 29 in the Environmental Management Act 2007.</p> <p>Prospecting activities in EPL 8571 shall not commence until an Environmental Clearance Certificate has been issued in accordance with the provisions of the Environmental Management Act 2007.</p> <p>The Project shall be compliant with Section 76 of the Act with regard to records, maps, plans and financial</p>

National Regulatory Regime	Summary	Applicability to the Project
	<p>agreements and provides provisions that mineral licence holders are liable for any damage to land, water, plant, or animal life, caused by spilling or pollution, and must take all such steps as may be necessary to remedy such spilling, pollution, loss, or damage, at its own costs.</p>	<p>statements, information, reports and returns submitted.</p>
<p>Environmental Management Act, 2007 (Act No. 7 of 2007) and its regulations (2012), including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011)</p>	<p>The Act aims to promote sustainable management of the environment and the use of natural resources. The Act requires certain activities to obtain an environmental clearance certificate prior to Project development.</p> <p>The Act states that an EIA should be undertaken and submitted as part of the environmental clearance certificate application process.</p> <p>The MEFT is responsible for the protection and management of Namibia's natural environment. The Department of Environmental Affairs, under the MEFT, is responsible for the administration of the EIA process.</p>	<p>This environmental scoping report documents the findings of the scoping phase of the environmental assessment undertaken for the proposed Project.</p> <p>The process will be undertaken in line with the requirements under the Act and its regulations. Prospecting activities on EPL 8571 shall not commence until an Environmental Clearance Certificate has been issued in accordance with the provisions of the Environmental Management Act 2007.</p>
<p>Hazardous Substances Ordinance, No. 14 of 1974</p>	<p>This Ordinance provides for the control of toxic substances and can be applied in conjunction with the Atmospheric Pollution Prevention Ordinance, No. 11 of 1976.</p> <p>This applies to the manufacture, sale, use, disposal, and dumping of hazardous substances, as well as their import and export.</p>	<p>The planned Project will involve the handling and storage of hazardous substances such as fuels, reagents, and industrial chemicals.</p>
<p>Labour Act, No. 11 of 2007</p>	<p>The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health & Safety provisions of Employees at Work, promulgated in terms of Section</p>	<p>The Project shall adhere to all labour provisions and guidelines, as enshrined in the Labour Act. The Project shall also develop and implement a comprehensive</p>

National Regulatory Regime	Summary	Applicability to the Project
	101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997)	occupational health and safety plan to ensure adequate protection for its personnel throughout the Project lifecycle.
Petroleum Products and Energy Amendment Act, No.3 of 2000	Provides provision for the Minister to regulate the cleaning up of petroleum product spills, leaks and related incidents. The Proponent is required to carry all costs associated with such incidents.	The planned Project will involve the handling and storage of hazardous substances such as fuels, and other hydrocarbons.

3.2 NATIONAL POLICIES AND PLANS

Table 5 - National policies and plans applicable to the proposed Project

Policy or plan	Description	Relevance to the Project
Vision 2030	Vision 2030 sets out the nation’s development targets and strategies to achieve its national objectives. Vision 2030 states that the overall goal is to improve the quality of life of the Namibian people aligned with the developed world.	The proposed Project shall aim to meet the objectives of Vision 2030 and shall contribute to the overall development of the country through continued employment opportunities and ongoing contributions to the gross domestic product (GDP).
Fifth National Development Plan (NDP5)	The NDP5 is the fifth in a series of seven five-year national development plans that outline the objectives and aspirations of Namibia’s long-term vision. The NDP5 pillars are economic progression, social transformation, environmental sustainability, and good governance.	The planned Project supports meeting the objectives of the NDP5 through creating opportunities for continued employment.
The Harambee Prosperity Plan II (2021 – 2025)	Second Pillar: Economic advancement – ensuring increasing productivity of priority key sectors (including mining) and the development of additional engines of growth, such as new employment opportunities.	The Project will contribute to the continued advancement of the mining industry and create an additional employment generation engine within the regional and national landscape.

Policy or plan	Description	Relevance to the Project
Namibia's Green Plan, 1992	Namibian has developed a 12-point plan for integrated sustainable environmental management to ensure a safe and healthy environment and to maintain a viable economy. Clause 2 (f) makes specific mention to guidelines related to Mining and Sustainable Development.	Guidelines as best practise to be adhered too during operational activities.
Minerals Policy	<p>The Minerals Policy was adopted in 2002 and sets guiding principles and direction for the development of the Namibian mining sector, while communicating the values of the Namibian people.</p> <p>The policy strives to create an enabling environment for local and foreign investments in the mining sector and seeks to maximise the benefits for the Namibian people from the mining sector, while encouraging local participation.</p> <p>The objectives of the Minerals Policy are in line with the objectives of the Fifth National Development Plan that include reduction of poverty, employment creation, and economic empowerment in Namibia.</p>	<p>The planned Project conforms to the Policy, which has been considered through the ESIA process and the production of this report.</p> <p>The Proponent intends to continue to support local spending and procurement.</p> <p>The Project will comply with the general guidelines of the Policy through the adoption of various legal mechanisms to manage all aspects of the environment effectively and sustainably from the start. The ESIA is one such mechanism to ensure environmental integrity throughout the planned Project's lifecycle.</p>

Table 6 - Specific permits and licence requirements for the proposed Project

Permit or licence	Act or Regulation	Related activities requiring a permit	Relevant Authority
Environmental clearance certificate	Environmental Management Act, No 7 of 2007	Required for all listed activities shown in Table 2. Requires issuance of Environmental Clearance Certificate by the Environmental Commissioner.	Ministry of Environment, Forestry and Tourism (MEFT)

Exclusive Prospecting Licence	Section 90 (2) (A) of the Minerals Act, No.33 of 1992	Written permission from the mining commissioner in the form of an Exclusive Prospecting License (EPL 8571) has been issued to date.	Ministry of Mines and Energy (MME)
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4 PROJECT DESCRIPTION

4.1 NEED FOR THE PROJECT

The mining sector in Namibia significantly contributes to the country's Gross Domestic Product (GDP), government tax receipts and export revenues. For this reason, exploration activities are encouraged in Namibia and the vision of the Minerals Policy being to “further attract investment and enable the private sector to take the lead in exploration, mining, mineral beneficiation and marketing” supports mineral exploration and development.

The proposed Project is in line with this vision and has the potential to create employment in local communities in the Kunene Region. In the event that exploration activities are successful, and a resource can be defined, with commercially viable mineral concentrations, exploration operations can result in socio-economic development in the area.

4.2 ALTERNATIVES CONSIDERED

In terms of the Environmental Management Act, No. 7 of 2007 and its regulations, alternatives considered should be analyzed and presented in the scoping assessment and EIA report. This requirement ensures that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified.

Exploration activities range from extremely low impact exploration such as remote sensing from satellites and electromagnetic surveys to detect any mineralization in the area to more invasive methods such as RC and diamond drilling. Drilling is typically reserved for advanced targets where anomalies have been identified and mineralization is deemed too potentially be present. The methods used shall be determined, based on the exploration programme, which is further designed once more information and data is obtained. At this stage of the Project, the exploration activities are yet to be finalised and therefore a range of options remain. Once the exploration programme is further defined, the most suitable options and methods shall be identified to ensure the impacts on the environment and society are minimised.

4.2.1 NO-GO ALTERNATIVES

Should exploration activities within EPL 8571 not take place, the anticipated environmental impacts from exploration activities would not occur, however, the social and economic benefits associated with the Project would also not materialize.

There would not be an opportunity to define resources within the Project area, which would be a missed opportunity for geological mapping and data collection that typically adds to regional

knowledge of Namibia’s mineral wealth and, if found to be viable for mining, would benefit the Namibian economy.

Even in the event that the Proponent is not able to declare a resource that is economically viable, the data generated is submitted to the MME allowing subsequent tenure holders to have an increased chance of success over the same property.

4.3 EXPLORATION METHODOLOGY

All geological and geophysical work will be conducted by contractors. The schedule of activities is presented in Table 7.

Table 7 - Preliminary Exploration Schedule

Phase	Date	Activity Description
Desktop Studies	August 2022	Historical data compilation and field verification
Geological Mapping	October 2022	Detailed Geological and Structural Mapping
Geochemical Sampling	October 2022	Soil and Rock Chip Geochem
Ground Geophysics	March 2023	Follow up of any structural/geochemical targets using appropriate geophysics
Data Integration and Interpretation	May 2023	Target generation and prioritization to determine whether drill targets are present
Drill Testing	July 2023	Drill testing using RC or DD, depending on depth and priority of targets
Down-Hole Geophysics	September 2023	Down hole electromagnetics if any conductors are intersected

Please note the above schedule is highly conceptual and largely outcomes-based and subject to change.

The exploration activities on EPL 8571 will include the following: geological mapping, geochemical surveys, remote sensing, geophysical surveys (airborne and ground-based) and potentially diamond and RC drilling. Details of these methods are described below. Ground-based exploration techniques are inevitable in the search for base, rare and precious metals. Data obtained by remote-sensing data are also used to select target areas.

Remote and geophysical surveys shall be undertaken to measure the chargeability, conductivity, and magnetic susceptibility of the rocks. The geophysical surveys will be done on foot by laying out medium diameter cables on the ground. These cables will be supplied with power which will, in turn,

provide a response from underground, which can be measured on the surface. This will be done in order to identify any subsurface conductors and could point towards mineralization. Diamond drilling and possible RC drilling may occur, and the number of holes and aerial extent will be determined by the geochemical and geophysical anomalies obtained.

Pitting/trenching does not form part of the Proponent's typical exploration activities; therefore, no pitting or trenching is planned as part of the exploration activities, but this should not rule out the option of conducting such activities if it is required.

The geophysical surveys will be done on foot by laying out medium diameter cables on the ground. These cables will be supplied with power which will in turn provide a response from underground, which can be measured on the surface. This will be done in order to identify any subsurface conductors and could point towards mineralization.

Pitting/trenching does not form part of the proponent's typical exploration activities; therefore, no pitting or trenching is planned as part of the exploration activities, but this should not rule out the option of conducting such activities if it is required.

Existing tracks shall be used as far as reasonably practicable. If new tracks are required, they will be developed by hand or by use of a bulldozer, terrain dependent. Vegetation clearing will be limited to clearing for access tracks and site camps. Should additional areas be cleared for exploration activities the Forest Act, No. 12 of 2001 and its regulations will be complied with (the relevant forestry permits will be applied for if required). Any established or large trees or specially protected plant species shall not be removed, and access tracks will be routed to avoid these wherever possible and permits will be obtained as necessary.

4.3.1 EXPLORATION SCHEDULE

Field exploration activities, using techniques as discussed above, are anticipated to be carried out over the license validity period. Remote sensing studies and planning phases for the prospecting programme will require 3 months. Geochemical sampling will be undertaken concurrently with geological mapping for approximately another 3 months. Geophysical surveys will then be carried out over a period of about 2 months. The above schedules are conceptual, and interpretation of the generated data is required, which may cause duration of limited field activity, while desktop interpretation is taking place.

Drilling is typically reserved for advanced targets where the proponent has a good idea that mineralisation is present. If mineralisation is discovered, it will initially be tested through reverse circulation (RC) drilling and if these results are further positive, diamond drilling will be utilised. The duration of drilling programs is variable, and usually depends on the information that is gained from drilling.

Applications for the environmental clearance certificate, along with all required permits will be submitted during this period should a renewal of the EPL be required.

4.3.2 EQUIPMENT AND MATERIALS

During the exploration phase three to four light duty vehicles (LDVs) will be used to transport workers to, from and around the site. Trucks may be used if the proponent needs to transport large volumes of equipment.

For the remote sensing and electromagnetic survey, the following equipment will be used to carry out the surveys: 3-4km of medium diameter cables, a large generator, a magnetometer or other sensor and one to two LDVs to transport people and equipment. During airborne geophysics the proponent is most likely to use the nearest airport base and the surveys will be conducted using fixed-wing aircraft, helicopters or drones.

Geochemical sampling or soil sampling comprises the collection of a small rock, soil or sediment samples in the field along a designed grid, and the analysis of the samples to identify geochemical anomalies. These surveys are typically conducted using shovels, picks, hammers, plastic bags. If required a small subsample will be dispatched to a laboratory for further analysis.

Drilling equipment, diesel fuel and consumables shall be brought to the exploration site to support exploration activities when/if needed. For advanced exploration, a drill rig (track-mounted or trailer-mounted) will be brought to site for RC or diamond drilling, along with a water truck and supporting equipment (rods truck, water and fuel bowsers, and RC compressor) for use during drilling. For RC drilling, the rock is crushed down the hole using a percussive drill bit and the crushed rock is brought to the surface using compressed air, while with diamond drilling, a diamond impregnated drill bit is used to cut a cylinder of the rock out, which allows for more detailed interpretation.

4.3.3 POWER SUPPLY

The individual contractors will be responsible to supply their own energy needs throughout the duration of their stay within the field camps one option may be to use small-scale generators.

4.3.4 WATER SUPPLY

Water will not be required during early-stage exploration. If the Project progresses to the advanced exploration stage, the Proponent will source water from either groundwater supplies (if available) or will truck water in from the approved water source.

4.3.5 WORKERS AND ACCOMMODATION

Technical experts will either be from Namibia or South Africa, while semi-skilled or unskilled labor will be sourced locally if and where possible. Initial teams will comprise of less than ten workers. However, if the proponent is successful in identifying drill targets the size may increase beyond ten

persons. The workers will be accommodated on site, erecting camp sites at the various exploration stations with the EPL. Contractor's camp infrastructure includes tents and chemical toilets, which would be set up on site temporarily, or if there is a village nearby, the proponent will make arrangements to accommodate workers in the nearby village.

4.3.6 WASTE MANAGEMENT

The varying waste categories expected to be produced by the project are general household waste, plastics, chemical containers and hazardous waste. All household/safe waste will be disposed of at the local landfill site in Opuwo, while hazardous waste will be transported to appropriate sites for safe disposal.

4.3.7 WASTEWATER EFFLUENT

Early-stage exploration does not require the discharge of wastewater. If a significant discovery is made, diamond drilling will be involved, which does generate wastewater. This water is circulated down each hole while adding environmentally friendly drill muds. Once drilling is completed the muds and drill cuttings are separated from the water and the water circulated down hole.

4.3.8 REHABILITATION

Once exploration activities are completed the areas shall be rehabilitated to a condition as close to the original state as far as possible. Rehabilitation shall be determined during the exploration programme and shall be agreed with the traditional authorities and regional authorities as per legislation (discussed in Section 3). Before and after photographs will be used to monitor rehabilitation success.

5 ENVIRONMENT AND SOCIAL BASELINE

A detailed environmental and socio-economic baseline assessment of the Project is provided in this report. Baseline studies aim to assess possible Project impacts (positive, negative and cumulative), thus ensuring input into the Project designs, which avoid, reduce or mitigate the potentially adverse environmental and social risks. This section provides an overview of the existing biophysical environment through the analysis of the available baseline data regarding the receiving environment. Desktop studies, followed by site verification on the national database are undertaken as part of the scoping process to get information about the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed Project can be measured.

5.1 BASELINE DATA COLLECTION

Initial baseline studies relevant to the Project formed part of the initial environmental assessment conducted for the EPL on which the Project is situated. As part of this assessment, the baseline was studied in detail, with inputs from specialist studies further discussed as part of the environmental and social impact assessment process

5.2 LAND USE

EPL 8571 is situated in the north-western part of Namibia in the Kunene Region where it falls over two communal conservancies namely Ongongo and Otjiu-West. Figure 6 outlines the EPL area with the surrounding communal conservancies.

Ongongo Conservancy has been registered since February 2012 and covers an area of 501 km² and has an approximate population of 882 individuals. Otjiu-West conservancy covers a larger area of 1100 km² with a population of 829 individuals and has been registered since May 2012.

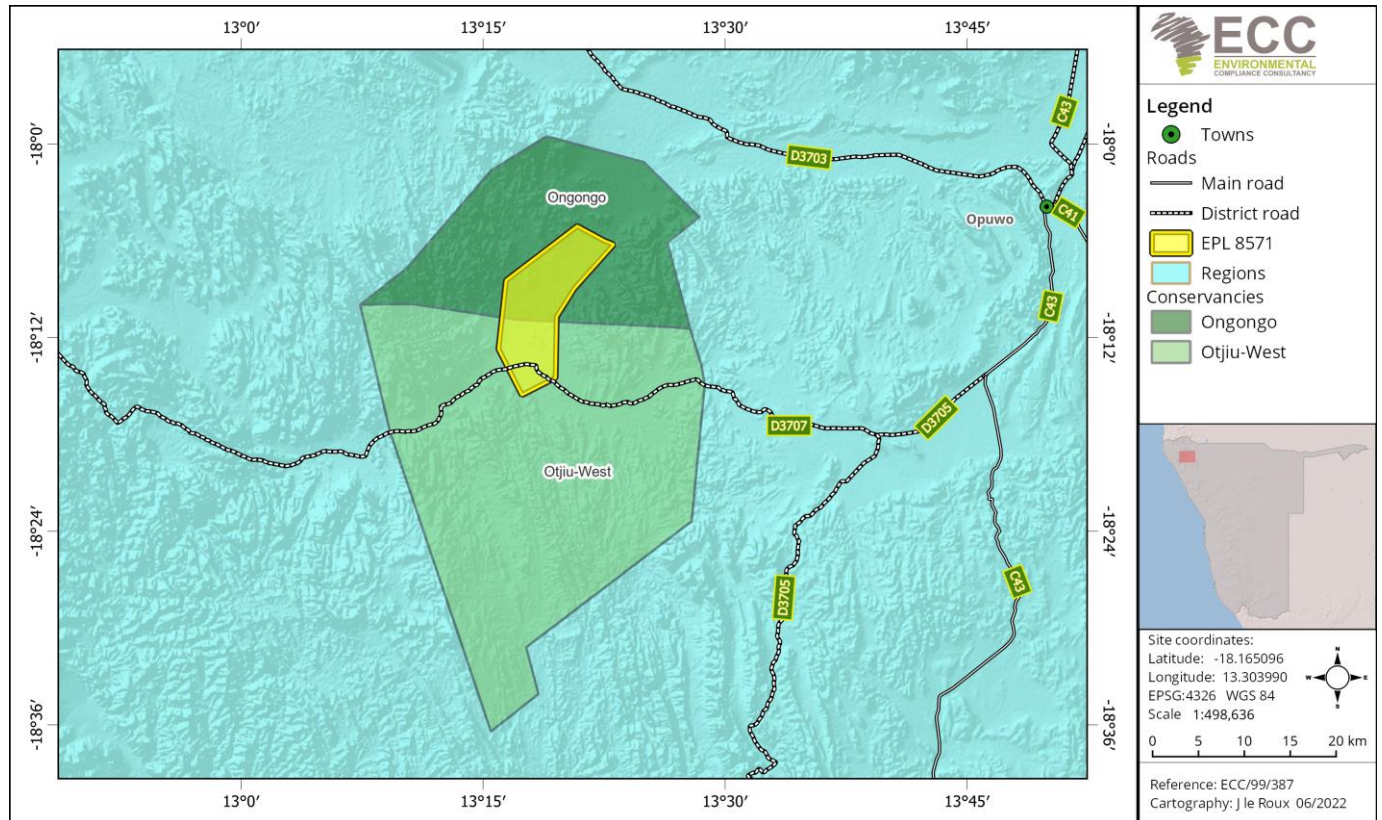


Figure 6 – Surrounding communal conservancies

5.3 CLIMATE

The proposed EPL is situated southwest of Opuwo in the Kunene Region, Namibia. The area where the EPL 8571 is located has a climate that is characterised by hot summers and mild winters with an average annual temperature of between 20 °C to 21 °C, mean maximum temperatures ranging between 30 °C and 35 °C and mean minimum temperatures ranging between 12 °C to 22 °C. The hottest months of the year are between September and November and the coolest months are in June and July (Bubenzer, 2002 & meteoblue, 2022).

The most humid months have a Relative Humidity (RH), averaging approximately 80% RH, and the driest months have an RH of approximately 30%. The average rainfall in this area during the year is between 200 to 250 mm and rainfall events are limited to the summer months, mainly between November and April as shown in Figure 7. Potential evaporation is between 3000 and 3200 mm per year (Bubenzer, 2002).

Climate and weather data from meteoblue (2022) for the site has been used to give the most accurate data for the EPL area. This area has wind speeds between 0 and up to 50 km/h, where the months of May to August are known to have the strongest winds. Wind can occur any time of the day and the most predominant wind directions for this area are ENE, SSW and SW shown in Figure 8 (meteoblue, 2022).

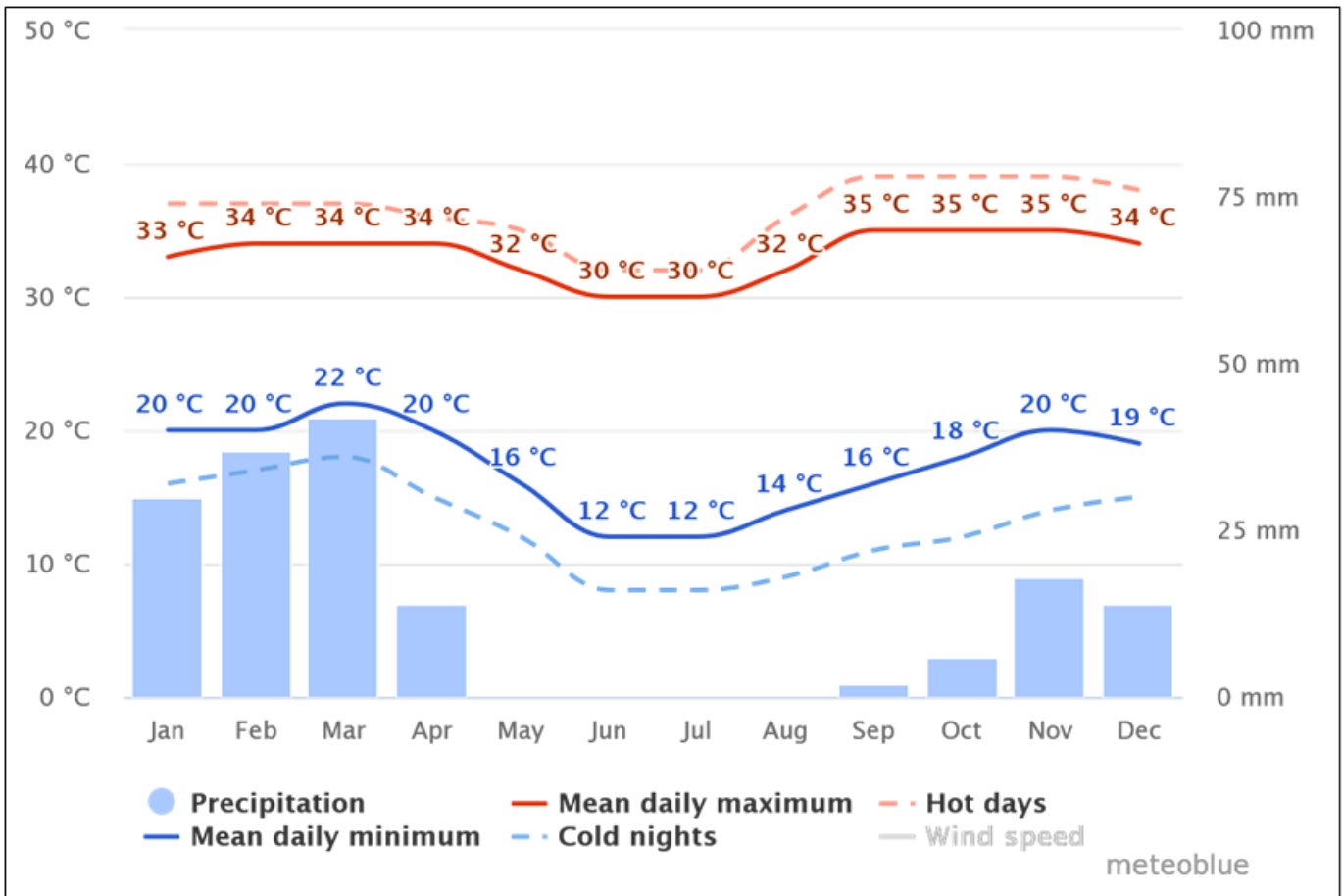


Figure 7 - Yearly expected weather conditions

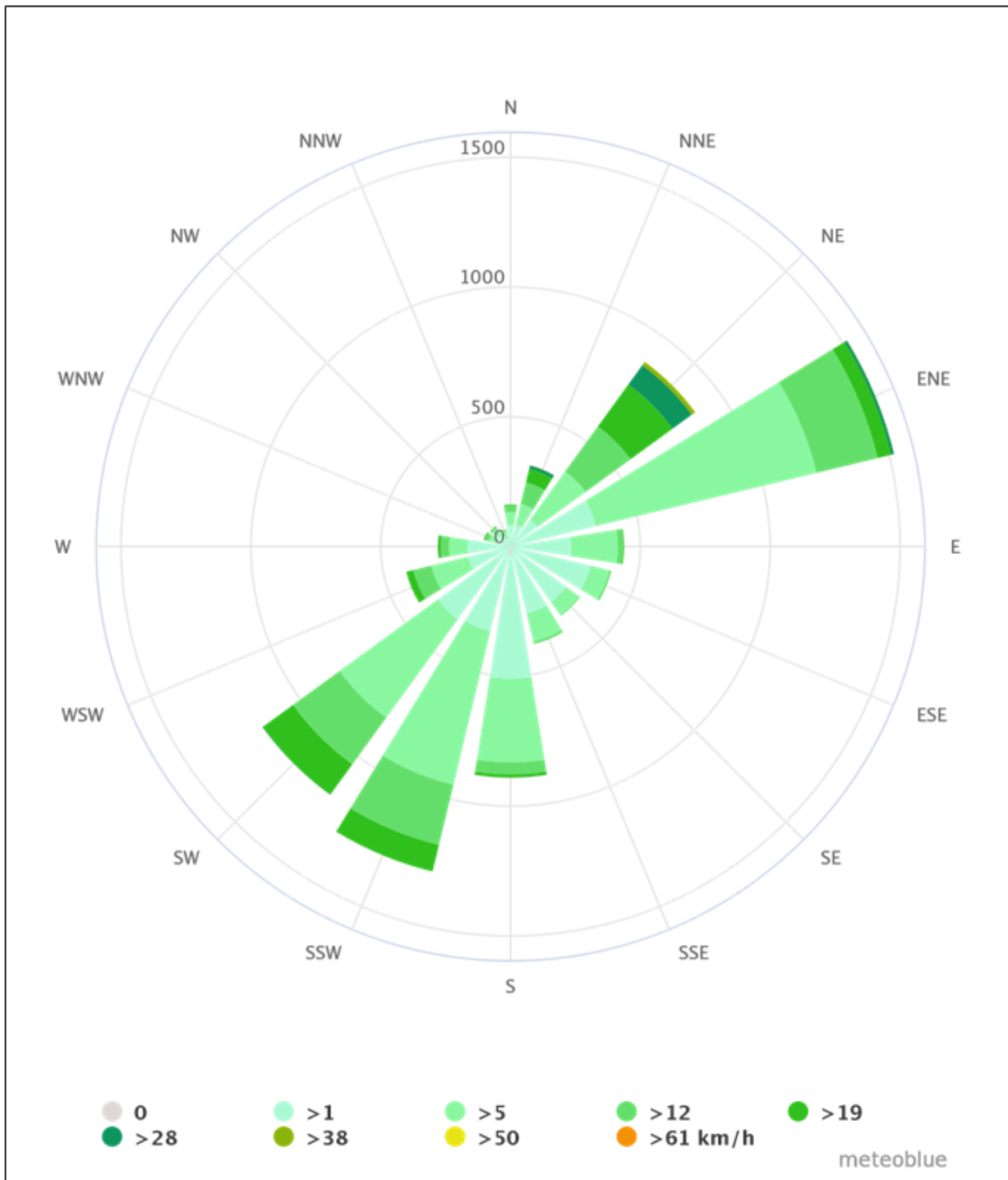


Figure 8 - Average wind directions for this area

5.4 SOIL, GEOLOGY AND TOPOGRAPHY

The regional geology of this area consists mainly of the Otavi Group and a small narrow section of the Swakop Group to the western side of the EPL. The main rock types are Limestones, Schists and Dolomites. The Otavi and Swakop Group is part of the Damara Supergroup and Gariiep Complex (Bubenzer, 2002) as shown in Figure 9.

The topography of the Project site is relatively rough with some rock outcrops/hills to the sides of the EPL and a smoother area to the central and parts and south of the EPL. There is a river running from the central north-eastern side of the EPL towards the southwestern corner of the EPL, which joins another river running from the east as seen in Figure 12. The elevation decreases from the north-eastern sides of the EPL towards the southwestern side (Figure 10), varying between just above 900 m to just below 740 m above mean sea level, but elevation across the EPL varies due to various elevated areas (i.e., hills).

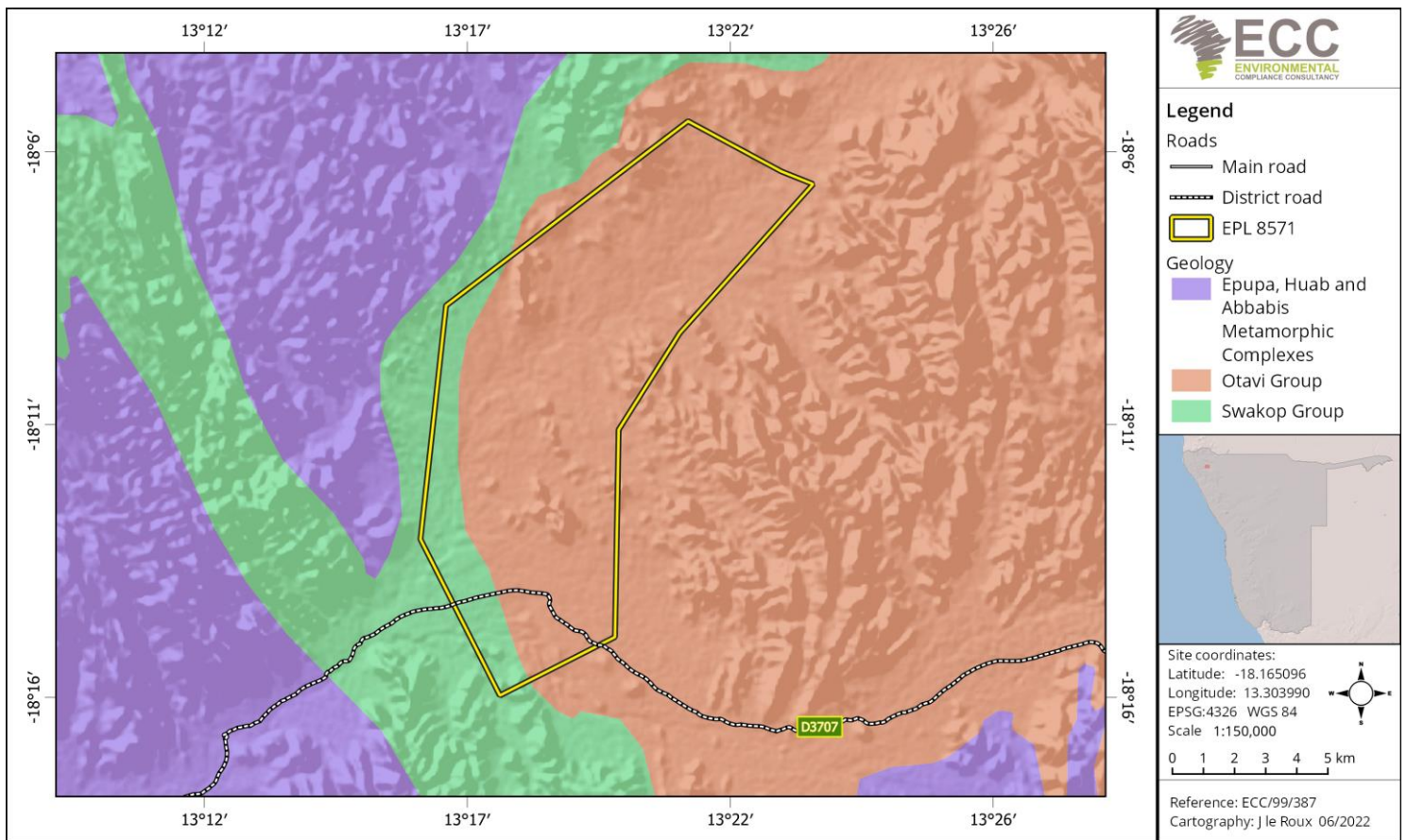


Figure 9 - Geology of the area

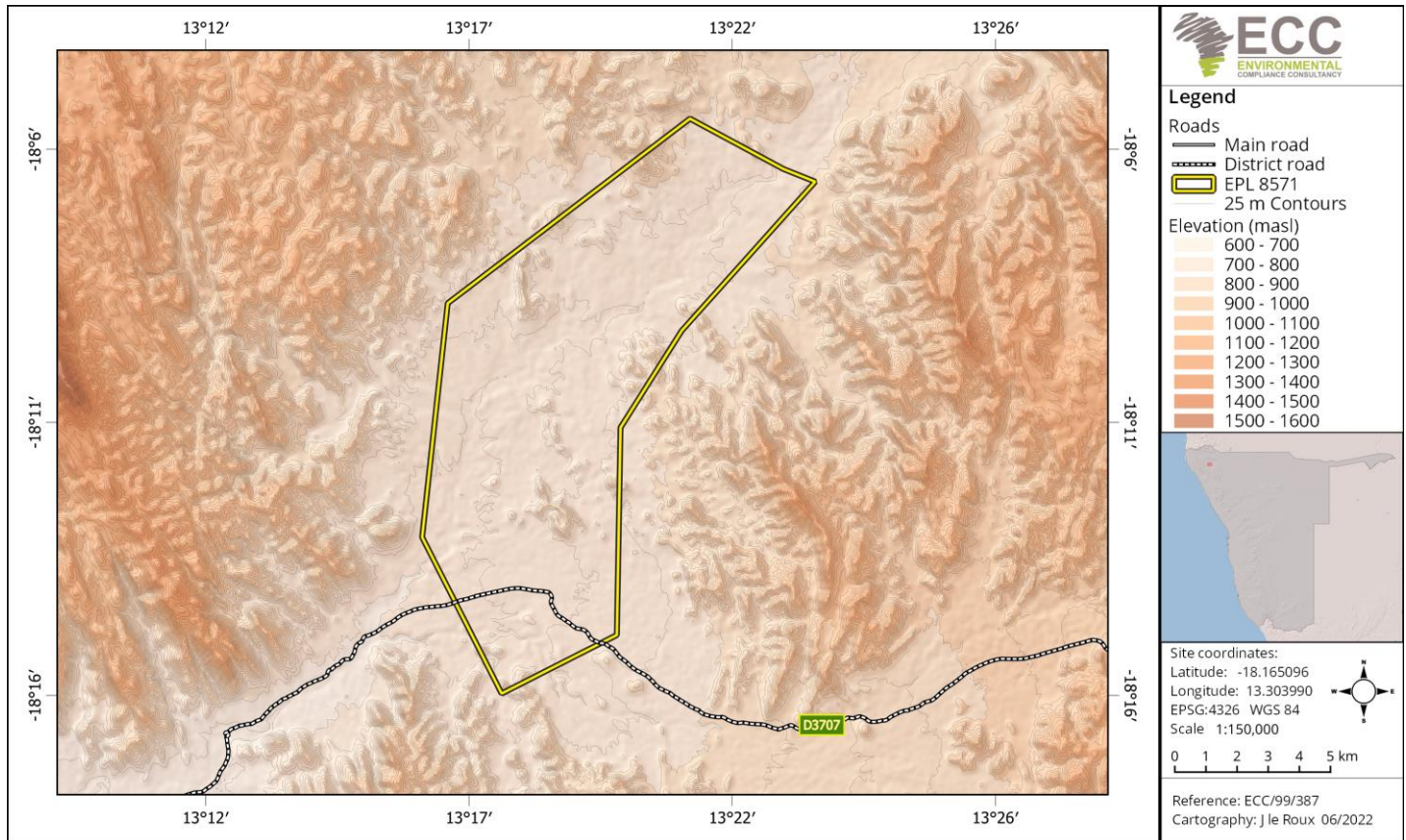


Figure 10 - Elevation of the area

The EPL area is largely covered by Petric Calcisols (River areas) and smaller sections of rock outcrops (Figure 11) (Bubenzner, 2002). Namibian soils vary a great deal, variations occur on a broad scale but there is even a great deal of variability at a local level.

The first part of the soil name provides information on the properties of the soil, namely: Petric represents soils with a solid layer at a shallow depth and this soil tends to remain hard even when wet. The second name reflects the conditions and processes which have led to the formation of the soils (Mendelsohn et al., 2002). Calcisols are usually present in depressions or other low-lying areas and also “typically contain accumulations of calcium carbonate” (often as calcrete). Calcrete generally forms below the surface but is on the surface in a soft powdery form. These soils have the potential to be fertile but might lack zinc and iron to high calcium levels (Mendelsohn et al., 2002).

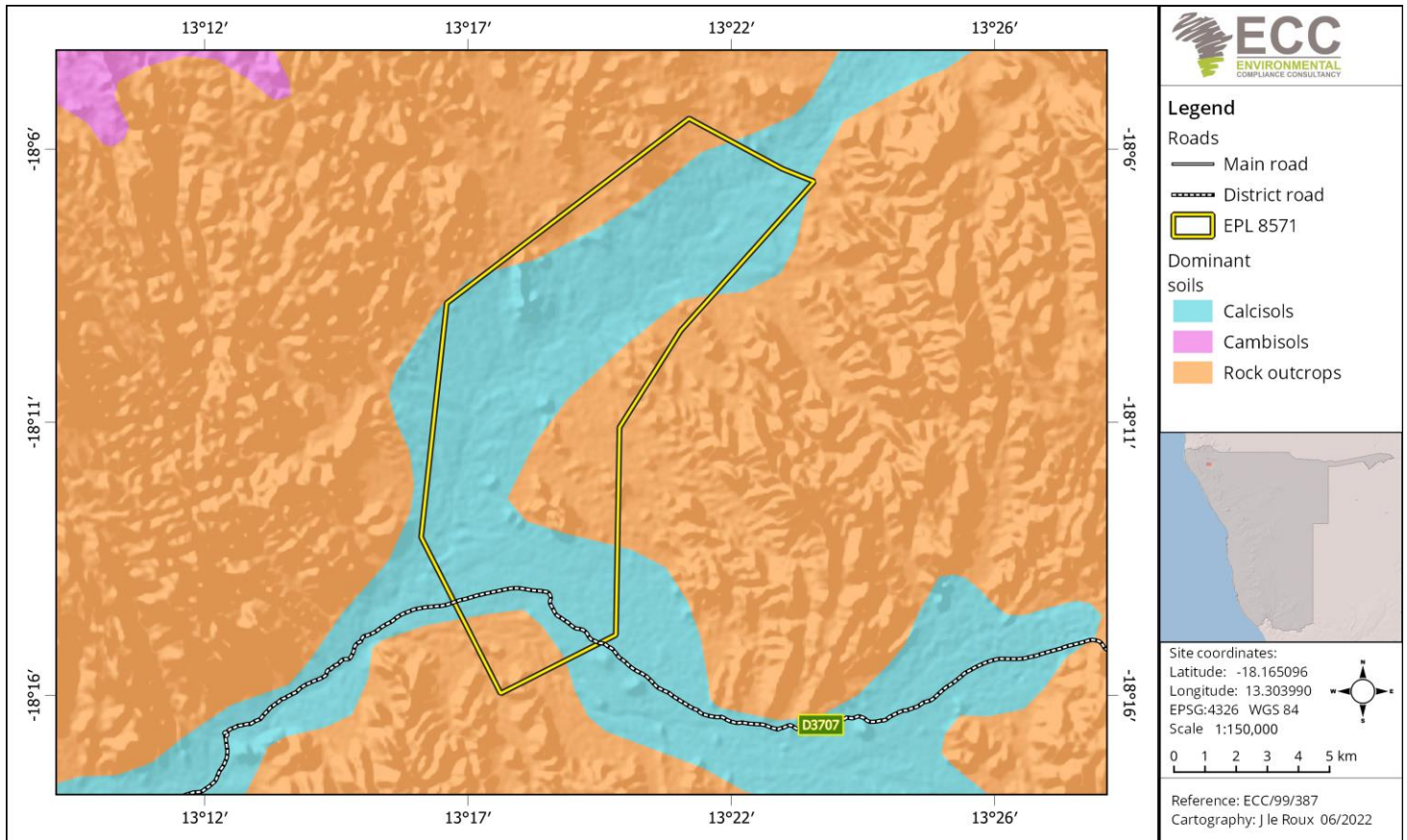


Figure 11 - Soil characteristics of the area

5.5 HYDROGEOLOGY

According to the Namibian Monitoring Information System & Hydrological Map of Namibia (<https://na-mis.com/>), the site falls over a porous aquifer with moderate groundwater potential, as well as over rock bodies with low and very low groundwater potential shown in Figure 12. The groundwater vulnerability in this area is considered to be very low to low and groundwater recharge within this area is considered to be low (0 to <0.5 % of the total average rainfall) as shown in Figure 12. Groundwater in this area is generally of good to excellent quality (Group A and B), but there are some areas around the site (closer to Opuwo), where water quality is generally poor and not suitable for human consumption (Group D).

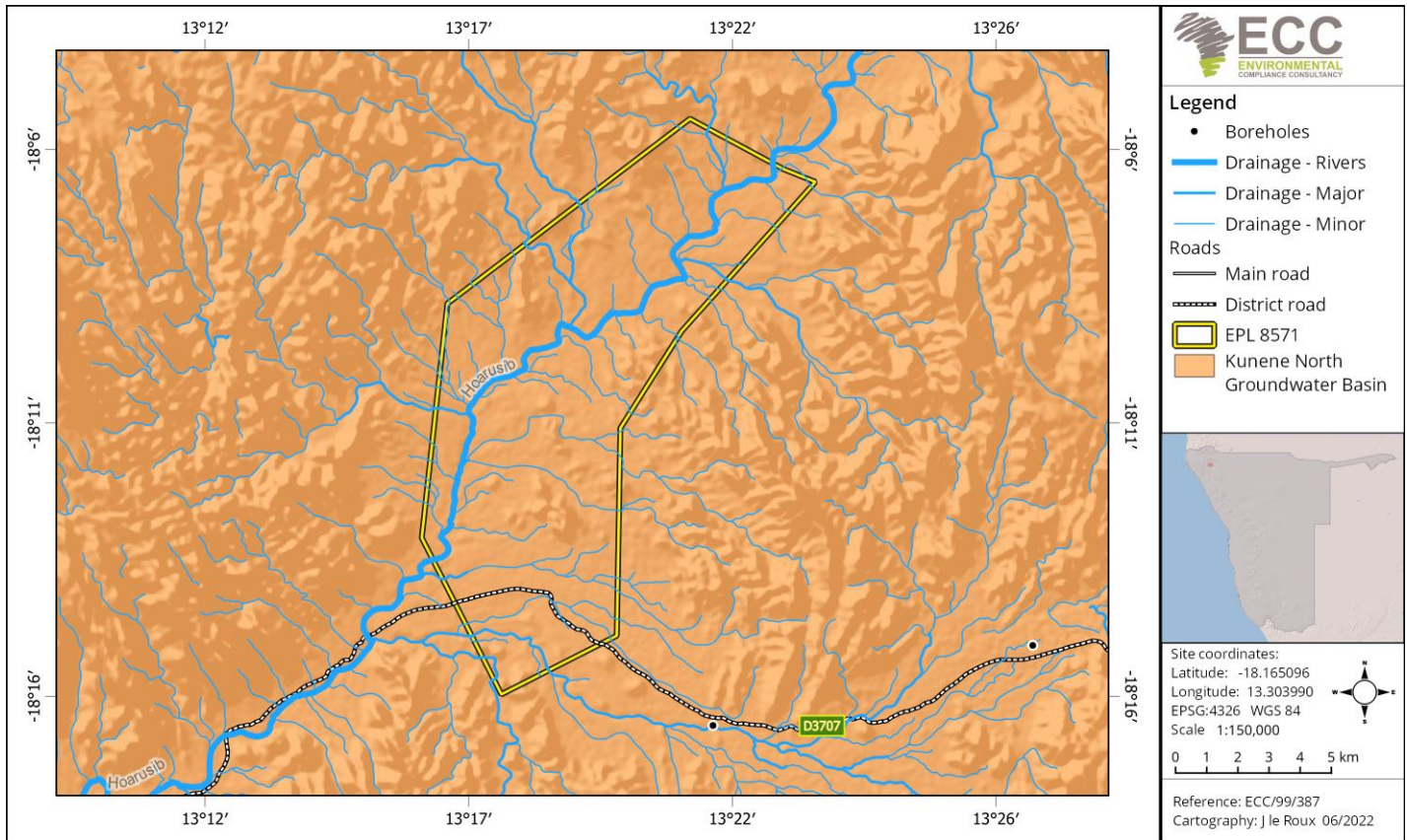


Figure 12 - Hydrology of area

5.6 BIODIVERSITY BASELINE

5.6.1 FLORA

Vegetation in Namibia is strongly influenced by rainfall. The proposed Project site is situated within the thornbush shrubland vegetation cover. The plant diversity and tallest trees are most lush in the north-eastern parts of the country and contrast sparser and shorter to the west and south of the country. This gradient is not simple as factors such as soil types, landscape and human impacts may also influence the vegetation. The plant diversity (100 to up to 300 species) for this area is low to medium, with low endemism (2 to 5 species) and the dominant vegetation structure for the EPL is sparse shrubland, vegetation type is Western highlands and the EPL falls within the Savanna biome (Mendelsohn et al. 2002).

In this part of Namibia the following tree and shrub species are either protected under national legislation, endemic, near-endemic or listed in the CITES appendices: *Aloe littoralis* (Nature Conservation Ordinance and CITES II), *Ficus Cordata* (Forestry protected), *Ficus sycomorus* (Forestry protected), *Obetia carruthersiana* (near-endemic), *Boscia albitrunca* (Forestry protected), *Cadaba schroepelii* (near-endemic), *Maerua schinzii* (Forestry protected), *Moringa ovalifolia* (Mannheimer & Curtis, 2009) just to name a few continued in Appendix G.

5.6.2 FAUNA

The overall terrestrial diversity for this area is low to moderate compared to other parts of the country. The area within and surrounding the EPL boundary has a low bird diversity status of between 51 and 80 species, with high bird endemism (between 6 to 10 species) and represents an area with a moderate to high mammal diversity of between 76 to 90 species (7 to 8 of these species are endemic). four larger carnivore species have been recorded in the general area (Bubenzer, 2002, IUCN, 2021, Mendelsohn et al., 2002, Oberprieler and Cillié, 2008 & Stuart and Stuart, 2015).

Furthermore, the reptile diversity within this area is moderate to high with between 61 and 70 species, of which 21 to 24 species are endemic (high). The number of observed lizard species for this area is between >35 species of which 9 to 11 of the species are endemic and the different snakes recorded are between 20 to 29 species (9 to 10 endemic species).

This area has a low to moderate frog diversity of between 8 to 11 species. Then there is also a low to moderate scorpion diversity (12 to 13 species) around which 5 to 6 species are endemic (Bubenzer, 2002 & Mendelsohn et al., 2002).

Various protected or threatened mammal species may occur in this area or might pass through on occasion of which one is classified as near threatened (Brown Hyena) and four are classified as vulnerable (Cheetah, Leopard, Pangolin, Black-footed cat, Hartmann's Mountain Zebra) according to the IUCN red list of threatened species (IUCN 2022).

Furthermore, all tortoise species, rock monitors and pythons (dwarf and rock pythons), that might potentially be encountered within the EPL boundaries are protected under the Nature Conservation Ordinance No. 4 of 1975. Then various species are also listed in the CITES Appendices, such as Cheetahs, Leopards, Pangolins, Elephants etc.

Most bird species in Namibia fall under Schedule 4: Protected Game within the Namibian Conservation Ordinance No. 4 of 1975, except for the following excluded species: Weavers, Sparrows, Mousebirds, Redheaded Quela, Bulbul, and Pied crow as well as 19 huntable game bird species identified in Schedule 6 of the Nature Conservation Ordinance (Nature Conservation Ordinance No. 4 of 1975).

Several migratory bird species may only pass-through Namibia, thus some of the species might be rare to encounter during the year but could potentially be found within the EPL boundaries. Surface water on or near the proposed site (rainy season) might attract various water birds (either resident or migratory).

5.7 SOCIAL AND SOCIO-ECONOMIC BASELINE

The urban population pyramid for Namibia shows a very clear dominance of the age group 20 to 35 as well as for infants (0 to 4 years of age) (Figure 13). As the majority of people in the Otjozondjupa Region are living in an urban area. The majority of Namibia's population is young, as most of them are within the child-bearing age range (NSA 2014).

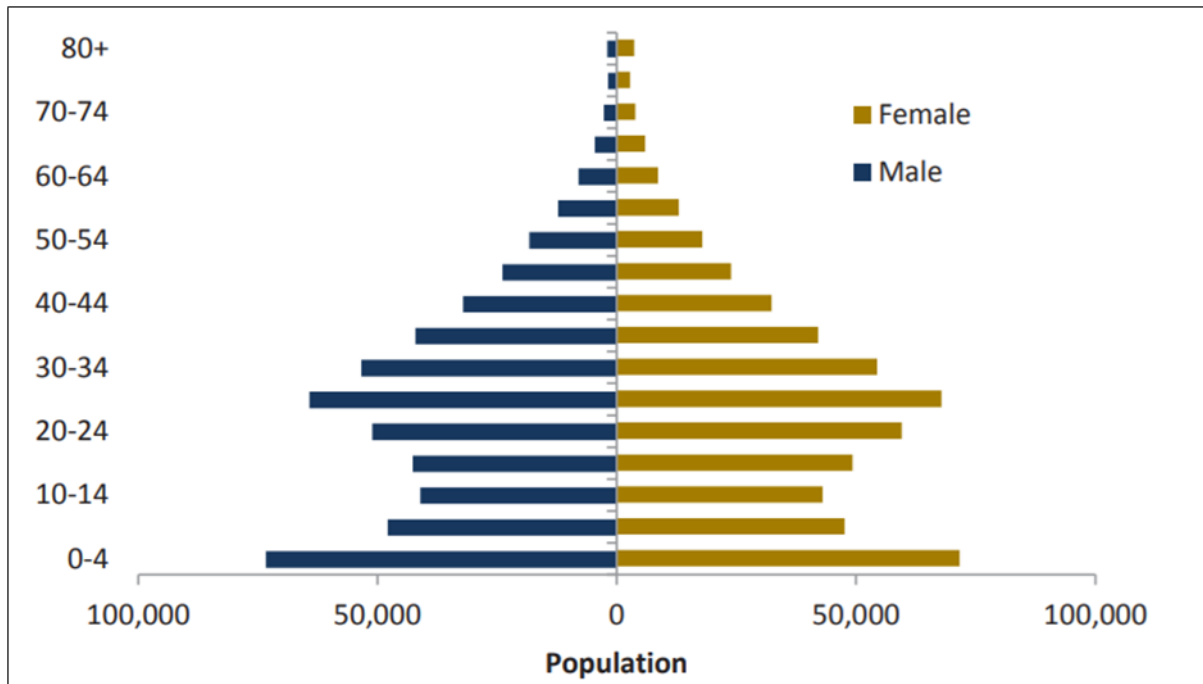


Figure 13 - 2015 urban population pyramid of Namibia

5.7.1 GOVERNANCE

Since its independence in 1990, Namibia is led by a democratically elected and stable government to date through three organs of government and functions (legislative, executive, and judiciary). The country was ranked 5th out of 54 African countries in the Ibrahim Index of African Governance in 2015 and subsequently ranked 4th out of 54 African countries in 2017 for indicators including the quality of governance and the government's ability to support human development; sustainable economic opportunity; rule of law and human rights; and development of smart information and communication technology to access information for socio-economic growth (National Planning Commission, 2017).

As a result of sound governance and stable macroeconomic management, Namibia has experienced rapid socio-economic development. Namibia has achieved the level of 'medium human development and ranks 125th on the Human Development Index out of 188 countries (NPC, 2020). Globally, Namibia was ranked 43rd out of 168 countries in 2018 on the Global Peace Index and was therefore considered one of the most peaceful countries in the world (NPC, 2020).

Namibia is divided into 14 regions, subdivided by 121 constituencies. The Kunene Region is divided into six constituencies. The proposed Project is in the Opuwo constituency of the Kunene Region. The Kunene Regional Council is responsible for the planning and development of the region in a sustainable manner for the benefit of its inhabitants by establishing, managing, and controlling settlement areas and focusing on core services. The council is accountable for an area of 115,293 km² (Kunene Regional Development Profile, 2015).

5.7.2 POPULATION AND GROWTH RATE

Namibia is one of the least densely populated countries in the world (2.8 persons per km²). Vast areas of Namibia are without people, in contrast to areas of dense concentrations, such as the central-north and along the Kavango River. Windhoek, the capital, is not only the main urban area with the largest population, but the concentration of private and public head offices attracts Namibians from all parts of the country in search of a better life.

The national population growth rate is estimated at less than 2%, which is lower than that of most African countries. Namibia’s population is young – although 57% falls into the age group 15 to 59, 37% of the total population is younger than 15 (Namibia Statistics Agency, 2017). Since 2005, there has been a steady improvement in life expectancy, which is currently estimated at 65 years. In 2018, it was estimated that 50% of all Namibians are urbanised, i.e. living in an urban settlement (retrieved from www.worldpopulationreview.com). The last national census was conducted in 2011 and counted 2.1 million Namibians (Namibia Statistics Agency, 2011). An intercensal demographic survey was conducted in 2016 and estimated the total population at 2.3 million (Namibia Statistics Agency, 2017) as shown in Figure 13.

It is predicted that urbanisation will continue, with an increase from 43% of the population living in urban areas in 2011, to 67% in 2041.

Table 8 - Socioeconomic baseline study summary of key indicators

Indicator	Kunene Region	Opuwo
Population estimate (2011 Census)	86 856	15 115
Gender ratio	50.2% male, 49.8% female	N/A
Number of households	18 495	5 178
Schools	64 formal schools 37 mobile units	1 Circuit office in Opuwo 22 centres Opuwo south district 34 centres Opuwo north district
Health facilities	3 hospitals 3 health centres 22 clinics	1 district hospital

Indicator	Kunene Region	Opuwo
Unemployment (Individuals) (2011 census)	32937	9479

5.7.3 EMPLOYMENT

In 2018, 53.4% of all working Namibians were employed in the private sector and 21.5% by the state. State-owned enterprises employ 7.6% of Namibians and private individuals 16.6%. Wages and salaries represented the main income source of 47.4% of households in Namibia. Agriculture (combined with forestry and fishing) as an economic sector has the most employees – 23% of all employed persons in Namibia work in this sector. Agriculture is also the sector that employs the most informal workers in Namibia, calculated at 87.6%. Wages of employees in the agriculture sector are lower than all other sectors except for workers in accommodation and food services and domestic work in private households (NSA, 2019).

Low education levels affect employability and prevent many households to earn a decent income. Of all people employed in Namibia, 63.5% are not higher qualified than junior secondary level (Grade 10 and lower). In total 11.8% of all people employed had no formal education. In total 29.1% of all people employed are within the category “elementary occupation” and 15.2 % in the category “skilled agriculture” (NSA, 2019).

Overall, the rate of unemployment is estimated at 33.4% for Namibia, using the broad definition of unemployment. More than 60 % of the population is over 15 years of age and about one-third of the total population can be regarded as part of the labour force. The unemployment rate in rural and urban areas is almost the same – 33.4% in urban areas and 33.5% in rural areas (NSA, 2019). The youth group also ranks high in unemployment levels, even though many Namibia youth complete post-secondary education. In 2018 the unemployment level was at 59.6% for those aged 15-19, 57% for those aged 20-24, and 42.3% for 25-29-year-olds (NSA, 2018).

According to the Socio-Economic impact Assessment of COVID-19 in Namibia by the United Nations Namibia (2020), there has been an estimated increase in unemployment from 33.4 % to 34.5% and through a best-case scenario, it is also estimated that poverty will increase from 17.2 % to 19.5 % due to a drop in the domestic GDP (United Nations Namibia 2020).

5.7.4 ECONOMIC ENVIRONMENT

Mining plays a pivotal role in the economy of Namibia. Since independence, it has consistently been the biggest contributor to Namibia’s economy in terms of revenue and accounts for 25% of the country’s income. Mining is one of the main contributors to GDP, and one of the largest economic sectors of Namibia.

Since 2016, Namibia has recorded slow economic growth, registering an estimated growth of only 1.1% in 2016. The primary and secondary industries contracted by 2.0 and 7.8% respectively. During 2017 the economy contracted by 1.7, 0.7 and 1.9% in the first, second and third quarters respectively (NSA, 2019). Despite the more positive expectations, the economy retracted to an average growth of not more than 1% annually since 2017.

During the second quarter of 2020, the domestic economy contracted by 11.1%, which is the largest contraction since 2013; However, the Bank of Namibia (BoN) predicts that the Gross Domestic Product (GDP) could grow by 1.9% in 2021 and by 2.8% in 2022. The impact assessment also showed that 96.5% of tourism businesses have been affected by COVID-19 in 2020, the manufacturing and construction sectors contracted by 9.2% and 5.7% respectively and there was also a 2% to 3% decline in net exports (United Nations Namibia 2020).

The EPL overlaps two communal conservancies, Ongongo and Otjiu-West (figure X). A communal conservancy represents a conservation area that is managed by a local community that aims to manage the natural resources within their conservancy in a sustainable way to generate returns and other benefits (MET/NACSO, 2018).

The locals of these communities are mainly employed by lodges, camps, or the locals farm with livestock in the area. Tourism and consumptive wildlife use are the main benefit contributor to these local communities, in addition, income generated from plant products and local crafts (MET/NACSO,2018).

5.7.5 HEALTH AND DISEASE

Since independence in 1990, the health status of Namibia has increased steadily, with a remarkable improvement in access to primary health facilities and medical infrastructure. In 2015, the World Health Organisation (WHO) recommended strategic priorities for the health system in Namibia, which entailed improved governance, an improved health information system, emergency preparedness, risk reduction and response, preventative healthcare, and the combating of HIV/AIDS and TB (WHO, 2016).

As elsewhere in Namibia, HIV/AIDS remains a major reason for low life expectancy and is one of the leading causes of death in the region. HIV/AIDS remains the leading cause of death and premature mortality for all ages, killing up to half of all males and females aged 40 to 44 years in 2013 (IHME, 2016).

Tuberculosis (TB) is a leading killer of people infected by HIV/AIDS, and Namibia had a high burden in 2018 – 35% of people with TB were infected with HIV. The country is included among the top 30 high-burden TB countries in the world, with an estimated incidence rate of 423 per 100,000 people, and 60 fatalities per 100,000 people in 2018 (retrieved from www.mhss.gov.na).

As of the beginning of 2020, the coronavirus (COVID-19), caused illness in humans on a pandemic scale and has resulted in an increasing number of deaths worldwide. The viral outbreak has adversely affected various socioeconomic activities globally, and with reports of a continually increasing number of people testing positive, it is anticipated that this may have significant impacts on the operations of various economic sectors in Namibia too. The disease caused many countries to enter a state of emergency, which included various levels of lockdown restrictions that had dire economic consequences. In addition, these measures have had a detrimental effect on tourism, and Namibia is, in both cases, no exception.

Furthermore, COVID-19 has also resulted in a loss of learning and socialising opportunities for children in Namibia and there was a lack of access to school feeding programs and parents had to provide or find alternative care for children. There has also been a 6 % increase in health workers across Namibia as a result of the pandemic (United Nations Namibia 2020). The Namibian economy remains confined, following the aftermath of COVID-19. Hence, development partners, public and private sectors need the commitment to explore new approaches in order to revive the fragile economy (NSA,2019). By mid-February 2022, Namibia has recorded 4 002 deaths due to COVID-19 most of these deaths occurred in 2021, as a result of the Delta and Omnicron variants.

6 IMPACT IDENTIFICATION & EVALUATION METHODOLOGY

6.1 INTRODUCTION

This chapters outlines ECCs method to identify and evaluate impacts arising from the proposed project. The findings of the assessment are presented in Chapter 7.

The evaluation and identification of the environmental and social impacts require the assessment of the project characteristics against the baseline characteristics, ensuring all potentially significant impacts are identified and assessed. The significance of an impact is determined by taking into consideration the combination of the sensitivity and importance or value of environmental and social receptors that may be affected by the proposed project, the nature and characteristics of the impact, and the magnitude of potential change. The magnitude of change (the impact) is the identifiable changes to the existing environment which may be negligible, low, minor, moderate, high, or very high; temporary or short term, long-term or permanent; and either beneficial or adverse, shown in Figure 14.

This chapter provides the following:

- Details on the assessment guidance used to assess impacts;
- Lists the limitations, uncertainties and assumptions with regards to the assessment methodology;
- Details how impacts were identified and evaluated, and how the level of significance was derived; and
- Details how mitigation was applied in the assessment and how additional mitigation was identified.

6.2 ASSESSMENT GUIDANCE

The principal documents used to inform the assessment method are:

- International Finance Corporation standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012);
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013); and,
- Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008).

6.3 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

The following limitations and uncertainties associated with the assessment methodology were observed:

- Topic-specific assessment guidance has not been developed in Namibia. A generic assessment methodology was applied to all topics using IFC guidance and professional judgement.

A number of limitations and uncertainties were acknowledged during the ESIA process. In line with ESIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 6 contains the assumptions and uncertainties identified during the assessment process.

Where uncertainties exist, a cautious approach has been applied, allowing the worst-case scenario for potential impacts to be identified. Where limitation and uncertainties exist, assumptions have been made and applied during the assessment process. These have been clearly described in the baseline section.

Table 9 - Limitations, uncertainties and assumption

LIMITATION / UNCERTAINTY	ASSUMPTION
Number of access roads and temporary drill campsites	The making of new tracks or access roads will be minimized, and existing tracks and routes will be used as far as possible. While every effort will be made to minimize environmental damage, in some cases it will be necessary to clear some bush to create small roads, which may be required for equipment to reach the site and for temporary campsites. If needed, cut lines have to be created by clearing of vegetation to have access to some parts of the EPL.

LIMITATION / UNCERTAINTY	ASSUMPTION
The program of exploration works is not confirmed	<p>It is assumed that exploration work shall take a couple of months with two-to-three-week sampling projects at different times on different sites and with follow-up exploration drilling projects possible. Activities involve drilling, remote sensing; geophysical surveys (airborne and ground-based), geochemical surveys and geological mapping. Pitting and trenching are unlikely and generally not favoured.</p> <p>If commercially viable concentrations can be defined by preliminary drilling, a next phase of advanced resource drilling operations is possible.</p>
Number of workers, area they will come from and accommodation	<p>It is planned that approximately 10 people will be contracted for the proposed project. Contractors may camp on exploration sites / communal land, depending on approval from traditional authorities.</p>
Structures	<p>No permanent infrastructure development will take place in this phase of operations which will span the 3-year award period. Depending on results, the proponent will set up temporary field camps required to house field staff for the purpose of sample collection, ground surveys and drilling. The camps will be such that their locations can be fully rehabilitated post completion of the field work.</p>

7 IMPACT ASSESSMENT FINDINGS AND MITIGATION MEASURES

This chapter presents the findings of the EIA for the proposed project as per the ESIA process, scope and methodology set out in Chapter 2 and Chapter 6. A range of potential impacts have been identified that may arise as a result of the proposed project. The aim of this ESIA report is to focus on the significant impacts that may arise as a result of the proposed project. This chapter therefore only considers the significant impacts and or those that may have specific interest to the community and stakeholders. A summary of impacts that are considered significant is discussed in this section.

When undertaking the assessment exercise, the design of the proposed project and best practice measures were considered to ensure the likely significant effects and any required additional mitigation measures were identified. A summary of the potential impacts and mitigation and or control measures are discussed below.

The following topics were considered during the scoping phase:

- Water (surface - and groundwater);
- Soil;
- Landscape (visual impacts, sense of place);
- Socio-economics (employment, demographics, and land-use);
- Noise;
- Ecology (fauna and flora);
- Air quality (emissions, pollutants and dust); and
- Heritage (including culture, history, archaeology and palaeontology).

Table 10 sets out the findings of the scoping assessment phase. Activities that could be the source of an impact have been listed, followed by receptors that could be affected. The pathway between the source and the receptor has been identified where both are present. Where an activity and or receptor have not been identified, an impact is unlikely, thus no further assessment or justification is provided. Where the activity, receptor and pathway have been identified, a justification has been provided documenting if further assessment is required or not required.

Due to the nature and localised scale of the exploration activities, and the environmental context of the EPL, the potential environmental and social effects are limited and unlikely to be significant. Aspects that prompted uncertainty relate to the potential increase in movements and the presence of people, which may cause the introduction of illegal and covert activities such as poaching, stock theft and the collection of organisms. Similarly, the potential of accidental veld fires may increase. In both cases the terrestrial ecology and biodiversity of Namibia is the receptor, although local landowners and their neighbours may experience these adversities firsthand. The recommended mitigation measures are contained in Table 10.

Cumulative impacts as a result of physical disturbance, the nuisance of noise and dust and the loss of sense of place may be experienced as well; in this case the receptors are the community members, visitors and tourists. Noise may have an effect on some organisms as well, though. Mitigation measures are recommended and contained in Table 10.

All precautions must be taken to prevent damage to heritage sites, in particular when a site with paleontological remains is discovered as a result of the exploration activities. The chance find procedure will be implemented in such a case. With the necessary mitigation measures in place (Table 10), the significance of the impact reduces from moderate to minor.

Table 10 - Scoping assessment findings and proposed mitigation measures

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Site operations such as maintenance activities, loss of containment, accidental fuel / hydraulic fluid leaks and spills, or similar sources.	Groundwater quality	Hydrocarbon leaks and spills could enter the aquifer causing contamination	Adverse Direct Partly Reversible Moderate Short term Regional Possible	Medium	Minor	Minor (4)	<ul style="list-style-type: none"> - Good housekeeping - Training through safety talks and induction - All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil - Spill kits and absorption material available during fuel delivery, storage or use - Accidental spills and leaks (including absorption material) to be cleaned as soon as possible - Major spills to be reported, also to the authorities - Maintenance and service schedules on equipment is in place 	Low (2)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							<ul style="list-style-type: none"> - Store bulk fuel in adequate containment areas (non-porous surface, bunded) - No damaged containers in use - Preventative measures will be in place when service and maintenance activities are done (drip trays, non-porous surfaces, funnels, non-damaged containers) - Refuelling will be done in areas with adequate preventative measures in place 	
Potential spillages of drill fluid, lubrication, etc. or drilling that penetrate the	Groundwater quality	Hydrocarbon leaks and spills could enter the aquifer causing	Adverse Direct Partly Reversible Moderate Medium term Regional Possible	Medium	High	Minor (4)	<ul style="list-style-type: none"> - Ensure spill kits and preventative measures (e.g. drill pads) are in place at exploration sites - Consider alternative sites when water table is too high 	Low (2)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
groundwater table.		contamination					<ul style="list-style-type: none"> - Drainage system should be dug to direct any accidental spills into sumps - Extraction volumes of water shall be minimal during exploration and where possible, water from existing water sources shall be used 	
Discharge and infiltration of non-contained wastewater	Water	Wastewater can contaminate surface and groundwater	Adverse Direct Partly Reversible Minor Short term Regional Unlikely	Low	Minor	Low (2)	<ul style="list-style-type: none"> - Wastewater discharges will be contained - Workers will be made aware about the importance of wastewater management - Good housekeeping - Ensure prompt clean-up of spills 	Low (1)
Inadequate management of solid waste	Water	Waste items and litter can pollute drainage channels	Adverse Cumulative Reversible Minor	Low	Low	Low (1)	<ul style="list-style-type: none"> - Good housekeeping - Training and awareness through safety-talks and induction 	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
			Temporary On-site Unlikely				- Implement a Standard Operational Procedure (SOP) on waste management, for all kinds of waste possible on-site (e.g., domestic, mineral, hydrocarbons, hazardous)	
Inadequate management of hazardous and hydrocarbon waste	Soil	Pollution of soil	Adverse Direct Reversible Minor Short term On-site Possible	Low	Minor	Low (2)	- Avoid hazardous waste on site - Implement a culture of correct waste collection, waste segregation and waste disposal	Low (1)
Vegetation clearing for access routes, drill pads and temporary contractors camp	Terrestrial ecology and biodiversity	Loss / alteration of terrestrial habitats and loss of species	Adverse Direct Reversible Minor Short term On-site Possible	Low	Minor	Low (2)	- Use existing roads for access to minimize new tracks and cut lines - Minimise clearance areas through proper planning of the exploration activities - Where necessary, rescue and relocate plants of significance	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Promote revegetation of cleared areas upon completion of exploration activities	
Ambient noise as a result of machinery and equipment-use and movement (e.g., drill rigs, generators, vehicles) and movement (also through the use of airborne equipment)	Terrestrial ecology and biodiversity	Residing, slow-moving and nesting organisms can be disturbed	Adverse Direct Reversible Minor Short term On-site Likely	Low	Minor	Low (2)	- Restrict excessive noise to areas of activities only - Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday) - No activities between dusk and dawn - Drill equipment shall be suitably positioned to ensure that noisy equipment is away from receptors - All equipment to be shut down or throttled back between periods of use,	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Respect civic aviation regulations about the use of a drone	
Increased movement of vehicles, machinery and equipment	Terrestrial ecology and biodiversity	Residing and nesting organisms such as reptiles can be disturbed, injured or killed	Adverse Direct Partly Reversible Moderate Short term On-site Possible	Low	Minor	Low (2)	<ul style="list-style-type: none"> - Restrict movements to areas of activities only - Use existing tracks and routes only - Identify rare, endangered, threatened and protected species in advance - Route new tracks around protected species and sensitive areas - Restrict movements to daytime hours - Make workers aware and notify them on avoiding some areas - No driving off designated access routes (into the bush) / off-road driving 	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- No animals or birds may be collected, caught, consumed or removed from site	
Increased disturbance of areas with natural vegetation	Terrestrial ecology and biodiversity	Alien species and weeds can be introduced to the area	Adverse Direct Reversible Minor Short term On-site Possible	Low	Minor	Low (2)	<ul style="list-style-type: none"> - All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed inspection completed prior to equipment being used - Monitor areas of activity for weed and alien species - Eradicate weeds and alien species as soon as they appear 	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Make workers aware about alien species and weeds	
Vegetation clearing	Soil	Increased exposure due to possible vegetation clearance can cause soil erosion	Adverse Direct Reversible Moderate Short-term On-site Possible	Low	Minor	Low (2)	- Ensure erosion control and prevention measures are in place when vegetation clearance is required - Where necessary, plan access routes, drill pads and camps outside of existing drainage lines - Where necessary, install diversions to curb possible erosion - Restore drainage lines when disturbed	Low (1)
Drilling and the use of drilling equipment	Soil	Loss of soil quality due to mixing of earth matter,	Adverse Direct Reversible Moderate	Low	Minor	Low (2)	- Limit the possibility of compaction and creating of a hard subsurface - Limit the possibility of trampling	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		trampling and compaction	Short term On-site Possible				<ul style="list-style-type: none"> - Topsoil should be stockpiled separately, and re-spread during rehabilitation - During drilling oil absorbent matting or plastics sheeting should be placed under and around the rig - Equipment must be in a good condition to ensure that accidental oil spills do not occur and contaminate soil - In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site - Limit the possibility to mix mineral waste with topsoil 	
Terrestrial ecology and biodiversity	Accidental and	Destroys grazing and	Adverse Direct Reversible	High	Minor	Moderate (6)	<ul style="list-style-type: none"> - Restrict movements of people to areas of activities only 	Minor (3)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
	uncontrolled fire	kill living organisms	Moderate Temporary Local Possible				<ul style="list-style-type: none"> - Train people and raise awareness about veld fires and firefighting - No open fire outside designated areas - Ensure proper cooking facilities at fly camps - No cigarette buds are discarded but contained and disposed of at an appropriate facility - Proper fire hazard identification signage to be placed in areas that store flammable material (i.e. hydrocarbons and gas bottles) - Control and reduce the potential risk of fire by segregating and safe storage of materials - Avoid potential sources of ignition by prohibiting smoking 	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							in and around facilities - Firefighting equipment and fire breaks should always be at designated areas and should be maintained regularly	
Community and livestock	Airborne surveying over the EPL, possible low flying	Perceived impact from surveying activities on livestock and humans	Adverse indirect Reversible Minor Temporary Local Unlikely	Low	Minor	Low (2)	Prior to conducting aerial surveying, both directly and indirectly affected parties should be informed in writing of exploration activities at least 2 weeks prior to conducting the aerial surveys. The following information is to be included in the written communication sent: - Company name, - Survey dates, time and duration,	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							<ul style="list-style-type: none"> - Purpose of the survey, - Flight altitude, - Survey location, Map of survey area and flight lines, and - Contact details for enquiries. - Compliance with all applicable laws and agreements - Maintain continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon - Ensure appropriate supervision of all activities - Restrict surveying activities to 	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							daytime hours (and in accordance with the airflight plan/ permit issued by the Namibian Civil Aviation Authority (NCAA))	
Drilling activities, movement of machinery and vehicles	Heritage	Potential damage to cultural heritage sites	Adverse Direct Partly Reversible High Permanent On-site Possible	High	Minor	Moderate (6)	<ul style="list-style-type: none"> - Implement a Chance Find Procedure - Raise awareness about possible heritage finds - Report all finds that could be of heritage importance - In case archaeological remains to be uncovered, cease activities and the site manager has to assess and demarcate the area - Project manager to visit the site and determine whether work can proceed without damage to findings, mark 	Minor (4)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							<p>exclusions boundary and inform ECC with GPS position</p> <ul style="list-style-type: none"> - If needed, further investigation has to be requested for a professional assessment and the necessary protocols of the Chance Find Procedure have to be followed, - Archaeologist will evaluate the significance of the remains and identify appropriate action, (record and remove; relocate or leave premises, depending on the nature and value of the remains), - Inform the police if the remains are human, - Obtain appropriate clearance or approval from the competent 	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.	
Drilling activities, resulting into dust emissions Windblown dust from exposed/cleared land during exploration activities	Community	Visual disturbance and loss of Sense of Place	Adverse Direct Reversible Moderate Temporary Local Likely	High	Minor	Moderate (6)	<ul style="list-style-type: none"> - Position drill equipment in such a way that it is out of sight from human receptors where practicable - Apply dust suppression where possible - Restrict speed of vehicles (<30km/h) - Specific activities that may generate dust and impact on residents shall be avoided during high wind events - All vehicles and machinery / equipment to be shut down or throttled 	Minor (4)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							<ul style="list-style-type: none"> back between periods of use - Barriers or fences shall be used if drilling occurs in locations that may affect residents or livestock - Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property - Maintain good housekeeping - Continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon 	
Movement of vehicles,	Community	Create conflict with communal	Adverse	Low	Minor	Low (2)	- Ensure documented permission to enter communal lands	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
exploration activities		land members about access, leaving gates open, suspicious movements, loss of farming area, etc.	Indirect Reversible Minor Short term On-site Likely				<p>should have access to all communal areas at all times</p> <ul style="list-style-type: none"> - Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property - Existing water points and feeding area need to be left unaffected - Use existing roads for access, avoid new tracks / cut lines, - Compliance with all applicable laws and agreements - Continuous engagement with residents to identify any concerns or issues, and mitigation and management measures agreed upon 	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Movement of vehicles, exploration activities	Community	Presence of exploration team can be blamed for stock theft and poaching	Adverse Cumulative Reversible Minor Temporary Local Unlikely	Low	Low	Low (1)	<ul style="list-style-type: none"> - Develop and implement an operations manual or procedures to work on communal lands and implement monitoring programmes thereafter - Maintain continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon - Ensure appropriate supervision of all activities - Raise awareness and sensitize employees about contentious issues such as stock theft and poaching - Accidents and incidents need to be reported to project 	Low (1)

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							manager and recorded in incident register	
Exploration activities	Community	Triggers job creation, skills development and opportunities for the local economy	Beneficial Direct Reversible Minor Short term Local Possible	Medium	Low	Low (2)	<ul style="list-style-type: none"> - Maximize local employment - As far as possible promote local procurement - Enhance development of local skills where possible 	Low beneficial

8 ENVIRONMENTAL MANAGEMENT PLAN

The EMP for the proposed project is presented in Appendix A. It provides management options to ensure the impacts of the proposed project are minimised. An EMP is a tool used to take proactive action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary.

The management measures should be adhered to during all stages of the exploration activities. All persons involved and partaking in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally responsible manner.

The objectives of the EMP are:

- To include all components of the development and operations of the project;
- To prescribe the best practicable control methods to lessen the environmental impacts associated with the project;
- To monitor and audit the performance of operational personnel in applying such controls; and
- To ensure that appropriate environmental training is provided to responsible operational personnel.

9 CONCLUSION

ECC's ESIA methodology was used to undertake the environmental assessment for the proposed exploration activities on EPL 8571, to identify if there is potential for significant effects to occur as a result of the proposed project.

Through the scoping process, the risks to the environment that have been identified are related to possible contamination of surface and groundwater due to the spillage of hydrocarbons as the soil in the area is very porous and also has a major river, the Hoarusib River running through the EPL, the cumulative impacts as a result of physical disturbance, nuisance of noise and dust and the loss of sense of place, thereby impacting human receptors in the area. Impacts with respect to airborne dust are expected to be limited to vehicular traffic and RC drilling (diamond drilling does not generate dust) activities. There will be some release of exhaust fumes from machinery that will impact the immediate vicinity but will be of short duration. Additionally, there will be associated drilling and machinery noise, which could be a disturbance to immediate neighbours, but this will be of short duration as well. Through further analysis and identification of mitigation and management methods, the assessment concludes that the likelihood of spillage of hydrocarbons into surface and ground water is low and the significance of effects on humans from the cumulative impacts of physical disturbance, noise, dust and emissions will be a temporary qualitative reduction in the sense of place and expected to be minor. Prior awareness and communication about the project shall be encouraged.

Due to the increased movements and presence of people, there is a potential that illegal and covert activities such as poaching, stock theft and the collection of organisms can be introduced to the area. Similarly, the potential of accidental veld fires may increase. In both cases the terrestrial ecology and biodiversity of Namibia is the receptor, although local landowners and their neighbours may experience these adversities first-hand. Through this investigation the significance of both impacts is indicated as moderate. In both cases numerous mitigation measures, with proven national success, exist and were also applied to reduce the significance to minor.

Heritage sites may exist around the EPL. All precautions will be taken to prevent damage to heritage sites, as a result of the exploration activities. The chance find procedure will be implemented in such a case. With the necessary mitigation in place, the significance reduces from moderate to minor.

All other social and environmental receptors were scoped out as significant effects were unlikely and therefore no further assessment was deemed necessary. Various best practice and mitigation measures have been identified to avoid and reduce effects as far as reasonably practical, as well as ensure the environment is protected and unforeseen effect and environmental disturbances are avoided.

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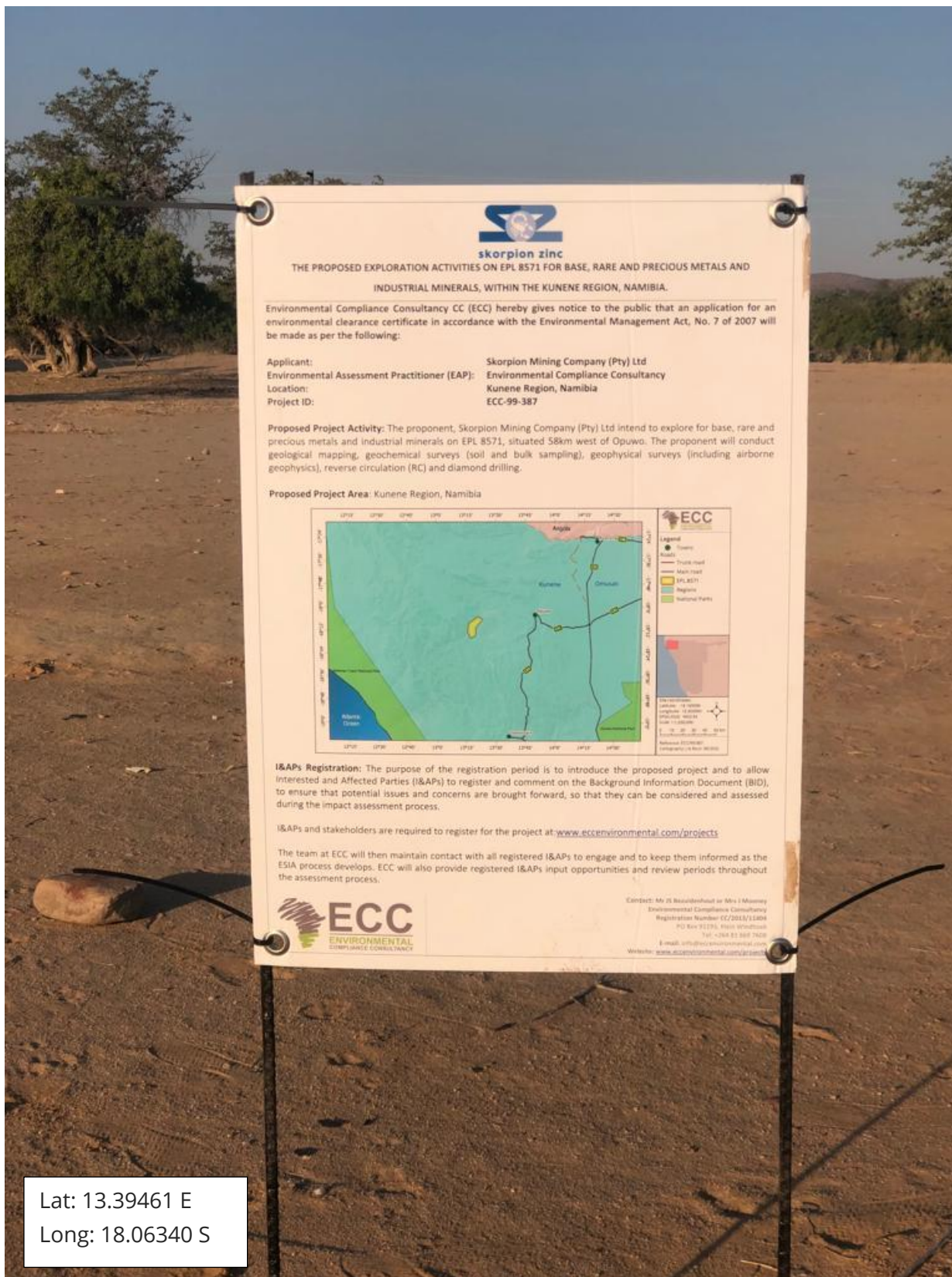
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APPENDIX A – ENVIRONMENTAL MANAGEMENT PLAN

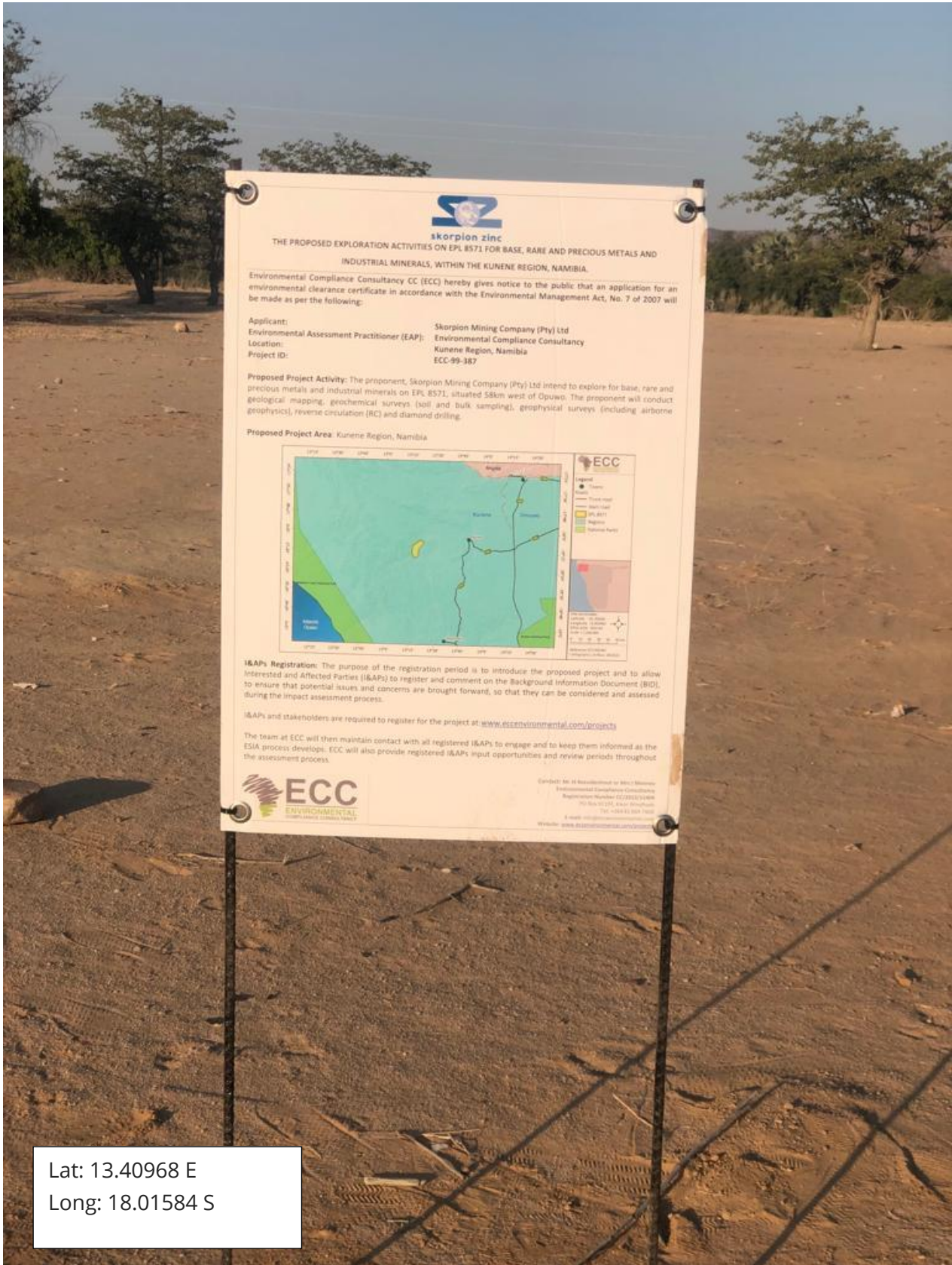
APPENDIX B – BACKGROUND INFORMATION DOCUMENT

APPENDIX D – SITE NOTICES





Lat: 13.39461 E
Long: 18.06340 S



Lat: 13.40968 E
Long: 18.01584 S

APPENDIX E – STAKEHOLDER LETTER



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REFERENCE: ECC-99-378-LET-19-D

27 June 2022

Identified stakeholder and potentially interested or affected party for:

The proposed exploration activities on EPL 8571 for base, rare metals, industrial and precious metals within the Kunene Region

RE: NOTIFICATION OF AN ENVIRONMENTAL ASSESSMENT OF THE PROPOSED EXPLORATION ACTIVITIES ON EPL 8571 FOR BASE, RARE METALS, INDUSTRIAL MINERALS AND PRECIOUS METALS WITHIN THE KUNENE REGION, NAMIBIA.

Environmental Compliance Consultancy (ECC) has been engaged by Skorpion Mining Company (Pty) Ltd, the Proponent, as their environmental assessment practitioner to conduct an environmental and social impact assessment, in terms of the Environmental Management Act, No. 7 of 2007 for the proposed exploration of base, rare, precious, and industrial metals in the Opuwo District, Kunene Region, Namibia.

This letter is intended to engage potentially interested and affected parties (I&APs) for the Project and provides a communication channel to ECC for the ESIA process. You have been identified as an interested or affected party and therefore ECC wishes to inform you of how you can be involved with the ESIA.

The Proponent proposes to conduct early exploration activities such as geological mapping, geochemical surveys (soil and bulk samplings), geophysical surveys (airborne and ground) and reverse circulation (RC) and or diamond drilling.

Public participation is an important part of the ESIA process, as it allows the I&APs to obtain information about the proposed project and provide feedback. Communication with the I&APs occurs at various stages throughout a project lifecycle including:

- Advertising in newspapers; public notice boards;
- Distributing a Background Information Document (BID) to identified I&APs; available online at <https://eccenvironmental.com/download/the->

ENVIRONMENTAL COMPLIANCE CONSULTANCY CC
PO BOX 91193 WINDHOEK, NAMIBIA
MEMBERS: J L MOONEY & JS BEZUIDENHOUT
REGISTRATION NUMBER: CC/2013/11404



[proposed-exploration-activities-for-base-rare-and-precious-metals-and-industrial-materials-on-epls-8571-8572-8573-kunene-region-namibia/ccenvironmental.com/projects/](https://eccenvironmental.com/projects/proposed-exploration-activities-for-base-rare-and-precious-metals-and-industrial-materials-on-epls-8571-8572-8573-kunene-region-namibia))

- Registered I&APs will also be informed of the available draft scoping report for a review period, during this period I&APs will have the opportunity to review the draft document and raise any issues or concerns, and

I&APs who wish to register for the project can do so on the ECC website as per the link provided below: [https://eccenvhttps://eccenvironmental.com/download/the-proposed-exploration-activities-for-base-rare-and-precious-metals-and-industrial-materials-on-epls-8571-8572-8573-kunene-region-namibia/ironmental.com/projects/](https://eccenvironmental.com/download/the-proposed-exploration-activities-for-base-rare-and-precious-metals-and-industrial-materials-on-epls-8571-8572-8573-kunene-region-namibia/ironmental.com/projects/)

If you are unable to complete the registration form online, please contact us via email for assistance. info@eccenvironmental.com

ECC values community input and participation in our projects and we look forward to working with you as the project develops.

Yours sincerely,



Stephan Bezuidenhout

Environmental Compliance Consultancy

Email: stephan@eccenvironmental.com



Jessica Bezuidenhout (Mooney)

081 669 7608

Email: jessica@eccenvironmental.com

APPENDIX F – EAP CVS

APPENDIX G – NBRI SPECIES LIST

SPECIES	ENDMISM	PROTECTED	IUCN 1	IUCN 2
<i>ACALYPHA FRUTICOSA FORSSK. VAR. FRUTICOSA</i>				
<i>ACRACHNE RACEMOSA (ROEM. & SCHULT.) OHWI</i>				
<i>ACTINIOPTERIS RADIATA (J.KÖNIG EX SW.) LINK</i>				
<i>ADENOLOBUS PECHUELI (KUNTZE) TORRE & HILLC. SUBSP. MOSSAMEDENSIS (TORRE & HILLC.) BRUMMITT & J.H.R</i>				
<i>AIZOANTHEMUM DINTERI (SCHINZ) FRIEDRICH</i>	ENDEMIC			
<i>ALBIZIA BREVIFOLIA SCHINZ</i>				
<i>ALBIZIA TANGANYICENSIS BAKER F. SUBSP. TANGANYICENSIS</i>				
<i>ANTICHARIS ANGOLENSIS B.NORD.</i>				
<i>APTOSIMUM WELWITSCHII HIERN</i>	NEAR ENDEMIC			
<i>BLEPHARIS GROSSA (NEES) T.ANDERSON</i>	NEAR ENDEMIC			
<i>BOSCIA ALBITRUNCA (BURCH.) GILG & GILG-BEN.</i>		FORESTRY PROTECTED		
<i>CAESALPINIA RUBRA (ENGL.) BRENAN</i>				
<i>CHENOPODIUM AMBROSIOIDES L.</i>				

SPECIES	ENDEMISM	PROTECTED	IUCN 1	IUCN 2
<i>CISSUS NYMPHAEIFOLIA</i> (WELW. EX BAKER) PLANCH.				
<i>CLEOME FOLIOSA</i> HOOK.F. VAR. <i>FOLIOSA</i>				
<i>CLEOME MONOPHYLLA</i> L.				
<i>COLOPHOSPERMUM MOPANE</i> (J.KIRK EX BENTH.) J.KIRK EX J.LÉONARD		FORESTRY PROTECTED		
<i>COMMICARPUS PLUMBAGINEUS</i> (CAV.) STANDL. VAR. <i>PLUMBAGINEUS</i>				
<i>COMMIPHORA AFRICANA</i> (A.RICH.) ENGL. VAR. <i>AFRICANA</i>				
<i>COMMIPHORA MULTIJUGA</i> (HIERN) K.SCHUM.	NEAR ENDEMIC			
<i>COMMIPHORA SAXICOLA</i> ENGL.	ENDEMIC			
<i>COMMIPHORA STEYNII</i> SWANEPOEL	ENDEMIC			
<i>COMMIPHORA VIRGATA</i> ENGL.				
<i>CORDIA SINENSIS</i> LAM.				
<i>CRINUM BUPHANOIDES</i> WELW. EX BAKER				
<i>CUCUMELLA CINEREA</i> (COGN.) C.JEFFREY				
<i>CUCUMIS SAGITTATUS</i> PEYR.				
<i>DACTYLIANDRA WELWITSCHII</i> HOOK.F.				
<i>DATURA INOXIA</i> MILL.				

SPECIES	ENDMISM	PROTECTED	IUCN 1	IUCN 2
<i>DICOMA TOMENTOSA</i> CASS.				
<i>ECBOLIUM CLARKEI</i> HIERN VAR. <i>CLARKEI</i>				
<i>ELAEODENDRON</i> <i>TRANSVAALENSE</i> (BURTT DAVY) R.H.ARCHER				
<i>ERAGROSTIS DINTERI</i> STAPP				
<i>ERIOCEPHALUS</i> <i>LUEDERITZIANUS</i> O.HOFFM.				
<i>ERUCASTRUM ARABICUM</i> FISCH. & C.A.MEY.				
<i>EUPHORBIA GLANDULIGERA</i> PAX				
<i>EUPHORBIA GUERICHIANA</i> PAX				
<i>GEIGERIA ALATA</i> (HOCHST. & STEUD.) BENTH & HOOK.F. EX OLIV. & HIERN				
<i>GNIDIA POLYCEPHALA</i> (C.A.MEY.) GILG				
<i>GREWIA SCHINZII</i> K.SCHUM.				
<i>HELICHRYSUM ROSEO-NIVEUM</i> MARLOTH & O.HOFFM.				
<i>HELICHRYSUM</i> <i>TOMENTOSULUM</i> (KLATT) MERXM. SUBSP. <i>TOMENTOSULUM</i>				
<i>HELIOTROPIUM GIESSII</i> FRIEDR.-HOLZH.				
<i>HELIOTROPIUM TUBULOSUM</i> E.MEY. EX DC.				

SPECIES	ENDMISM	PROTECTED	IUCN 1	IUCN 2
<i>HIERNIA ANGOLENSIS</i> S.MOORE				
<i>HIRPICIUM GAZANIOIDES</i> (HARV.) ROESSLER				
<i>HYBANTHUS DENSIFOLIUS</i> ENGL.				
<i>JUSTICIA BETONICA</i> L.				
<i>KOHAUTIA CYNANCHICA</i> DC.				
<i>KOHAUTIA RAMOSISSIMA</i> BREMEX.				
<i>LEUCOSPHAERA BAINESII</i> (HOOK.F.) GILG				
<i>LITOGYNE GARIEPINA</i> (DC.) ANDERB.				
<i>MARCELLIOPSIS WELWITSCHII</i> (HOOK.F.) SCHINZ				
<i>MOMORDICA WELWITSCHII</i> HOOK.F.				
<i>NUXIA OPPOSITIFOLIA</i> (HOCHST.) BENTH.				
<i>OPHIOGLOSSUM POLYPHYLLUM</i> A.BRAUN				
<i>OZOROA CRASSINERVA</i> (ENGL.) R.FERN. & A.FERN.				
<i>PAVETTA ZEYHERI</i> SOND.				
<i>PERISTROPHE PANICULATA</i> (FORSSK.) BRUMMITT				
<i>PETALIDIUM COCCINEUM</i> S.MOORE				

SPECIES	ENDMISM	PROTECTED	IUCN 1	IUCN 2
<i>PETALIDIUM LUTEO-ALBUM</i> <i>A.MEEUSE</i>	ENDEMIC			
<i>PETALIDIUM OHOPOHENSE</i> <i>P.G.MEY.</i>	ENDEMIC			
<i>PETALIDIUM</i> <i>ROSSMANNIANUM P.G.MEY.</i>	ENDEMIC			
<i>PETALIDIUM VARIABILE (ENGL.)</i> <i>C.B.CLARKE VAR. SPECTABILE</i> <i>MILDBR.</i>	ENDEMIC			
<i>PETALIDIUM VARIABILE (ENGL.)</i> <i>C.B.CLARKE VAR. VARIABILE</i>	ENDEMIC			
<i>PHRAGMITES MAURITIANUS</i> <i>KUNTH</i>				
<i>PHYLLANTHUS DINTERI PAX</i>	ENDEMIC			
<i>PLUCHEA BOJERI (DC.)</i> <i>HUMBERT</i>				
<i>PLUMBAGO ZEYLANICA L.</i>				
<i>RICINUS COMMUNIS L. VAR.</i> <i>COMMUNIS</i>				
<i>ROGERIA ADENOPHYLLA J.GAY</i> <i>EX DELILE</i>				
<i>RUELLIA MARLOTHII ENGL.</i>				
<i>SEDDERA SCHIZANTHA</i> <i>HALLIER F.</i>				
<i>SENNA ITALICA MILL. SUBSP.</i> <i>ARACHOIDES (BURCH.) LOCK</i>				
<i>SENNA SINGUEANA (DELILE)</i> <i>LOCK</i>				
<i>SESAMOTHAMNUS GUERICHII</i> <i>(ENGL.) E.A.BRUCE</i>	NEAR ENDEMIC			

SPECIES	ENDMISM	PROTECTED	IUCN 1	IUCN 2
<i>SOLANUM CATOMBELENSE</i> PEYR.				
<i>SPHAERANTHUS PEDUNCULARIS</i> DC. SUBSP. <i>ROGERSII</i> (N.E.BR.) WILD				
<i>STIPAGROSTIS HIRTIGLUMA</i> (STEUD. EX TRIN. & RUPR.) DE WINTER SUBSP. <i>PATULA</i> (HACK.) DE WINTER				
<i>STIPAGROSTIS UNIPLUMIS</i> (LICHT.) DE WINTER VAR. <i>UNIPLUMIS</i>				
<i>TAPINANATHUS OLEIFOLIUS</i> (J.C.WENDL.) DANSER				
<i>TRIANTHEMA TRIQUETRA</i> ROTTLER EX WILLD. SUBSP. <i>TRIQUETRA</i> VAR. <i>TRIQUETRA</i>				
<i>TRICHOLAENA MONACHNE</i> (TRIN.) STAPF & C.E.HUBB.				
<i>XEROPHYTA SQUARROSA</i> BAKER				