skorpion zinc

Submitted to: Skorpion Mining Company (Pty) Ltd
Attention: Mr Westley Price
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REPORT:

SCOPING REPORT PLUS IMPACT ASSESSMENT FOR EXPLORATION ACTIVITIES ON EPL 8570, //KHARAS REGION, NAMIBIA

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ECC ENVIRONMENTAL COMPLIANCE CONSULTANCY

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EXECUTIVE SUMMARY

Skorpion Mining Company (Pty) Ltd (Herein referred to as Skorpion or the Proponent) intends to undertake exploration activities on Exclusive Prospecting Licence EPL 8570 for base and rare metals, industrial minerals and precious metals in the //Kharas Region. The EPL lies approximately 26km NW of Rosh Pinah, the EPL is accessible via the C13 road.

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 8570 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.

The regional geology of this area consists mainly of the Kalahari and Namib Sands Group and sections of the Gariep complex to the northern and southern sides of the EPL. The main rock types are sands and calcrete. The EPL area is largely covered by lithic Leptosols and smaller sections of eutric Regosols The plant diversity for this area is medium, with high to very high endemism and the dominant vegetation structure for the EPL is dwarf shrubland, vegetation type is Succulent steppe and the EPL falls within the Succulent Karoo biome. The EPL overlays two groundwater basins, namely the Namib and Orange River. Very limited volumes of groundwater are available in the basement rocks of the //Kharas Region, since there are no productive aquifers. Lack of recharge and poor groundwater quality in most areas further aggravate the situation. The potential for contamination from the proposed activities is regarded as minimal. Protection of water quantity and quality is addressed in the EMP.

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
BID	background information document
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
EPL	exclusive prospecting licence
GDP	gross domestic profit
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
NCAA	Namibia Civil Aviation Authority
NDP	national development plan
NPC	national planning committee
NSA	national statistics agency
N	north
NNE	north-northeast
RC	reverse circulation
RH	relative humidity
S	South
SSW	south-southwest

1 INTRODUCTION

1.1 COMPANY BACKGROUND

Environmental Compliance Consultancy (ECC) has been retained by Skorpion Mining Company (Pty) Ltd (the Proponent) to conduct an environmental and social impact assessment (ESIA) for the exploration of base, rare and precious metals and industrial minerals within the proposed exclusive prospecting licence area located on (EPL) 8570. EPL 8570 is located within the //Kharas Region approximately 26km NW of Rosh Pinah, the EPL is accessible via the C13 road. The location of EPL 8570 is shown in Figure 1.

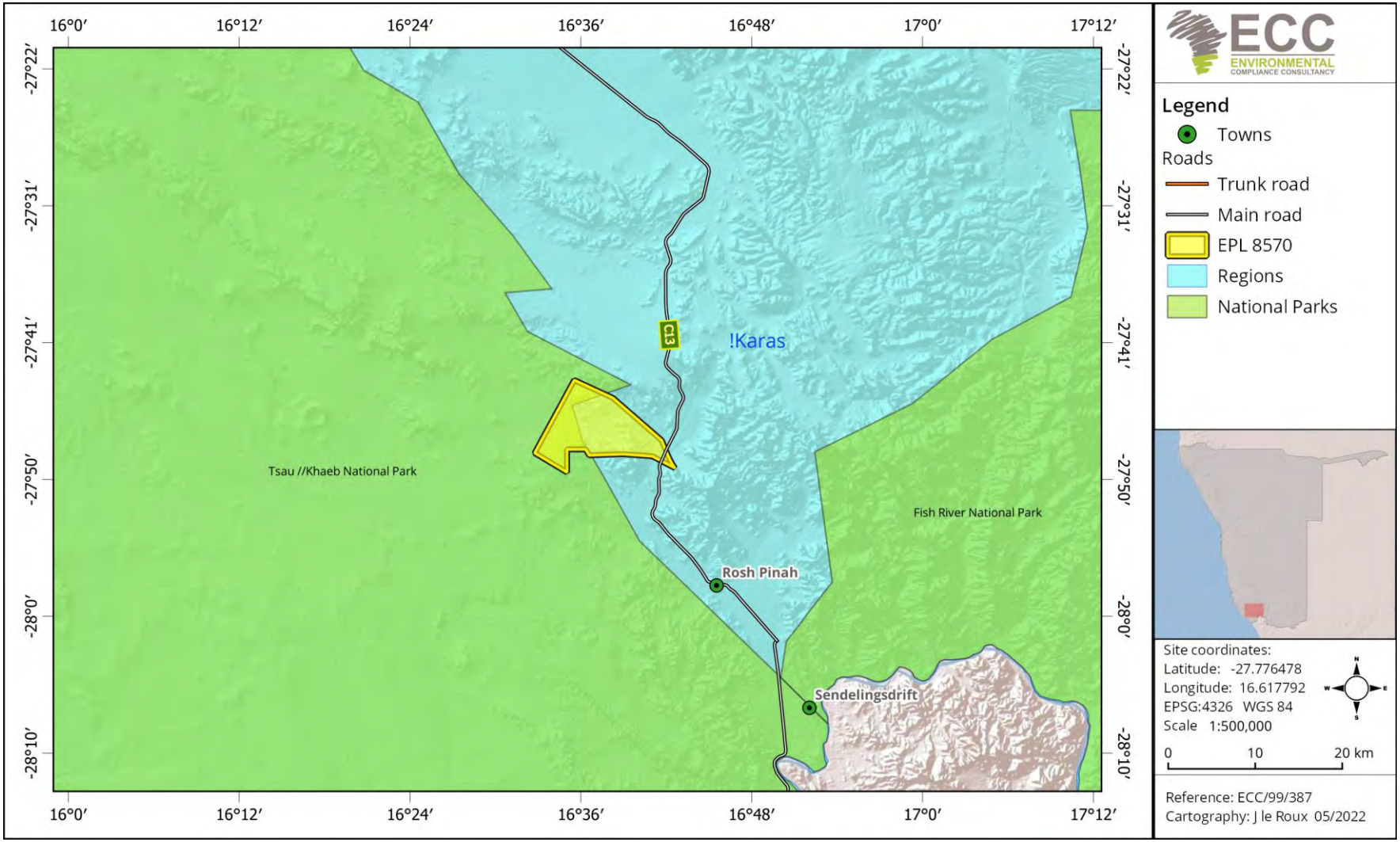

Figure 1 - Locality map of EPL 8570, //Kharas Region

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 of 2012. 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; outlines the terms of reference for the assessment phase 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 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
Email: info@eccenvironmental.com

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 of 2012. 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
WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES (2.1) The construction of facilities for waste sites, treatment of waste and disposal of waste. (2.3) The import, processing, use and recycling, temporary storage, transit or export of waste.	• Waste generated which will mainly consist of solid waste and general waste during the exploration phase will be removed by a skip and will be disposed of at the nearest registered 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 the exploration phase by the drill crew.
MINING AND QUARRYING ACTIVITIES (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. (3.2) Other forms of mining or extraction of any natural resources whether regulated by law or not.	• The proposed project has obtained an EPL from MME; now requires an environmental clearance certificate 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 8570, which will include: geological mapping, geochemical sampling, remote sensing, airborne geophysics, ground geophysics, reverse circulation drilling and diamond drilling.

Listed Activity	ESIA Screening Finding
(3.3) Resource extraction, manipulation, conservation, and related activities	
FORESTRY ACTIVITIES (4.) The clearance of forest areas, deforestation, aforestation, 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.	• Limited vegetation clearing may be required for tracks and survey access creation, and possibly for the setup of survey and drilling teams' field camps. Clearing of large trees will be avoided.
WATER RESOURCE DEVELOPMENTS (8.1) The abstraction of ground or surface water for industrial or commercial purposes.	• For the drilling of exploration boreholes, groundwater may need to be abstracted, or water will be carted/transported from nearby approved sources.
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.	• Portable chemical toilets, long drop hole for toilet will be used during the exploration activities. • Chemical toilets can be used during the Project • Bulk fuel may be required for the onsite generation of electricity, and for refuelling the prospecting crews and fleet. • Consumer installation certificates are required for bulk fuel storage and dispensing. • Smaller volumes of hazardous chemicals (oil, grease, diesel etc.) will be stored in drip trays to avoid contamination/pollution. • MSDS sheets will be kept onsite, accessible and used for all dangerous materials, chemicals, solvents, lubricants and related substances. The MSDS sheets ensure proper transport, handling, storage, use, disposal and response in the event of an incident.

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 ECCs combined ESIA 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.

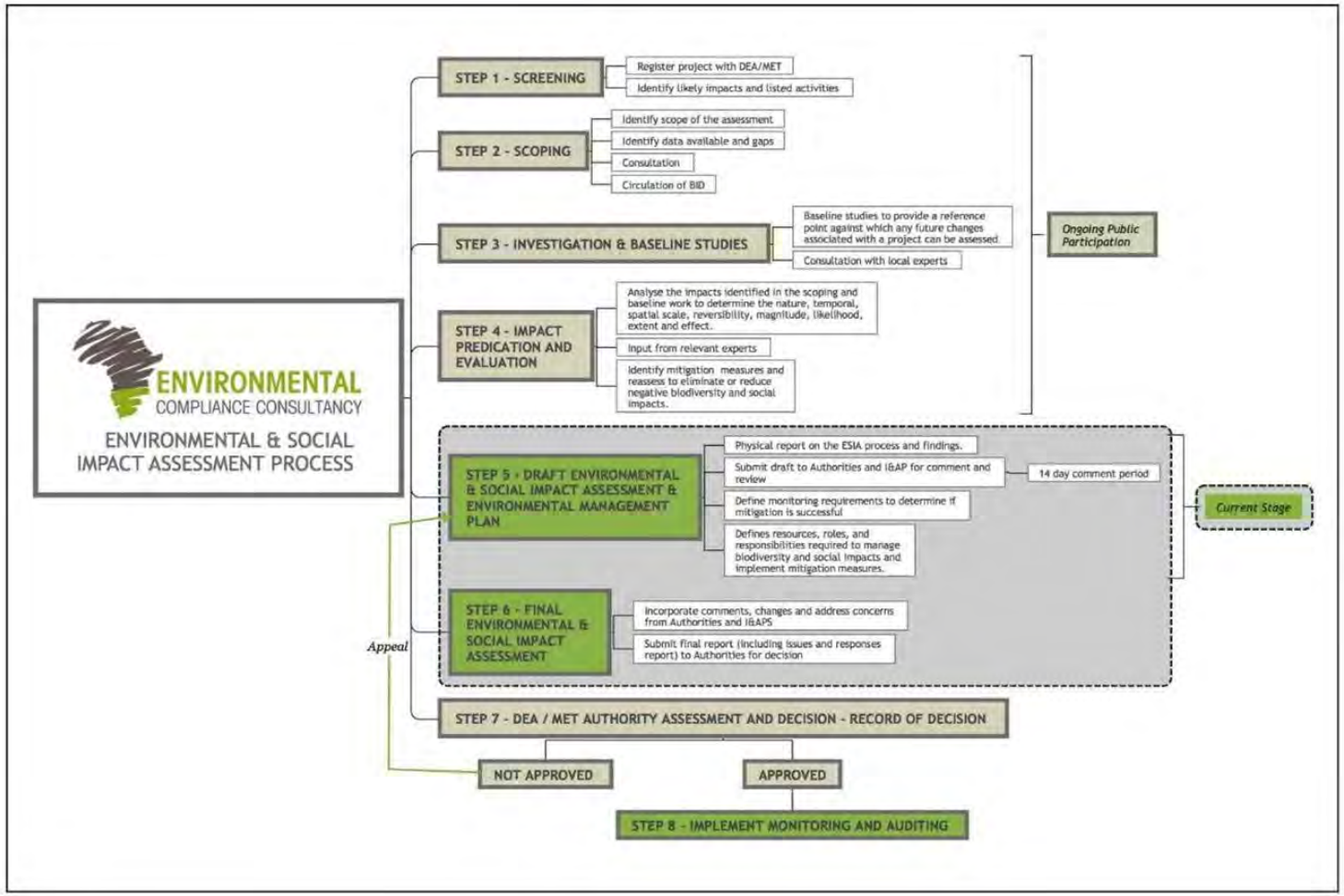

Figure 2 - ESIA Process and stages complete

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 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 a listed activity and there may be potential for significant impacts to occur.

2.4 SCOPING AND 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 interacts 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 outcomes of the screening process are discussed further in sections 6 and 7.

Feedback from consultation with the client and stakeholders are also considered 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 on 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), focusing 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 STAKEHOLDERS 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);
- //Kharas Regional Council
- Tsau //Khaeb Sperrgebiet National Park
- Farmer owners over whose farms the EPL falls

The records of the public consultation process will provide a list of interested and affected parties (I&APs), 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 15 August 2022. The public review period was open for a period of 7 days from the 15 August 2022 to 21 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 NTS can be found in Appendix B.

2.6.3 NEWSPAPER 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 D.

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. A public meeting was not required during the public consultation process for the proposed Project.

2.6.6 SUMMARY OF ISSUES RAISED

The I&APs were encouraged to provide constructive input during the consultation periods. All comments, questions or concerns received during the registration period are provided in Table 3.

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

Stakeholder name, details and method through which feedback was received	Comments/Questions Received	Response/Clarification
8 July 2022 (Via Email) Vanessa Stein National Botanical Research Institute	While we recognize the importance of mining activities for the growth of our economic development, we have the following concern: 1. Mining activities have always been known to leave behind a very aesthetically disturbing effect; especially in an area that is world renowned for its succulent diversity, endemism and threatened plant species. The BID is downplaying the importance of the area. This is one of the two most important areas for plants in the country. It is a hotspot for endemism and diversity. A full botanical study MUST be conducted by a QUALIFIED BOTANIST on account of the fact that the proposed project will impact the Succulent Karroo Steppe. The accumulative impacts of developments should be seriously considered. The NBRI must be	In response to 1,2 and 3 a detailed botanical list has been provided in Appendix G. Please note that this it is for exploration and not mining. With that said, the EMP makes provision for the conservation of endemic, endangered and protected species. Section 2.5, Table 2, pg. 18 states: – Minimize clearance areas through proper planning of the exploration activities; – Route new tracks around established and protected trees, and clumps of vegetation; – Identify rare, endangered, threatened and protected species; – During toolbox talks and induction, highlight to workers that the removal of significant plants (species of

	contacted to request a list of species for all the quadrants within this EPL. If the area is very dry it will not be possible to see the geophyte diversity, and this is why it is so important to consult a list of species for that area.	conservational importance) is avoided, or if unavoidable, the relevant permits will be obtained prior to disturbance. – Where possible rescue and relocate plants of significance with the appropriate permits in place beforehand and – Promote revegetation of cleared areas upon completion of the exploration activities.
	2. Upon preliminary extraction of a species list we can already conclude that there are over 45 species which are endemic to this area. About 70 species occurring here are protected, not to mention the ones that are vulnerable, critically endangered, endangered and near threatened. Just looking at these figures one can already tell that this is a centre of endemism and diversity.	
	3. This area, especially rocky habitats, is a very important ecological area. Single endemic and endangered flora species exist on this Project site, which should be identified and relocated before any exploration or site clearance commence. It is accordingly recommended that a Search and Rescue Management Plan be drafted (with monitoring plan) and that this Plan include the necessary permit/s as per the Forest Act (No. 12 of 2001, as amended). This Plan should be implemented by a botanist to be present during site lay-out and demarcation, to identify protected / critically endangered /	

	vulnerable and endangered species for removal and transplant (if at all possible). Site lay-out should be done within a carefully planned and responsible manner to avoid unnecessary removal of ground cover or any endangered and or protected species be trampled on. Climate change is already impacting this area and any further development should take extra precautions to prevent further damage and destruction.	

The public was further provided with an opportunity to send any comments on the draft scoping report and the EMP to be included and addressed, where applicable, in the final this final document.

2.7 Draft EIA and EMP

This 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 shown in Figure 2. 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

The final EIA report and associated appendices will be made 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. A small portion (approximately 40%) of the Project area is located inside a protected area, the Tsau //Khaeb National Park (previously known as Sperrgebiet) but contains no listed heritage areas. The remainder of the EPL is located on private farmland.

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 to 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)	The constitution defines the country's position in relation to sustainable development and environmental management. The constitution refers that the State shall actively promote and maintain the welfare of the people by adopting policies aimed at the following: "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."	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).
Minerals (Prospecting and Mining) Act No. 33 of 1992	The Act provides for the granting of various licences related to mining and exploration. 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." The Act sets out the requirements associated with licence terms and conditions, such that the holder of a mineral licence shall comply with. The Act also contains relevant provisions for pollution control related to mining activities and land access agreements and provides provisions that mineral	Exclusive Prospecting Licence EPL 8570 was issued to the Proponent in May 2022 and is valid for a period of 3 years. The proposed prospecting activity on EPL 8570 requires an EIA to be carried out, as it triggers listed activities as defined in Government Notice 29 in the Environmental Management Act 2007. Prospecting activities in EPL 8570 shall not commence until an environmental clearance certificate has been issued in accordance with the provisions of the Environmental Management Act 2007. The Project shall be compliant with Section 76 of the Act with regard to records, maps, plans and financial statements, information, reports and returns submitted.

National Regulatory Regime	Summary	Applicability to the Project
	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.	
Environmental Management Act, 2007 (Act No. 7 of 2007) and its regulations (2012), including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011)	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. The Act states that an EIA should be undertaken and submitted as part of the environmental clearance certificate application process. 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.	This environmental scoping report documents the findings of the scoping phase of the environmental assessment undertaken for the proposed Project. The process will be undertaken in line with the requirements under the Act and its regulations. Prospecting activities on EPL 8570 shall not commence until an Environmental Clearance Certificate has been issued in accordance with the provisions of the Environmental Management Act 2007.
Hazardous Substances Ordinance, No. 14 of 1974	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. This applies to the manufacture, sale, use, disposal, and dumping of hazardous substances, as well as their import and export.	The planned Project will involve the handling and storage of hazardous substances such as fuel and other hydrocarbons.
Labour Act, No. 11 of 2007	The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health & Safety provisions of Employees at Work, promulgated in terms of Section 101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997)	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 occupational health and safety plan to ensure adequate

National Regulatory Regime	Summary	Applicability to the Project
		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 onboard storage of hazardous substances such as fuels, reagents, and industrial chemicals.

3.2 NATIONAL POLICIES AND PLANS

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

Policy or plan	Description	Relevance to the r 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.
Namibia's Green Plan, 1992	Namibia has developed a 12-point plan for integrated sustainable environmental management to ensure a	Guidelines as best practise to be adhered to during operational activities.

Policy or plan	Description	Relevance to the r Project
	safe and healthy environment and to maintain a viable economy. Clause 2 (f) makes specific mention to guidelines related to Mining and Sustainable Development.	
Minerals Policy	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. 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. 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.	The planned Project conforms to the Policy, which has been considered through the ESIA process and the production of this report. The Proponent intends to continue to support local spending and procurement. 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.

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 licence (EPL 8570) has been issued to date.	Ministry of Mines and Energy (MME)

Free entry permit to enter national park	Nature Conservation Ordinance, 1975 (Ordinance 4 of 1975)	The proponent will need the free entry park permit in order to enter park without paying the standard entry fee required by tourists. This permit will need to be renewed every three months in order by the proponent in order to oversee exploration activities for the section of the EPL 8570 that is within the national park.	Ministry of Environment, Forestry and Tourism
Borehole drilling and abstraction permit	Water Resource Management Act No. 11 of 2013, Section 61 (1)	The proponent for the purpose of exploring for or extracting minerals or any other substance, other than groundwater, proposes to drill a borehole, deepen or enlarge an existing borehole, or make or deepen an excavation in the ground to the level or below the level of the water table, may not commence with work in that regard unless the proponent, in accordance with section 56, has applied for and has been granted a borehole licence by the Minister to undertake such work.	Ministry of Agriculture, Water and Forestry

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 //Kharas 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 analysed and presented in the scoping assessment and ESIA 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 8570 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	June 2022	Historical data compilation and field verification
Geological Mapping	August 2022	Detailed Geological and Structural Mapping
Geochemical Sampling	August 2022	Soil and Rock Chip Geochem
Ground Geophysics	January 2023	Follow up of any structural/geochemical targets using appropriate geophysics
Data Integration and Interpretation	March 2023	Target generation and prioritization to determine whether drill targets are present
Drill Testing	May 2023	Drill testing using RC or DD, depending on depth and priority of targets
Down-Hole Geophysics	July 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 8570 will include the following: geological mapping, geochemical surveys, remote sensing, geophysical surveys (airborne and ground-based) and potentially diamond and RC drilling. 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. Details of these methods are described below.

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.

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 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 approximately 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 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, etc. and the samples are typically stored at the Skorpion Exploration Camp outside Rosh Pinah. 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 may be accommodated on-site, erecting campsites at the various exploration stations with the EPL with the necessary approvals in place from farm owners. The 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 Rosh Pinah.

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 or non-hazardous waste

will be disposed of at the local landfill site. While hazardous waste will be transported to appropriate sites for safe disposal at Skorpion Mine.

4.3.7 WASTEWATER EFFLUENT

Early-stage exploration does not produce 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 mud and drill cuttings are separated from the water and the water circulated down the hole, while the drilling muds will be disposed of at Skorpion Mine.

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 upon with the landowners and 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.

5.2 LAND USE

EPL 8570 is situated in the southwestern part of Namibia in the //Kharas Region next to the Skorpion Zinc mine. A portion of the EPL lies within the Tsau //Khaeb National Park, while the rest of the EPL is located on a private farm. Farms in this area are generally used for livestock farming (mostly sheep) and hunting. Rosh Pinah is the closest town and is approximately 26 km southeast of the EPL.

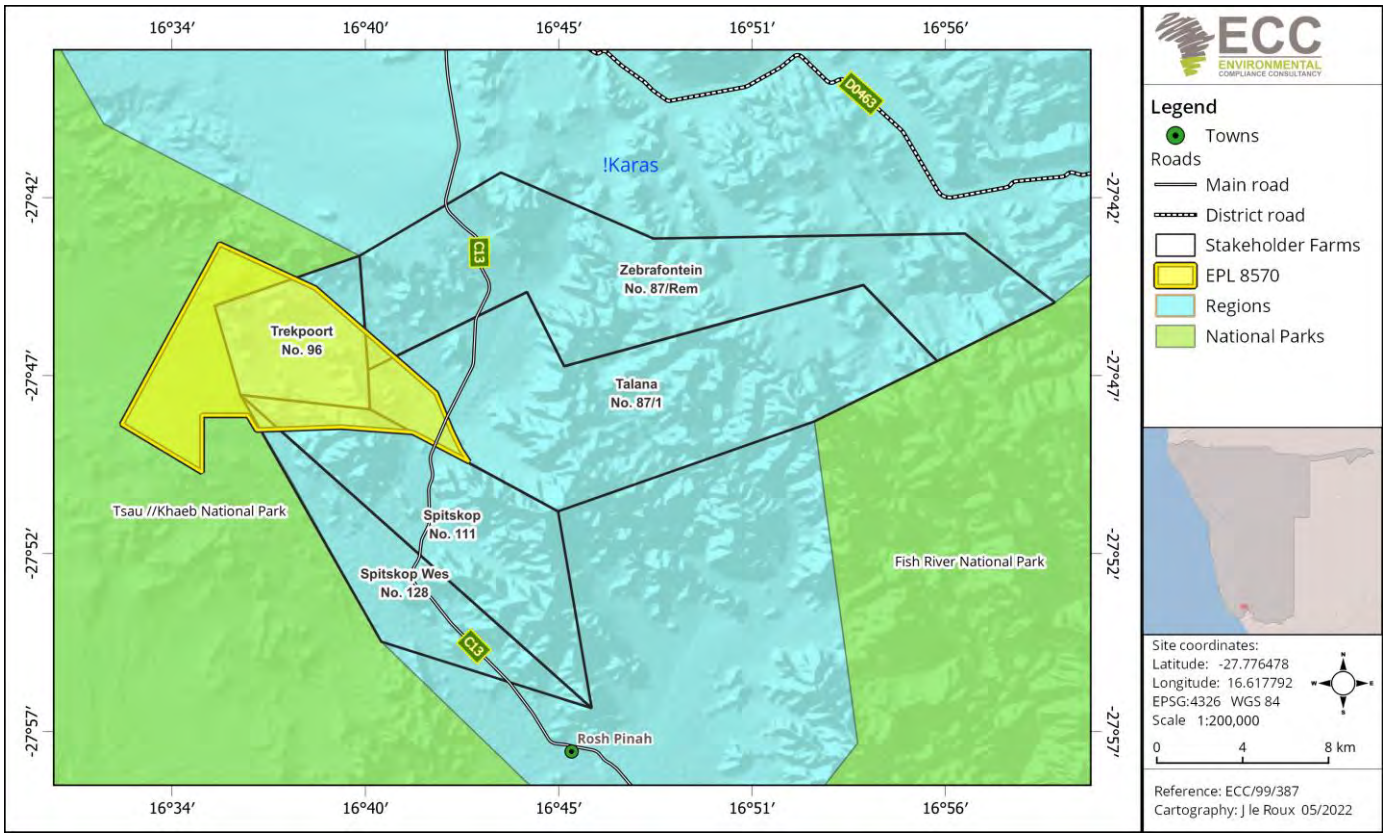

Figure 3 - Stakeholder map

5.3 CLIMATE

The town of Rosh Pinah has a prevailing desert climate. The average annual temperature for Rosh Pinah is 23°C, with an average rainfall of approximately 47 mm per annum. The wind conditions in the region are controlled by the interaction of the South Atlantic anticyclone, the northward-flowing and cold Benguela Current (with associated upwelling), eastward-moving mid-latitude cyclones and the atmospheric pressure field over the subcontinent (Kamstra, 1985). This generally leads to strong zonal pressure gradients at the coast and the resultant fresh to strong equatorward winds. These strong equator wards winds are interrupted by the passing of coastal lows with which are associated periods of calm or NW wind conditions. Fog occurs, on average, on more than 100 days per year at Oranjemund. It forms as moist cold air from the ocean and meets the hot dry air of the desert.

The entire ecosystem is driven by wind, which redistributes sand, seed, and leaf litter through the ecosystem. The wind in the study area predominantly originates from the southeast (26% of the time), south (16% of the time) and southwest (13% of the time). The highest wind speeds are experienced in winter. Calm conditions occur 32% of the time during winter. Winter is characterised by short-lived, high wind speed events. Summer experiences the lowest wind speeds, with a high frequency of calm conditions in summer (GSC – EIA, 2015).

The proposed EPL is situated northwest of Rosh Pinah, next to the Skorpion Zinc mine in the //Kharas Region, Namibia. The area where the EPL 8570 is located has a climate that is characterised by warm summers and cool winters with an average annual temperature of between 16˚C to 17˚C, mean maximum temperatures ranging between 21˚C and 33˚C and mean minimum temperatures ranging between 7˚C to 18˚C. The hottest months of the year are between December and March and the coolest months are in June, July and August (Bubenzer, 2002 & meteoblue, 2022) shown in Figure 4.

The most humid months have a relative humidity (RH), averaging approximately 70% RH, and the driest months have an RH of approximately 20%. The average rainfall in this area during the year is between 50 to 100 mm and rainfall events are limited to the summer months, mainly between January and April. Potential evaporation is between 2800 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 38 km/h, where strong winds can be experienced throughout the year but the months of April to September are known to have the strongest winds. Wind can occur at any time of the day and the most predominant wind directions for this area are N, NNE, S and SSW (Figure 5) (meteoblue, 2022).

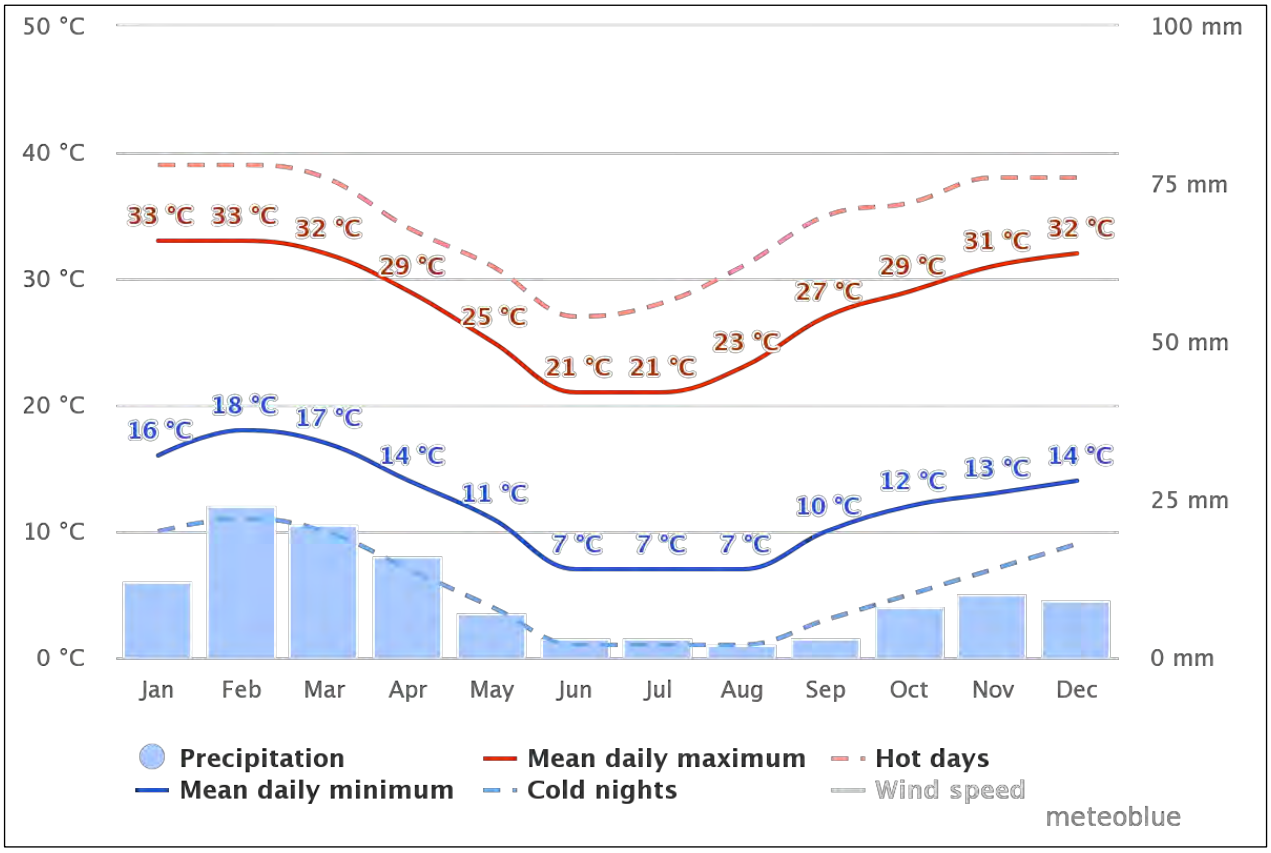

Figure 4 - Yearly expected weather conditions (meteoblue, 2022)

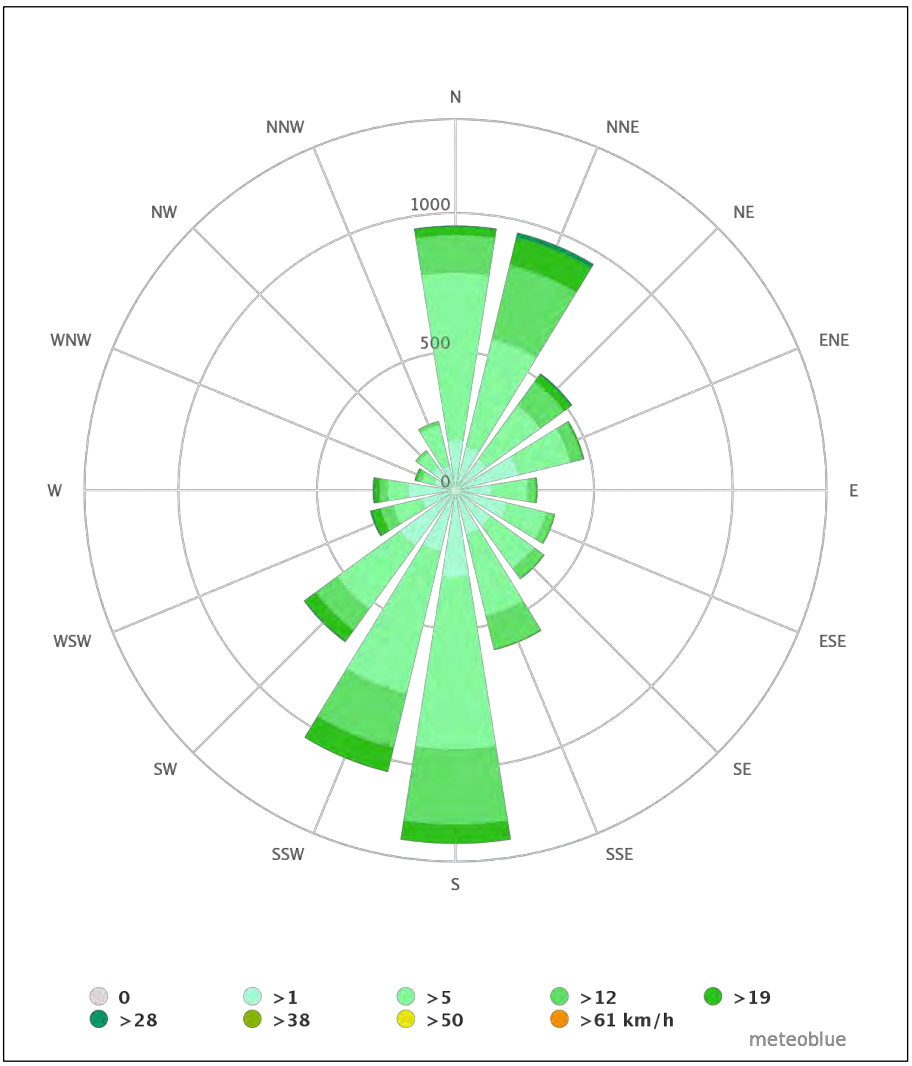

Figure 5 - Average wind direction in this area (meteoblue, 2022)

5.4 SOIL, GEOLOGY AND TOPOGRAPHY

Namibia can be divided into two broad geological provinces, one covering the western parts and the other in the east. The western parts consist of a variety of geological formations of different ages and compositions and formed under very diverse environmental conditions – some were formed in the depths of primaeval oceans, others as a result of the movement of the earth's crust or because of collisions or volcanic eruptions. Most of these formations are exposed in the west as rugged landscapes of mountains, hills, valleys and plains with sparse vegetation, providing an interesting insight into Namibia's geological past.

In eastern Namibia, the formations are covered with deposits of a much more recent past (Mendelsohn et al., 2002). The deposits are loose, aeolian of origin, sandy and unconsolidated. On the surface, the east of Namibia appears monotonous and uniform, covered with dense vegetation in the north and decreasing to the south. Most of the knowledge about these

sediments has been derived from water abstraction boreholes, rare outcrops and underlying formations exposed along drainage lines and around isolated pans.

Apart from diamonds, most of Namibia's valuable mineral resources have been found in the western part of Namibia where the oldest rocks are exposed to the surface, i.e., in the Damara Supergroup (Mendelsohn et al., 2002).

The regional geology of this area consists mainly of the Kalahari and Namib Sands Group and sections of the Gariep complex to the northern and southern sides of the EPL. The main rock types are sands and calcrete. The Kalahari and Namib sands group forms part of the Kalahari Group and the Gariep Complex forms part of the Damara Supergroup and Gariep Complex (Bubenzer, 2002) shown in Figure 6.

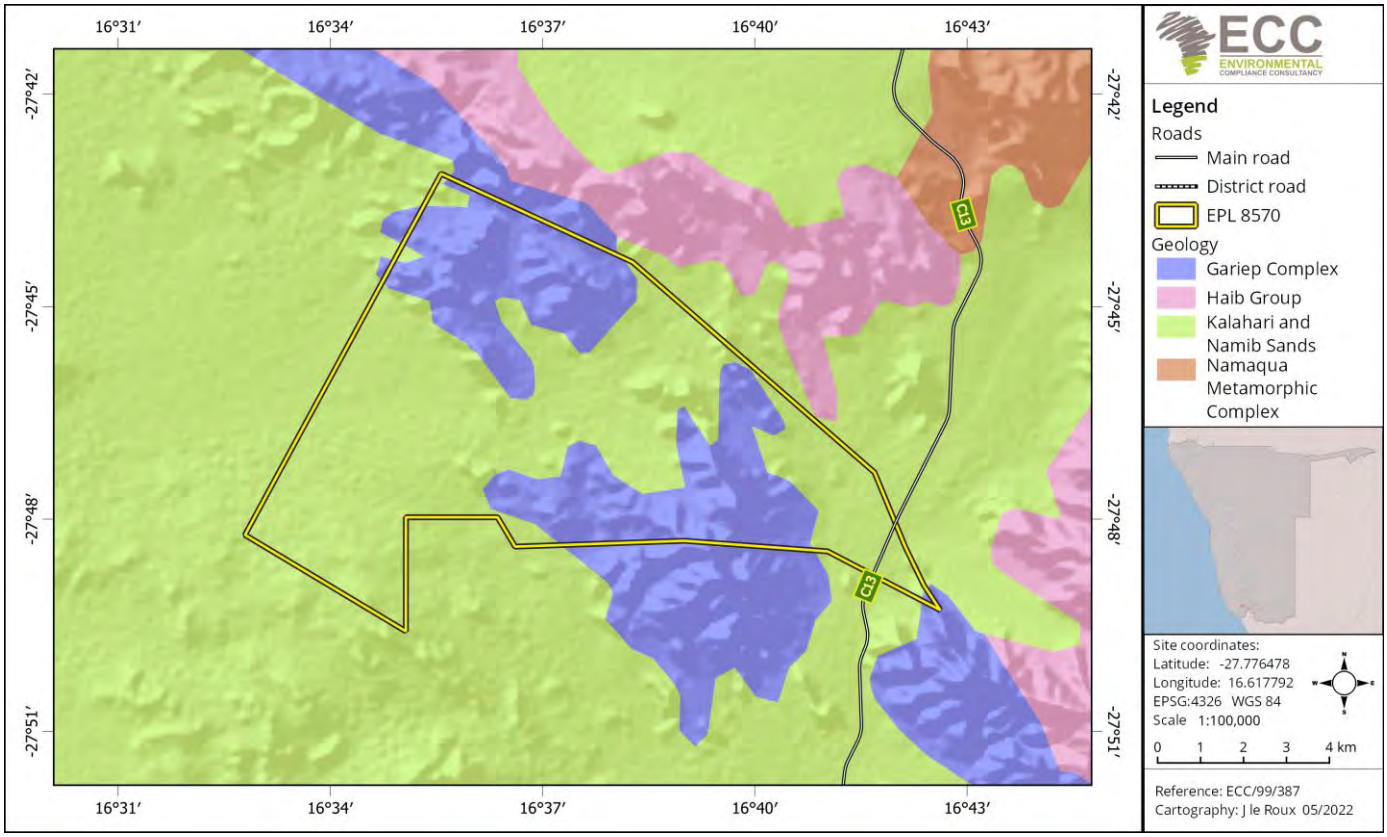

Figure 6 - Geology of this area

The topography of the Project site is relatively flat in some areas with hills to the northern and western sides of the EPL. The elevation decreases from the western side of the EPL towards the eastern side (**Error! Reference source not found.**), varying between about 1150 m to just below 7 00 m above mean sea level, but elevation across the EPL varies due to various elevated areas (i.e., hills) shown in Figure 7.

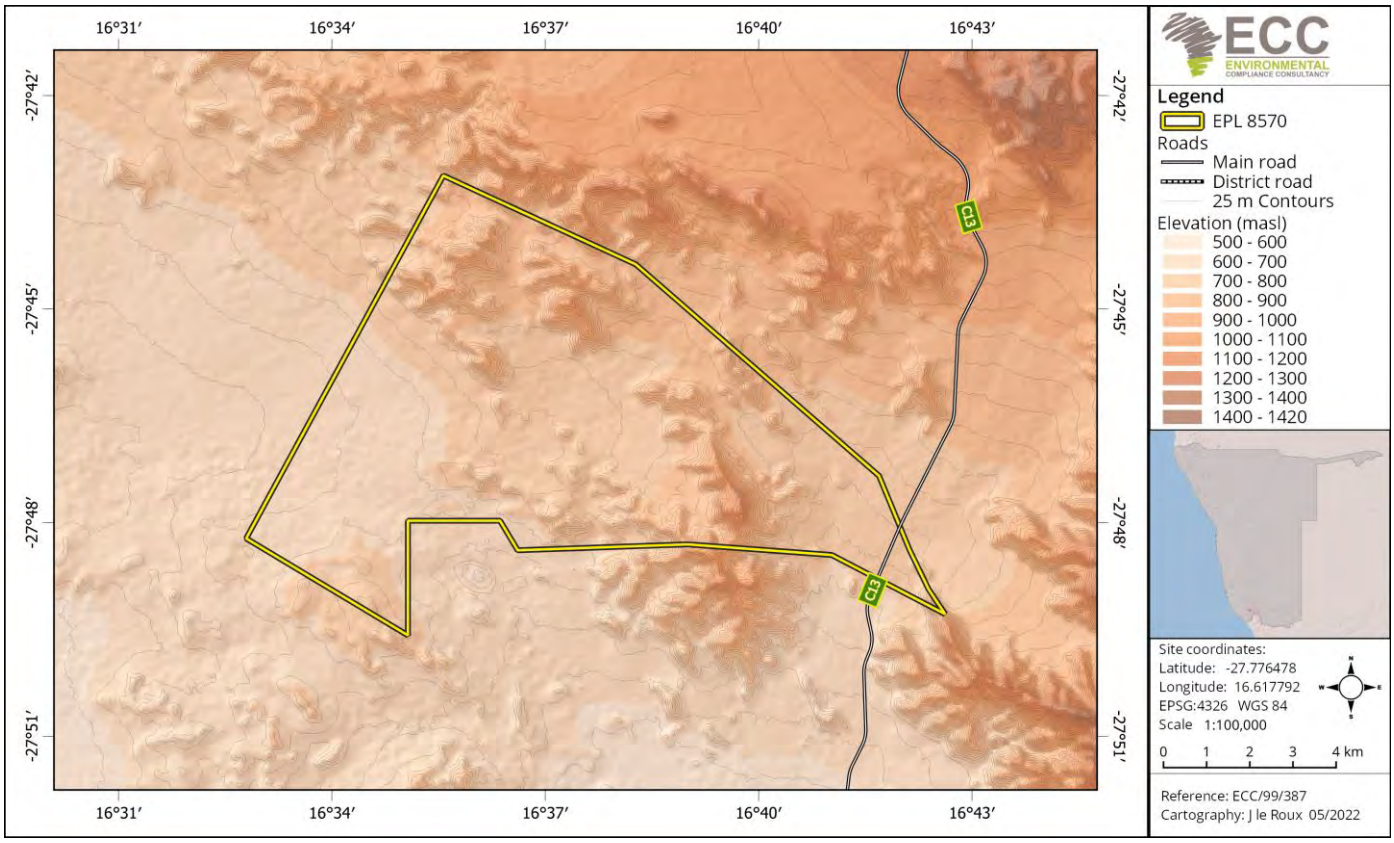

Figure 7 - Elevation of this area

The EPL area is largely covered by lithic Leptosols and smaller sections of eutric Regosols (**Error! Reference source not found.**) (Bubenzer, 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 denotes soil properties. Lithic soils are characterised as very thin or shallow soils whereas eutric soils are fertile with high base saturation. The second name reflects the conditions and processes which have led to the formation of the soils (Mendelsohn et al., 2002).

Leptosols are typically formed in areas that are actively eroding, especially in hilly or undulating areas which cover a large part of the southern and north-western parts of Namibia. This type of soil is coarse-textured and offers limited depth due to the presence of hard-rock, highly calcareous or cemented layer within 30cm of the surface. Leptosols are the shallowest soils in Namibia and often contain gravel. It has a low water-holding capacity and so water run-off and water erosion can be very high in these areas if heavy rainfall occurs (Mendelsohn et al., 2002) shown in Figure 8.

Regosols are medium to fine-textured soils of actively eroding landscapes. These soils are not as shallow as Leptosols but never reach depths of more than 50 cm. This type of soil cannot provide vegetation with sufficient minerals or water (Mendelsohn et al., 2002).

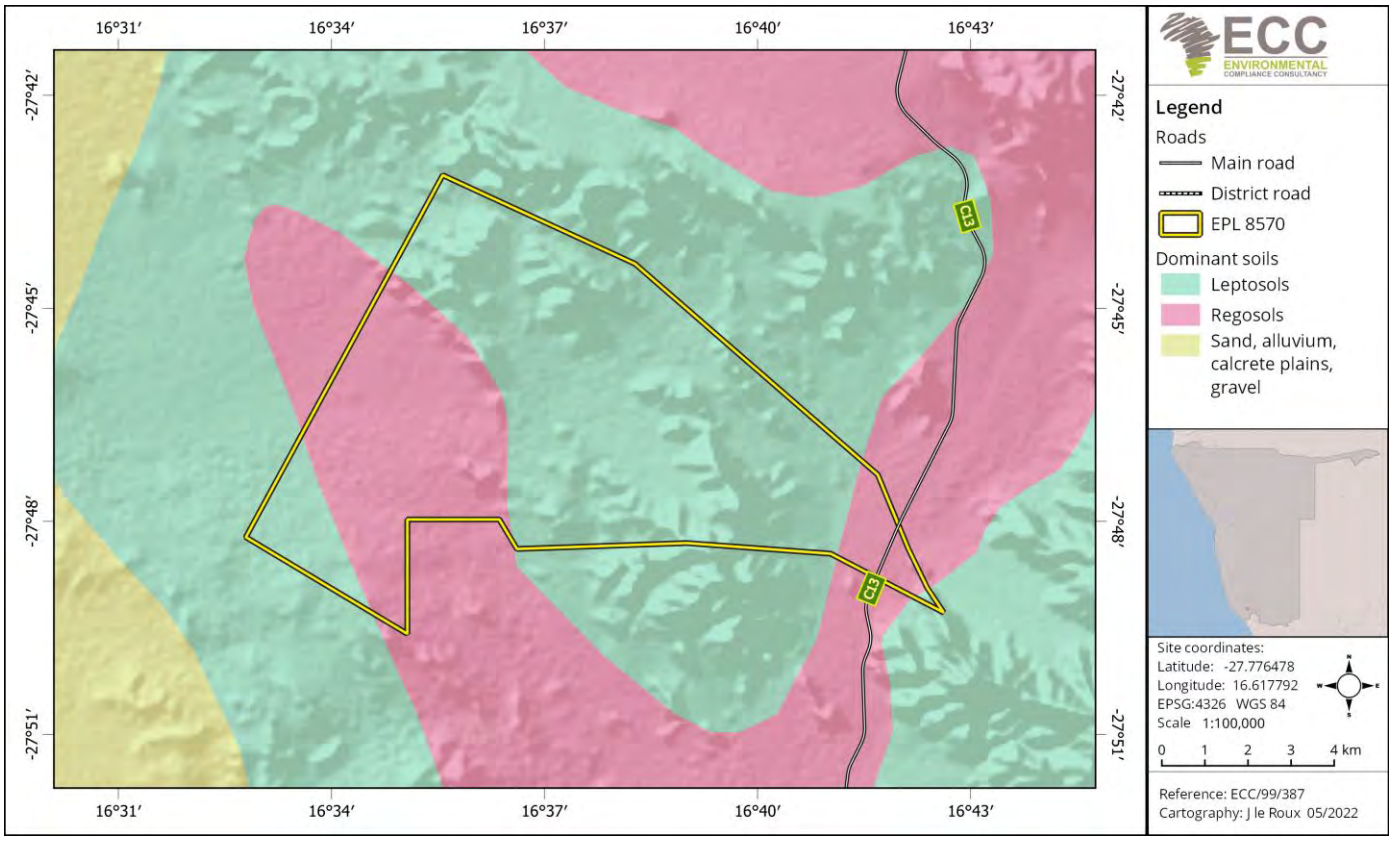

Figure 8 - Soil type of this area

5.5 HYDROGEOLOGY

According to the Namibian Monitoring Information System & Hydrological Map of Namibia (https://na-mis.com/), the site falls over rock bodies with moderate to very low groundwater potential. The groundwater vulnerability in this area is considered to be low to very low and groundwater recharge within this area is also considered to be low (0 to <0.5 % of the total average rainfall). Groundwater quality in this area is generally poor and not suitable for human consumption (Group D and C) with some good to excellent quality pockets (Group A and B), found around the site (northeast).

The proposed Project overlays two groundwater basins, namely the Namib and Orange River (Figure 9). Very limited volumes of groundwater are available in the basement rocks of the //Kharas Region since there are no productive aquifers. Lack of recharge and poor groundwater quality in most areas further aggravate the situation.

The Zebrafontein Drainage network has incised itself along the Zebrafontein Valley Fault, representing a prominent north-east trending lineament. This fault zone plays an important role in the groundwater dynamics of the area as it transects the northwest-trending faults (and associated aquifers) over a distance of some 18km. As the Zebrafontein Drainage falls some 500m

over this distance, the potential of this fault as a conduit (pipe-like structure or channel that transports water) for down-gradient loss of groundwater is apparent (GSC – EIA, 2015).

Groundwater resources in fractured bedrock aquifers of the Namib and the Sperrgebiet are very limited and, if exploited, extraction easily exceeds recharge. Drainage is normally dendritic from the north towards the Orange River. The dominant ephemeral river is the Fish River with its deep canyon in the Ai-Ais Nature Reserve (Christelis, G. & Struckmeier, W. (Eds.), 2001). The only permanent water in this region is the Orange River, which supplies water to towns and mines (Oranjemund, Rosh Pinah) as well as agricultural and tourism projects.

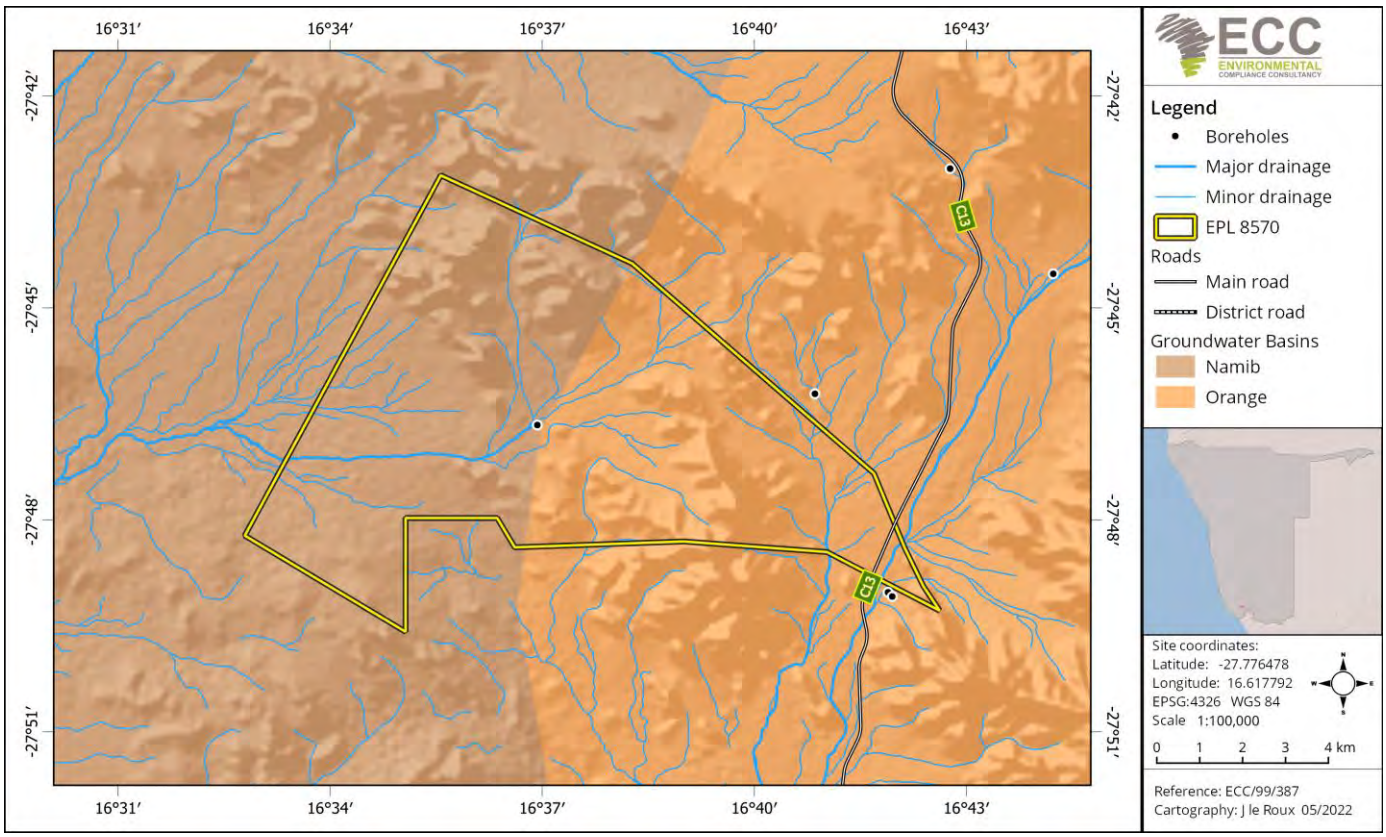

Figure 9 - Hydrology of the area

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 (150 to up to 300 species) for this area is medium, with high to very high endemism (26 to more than 36 species) and the dominant vegetation structure for the EPL is dwarf shrubland, vegetation type is Succulent steppe and the EPL falls within the Succulent Karoo biome (Mendelsohn et al. 2002) shown in Figure 11. The following are the protected and endemic flora species found within the EPL: *Acanthopsis adamanticola H.M.Steyn* (Endemic), *Acanthosicyos horridus Welw. ex Hook.f.* (forestry protected), *Adromischus alstonii (Schönland & Baker f.) C.A.Sm.* (protected), *Adromischus marianiae (Marloth) A.Berger var. kubusensis (Uitewaal) Toelken* (protected), *Adromischus montium-klinghardtii (Dinter) A.Berger* (protected), *Aloe erinacea Hardy* (Endemic, Protected and Endangered), *Aloe gariepensis Pillans* (Protected), *Aloe microstigma Salm-Dyck subsp. Microstigma* (Protected), *Aloe pachygaster Dinter* (Endemic & Protected), *Aloe pearsonii Schönland* (Protected & Near Threatened), *Aloe ramosissima Pillans* (Protected & Vulnerable), *Aloidendron pillansii (L.Guthrie) Klopper & Gideon F.Sm.* (Protected & Critically Endangered), *Aloidendron pillansii (L.Guthrie) Klopper & Gideon F.Sm.* (Protected and Vulnerable), *Antimima quarzitica (Dinter) H.E.K.Hartmann* (Endemic & Protected), *Arctotis frutescens Norl.* (Endemic), *Aridaria noctiflora (L.) Schwantes subsp. straminea (Haw.) Gerbaulet* (Protected), *Astridia hallii L.Bolus* (Endemic & Protected), *Berkheya schinzii O.Hoffm.* (Endemic), *Boscia albitrunca (Burch.) Gilg & Gilg-Ben*. (Forestry Protected), *Cephalophyllum confusum (Dinter) Dinter & Schwantes* (Endemic & Protected), *Cephalophyllum herrei L.Bolus* (Protected & Near Threatened), etc the rest of the species found within this area are listed in Appendix G.

Most of the endemic, protected, endangered and critically endangered flora species are found on rocky slopes, outcrops and lower reaches on the westward-flowing ephemeral rivers. Therefor driving in and drilling in these are areas that should be avoided by the exploration team when preparing their exploration plans. These areas are shown in Figure 10 **- Rocky slopes, outcrops and drainage lines in EPL 8570**, these measures have also been incorporated into the environmental management plan in Appendix A.

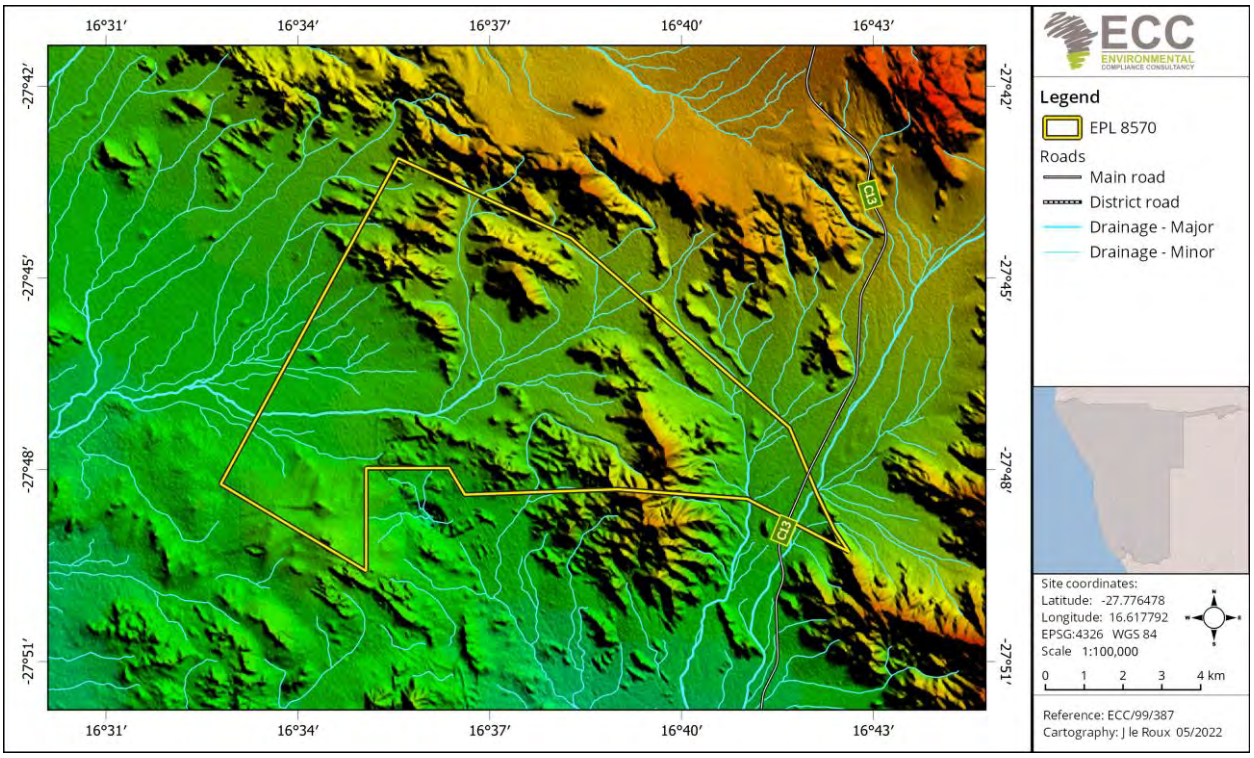

Figure 10 - Rocky slopes, outcrops and drainage lines in EPL 8570

The succulent Karoo ecosystem is the most diverse desert system in the world. The vegetation between Aus and Rosh Pinah can be described as a composition of bushes and shrubs with grasses evident almost throughout the landscape. The Rosh Pinah landscape is in the hyper-arid zone. The high mountains, deep valleys, perennial Orange River and effects of coastal fog (in the extreme west) contribute to adding further habitat diversity to the area.

Environmentally sensitive sites include but are not limited to areas with high conservation value due to the presence of important plant specimens, pristine habitats and high biodiversity. To minimise impacts on vegetation during transportation, only existing tracks and designated resting points must be utilised.

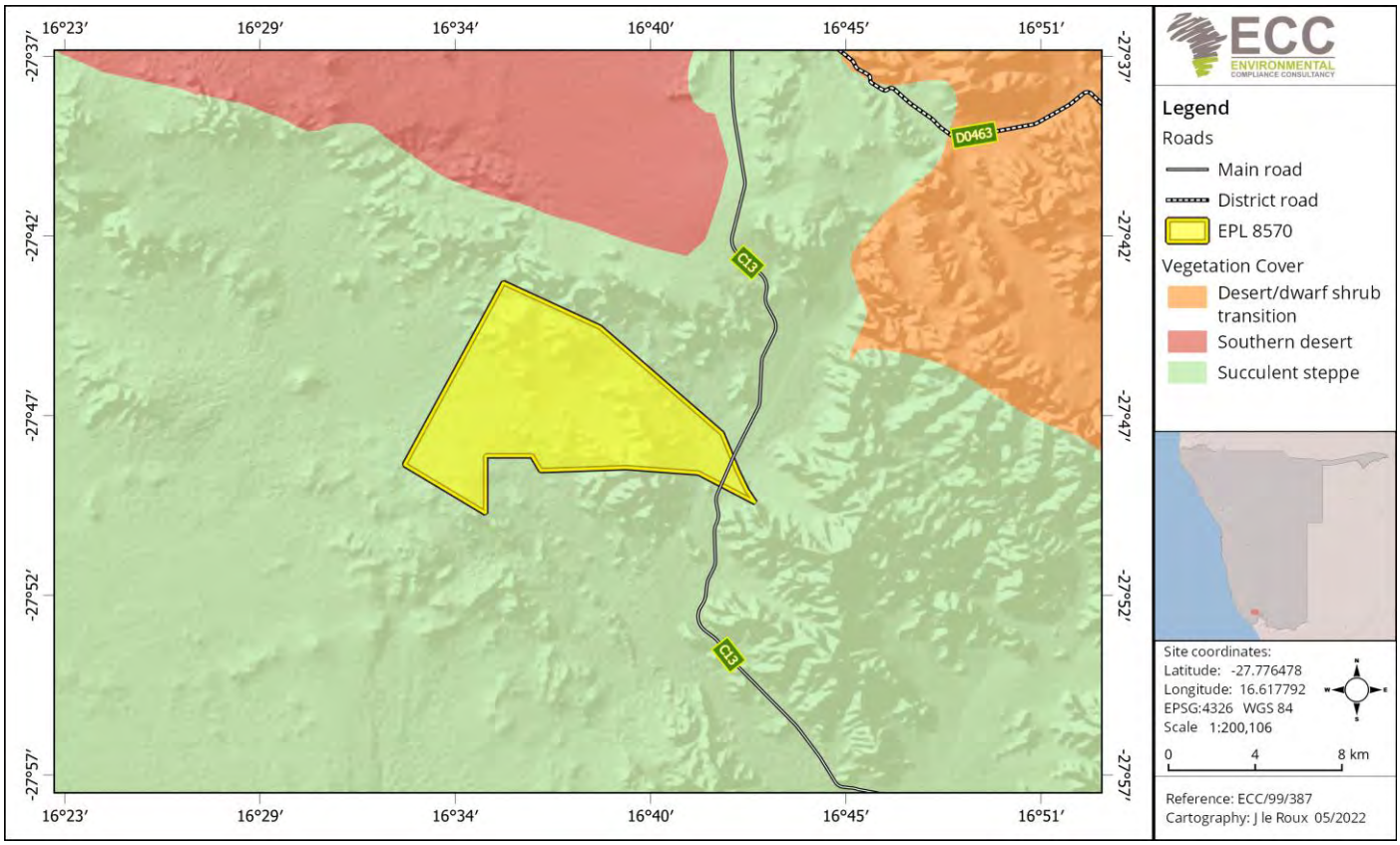

Figure 11 - Vegetation of this area

5.6.2 FAUNA

The overall terrestrial diversity for this area is low 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 110 species, with low bird endemism (between 1 to 3 species) and represents an area with a moderate mammal diversity of between 46 to 60 species (5 to 6 of these species are endemic). Up to 4 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 with between 51 and 60 species, of which 13 to 16 species are endemic (moderate). The number of observed lizard species for this area is between 32 to more than >35 species of which 6 to 11 of the species are endemic and the different snakes recorded are between 15 to 19 species (5 to 6 endemic species).

This area has a very low frog diversity of between 1 to 3 species. Then there is also a high scorpion diversity (16 to 17 species) around which 1 to 2 species are endemic (Bubenzer, 2002 & Mendelsohn et al., 2002).

Furthermore, all tortoise species 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 and various raptors and vultures 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 //Kharas Region is the southernmost and least densely populated of the 14 regions of Namibia. The region showed a population increase of 1.1%. This is less than the Namibian intercensal growth rate of 1.4%.

The //Kharas Region consists of the municipality of Keetmanshoop, the towns of Karasburg, Lüderitz and Oranjemund, and the self-governed villages of Aroab, Berseba, Bethanie, Koës and Tses. The region has a well-developed energy and water network and an advanced postage and telecommunications system that links villages and towns with the rest of the country and the world at large. Oranjemund has a well-developed water and electricity reticulation system. Water is obtained from the Orange River and electricity directly from Eskom. Water for irrigation is obtained from the Naute Dam and the Orange River.

Rosh Pinah does not have a municipality, but is managed by RoshSkor, which is a joint venture management committee established between the two mines. This town management company is responsible for providing services with regard to waste and sewage, sanitation, and water and electricity. RoshSkor also faces several challenges which include, amongst others, increased pressure on available housing and sanitation services brought about by an influx of job seekers. Rosh Pinah's economy is completely reliant on the presence of the mines. The small economy is fuelled either by the salaries earned by mine staff or by the staff of business partners that do work for the mines. Any fluctuation in the international zinc industry or performance of either one of the two mines has an immediate impact on this micro-economy. Other economic activities of a minor scale surrounding the town include farming, conservation and tourism activities.

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.

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 urbanized, 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).

It is predicted that urbanization will continue, with an increase from 43% of the population living in urban areas in 2011, to 67% in 2041. The populations of the Khomas and Erongo regions are projected to increase the most, with over a third of Namibia's population expected to live in these two regions (Namibia Statistics Agency, 2011).

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 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, and 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.

5.7.5 CULTURAL HERITAGE

From the Namibian GIS data and information from the Atlas of Namibia, there are no heritage sites within the proposed site with regards to the following periods: records from 1.8 million to 10000 years ago, 10000 to 2000 years ago or within the last 2000 years (Bubenzer, 2002 & Mendelsohn et al., 2002). Regardless, there is potential to unearth heritage sites.

6 IMPACT IDENTIFICATION & EVALUATION METHODOLOGY

6.1 INTRODUCTION

This chapter 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.
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.

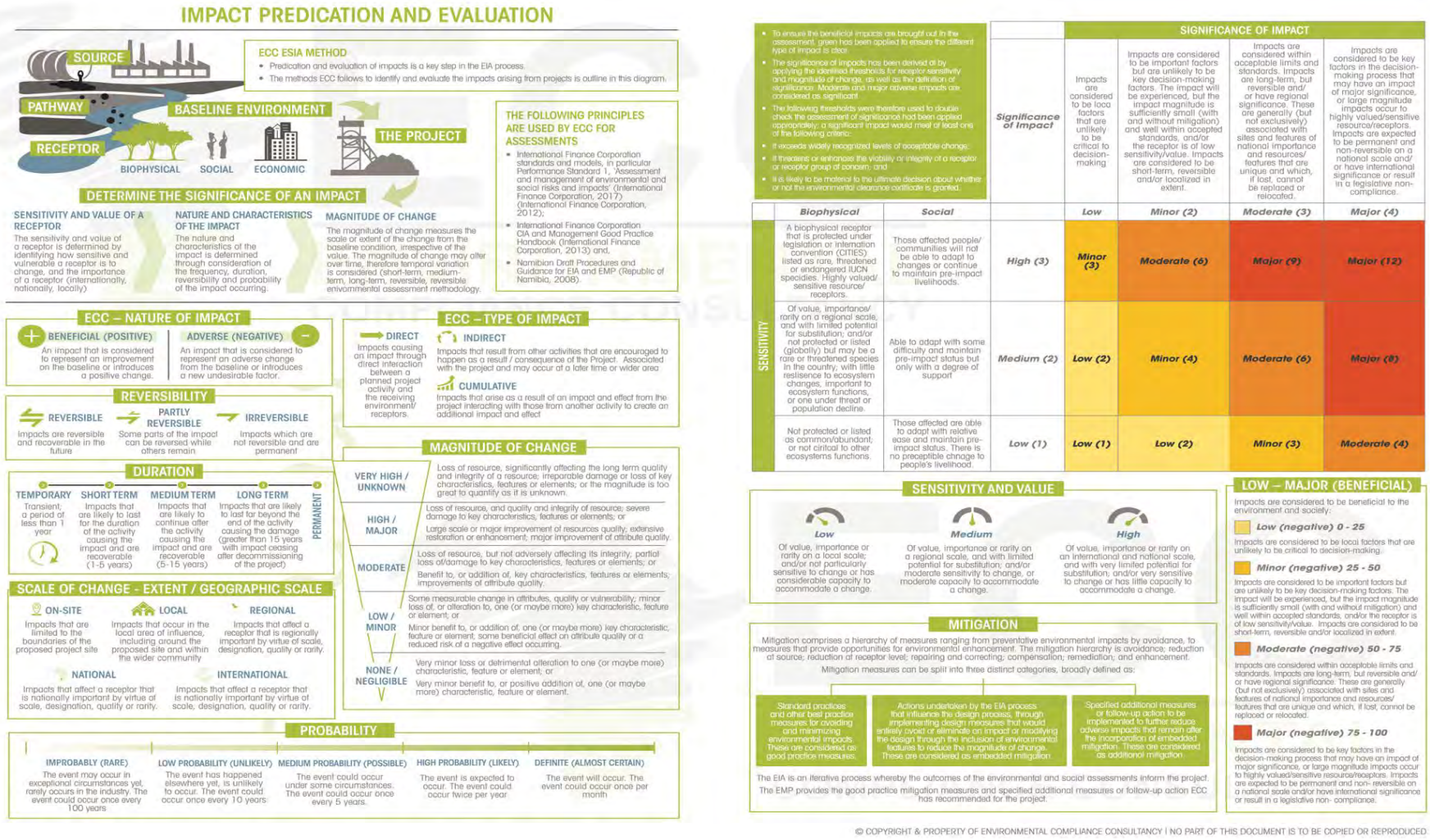

Figure 12 - ECC assessment methodology

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.

Several 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 8 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 limitations and uncertainties exist, assumptions have been made and applied during the assessment process. These have been clearly described in the baseline section.

Table 8 - Limitations, uncertainties and assumptions

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 vegetation to have access to some parts of the EPL.
The program of exploration works is not confirmed	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. If commercially viable concentrations can be defined by preliminary drilling, a next phase of advanced resource drilling operations is possible.
Number of workers, area they will come from and accommodation	It is planned that approximately ten people will be contracted for the proposed project. Contractors may camp on exploration sites/farmland, depending on approval from landowners.
Structures	No permanent infrastructure development will take place in this phase of operations which will span the 3-year award period. Depending on the 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 fieldwork.

7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MEASURES

This chapter presents the findings of the ESIA for the proposed project as per the ESIA process, scope and methodology set out in Chapters 2 and Chapter 6. A range of potential impacts have been identified that may arise as a result of the proposed project. This ESIA report aims 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 9 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 relates 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 *9*.

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 9), the significance of the impact reduces from moderate to minor.

Table 9 - Scoping assessment findings and proposed mitigation measures

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE 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.	**Ground water quality**	Hydrocarbon leaks and spills could enter the aquifer causing contamination	Adverse Direct Partly Reversible Moderate Short term Regional Possible	Medium	Minor	Minor (4)	- 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 - Store bulk fuel in adequate containment areas (non-porous surface, bunded) - No damaged containers in use - Preventative measures will be in place when service	**Low (2)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							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 table.	**Ground water quality**	Hydrocarbon leaks and spills could enter the aquifer causing contamination	Adverse Indirect Partly Reversible Minor Short term Local Possible	Low	Minor	Low (2)	- 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 - 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	**Low (1)**
Discharge and infiltration	**Water**	Wastewater can contaminate	Adverse Direct	Low	Minor	Low (2)	- Wastewater discharges will be contained - Workers will be made aware about the	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
of non-contained wastewater		surface and groundwater	Partly Reversible Minor Short term Regional Unlikely				importance of wastewater management - Good housekeeping - Ensure prompt clean-up of spills	
Inadequate management of solid waste	**Water**	Waste items and litter can pollute drainage channels	Adverse Cumulative Reversible Minor Temporary On-site Unlikely	Low	Low	Low (1)	- Good housekeeping - Training and awareness through safety talks and induction - Implement a Standard Operational Procedure (SOP) on waste management, for all kinds of waste possible on-site (e.g., domestic, mineral, hydrocarbons, hazardous) - Avoid hazardous waste on site - Implement a culture of correct waste collection, waste segregation and waste disposal	**Low (1)**
Inadequate management of hazardous and hydrocarbon waste	**Soil**	Pollution of soil	Adverse Direct Reversible Minor Short term On-site Possible	Low	Minor	Low (2)		**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
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 Partly Reversible Moderate Short term On-site Likely	Medium	Low	Minor (4)	- Minimize clearance areas through proper planning of the exploration activities; - Route new tracks around established and protected trees, and clumps of vegetation; - Identify rare, endangered, threatened and protected species; - During toolbox talks and induction, highlight to workers that the removal of significant plants (species of conservational importance) is avoided, or if unavoidable, the relevant permits will be obtained prior to disturbance. - Where possible rescue and relocate plants of significance with the appropriate permits in place beforehand and - Promote revegetation of cleared areas upon completion of the exploration activities.	**Low (2)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
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 on 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, - Respect civic aviation regulations about the use of a drone	**Low (1)**
Increased movement of vehicles, machinery	**Terrestrial ecology and**	Residing and nesting organisms such as reptiles can be	Adverse Direct Partly Reversible Moderate Short term	Low	Minor	Low (2)	- Restrict movements to areas of activities only - Use existing tracks and routes only	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
and equipment	**biodiversity**	disturbed, injured or killed	On-site Possible				- 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 about avoiding some areas - No driving off designated access routes (into the bush) / off-road driving - 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 Moderate Short term On-site Possible	Low	Minor	Low (2)	- 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	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- Monitor areas of activity for weed and alien species - Eradicate weeds and alien species as soon as they appear - Make workers aware of 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 the mixing of earth	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 THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		matter, trampling and compaction	Short term On-site Possible				- Topsoil should be stockpiled separately, and re-spread during rehabilitation - During drilling oil absorbent matting or plastic 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 uncontrolled fire**	Destroys grazing and kills living organisms	Adverse Direct Reversible Moderate Temporary Local Possible	medium	Minor	Minor (4)	Restrict movements of people to areas of activities only Train people and raise awareness about veld fires and firefighting	**Low (2)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							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 in and around facilities	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- 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**	The 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, - Purpose of the survey, - Flight altitude, - Survey location, Map of survey area and flight lines, and - Contact details for enquiries.	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							- 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 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)	- Implement a Chance-Find Procedure - Raise awareness about possible heritage finds - Report all finds that could be of heritage importance - In case archaeological remains are uncovered, cease activities and the	**Minor (4)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							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 exclusions boundary and inform ECC with GPS position - 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	

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.	
Drilling activities, resulting in 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)	– 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 back between periods of use – Barriers or fences shall be used if drilling occurs in	**Minor (4)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							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, exploration activities	**Community**	Create conflict with farm owners about access, leaving gates open, suspicious movements, loss of	Adverse Indirect Reversible Minor Short term On-site Likely	Low	Minor	Low (2)	– Ensure documented permission to enter farm owners should have access to all farm areas at all times – Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property – Existing water points and feeding areas need to be left unaffected	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
		farming area, etc.					– 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	
Movement of vehicles, exploration activities	**Community**	The presence of exploration team can be blamed for stock theft and poaching	Adverse Cumulative Reversible Minor Temporary Local Unlikely	Low	Low	Low (1)	– Develop and implement an operation manual or procedures to work on farmlands 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	**Low (1)**

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTION OF THE MAGNITUDE	VALUE OF SENSITIVITY	MAGNITUDE OF CHANGE	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
							contentious issues such as stock theft and poaching – Accidents and incidents need to be reported to the project manager and recorded in the 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)	– Maximize local employment – As far as possible promote local procurement – Enhance the 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 8570, to identify if there is potential for significant effects to occur as a result of the proposed Project.

Through the scoping process, impacts with respect to airborne dust are expected to be limited to vehicular traffic and RC drilling activities (diamond drilling does not generate dust). 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 likely 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 practices 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 effects and environmental disturbances are avoided.

10 REFERENCES

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APPENDIX A – ENVIRONMENTAL MANAGEMENT PLAN

APPENDIX B – BACKGROUND INFORMATION DOCUMENT

APPENDIX C – NEWSPAPERS AND ADVERTISMENTS

Published in the market watch on the 27th of June 2022

8 Republikein Sun Allgemeine Zeitung **Market Watch** MONDAY 27 JUNE 2022

SPCA WOS
IT IS COOL to be KIND
Tel: 061-238 654 • Cell: 081 124 4520 (EMERGENCY)

CAREER OPPORTUNITIES AT NEDBANK

As a leading Namibian Financial Institution, our success depends on the calibre of people we invite to join our professional and highly skilled team. For more than 40 years, we have focused on building an environment where motivated people flourish. If you can make a contribution to our team, join us.

Suitably qualified and highly motivated candidates are invited to apply for the following position:

Credit Manager (Private Banking)

Closing Date: 01 July 2022

Candidates to apply via e-mail:

see money differently

INVITATION
STAKEHOLDER ENGAGEMENT AND CONSULTATION WORKSHOP

RENTAL OF ROOFTOP SOLAR PV EQUIPMENT FOR OWN GENERATION

The Electricity Control Board hereby invites interested stakeholders to attend a workshop that will be held on **5 July 2022 at NPAM, Paul Nash Street, Windhoek from 08:30 -13:00.**

The purpose of the workshop is to clarify the existing regulatory framework with regards to the installation of solar rooftop installation and the agreements thereof, and investigate workable solutions to ensure a viable industry.

The ECB has been approached by various service providers that offer equipment rental/lease agreements for solar PV rooftop systems to their customers subject to the payment of a fixed rental amount per month for the duration of the lease agreement. The rental agreement could be either a pure rental agreement or a rent-to-own agreement.

The ECB previously approved such agreements on the following conditions:

1. That the rental is not linked to the sale of electricity (which requires a generation licence)
2. The rental amount must be based on the capital and financing costs of the plant
3. The rental amount could incorporate a return for the lessor of the equipment.

Previous approval granted by the ECB allowed for the rental to be adjusted in accordance with performance of the plant (i.e. adjusting rental amount by the ratio by which the plant had under-performed vis-à-vis the forecasted production).

However, upon further consideration the ECB concluded that such adjustment of the rental amount based on the performance of the plant, links the rental amount to the sale of electricity, which is not allowed without a generation licence, and equipment rental on this basis should therefore not be permitted for unlicensed participants.

All interested stakeholders are invited to provide written submissions on the preliminary opinion and/or to indicate their intention to make oral presentations at the workshop to the ECB by or before 27 June 2022. Oral submissions must not exceed 10 minutes. Interested parties must indicate the representative who will make the presentation at the workshop as well as the number of representatives that will attend the meeting.

The following document can be obtained from the ECB:

- The ECB document that includes the background, summary of discussions to date and the ECB opinion.

Queries and further clarifications must be directed:
Ms. Danel Wakudumo
Tel: +264 374 336
E-mail: dwakudumo@ecb.org.na

skorpion zinc

NOTICE OF AN ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED EXPLORATION ACTIVITIES ON EPL 8570 FOR BASE, RARE, AND PRECIOUS METALS AND INDUSTRIAL MINERALS, WITHIN THE //KHARAS REGION, NAMIBIA.

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Skorpion Mining Company (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: //Kharas Region, Namibia

Project: The proposed exploration site is located approximately 35km NW of Rosh Pinah, accessible via the C13, //Kharas Region, Namibia.

Proposed Activities: The Proponent, Skorpion Mining Company (Pty) Ltd, intends to explore for base, rare metals and precious metals and industrial metals on EPL 8570. The proponent will conduct geological mapping, geochemical surveys (soil and bulk sampling), geophysical surveys (airborne and ground) and remote sensing surveys. Reverse circulation and diamond drilling may follow, but will only take place for advanced targets when it is confirmed that mineralisation is present.

Purpose of the review and registration period: : The purpose of the review and registration period is to introduce the proposed project and to provide an opportunity for people who are potentially interested and or affected parties (I&APs) to register for the project's impact assessment process. Registered I&APs will be provided with the opportunity to comment on the background information document (BID), to ensure that their issues, and concerns are brought forward, captured and considered in the assessment process.

The registration period is effective from 27 June 2022 to 19 July 2022. I&APs and stakeholders are required to register at: https://eccenvironmental.com/download/the-proposed-exploration-of-base-rare-and-precious-metals-and-industrial-materials-on-epl-8570-kharas-region-namibia/

The team at ECC will then maintain contact with all registered I&APs to keep them informed and engaged with the ESIA process. ECC will provide registered I&APs relevant documents for their review during the assessment process and all documents will be made available on the website.

Environmental Compliance Consultancy
Registration Number: CC/2013/1184
Members: Mr JB Barnard/Jacobus and Mrs J Mooney
PO Box 91193, Klein Windhoek
Tel: +264 61 058 7003
E-mail: info@eccenvironmental.com
Website: www.eccenvironmental.com/projects
Project ID: ECC-99-387-ADT-01-D

ECC ENVIRONMENTAL COMPLIANCE CONSULTANCY

What?... we are not going with?!!
Need boarding for your pets?
Contact SPCA Windhoek if you need boarding for your pets.
Rate per day: N$ 100 per dog.
N$ 50 per cat.

skorpion zinc

NOTICE OF AN ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED EXPLORATION ACTIVITIES ON EPL 8571, 8572 & 8573 FOR BASE, RARE, AND PRECIOUS METALS AND INDUSTRIAL MINERALS, WITHIN THE KUNENE REGION, NAMIBIA.

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Skorpion Mining Company (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Kunene Region, Namibia

Project: The proposed exploration sites are located in the Opuwo district accessible from Opuwo, Kunene Region, Namibia.

Proposed Activities: The Proponent, Skorpion Mining Company (Pty) Ltd, intends to explore for base, rare metals and precious metals and industrial metals on EPL 8571, 8572 & 8573. The proponent will conduct geological mapping, geochemical surveys (soil and bulk sampling), geophysical surveys (airborne and ground) and remote sensing surveys. Reverse circulation and diamond drilling may follow, but will only take place for advanced targets when it is confirmed that mineralisation is present.

Purpose of the review and registration period: The purpose of the review and registration period is to introduce the proposed project and to provide an opportunity for people who are potentially interested and or affected parties(I&APs) to register for the project's impact assessment process. Registered I&APs will be provided with the opportunity to comment on the background information document (BID), to ensure that their issues and concerns are brought forward, captured and considered in the assessment process.

The registration period is effective from 27 June 2022 to 19 July 2022. I&APs and stakeholders are required to register at: 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/

The team at ECC will then maintain contact with all registered I&APs to keep them informed and engaged with the ESIA process. ECC will provide registered I&APs relevant documents for their review during the assessment process and all documents will be made available on the website.

Environmental Compliance Consultancy
Registration Number: CC/2013/1184
Members: Mr JB Barnard/Jacobus and Mrs J Mooney
PO Box 91193, Klein Windhoek
Tel: +264 61 058 7003
E-mail: info@eccenvironmental.com
Website: www.eccenvironmental.com/projects
Project ID: ECC-99-387-ADT-01-D

ECC ENVIRONMENTAL COMPLIANCE CONSULTANCY

Published in the market watch on the 4th of July 2022

6 Republikein Sun Allgemeine Zeitung **Market Watch** MONDAY 4 JULY 2022

skorpion zinc

NOTICE OF AN ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED EXPLORATION ACTIVITIES ON EPL 8570 FOR BASE, RARE, AND PRECIOUS METALS AND INDUSTRIAL MINERALS, WITHIN THE //KHARAS REGION, NAMIBIA.

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Skorpion Mining Company (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: //Kharas Region, Namibia

Project: The proposed exploration site is located approximately 35km NW of Rosh Pinah, accessible via the C13, //Kharas Region, Namibia

Proposed Activities: The Proponent, Skorpion Mining Company (Pty) Ltd, intends to explore for base, rare metals and precious metals and industrial metals on EPL 8570. The proposed will conduct geological mapping, geochemical surveys (soil and bulk sampling), geophysical surveys (airborne and ground) and remote sensing surveys. Reverse circulation and diamond drilling may follow, but will only take place for advanced targets when it is confirmed that mineralisation is present.

Purpose of the review and registration period: : The purpose of the review and registration period is to introduce the proposed project and to provide an opportunity for people who are potentially interested and or affected parties (IAPs) to register for the project's impact assessment process. Registered IAPs will be provided with the opportunity to comment on the background information document (BID), to ensure that their issues, and concerns are brought forward, explored and considered in the assessment process.

The registration period is effective from 27 June 2022 to 18 July 2022. IAPs and stakeholders are required to register at: https://forms.gle/qrrwqmb1ZwwVGmuJ6 [illegible]

The team at ECC will then maintain contact with all registered IAPs to keep them informed and engaged with the EIA process. ECC will provide registered IAPs relevant documents for their review during the assessment process and all documents will be made available on the website.

Environmental Compliance Consultancy
Registration Number: CC/2012/01484
Members: Mr JB Bezuidenhout or Mrs J Mooney
PO Box 91193, Klein Windhoek
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E-mail: info@ecenvironmental.com
Website: www.ecenvironmental.com/projects
Project ID: ECC-99-387-ADR-16-D

ECC

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NOTICE OF AN ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS FOR THE PROPOSED EXPLORATION ACTIVITIES ON EPL 8571, 8572 & 8573 FOR BASE, RARE, AND PRECIOUS METALS AND INDUSTRIAL MINERALS, WITHIN THE KUNENE REGION, NAMIBIA.

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Skorpion Mining Company (Pty) Ltd
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Kunene Region, Namibia

Project: The proposed exploration sites are located in the Opuwo district accessible from Opuwo, Kunene Region, Namibia.

Proposed Activities: The Proponent, Skorpion Mining Company (Pty) Ltd, intends to explore for base, rare metals and precious metals and industrial metals on EPL 8571, 8572 & 8573. The proposed will conduct geological mapping, geochemical surveys (soil and bulk sampling), geophysical surveys (airborne and ground) and remote sensing surveys. Reverse circulation and diamond drilling may follow, but will only take place for advanced targets when it is confirmed that mineralisation is present.

Purpose of the review and registration period: The purpose of the review and registration period is to introduce the proposed project and to provide an opportunity for people who are potentially interested and or affected parties (IAPs) to register for the project's impact assessment process. Registered IAPs will be provided with the opportunity to comment on the background information document (BID), to ensure that their issues and concerns are brought forward, explored and considered in the assessment process.

The registration period is effective from 27 June 2022 to 18 July 2022. IAPs and stakeholders are required to register at: https://forms.gle/qrrwqmb1ZwwVGmuJ6 [illegible]

The team at ECC will then maintain contact with all registered IAPs to keep them informed and engaged with the EIA process. ECC will provide registered IAPs relevant documents for their review during the assessment process and all documents will be made available on the website.

Environmental Compliance Consultancy
Registration Number: CC/2012/01484
Members: Mr JB Bezuidenhout or Mrs J Mooney
PO Box 91193, Klein Windhoek
Tel: +264 61 [illegible]
E-mail: info@ecenvironmental.com
Website: www.ecenvironmental.com/projects
Project ID: ECC-99-387-ADR-17-D

ECC

STAKEHOLDER'S NOTICE CRAN

INVITATION TO PUBLIC CONSULTATION ON IMT-2020 5G STRATEGY FOR NAMIBIA FOR THE PERIOD 2022 – 2027

The **Communications Regulatory Authority of Namibia (CRAN)** herewith informs all stakeholders and members of the public that it has published a draft **Fifth Generation (5G) Strategy for Namibia** for **2022** to **2027** for consultation. The document is available on CRAN website www.cran.na, under the **5G IMT** menu tab.

Furthermore, all stakeholders are requested to submit written comments from **01 to 31 July 2022** (within **30 days** of issuing this notice) to the Authority at email: 5Gstrategy@cran.na.

In addition, the Authority will host a public hearing on the **Friday, 05 August 2022** at **venue to be Confirmed (TBC)**. All stakeholders and members of the public who wish to attend should **RSVP** on/or before **Monday, 01 August 2022** before close of business at Tel: +264 61 222 666 or email: 5Gstrategy@cran.na.

Questions, queries and further clarification may be directed to Ms. Ronell Le Grange, Head: Electronic Communications of Tel: +264 61 222 666 or email: RLeGrange@cran.na.

GKD GRANDVIEW KLEIN

VACANCIES

GRANDVIEW DIAMONDS NAMIBIA (PTY)LTD
Reg. No. 2003/151

Grandview Diamonds Namibia (Pty) Ltd an equal opportunity employer invites candidates who are experienced and passionate about the diamond industry and with uncompromising standards of excellence to a career in the industry.

Qualifications Required:

- Grade 10 or 12 certificate for diamond polishers
- 5 – 7 years' experience as a round diamond Polisher
- 5 – 7 years' experience as a Fantasy Diamond Polisher
- Experience of polishing round shape on a level of Triple Ex and very good
- Experience of polishing fancy shapes
- 8 -10 years' experience as an Accountant
- Grade 12 Certificate plus relevant qualification in finance/ accounting
- Good spoken English
- Police clearance is a mandatory requirement
- Trustworthy and self-driven
- Preference will be given to Namibian citizens
- Previous employer's reference letter is mandatory

Closing date for application is 15 JULY 2021

CV/Resume should be accompanied by a cover letter, certified copies of identification document, highest qualifications and police clearance.

Individuals with disabilities are encouraged to apply.

Please forward CV/Resume to the Human Resources at the following postal address:

P.O. Box 81279, Olympia, Windhoek
OR alternatively CV/Resumes can be delivered to our offices at:
25 - 27 Nickel Street, Prosperita, Windhoek.

No emailed or faxed CV's will be accepted

EMBASSY OF THE UNITED STATES OF AMERICA

The United States Embassy in Windhoek has the following vacancy as detailed below. Please note that applications must be submitted electronically via the Electronic Recruitment Application (ERA) system, by July 15, 2022 to be considered.

Interested applicants should visit the U.S. Embassy website at https://na.usembassy.gov/embassy/jobs/ to apply for this vacancy

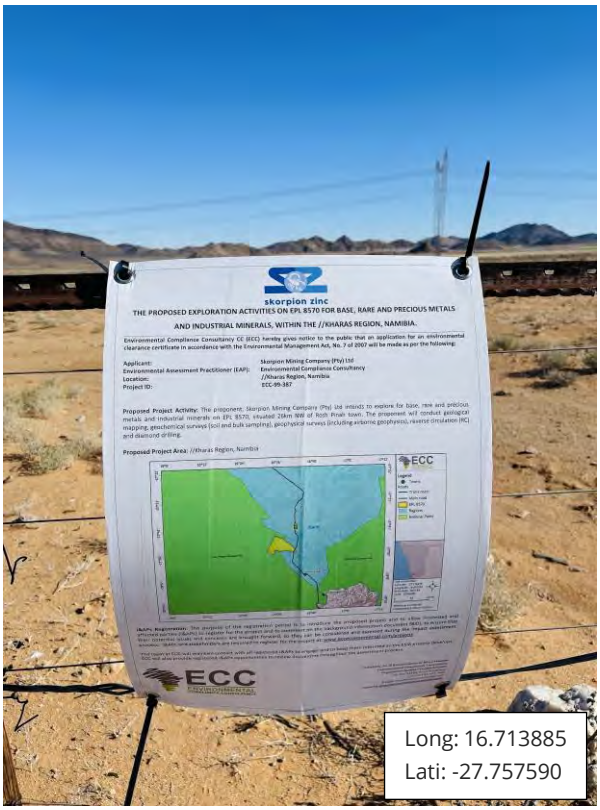
Trades Helper

Located in the Facilities Maintenance Section and supervised by the Maintenance Supervisor, the incumbent will assist Maintenance Technicians in the completion of Work Orders in the different trades (Electrical, HVAC, and Plumbing). Works independently on semi-skilled requests and on any painting requirements. Works on all U.S. Government facilities including office buildings and residential.

FOR FURTHER INFORMATION: The complete position descriptions listing all of the duties and responsibilities may be obtained on our website at https://na.usembassy.gov/embassy/jobs/

EQUAL EMPLOYMENT OPPORTUNITY: The U.S. Mission provides equal opportunity and fair and equitable treatment in employment to all people without regard to race, color, religion, sex, national origin, age, disability, political affiliation, marital status, or sexual orientation. The Department of State also strives to achieve equal employment opportunity in all personnel operations through continuing diversity enhancement programs.

APPENDIX D – SITE NOTICES



APPENDIX E – STAKEHOLDER LETTERS

+264 81 669 7608
info@eccenvironmental.com
www.eccenvironmental.com

REFERENCE: ECC-99-378-LET-22-D

27 June 2022

Identified stakeholder and potentially interested or affected party for:

The proposed exploration activities on EPL 8570 for base, rare metals, industrial and precious metals within the //Kharas Region

RE: NOTIFICATION OF AN ENVIRONMENTAL ASSESSMENT OF THE PROPOSED EXPLORATION ACTIVITIES ON EPL8570 FOR BASE, RARE METALS, INDUSTRIAL MINERALS AND PRECIOUS METALS WITHIN THE //KHARAS 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 Rosh Pinah, //Kharas 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-proposed-

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

exploration-of-base-rare-and-precious-metals-and-industrial-materials-on-epl-8570-kharas-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://eccenvironmental.com/download/the-proposed-exploration-of-base-rare-and-precious-metals-and-industrial-materials-on-epl-8570-kharas-region-namibia/

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,

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APPENDIX F – EAP CVS

APPENDIX G – NBRI SPECIES LIST

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Acanthopsis adamanticola H.M.Steyn	Endemic			
Acanthopsis disperma Nees				
Acanthosicyos horridus Welw. ex Hook.f.	Near Endemic	Forestry Protected		
Acrotome pallescens Benth.				
Adromischus alstonii (Schönland & Baker f.) C.A.Sm.		Protected		
Adromischus marianiae (Marloth) A.Berger var. kubusensis (Uitewaal) Toelken		Protected		
Adromischus montium-klinghardtii (Dinter) A.Berger		Protected		
Albuca cooperi Baker				
Albuca exuviata Baker				
Albuca longipes Baker				
Albuca setosa Jacq.				
Aloe erinacea Hardy	Endemic	Protected	Endangered	Endangered
Aloe gariepensis Pillans	Near Endemic	Protected		
Aloe microstigma Salm-Dyck subsp. microstigma		Protected		
Aloe pachygaster Dinter	Endemic	Protected		
Aloe pearsonii Schönland	Near Endemic	Protected		Near Threatened
Aloe ramosissima Pillans	Near Endemic	Protected	Vulnerable	
Aloidendron pillansii (L.Guthrie) Klopper & Gideon F.Sm.	Near Endemic	Protected	Critically Endangered	
Aloidendron pillansii (L.Guthrie) Klopper & Gideon F.Sm.	Near Endemic	Protected	Vulnerable	
Amellus epaleaceus O.Hoffm.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Amellus nanus DC.				
Anginon verticillatum (Sond.) B.L.Burtt				
Anthospermum dregei Sond. subsp. dregei				
Anticharis scoparia (E.Mey. ex Benth.) Hiern ex Benth. & Hook.f.				
Antimima quarzitica (Dinter) H.E.K.Hartmann	Endemic	Protected		
Antizoma miersiana Harv.				
Aptosimum eriocephalum E.Mey. ex Benth.				
Aptosimum spinescens (Thunb.) F.E.Weber				
Aptosimum tragacanthoides E.Mey. ex Benth.				
Arctotis fastuosa Jacq.				
Arctotis frutescens Norl.	Endemic			
Arctotis namibiensis R.J.McKenzie & Mannheimer				
Aridaria brevicarpa L.Bolus				
Aridaria noctiflora (L.) Schwantes subsp. straminea (Haw.) Gerbaulet		Protected		
Aridaria serotina L.Bolus				
Asparagus capensis L. var. capensis				
Asparagus exuvialis Burch. forma exuvialis				
Asparagus graniticus (Oberm.) Fellingham & N.L.Mey.				
Asparagus juniperoides Engl.	Near Endemic			
Asparagus retrofractus L.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Asplenium cordatum (Thunb.) Sw.				
Astridia alba (L.Bolus) L.Bolus				
Astridia hallii L.Bolus	Endemic	Protected		
Atriplex suberecta I.Verd.				
Atriplex vestita (Thunb.) Aellen var. appendiculata Aellen				
Babiana namaquensis Baker				
Ballota africana (L.) Benth.				
Berkheya canescens DC.				
Berkheya chamaepeuce (S.Moore) Roessler				
Berkheya schinzii O.Hoffm.	Endemic			
Berkheya spinosissima (Thunb.) Willd. subsp. spinosissima				
Blepharis furcata (L.f.) Pers.	Near Endemic			
Blepharis mitrata C.B.Clarke				
Boscia albitrunca (Burch.) Gilg & Gilg-Ben.		Forestry Protected		
Brownanthus neglectus S.M.Pierce & Gerbaulet				
Brownanthus pseudoschlichtianus S.M.Pierce & Gerbaulet				
Brownanthus schenkii (Schinz) Schwantes				
Bulbine capitata Poelln.				
Bulbine namaensis Schinz	Near Endemic			
Bulbine rhopalophylla Dinter				
Calicorema squarrosa (Schinz) Schinz	Near Endemic			
Calobota halenbergensis (Merxm. & Schreib.) Boatwr. & B.-E. van Wyk	Near Endemic			

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Carissa haematocarpa (Eckl.) A.DC.				
Cephalophyllum confusum (Dinter) Dinter & Schwantes	Endemic	Protected		
Cephalophyllum herrei L.Bolus		Protected		Near Threatened
Ceraria fruticulosa H.Pearson & Stephens	Near Endemic			
Ceraria namaquensis (Sond.) H.Pearson & Stephens	Near Endemic			
Chascanum garipense E.Mey.				
Chascanum namaquanum (Bolus ex H.Pearson) Moldenke				
Cheilanthes capensis (Thunb.) Sw.				
Cheilanthes deltoidea Kunze				
Cheilanthes kunzei Mett.				
Cheilanthes rawsonii (Pappe) Mett. ex Kuhn				
Cheilanthes robusta (Kunze) R.M.Tryon				
Cheiridopsis caroli-schmidtii (Dinter & A.Berger) N.E.Br.	Endemic	Protected		
Cheiridopsis robusta (Haw.) N.E.Br.		Protected		
Chenopodium ambrosioides L.				
Chenopodium mucronatum Thunb.				
Chlorophytum viscosum Kunth				
Cissampelos capensis L.f.				
Clutia thunbergii Sond.				
Codon royenii L.				
Conophytum pageae (N.E.Br.) N.E.Br.		Protected		
Cotula tenella E.Mey. ex DC.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Cotyledon orbiculata L. var. orbiculata				
Crassothonna cylindrica (Lam.) B.Nord.				
Crassothonna opima (Merxm.) B.Nord.	Near Endemic			
Crassothonna protecta (Dinter) B.Nord.				
Crassothonna sparsiflora (S.Moore) B.Nord.	Near Endemic			
Crassula brevifolia Harv. subsp. brevifolia		Protected		
Crassula campestris (Eckl. & Zeyh.) Endl. ex Walp.		Protected		
Crassula cotyledonis Thunb.		Protected		
Crassula elegans Schönland & Baker f. subsp. elegans	Near Endemic	Protected		
Crassula expansa Dryand. subsp. pyrifolia (Compton) Toelken		Protected		
Crassula fusca Herre		Protected		Near Threatened
Crassula garibina Marloth & Schönland subsp. garibina		Protected		
Crassula macowaniana Schönland & Baker f.		Protected		Near Threatened
Crassula muscosa L. var. muscosa		Protected		
Crassula nemorosa (Eckl. & Zeyh.) Endl. ex Walp.		Protected		
Crassula numaisensis Friedrich	Endemic	Protected		
Crassula oblanceolata Schönland & Baker f.		Protected		
Crassula pseudohemisphaerica Friedrich		Protected		

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Crassula rupestris Thunb. subsp. commutata (Friedrich) Toelken		Protected		
Crassula sericea Schönland var. hottentotta (Marloth & Schönland) Toelken		Protected		
Crassula subacaulis Schönland & Baker f. subsp. erosula (N.E.Br.) Toelken		Protected		
Crassula subaphylla (Eckl. & Zeyh.) Harv. var. subaphylla		Protected		
Crassula tenuipedicellata Schönland & Baker f.				
Crassula tomentosa Thunb. var. tomentosa		Protected		
Crotalaria giessii M.M.le Roux & B-E.Van Wyk	Endemic			
Cucumella aspera (Cogn.) C.Jeffrey				
Cyanella ramosissima (Engl. & K.Krause) Engl. & K.Krause				
Cyperus marginatus Thunb.				
Cyphia dentariifolia C.Presl var. dentariifolia				
Cysticapnos vesicaria (L.) Fedde				
Desertia luteovirens Mart.-Azorín, M.Pinter & Wetschnig	Near Endemic			
Dianthus namaensis Schinz var. dinteri (Schinz) S.S.Hooper				
Diascia ausana Dinter				
Diascia minutiflora Hiern				
Dicoma capensis Less.				
Didelta carnosa (L.f.) Aiton var. carnosa				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Didelta carnosa (L.f.) Aiton var. tomentosa (Less.) Roessler				
Didelta spinosa (L.f.) Aiton				
Didymodoxa capensis (L.f.) Friis & Wilmot-Dear var. capensis				
Dimorphotheca polyptera DC.				
Dimorphotheca sinuata DC.				
Dioscorea elephantipes (L'Hér) Engl.				
Diospyros ramulosa (E.Mey. ex A.DC.) De Winter				
Dipcadi brevifolium (Thunb.) Fourc.				
Dischisma spicatum (Thunb.) Choisy				
Dodonaea angustifolia L.f.				
Dracophilus dealbatus (N.E.Br.) Walgate	Near Endemic			
Dracophilus delaetianus (Dinter) Dinter & Schwantes	Endemic			
Drimia elata Jacq.				
Drimia exuviata (Jacq.) Jessop				
Drimia namibensis (Oberm.) J.C.Manning & Goldblatt	Endemic			
Drosanthemum hispidum (L.) Schwantes				
Drosanthemum luederitzii (Engl.) Schwantes				
Drosanthemum pauper (Dinter) Dinter & Schwantes	Endemic			
Drosanthemum subcompressum (Haw.) Schwantes				
Dyerophytum africanum (Lam.) Kuntze				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Eberlanzia clausa (Dinter) Schwantes	Endemic	Protected		Near Threatened
Eberlanzia cyathiformis (L.Bolus) H.E.K.Hartmann		Protected		
Eberlanzia schneideriana (A.Berger) H.E.K. Hartmann	Near Endemic	Protected		
Eberlanzia sedoides (Dinter & A.Berger) Schwantes	Near Endemic	Protected		Near Threatened
Ebracteola derenbergiana (Dinter) Dinter & Schwantes	Near Endemic	Protected		
Ehretia alba Retief & A.E.van Wyk				
Ehretia namibiensis Retief & A.E.van Wyk subsp. namibiensis	Endemic			
Ehrharta calycina Sm.				
Ehrharta calycina Sm. var. angustifolia Kunth				
Ehrharta delicatula (Nees) Stapf				
Ehrharta pusilla Nees ex Trin.				
Ehrharta triandra Nees ex Trin.				
Ellisochloa rangei (Pilg.) P.M. Peterson & N.P. Barker	Endemic			
Enneapogon desvauxii P.Beauv.				
Enneapogon scaber Lehm.				
Eragrostis brizantha Nees				
Eriocephalus ambiguus (DC.) M.A.N.Müll.				
Eriocephalus scariosus DC.	Near Endemic			
Euclea asperrima Friedr.-Holzh.	Endemic			Near Threatened
Euclea undulata Thunb.				
Euphorbia cibdela N.E.Br.	Near Endemic			

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Euphorbia dregeana E.Mey. ex Boiss.	Near Endemic			
Euphorbia ephedroides E.Mey. ex Boiss. var. ephedroides				
Euphorbia guerichiana Pax				
Euphorbia gummifera Boiss.	Near Endemic			Near Threatened
Euphorbia mauritanica L. var. mauritanica				
Euphorbia melanohydrata Nel subsp. melanohydrata	Near Endemic			
Euphorbia rhombifolia Boiss.				
Euryops lateriflorus (L.f.) DC.				
Euryops mucosus B.Nord.	Endemic		Near Threatened	
Euryops namaquensis Schltr.				
Euryops namibensis (Merxm.) B.Nord.	Near Endemic			
Felicia microsperma DC.				
Felicia namaquana (Harv.) Merxm.				
Ferraria variabilis Goldblatt & J.C.Manning	Endemic			
Ficus ilicina (Sond.) Miq.				
Fingerhuthia africana Lehm.				
Forsskaolea candida L.f.				
Foveolina dichotoma (DC.) Källersjö				
Freesia viridis (Aiton) Goldblatt & J.C.Manning				
Gaillonia crocyllis (Sond.) Thulin				
Galenia africana L.				
Galenia dregeana Fenzl ex Sond.				
Galenia meziana K.Müll.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Galenia papulosa (Eckl. & Zeyh.) Sond.				
Galenia pruinosa Sond.				
Galium tomentosum Thunb.				
Gazania jurineifolia DC. subsp. scabra (DC.) Roessler	Near Endemic			
Gazania lichtensteinii Less.				
Gazania tenuifolia Less.				
Gethyllis namaquensis (Schönland) Oberm.	Near Endemic			
Gnidia suavissima Dinter				
Gorteria corymbosa DC.	Near Endemic			
Gorteria parviligulata (Roessler) Stangb. & Anderb.				
Grielum humifusum Thunb. var. parviflorum Harv.				
Haemanthus coccineus L.				
Haemanthus pubescens L.f. subsp. arenicola Snijman				
Hebenstretia namaquensis Roessler				
Hebenstretia parviflora E.Mey.				
Helichrysum alsinoides DC.				
Helichrysum gariepinum DC.	Near Endemic			
Helichrysum herniarioides DC.				
Helichrysum obtusum (S.Moore) Moeser				
Heliophila cornuta Sond. var. squamata (Schltr.) Marais				
Heliophila deserticola Schltr. var. deserticola				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Heliophila deserticola Schltr. var. micrantha A.Schreib.				
Heliophila eximia Marais				
Heliophila trifurca Burch. ex DC.	Near Endemic			
Hereroa hesperantha (Dinter & A.Berger) Dinter & Schwantes	Near Endemic	Protected		
Hermannia amoena Dinter ex Friedr.-Holzh.				
Hermannia comosa Burch. ex DC.				
Hermannia desertorum Eckl. & Zeyh.				
Hermannia gariepina Eckl. & Zeyh.				
Hermannia macra Schltr.				
Hermannia paucifolia Turcz.				
Hermannia pfeilii K.Schum.				
Hermannia spinosa E.Mey. ex Harv.				
Hermannia stricta (E.Mey. ex Turcz.) Harv.				
Hermbstaedtia glauca (J.C.Wendl.) Rchb. ex Steud.				
Hexacyrtis dickiana Dinter	Near Endemic			
Hirpicium echinus Less.				
Hoodia gordonii (Masson) Sweet ex Decne.		Protected		Near Threatened
Hydnora africana Thunb.				
Hyobanche barklyi N.E.Br.	Near Endemic			
Hyobanche glabrata Hiern				
Hypertelis salsoloides (Burch.) Adamson var. salsoloides				
Ifloga molluginoides (DC.) Hilliard				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Indigastrum argyroides (E.Mey.) Schrire				
Indigastrum candidissimum (Dinter) Schrire				
Indigofera merxmuelleri A.Schreib.	Endemic			
Indigofera pungens E.Mey.				
Jamesbrittenia bicolor (Dinter) Hilliard	Endemic			
Jamesbrittenia fruticosa (Benth.) Hilliard				
Jamesbrittenia glutinosa (Benth.) Hilliard	Near Endemic			
Jamesbrittenia maxii (Hiern) Hilliard				
Jamesbrittenia ramosissima (Hiern) Hilliard				
Jamesbrittenia sessilifolia (Diels) Hilliard	Endemic			
Jordaaniella cuprea (L.Bolus) H.E.K.Hartmann		Protected		
Juttadinteria attenuata Walgate	Near Endemic	Protected		
Juttadinteria deserticola (Marloth) Schwantes	Near Endemic	Protected		
Karroochloa schismoides (Stapf ex Conert) Conert & Türpe				
Kedrostis capensis (Sond.) A.Meeuse				
Kissenia capensis Endl.				
Kleinia cephalophora Compton				
Kleinia longiflora DC.				
Kleinia pinguifolia DC.				
Kohautia caespitosa Schnizl. subsp. brachyloba (Sond.) D.Mantell				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Lachenalia buchubergensis Dinter	Near Endemic			
Lachenalia giessii W.F.Barker	Endemic			
Lachenalia namibiensis W.F.Barker	Endemic			
Lachenalia nordenstamii W.F.Barker				
Lampranthus otzenianus (Dinter) Friedrich				
Lampranthus stipulaceus (L.) N.E.Br.				
Lapeirousia barklyi Baker				
Lapeirousia dolomitica Dinter subsp. dolomitica	Near Endemic			
Larryleachia picta (N.E.Br.) Plowes		Protected		
Lasiopogon glomerulatus (Harv.) Hilliard				
Lasiospermum brachyglossum DC.				
Leipoldtia weigangiana (Dinter) Dinter & Schwantes subsp. grandifolia (L.Bolus) H.E.K.Hartmann & Ru	Near Endemic			
Leipoldtia weigangiana (Dinter) Dinter & Schwantes subsp. littlewoodii (L.Bolus) H.E.K.Hartmann & R	Near Endemic			
Leipoldtia weigangiana (Dinter) Dinter & Schwantes subsp. weigangiana	Near Endemic			
Lepidium africanum (Burm.f.) DC. subsp. divaricatum (Aiton) Jonsell				
Lessertia benguellensis Baker f.				
Lessertia brachypus Harv.				
Lessertia eremicola Dinter	Endemic			Near Threatened
Lessertia falciformis DC.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Leucophrys mesocoma (Nees) Rendle				
Leysera tenella DC.				
Limeum aethiopicum Burm.f. var. glabrum Moq.				
Lotononis maculata Dummer				
Lotononis pachycarpa Dinter ex B.-E.van Wyk	Endemic			
Lotononis rabenaviana Dinter & Harms				
Lotononis strigillosa (Merxm. & A.Schreib.) A.Schreib.	Near Endemic			
Lycium amoenum Dammer				
Lycium gariepense A.M.Venter	Near Endemic			
Lycium horridum Thunb.				
Lycium pilifolium C.H.Wright				
Lyperia tristis (L.f.) Benth.				
Manochlamys albicans (Aiton) Aellen				
Manulea androsacea E.Mey. ex Benth.	Near Endemic			
Melasphaerula ramosa (L.) N.E.Br.				
Melianthus comosus Vahl				
Melianthus pectinatus Harv. subsp. gariepinus (Merxm. & Roessler) S.A.Tansley				
Melolobium candicans (E.Mey.) Eckl. & Zeyh.				
Melolobium microphyllum (L.f.) Eckl. & Zeyh.				
Mesembryanthemum barklyi N.E.Br.	Near Endemic			

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Mesembryanthemum hypertrophicum Dinter	Near Endemic			
Mesembryanthemum longipapillosum Dinter				
Mesembryanthemum pellitum Friedrich				Near Threatened
Microloma calycinum E.Mey.	Near Endemic			
Monechma crassiusculum P.G.Mey.	Near Endemic			
Monechma distichotrichum (Lindau) P.G.Mey.				
Monechma mollissimum (Nees) P.G.Mey.				
Monsonia deserticola Dinter ex R.Knuth	Endemic			
Monsonia drudeana Schinz	Endemic			
Montinia caryophyllacea Thunb.				
Moraea rigidifolia Goldblatt	Endemic			
Namophila urotepala U.Müll.-Doblies & D.Müll.-Doblies	Endemic			
Nemesia fleckii Thell.	Near Endemic			
Nemesia violiflora Roessler	Endemic			
Nemesia viscosa E.Mey. ex Benth.	Near Endemic			
Nolletia gariepina (DC.) Mattf.				
Nymania capensis (Thunb.) Lindb.				
Oncosiphon grandiflorum (Thunb.) Källersjö				
Oncosiphon suffruticosum (L.) Källersjö				
Ophioglossum polyphyllum A.Braun				
Ornithogalum geniculatum Oberm.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Ornithogalum glandulosum Oberm.	Near Endemic			Near Threatened
Ornithogalum puberulum Oberm. subsp. puberulum	Endemic			
Ornithogalum stapffii Schinz	Endemic			
Ornithogalum suaveolens Jacq.				
Ornithogalum unifolium Retz. var. unifolium				
Ornithoglossum parviflorum B.Nord. var. parviflorum				
Ornithoglossum vulgare B.Nord.				
Osteospermum clandestinum (Less.) Norl.				
Osteospermum karrooicum (Bolus) Norl.				
Osteospermum pinnatum (Thunb.) Norl. var. pinnatum				
Osteospermum polycephalum (DC.) Norl.				
Osteospermum sinuatum (DC.) Norl. var. sinuatum				
Othonna filicaulis Jacq.				
Othonna lasiocarpa (DC.) Sch.Bip.				
Oxalis ausensis R.Knuth	Endemic			
Oxalis beneprotecta Dinter ex R. Kunth				
Oxalis copiosa F.Bolus				
Oxalis laxicaulis R.Knuth	Endemic			
Oxalis obtusa Jacq.				
Oxalis pes-caprae L. var. pes-caprae				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Ozoroa concolor (C.Presl ex Sond.) De Winter	Near Endemic			
Ozoroa crassinervia (Engl.) R.Fern. & A.Fern.				
Ozoroa dispar (C.Presl) R.Fern. & A.Fern.				
Pachypodium namaquanum (Wyley ex Harv.) Welw.		Protected	Near Threatened	
Pappea capensis Eckl. & Zeyh.				
Pegolettia gariepina Anderb.	Near Endemic			
Pelargonium antidysentericum (Eckl. & Zeyh.) Kostel. subsp. antidysentericum				
Pelargonium articulatum (Cav.) Willd.				
Pelargonium crassicaule L'Hér.	Near Endemic			
Pelargonium crithmifolium Sm.				
Pelargonium grandicalcaratum R.Knuth				
Pelargonium klinghardtense R.Knuth	Near Endemic			
Pelargonium minimum (Cav.) Willd.				
Pelargonium paniculatum Jacq.	Near Endemic			
Pelargonium redactum Vorster				
Pelargonium spinosum Willd.				
Pelargonium tenuicaule R.Knuth				
Pelargonium vinaceum E.M.Marais				
Pelargonium xerophyton Schltr. ex R.Knuth				
Peliostomum leucorrhizum E.Mey. ex Benth.				
Peliostomum viscosum E.Mey. ex Benth.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Pentzia pinnatisecta Hutch.				
Pharnaceum brevicaule (DC.) Bartl.				
Pharnaceum confertum (DC.) Eckl. & Zeyh. var. brachyphyllum Adamson				
Phyllobolus oculatus (N.E.Br.) Gerbaulet	Near Endemic			
Phyllopodium namaense (Thell.) Hilliard	Near Endemic			
Piaranthus decorus (Masson) N.E.Br. subsp. cornutus (N.E.Br.) Meve				
Pollichia campestris Aiton				
Polygala lasiosepala Levyns				
Polygala leptophylla Burch. var. leptophylla				
Polygala mossii Exell	Near Endemic			
Polygala teretifolia L.f.				
Polygala virgata Thunb. var. decora (Sond.) Harv.				
Polypogon monspeliensis (L.) Desf.				
Prenia tetragona (Thunb.) Gerbaulet				
Psammophora longifolia L.Bolus	Near Endemic	Protected		
Psammophora modesta (Dinter & A.Berger) Dinter & Schwantes	Near Endemic	Protected		
Psilocaulon articulatum (Thunb.) N.E.Br.				
Psilocaulon coriarium (Burch. ex N.E.Br.) N.E.Br.				
Psilocaulon salicornioides (Pax) Schwantes	Near Endemic			
Pteronia acuta Muschl.				
Pteronia divaricata (P.J.Bergius) Less.				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Pteronia lucilioides DC.	Near Endemic			
Pteronia mucronata DC.				
Pteronia paniculata Thunb.				
Pteronia pomonae Merxm.	Endemic			
Pteronia sordida N.E.Br.				
Putterlickia pyracantha (L.) Szyszyl.				
Quaqua acutiloba (N.E.Br.) Bruyns		Protected		
Quaqua mammillaris (L.) Bruyns		Protected		Near Threatened
Rhus populifolia E.Mey. ex Sond.				
Rhus problematodes Merxm. & Roessler				
Rhus undulata Jacq.				
Roepera cordifolia (L.f.) Beier & Thulin				
Roepera hirticaulis (Van Zyl) Beier & Thulin	Endemic			Near Threatened
Roepera leptopetala (Sond.) Beier & Thulin				Near Threatened
Rogeria longiflora (Royen) J.Gay ex DC.				
Rubia horrida (Thunb.) Puff				
Ruschia abbreviata L.Bolus	Near Endemic			
Ruschia divaricata L.Bolus		Protected		
Ruschia muelleri (L.Bolus) Schwantes				
Ruschia odontocalyx (Schltr. & Diels) Schwantes	Endemic	Protected		
Ruschia spinosa (L.) Dehn		Protected		
Ruschia tumidula (Haw.) Schwantes		Protected		
Salsola armata C.A.Sm. ex Aellen				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Salsola ruschii Aellen				
Salvia garipensis E.Mey. ex Benth.	Near Endemic			
Sarcocaulon crassicaule Rehm				
Sarcocaulon flavescens Rehm				
Sarcocaulon inerme Rehm	Endemic			
Sarcocaulon patersonii (DC.) G.Don	Near Endemic			
Sarcocaulon salmoniflorum Moffett				
Schismus barbatus (Loefl. ex L.) Thell.				
Searsia populifolia (E.Mey. ex Sond.) Moffett	Near Endemic			
Selago angolensis Rolfe				
Selago angustibractea Hilliard	Near Endemic			
Senecio acaulis (L.f.) Sch.Bip.				
Senecio arenarius Thunb.				
Senecio cakilefolius DC.				
Senecio corymbiferus DC.				
Senecio flavus (Decne.) Sch.Bip.				
Senecio giessii Merxm.	Near Endemic			
Senecio piptocoma O.Hoffm.				
Senecio sarcoides C.Jeffrey				
Sisyndite spartea E.Mey. ex Sond.	Near Endemic			
Solanum rigescens Jacq.				
Sphalmanthus tetragonus (Thunb.) L.Bolus				
Spiloxene etesionamibensis U.Müll.-Doblies, Mark.Ackermann, Weigend & D.Müll.-Doblies	Endemic			
Stachys rugosa Aiton				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Stapelia similis N.E.Br.	Near Endemic	Protected		
Stapeliopsis neronis Pillans				Vulnerable
Stipagrostis ciliata (Desf.) De Winter var. capensis (Trin. & Rupr.) De Winter				
Stipagrostis geminifolia Nees	Near Endemic			
Stipagrostis lutescens (Nees) De Winter var. lutescens				
Stipagrostis obtusa (Delile) Nees				
Stoeberia arborea van Jaarsv.		Protected		
Stoeberia beetzii (Dinter) Dinter & Schwantes	Near Endemic	Protected		
Stoeberia frutescens (L.Bolus) van Jaarsv.		Protected		
Stoeberia gigas (Dinter) Dinter & Schwantes	Near Endemic	Protected		
Strumaria hardyana D.Müll.-Doblies & U.Müll.-Doblies	Endemic			
Tapinanthus oleifolius (J.C.Wendl.) Danser				
Tetraena applanata (Van Zyl) Beier & Thulin	Endemic			Near Threatened
Tetraena longicapsularis (Schinz) Beier & Thulin	Near Endemic			
Tetraena longistipula (Schinz) Beier & Thulin	Endemic			Near Threatened
Tetraena microcarpa (Licht. ex Cham.) Beier & Thulin	Near Endemic			
Tetraena pterocaulis (Van Zyl) Beier & Thulin				
Tetraena retrofracta (Thunb.) Beier & Thulin				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Tetraena rigida (Schinz) Beier & Thulin				
Tetragonia arbuscula Fenzl				
Tetragonia decumbens Mill.				
Tetragonia microptera Fenzl				
Tetragonia reduplicata Welw. ex Oliv.				
Thesium lacinulatum A.W.Hill				
Thesium lineatum L.f.				
Trachyandra bulbinifolia (Dinter) Oberm.	Near Endemic			
Trachyandra lanata (Dinter) Oberm.	Endemic			
Trachyandra muricata (L.f.) Kunth				
Trianthema parvifolia E.Mey. ex Sond. var. parvifolia				
Tribulus cristatus C.Presl				
Tribulus terrestris L.				
Trichodesma africanum (L.) Lehm.				
Tridentea jucunda (N.E.Br.) L.C.Leach		Protected		
Tripteris breviradiata (Norl.) B.Nord.				
Tripteris crassifolia O.Hoffm.				
Tripteris karrooica Bolus				
Tripteris microcarpa Harv. subsp. microcarpa				
Tripteris polycephala DC.	Near Endemic			
Tripteris sinuata DC. var. sinuata				
Troglophyton capillaceum (Thunb.) Hilliard & B.L.Burtt subsp. capillaceum				
Troglophyton parvulum (Harv.) Hilliard & B.L.Burtt				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Tromotriche pedunculata (Masson) Bruyns subsp. longipes (C.A.Lückh.) Bruyns		Protected		
Tylecodon bleckiae G.Will.				
Tylecodon buchholzianus (Schuldt & P.Stephan) Toelken subsp. buchholzianus				
Tylecodon hallii (Toelken) Toelken		Protected		
Tylecodon paniculatus (L.f.) Toelken subsp. paniculatus				
Tylecodon racemosus (Harv.) Toelken				
Tylecodon reticulatus (L.f.) Toelken subsp. phyllopodium Toelken				
Tylecodon rubrovenosus (Dinter) Toelken				
Tylecodon wallichii (Harv.) Toelken subsp. ecklonianus (Harv.) Toelken				
Ursinia nana DC. subsp. nana				
Ursinia speciosa DC.				
Viscum capense L.f.				
Wahlenbergia annularis A.DC.				
Wahlenbergia erophiloides Markgr.	Endemic			Near Threatened
Wahlenbergia oxyphylla A.DC.				
Wahlenbergia patula A.DC.				
Wahlenbergia subrosulata Brehmer				
Wahlenbergia subumbellata Markgr.	Near Endemic			
Wellstedia dinteri Pilg. subsp. gracilior (D.R.Hunt) Retief & A.E.van Wyk				

SPECIES	ENDEMISM	PROTECTED	IUCN1	IUCN2
Xenoscapa fistulosa (Spreng. ex Klatt) Goldblatt & J.C.Manning				
Zygophyllum applanatum Van Zyl	Endemic			Near Threatened
Zygophyllum cordifolium L.f.				
Zygophyllum decumbens Delile var. decumbens				
Zygophyllum leucocladum Diels				Near Threatened
Zygophyllum longicapsulare Schinz	Near Endemic			
Zygophyllum macrocarpon Retief				
Zygophyllum morgsana L.				Near Threatened
Zygophyllum patenticaule Van Zyl				
Zygophyllum prismatocarpum E.Mey. ex Sond.				
Zygophyllum rigidum Schinz				
Zygophyllum segmentatum Van Zyl				