Environmental Scoping and Management Report

Proposed Mineral Exploration and Small-scale Mining Activities on Mining Claims (MCs) 75393, 75394, 75395, 75396, 75397, 75398 & 75399 in respect to Dimension Stone, Industrial Mineral and Semi-Precious Stones, South-east of Karibib, Erongo Region

DECEMBER 3

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Title	Proposed Mineral Exploration and Small-scale Mining Activities on Mining Claims (MCs) 75393, 75394, 75395, 75396, 75397, 75398 & 75399 in respect to Dimension Stone, Industrial Mineral and Semi-Precious Stones	
ECC Application Reference number	APP – 004974	
Location	South-east of Karibib, Erongo Region	
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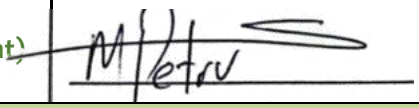
Mr. Lawrence Tjatindi (EAP) 1		20 September 2024
Approval – Client 2		
Mr. Michael I. T. Petrus (License Holder, Proponent)		22 September 2024

Declaration of authorship

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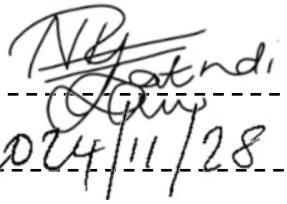
I Lawrence Tjatindi (full name of Environmental Assessment Practitioner - EAP) understand and agree that the information I have furnished in this submission will be reviewed by the Office of the Environmental Commissioner (OEC). I accept that the Environmental Commissioner, will hold me accountable in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

Tick the box (es) applicable to your submission:

- ☐ Pro Forma Environmental Contract for Mining Claim(s)
- ☐ Environmental Questionnaire for Mining
- ☒ Scoping report
- ☐ Environmental Impact Assessment (EIA)
- ☒ Environmental Management Plan (EMP)
- ☐ Consent from Relevant Authority

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

Consultancy Name: EnviroLeap Consulting cc

EAP Signature: 

Date: 2024/11/28

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

executive summary

Project Overview

Mr. Michael Inyenga Tonateni Petrus, the proponent is the sole owner of Inyenga Marble Mine (IPMM) a fully registered, 100% Namibian owned company that ventures in small-scale exploration and quarrying of semi-precious and dimension stone.

The proponent aim is to take advantage of the opportunity for self-employment and job creation that exist in the small-scale quarrying industry. Mr. Inyenga currently operates his business activities on Mining Claims No. 69320 and 69321, on a quarry situated about 45 km South-west of Karibib central on Farms Etusis No. 75 and Gamikaub West No. 115, in the vicinity of Karibib Town in Erongo Region.

Mr. Petrus seeks to expand their mineral exploration and mining / quarry development on Mining Claims (MCs 75181 - 75188) South-west of Karibib in the Karibib Rural Constituency on / within Farm Etusis No. 75. Principally, the proponent intends to explore (desktop geological study, collection of bulk samples and identification of previous activity in the area where the mineral of interest were conducted) and intends to further establish and operate a Small-Medium-Scale Mining operation for the extraction of Dimension Stone and Industrial Mineral (such as Marble and Lithium), and Semi-Precious Stones and other associated activities.

The core activities of Mr. Inyenga's operation, apart from minimum value addition by way of cutting the marble into block and processing into household products such wash basins and table-tops, also includes: - Exploration of Semi-precious Stones - Quarrying of Marble (Dimension Stone). Principally, the proponent proposes to further develop it's mining license into sustainable Marble Quarries while they continue to explore (desktop geological study, collection of bulk and or geological samples and identification of previous activity in the area where similar mineral mining were conducted) and to obtain bulk-samples for further laboratory analysis by use of hand-held equipment and to small degree drilling.

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of dust and noise pollution especially during the handling (loading and off-loading) will be experienced.

Need for the Proposed Project

Mining contributes about 25% to the Namibian GDP income, and thus the largest contributor to the Namibian economy. As in many African countries, mining is a key source of mineral commodities essential for maintaining and improving standards of living. Most important, the Namibian government makes provision for its citizens to obtain various mining license in order to create self-employment or business opportunities.

Overall, the exploration activities is expected to generate full time medium to long term direct employment for at least 5-10 workers. The majority of workers to be employed on the proposed exploration project are expected to be skilled and/or semi-skilled (general labourers and operators).

Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

Project Description

The proponent aim is to take advantage of the opportunity for self-employment and job creation that exist in the small-scale quarrying industry. Mr. Inyenga currently operates his business activities on Mining Claims No. 69320 and 69321, on a quarry situated about 45 km South-west of Karibib central on Farms Etusis No. 75 and Gamikaub West No. 115, in the vicinity of Karibib Town in Erongo Region.

Mr. Petrus seeks to expand their mineral exploration and mining / quarry development on Mining Claims (MCs 75181 - 75188) South-west of Karibib in the Karibib Rural Constituency on / within Farm Etusis No. 75. Principally, the proponent proposes to further develop it's mining license into sustainable Marble Quarries while they continue to explore (desktop geological study, collection of bulk and or geological samples and identification of previous activity in the area where similar mineral mining were conducted) and to obtain bulk-samples for further laboratory analysis by use of hand-held equipment and to small degree drilling.

The Mining Claims (MCs 75181 - 75188) area is serviced by a number of internal local tracks and farm roads coming the D1992 and some of the minor roads require high clearance 4 x 4 vehicles that may need to be upgraded as required. The following supporting infrastructures and services will be required:

(i) Mining Technique: Quarry, with a diamond wire saws and stone cutting machines used for cutting out the 5 m3 and 7 m3 rectangular blocks.

(ii) Processing: Further processing of the mined-out marble blocks will take place either in Karibib or Walvis Bay. At the processing plant, a giant saw is used to cut up the marble into more manageable pieces.

(iii) Mining and operational equipment: Excavators, wheel / forklift loaders, diesel generator sets, four-cylinder mining machines, wire saw machines, containers, trucks, 4 by 4 cars and air-compressors.

(iv) External and internal roads network: The Proponent utilize the already existing external and internal road networks and created additional new access road linking the quarries (mine) sites to the main access;

(v) Water supply: Raw water will be sourced from local groundwater resources. The Proponent will utilize the existing boreholes and will also drill additional boreholes as nay be require;

(vi) Energy: Proposed mining operations on Mining Claims (MCs 75181 - 75188) will use Onsite administrations and offices (supporting infrastructure): The Proponent will utilize containerised systems;

(vii) Waste Rock: Waste rock will be used for mine rehabilitation. The effective capacity of the waste rock facility will vary but is likely to be in range of 120 × 90 m3, calculated with 0.85

The proposed exploration activities mainly consist of the following prospecting activities:

i. Geophysical surveys: entails data collection of the substrata, by air or ground, through sensors such as radar, magnetic and electromagnetic to detect any mineralization.
ii. Drilling: Should analyses by an analytical laboratory be positive, holes are drilled and drill samples collected for further analysis. This will determine the depth of the potential mineralization.

Need for Environmental Assessment

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socio- economic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition for Mr. Michael I. T. Petrus to undertake its operation in compliance with the environmental legislative requirements in Namibia.

Approach to the EIA Process

The assessment process consisted of a site visit to the project location and public consultation meetings with the Interested and Affected Parties (I&APs). An environmental scoping and management plan (EMP) were compiled and constitute the application for an Environmental Clearance Certificate submitted to the Ministry of Environment and Tourism (Office of Environmental Commissioner).

Overall Recommendation

Based on the findings of the environmental scoping assessment, which concludes that all potential negative impacts associated to the proposed Mr. Petrus's prospecting operations are minimal and practical mitigation measures are available. Equally, the positive impacts can be harnessed to increase the net marginal benefits relating to the socio-economic aspects of the operations.
The proposed operations is considered to have an overall low negative environmental impact and an overall moderate positive socio-economic impact (with the implementation of respective mitigation and enhancement measures).

Based on this, it recommended that the proponent must upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as may be stipulated in their EMP and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

The following is a summary of the likely negative impacts that have been assessed for the different phases of the proposed exploration activities:

i. Land use (Likely impacts are negligible; the mining license area and sites are isolated from the distant settlements, and conservation zones).
ii. Noise (Likely impacts are low as the site is far from residential areas).
iii. Ecological and biodiversity loss (Likely impacts are localized and low).
iv. Health and safety (Overall likely impacts are low with correct PPE).
v. Solid and hazardous waste management (Likely impacts are low with a solid waste management plan and minimal hydrocarbon fuel use).
vi. Socioeconomic (Likely negative impacts are low)

Taking into consideration the findings of the environmental scoping assessment process and given the national and regional strategic requirements for infrastructure development and economic growth, it is the opinion of the EAP that the project benefits outweigh the costs and that the project will make a positive contribution towards steering Namibia on its pathway towards its vision of becoming a Logistic Hub.
Provided that the specified mitigation measures are applied effectively, it is recommended that Mr. Petrus's are issued with an ECC in terms of the Section 32 of the EMA No. 7 of 2007 and it's EIA Regulations of 2012.

glossary

AfDB	African Development Bank
BID	Background Information Document
BoN	Bank of Namibia
CA	Competent Authority
DEAF	National Department of Environmental Affairs and Forestry
EA	Environmental Authorization
ECC	Environmental Clearance Certificate
EAP	Environmental Assessment Practitioner
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
GPS	Geographical Positioning System
MME	Ministry of Mines and Energy
MEFT	Ministry of Environment, Forestry and Tourism
IMF	International Monetary Fund
GPS	Geographical Positioning System
UN	United Nations

contents

1. INTRODUCTION

The Environmental Management Act No. 7 of 2007 (also referred to as the EMA) and its Regulations promulgated in the Government Gazette No. 4878 of 2012, stipulates that for each developmental activity, which is listed as those that may not be undertaken without obtaining and Environmental Clearance Certificate (ECC), an Environmental Assessment (EA) must be conducted. The proposed prospecting and mining / quarrying for mineral commodity triggers some listed activities in terms of the EMA.
Therefore, an environmental assessment must be conducted with an aim to identify, assess and ascertain potential environmental impacts that may arise as a result of undertaking the proposed operations. Hence, the environmental assessment is a process by which the potential impacts, whether positive or negative are predicted / identified, findings interpreted and communicating to interested and affected parties (I&APs) for inputs.

Additionally, this report presents findings of an environmental scoping process that evaluates the likely socio-economic and environmental effects the proposed operation, and further identifies suitable mitigation measures for avoiding or minimizing the predicted impacts. The envisioned EIA process was undertaken in a holistic approach encompassing different elements as shown in ***Figure 1***.

Figure 1: *Anticipated Environmental Assessment Timeline*

1.1. PROJECT APPLICANT AND PROJECT OVERVIEW

Mr. Michael I. T. Petrus (herein referred to as the Proponent,), Mr. Michael Inyenga Tonateni Petrus, the proponent is the sole owner of Inyenga Marble Mine (IPMM) a fully registered, 100% Namibian owned company that ventures in small-scale exploration and quarrying of semi-precious and dimension stone.

Mr. Petrus seeks to expand their mineral exploration and mining / quarry development (**Figure 2**) on Mining Claims (MCs 75181 - 75188) South-west of Karibib in the Karibib Rural Constituency on / within Farm Etusis No. 75. Principally, the proponent intends to explore (desktop geological study, collection of bulk samples and identification of previous activity in the area where the mineral of interest were conducted) and intends to further establish and operate a Small-Medium-Scale Mining operation for the extraction of Dimension Stone and Industrial Mineral (such as Marble and Lithium), and Semi-Precious Stones and other associated activities.

Figure 2: *Close-up view of a typical marble quarry in operation (Source: Best Cheer, 2024)*

Principally, the proponent proposes to further develop it's mining license into sustainable Marble Quarries while they continue to explore (desktop geological study, collection of bulk and or geological samples and identification of previous activity in the area where similar mineral mining were conducted) and to obtain bulk-samples for further laboratory analysis by use of hand-held equipment and to small degree drilling.

The Mining Claims are located in the vicinity of Karibib Town in Erongo Region. From Windhoek (capital City), the site can be accessed through the B2 road connecting Okahandja and Swakopmund. The claims are located in Farm Etusis No. 75 about 15 Km South-west of Karibib.

Consequently the claims area is accessible by 2x4 / 4x4 pick-up vehicle by the existing tracks and otherwise, the sensitive section of the area will only be accessed by foot to ensure minimum impacts on the receiving environment.

1.2. PROJECT MOTIVATION (INCLUDING NEED AND DESIRABILITY)

Mining contributes about 25% to the Namibian GDP income, and thus the largest contributor to the Namibian economy. As in many African countries, mining is a key source of mineral commodities essential for maintaining and improving standards of living. Most important, the Namibian government makes provision for its citizens to obtain various mining license in order to create self-employment or business opportunities.

Mr. Michael I. T. Petrus, were therefore presented an opportunity to venture into the sector by undertaking mining activities (establishment of a Marble Quarry) and an exploration programme in respect in respect to Dimension Stone (Marble).

1.2.1. Need and Desirability

Overall, the exploration activities is expected to generate full time medium to long term direct employment for at least 5 – 10 workers. The majority of workers to be employed on the proposed mining operation project are expected to be skilled and/or semi-skilled (general labourers and operators).

Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution to Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities
- Attainment of the SDGs 1 and 8 in Namibia
-

1.3. REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socio-economic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition Mr. Petrus's to undertake its operation in compliance with the environmental legislative requirements in Namibia.

To ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process.

The purpose of the environmental assessment and therefore this report are to ensure compliance of the proposed operations with the environmental legislation in respect to managing potential impacts associated with the proposed Mr. Petrus's Mining and Exploration activities operations:

- Identifying potential socio-economic and environmental impacts
- Proposing management measures to avoid, prevent and of mitigate these
- Compile an Environmental Management for compliance monitoring and reporting on the implementation of the Environmental Clearance Certificate conditions

Table 1: List of activities identified in the EIA Regulations which apply to the proposed project

EMA 2007 Legislation	Description of activity	Relevance to Mr. Michael I. T. Petrus Marble Mining and Exploration
Activities 2	2.1 The construction of facilities for waste sites, treatment of waste and disposal of waste. 4 Government Gazette 6 February 2012 No. 4878 2.2 Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976. 2.3 The import, processing, use and recycling, temporary storage, transit or export of waste.	The operation has a component of generation, waste management, handling and disposal
Activity 3	3.1 The construction of facilities for any process or activities which requires a license, right or other form of authorization, and the renewal of a license, right or other form of authorization, in terms of the Minerals (Prospecting and Quarrying Act), 1992. 3.2 Other forms of quarrying or extraction of any natural resources whether regulated by law or not.	The construction of facilities for the purpose of carrying out a listed activities The quarrying or extraction of any natural resources whether regulated by law or not.
Activity 4	4. The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorization in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.	The clearance of vegetation areas to allow the quarrying activity to take place
Activity 9	9.1 Manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974.	The operation has a component of storage and handling of a dangerous goods, including petrol, diesel, and liquid petroleum gas or paraffin onsite.

Therefore, Mr. Petrus appointed Enviro-Leap Consulting to conduct an environmental assessment and facilitate the process of obtaining and Environmental Clearance Certificate.

1.4. EIA TEAM

Mr. Petrus to undertake the EIA required for the proposed project. A public participation process (PPP) forms an integral part of the Environmental Assessment Process to aid in identifying issues and possible alternatives for consideration. Details on the PPP are included in section 4 of this Scoping Report.

Table 2: *The EIA Management Team*

NAME	ORGANISATION	ROLE/ SPECIALIST STUDY UNDERTAKEN
Environmental Assessment Practitioners		
Shadrack Tjiramba	Enviro-Leap Consulting cc	Environment Practitioner
Lawrence Tjatindi	Enviro-Leap Consulting cc	Internal Reviewer

1.5. DETAILS AND EXPERTISE OF THE EAP

Over the past four years the Enviro-Leap Consulting has been involved in a multitude of Environmental Assessment projects across SADC and within Namibia. The Environmental Practitioners of Enviro-Leap Consulting has a combined of more than 35 years' experience in the environmental sector (management and policy), ecological research and stakeholder engagement. Consequently, the team offers a wealth of experience and appreciation of the environmental and social priorities and national policies and regulations in Namibia.

1.6. OBJECTIVES OF THE ENVIRONMENTAL SCOPING ASSESSMENT

The primary objective of this EA Report is to present stakeholders, I&APs and the Competent Authority, the DEA, with an overview of the predicted impacts and associated management actions required to avoid or mitigate the negative impacts; or to enhance the benefits of the proposed Mr. Petrus operations.

In broad terms, the 2012 EMA EIA Regulations (GG 4878) stipulates that an EIA Process must be undertaken providing to determine the potential environmental impacts, mitigation and closure outcomes, as well as the residual risks of any listed activity.

Therefore, based on these (EIA Regulations), the objectives of the Environmental Assessment (EA) Process is to:

- determine the policy and legislative context within which the activity is located and note how the proposed activity complies with and responds to the policy and legislative context;
- describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- determine the nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and the degree to which these impacts (a) can be reversed; (b) may cause irreplaceable loss of resources, and (c) can be avoided, managed or mitigated; and
- identify suitable measures to avoid, manage or mitigate identified impacts;

In terms of legal requirements, a crucial objective of the Environmental Scoping or EIA Report is to satisfy the requirements of EIA Regulations in respecting to obtaining an Environmental Clearance Certificate. This section regulates and prescribes the content of the Scoping Report and specifies the type of supporting information that accompany the submission of the ECC application to the Competent Authority.

2. PROJECT DESCRIPTION

This section provides an overview of the marble quarrying / mining and or prospecting activities on Mining Claims (MCs 75181 - 75188), sites and technology selection process for identifying the most suitable exploration techniques to be adopted.

2.1. OVERVIEW OF THE PROPOSED MINING AND EXPLORATION ACTIVITIES

The immediate focus of planned exploration focused on interpreting the pending rock and soil samples as well as the historical data. A section of the broader Farm Etusis No. 75, already host an operational quarry, and now the proponent proposes to undertake an expansion by establishing another marble quarry on the new proposed Mining Claims (MCs 75181 - 75188) to start extraction thereto (as illustrated in **Figure 3**).

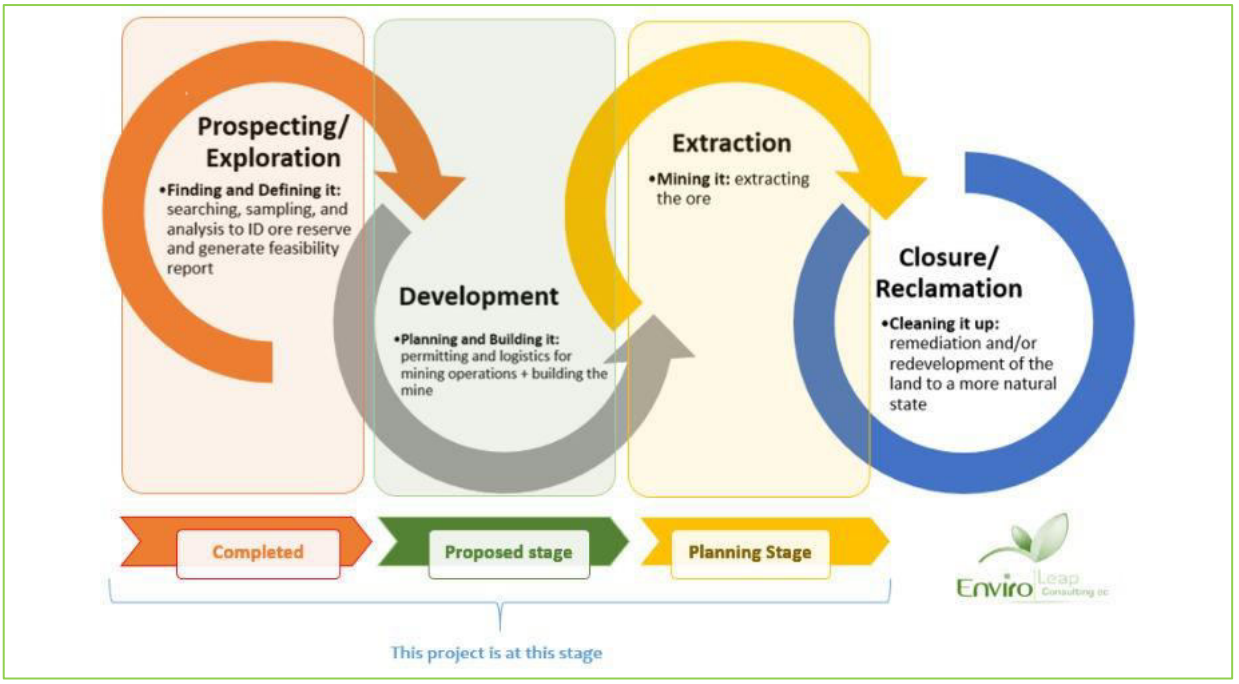


Figure 3: Shows a mineral discovery development life cycle, highlighting the current stage

The following is the summary of the key components of the proposed project:

(i) Commodity Group: Dimension stone with special focus marble and other economic rocks.

(ii) Size of Deposit: In excess of 100 million cubic meters and will continuous ongoing exploration activities, this amount will increase by fourfold.

(iii) Estimated mine life: 25 years and beyond.

(iv) Socioeconomic benefits: The Group has invested around N$600 million in the Namibian economy and in particular the Erongo Region. The proposed project will have employment opportunities, value addition, in-situ potential underground minerals resources and high beneficiation opportunities in Karibib / Walvis Bay and additional socioeconomic benefits in terms of capital investments, license rental fees, royalties payable to Government, export earnings, foreign direct investments and various taxes payable to the Government.

(v) Mining Technique: Quarry, with a diamond wire saws and stone cutting machines used for cutting out the 5 m3 and 7 m3 rectangular blocks.

(vi) Processing: Further processing of the mined-out marble blocks will take place either in Karibib or Walvis Bay. At the processing plant, a giant saw is used to cut up the marble into more manageable pieces.
(vii) Sources of water supply: Groundwater from a local borehole to be drilled.
(viii) Sources of electricity supply: Diesel generator and solar.
(ix) Mining and operational equipment: Multiple excavators, wheel-loaders, forklift loaders, diesel generator sets, four-cylinder mining machines, wire saw machines, semi-automatic drilling machines, containers, trucks, 4 by 4 cars and air-compressors, and.
(x) Waste Rock: Waste rock will be used for mine rehabilitation. The effective capacity of the waste rock facility will vary but is likely to be in range of 120 × 90 m3, calculated with 0.85 as capacity utilization coefficient of waste rock.

2.1.1 Mine Design and Construction

The mining techniques to be employed for the proposed project will be an open pit mining method using conventional diesel-powered equipment and a drill and blast, load and haul operation:

- Transportation facilities, including access roads to the site and on-site roads.
- Waste rock and mine blocks stockpiles.
- Linear infrastructure, including water supply systems, power infrastructure, including powerline and distribution systems (Generator and Solar).
- Containerised administration blocks and warehouses.
- Fuel supply and storage, workshop and equipment maintenance facilities.
- Wastewater treatment systems, domestic solid waste disposal storage / transfer facility, and **s**torm water management in the pit and supporting infrastructure.

2.1.2 Mine Operations (Extracting the Marble)

The mine operational phase will involve the extraction of the marble blocks from the quarry using special cutting saws. The cut-out blocks will be pulled from the quarry to the stockpiling and sorting area (Plates 2.1 and 2.2). A basic shape of a large rectangle is aimed for, so that it is easier to shape the marble into useful objects during further processing. The following is the overall summary of the activities to be undertaken during the mining stage:

- Mining operations (actual mining operations as may be required).
- Transportation of the mined marble blocks from pit to the sorting areas, and then to Karibib or Walvis Bay for further processing**.**
- Waste rock management / reprocessing / recovery.
- Ongoing exploration support.
- Ongoing rehabilitation and maintenance.
- Waste management, Municipal waste water / solid waste management / transfer to Usakos / Karibib, and.
- Environmental performance monitoring.

The following is the indicative summary of the key equipment to be used for the proposed marble mining operations to be developed in the ML No. 190:

- Excavators, wheel-loaders, forklift loaders, diesel generator sets, four-cylinder mining machines, wire saw machines, semi-automatic drilling machines, containers, trucks, 4 by 4 vehicles, and air-compressors.

2.1.3 Transporting the Marble

Once the marble is removed from the quarry, the blocks will be examined for quality (Plates 2.3 and 2.4). All the marble of a particular colour will be placed together. Cracks and impurities will be eliminated from the marble (Plates 2.3 and 2.4). The marble blocks will then be transported to the processing plant in Karibib or Walvis Bay by truck.

2.1.4 Processing the Marble

During the processing stage, the marble will be cut into more usable shapes. This may involve running through epoxy and other treatment processes followed by polishing processes to make it usable. The marble is cut into different shapes for different tasks. Some of the most common types of marble products include: sculpture marble, marble tiles, countertop marbles and others. Finally, the marble is shipped to different places where it can be sold locally and internationally (export).

2.2. PROJECT RATIONALE (MOTIVATION, NEED AND DESIRABILITY)

2.2.1 Project Motivation

The proposed activity responds to Namibia's strategic vision 2030 and the NDP5 of creating a conducive environment within which its citizens prospers and contribute to the national development goals by creating employment opportunities. Overall, this activity contribute to the nation's efforts of elevating poverty amongst the rural citizens.

Critically, going ahead with the proposed activity on ML 190 creates a potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

2.2.2 Project Need and Desirability

Mining contributes about 25% to the Namibian GDP income, and thus the largest contributor to the Namibian economy. As in many African countries, mining is a key source of mineral commodities essential for maintaining and improving standards of living. Most important, the Namibian government makes provision for its citizens to obtain various mining license in order to create self-employment or business opportunities.

Mr. Michael I. T. Petrus , were therefore presented an opportunity to venture into the sector by undertaking mining activities (establishment of a Marble Quarry) and an exploration programme in respect in respect to Dimension Stone (Marble).

Overall, the exploration activities is expected to generate full time medium to long term direct employment for at least 5-10 workers. The majority of workers to be employed on the proposed exploration project are expected to be skilled and/or semi-skilled (general labourers and operators).

2.3. PROJECT LOCATION

The Mining Claims (MCs 75181 - 75188) are located in the vicinity on Mining Claims South-west of Karibib in the Karibib Rural Constituency on / within Farm Etusis No. 75 (Figures 4 and 5) in the Erongo Region. From Windhoek (capital City), the site can be accessed through the B2 road connecting Okahandja and Swakopmund. The claims are located in Farm Etusis No. 75 about 15 Km South-west of Karibib.

Consequently the claims area is accessible by 2x4 / 4x4 pick-up vehicle by the existing tracks and otherwise, the sensitive section of the area will only be accessed by foot to ensure minimum impacts on the receiving environment.

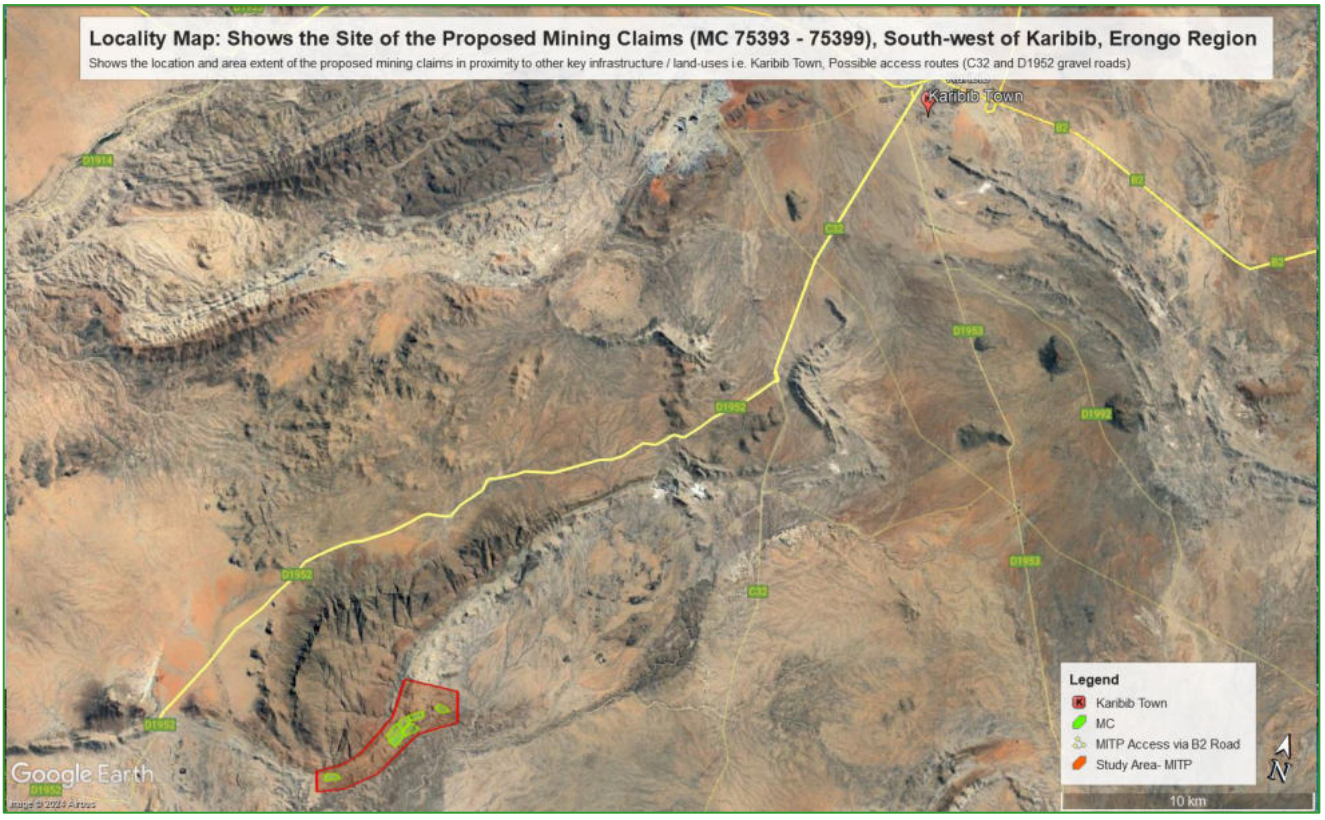


Figure 4: *Show the location and area extent (104 Ha) of the proposed Mining License 190 in the Erongo Region*

Table 3: *Mining Claim's Centre coordinates of the proposed development site*

Corner point	Latitude	Longitude
A – MC 75393 Corner Point 1	22°13'13.42"S	15°43'48.06"E
B – MC 75394 (Centre Point)	22°13'5.82"S	15°43'41.40"E
C – MC, 75395 (Centre Point)	22°12'48.75"S	15°43'51.51"E
D – MC 75396 (Centre Point)	22°12'37.42"S	15°44'4.40"E
F – MC 75397 (Centre Point)	22°12'18.79"S	15°44'35.24"E
G – MC 75398 (Centre Point)	22°14'21.91"S	15°42'37.22"E
H – MC 75399 (Centre Point)	22°12'56.71"S	15°44'1.09"E

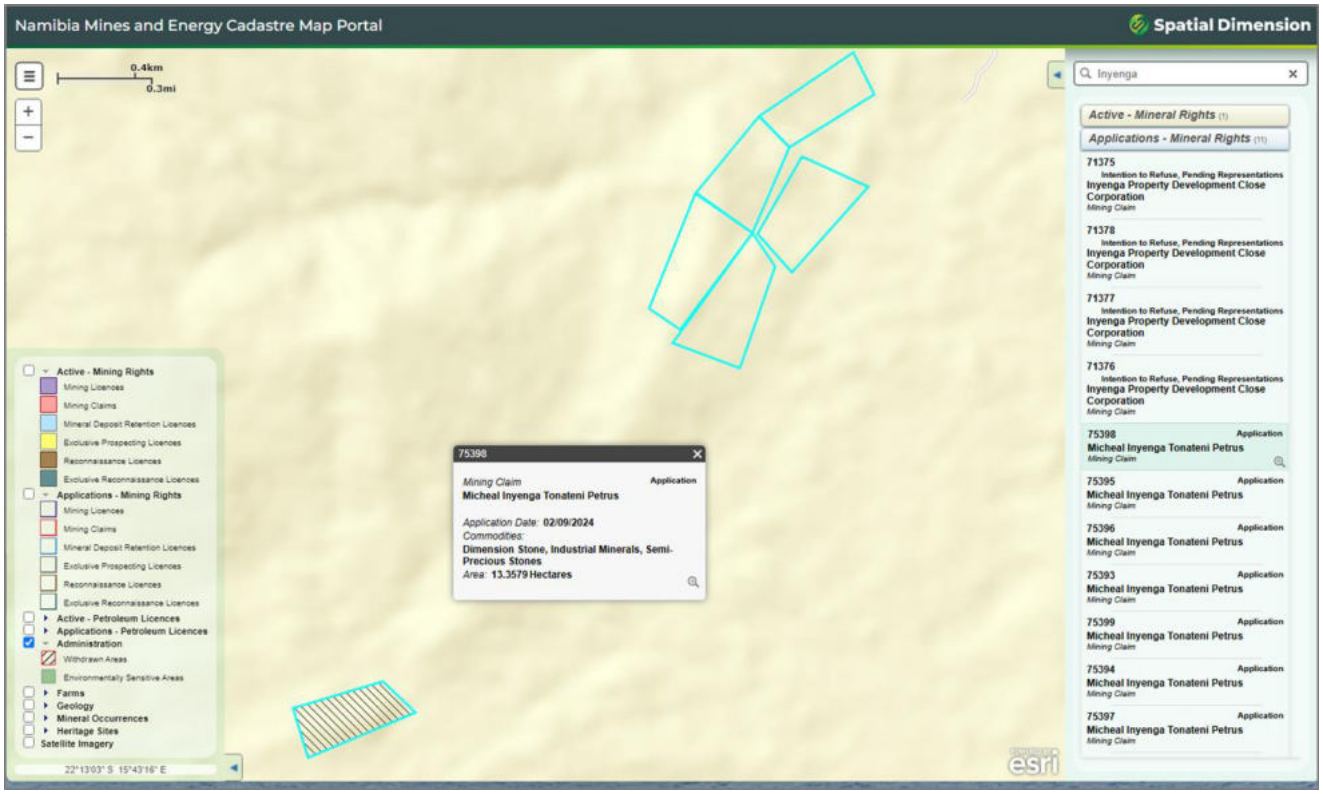


Figure 5: Evidence of the proposed mining license on the Ministry of Mine's cadastre (MME, 2024)

2.4. SUPPORTING INFRASTRUCTURE AND SERVICES

2.4.1 Current Land Uses

The area covered by the Mining Claims (MCs 75181 - 75188) is not all pristine as they are portions dominated by a number of old excavations, waste rock and scrap metals linked to the historical exploration and mining operations as well as other previous and current land uses. The proposed mining and exploration operations within the Mining Claims (MCs 75181 - 75188) will address some of the current poor state of the local environment that has been abandoned and not been rehabilitated over many years of historical exploration and mining operations.

A number of lodges are found in the general surrounding areas but not necessary within the proposed project boundary, the Mining Claims (MCs 75181 - 75188). Bush thickening or encroachment is viewed as an economic problem in the general area but does not seem to be an issue within the proposed project area. The area is not part of the communal conservancy system in Namibia with no protected area bordering the Mining Claims area.

The carrying capacity for the general area is 10-20kg/ha (Mendelsohn et al. 2002) or 12- 15LAU/ha (van der Merwe 1983) and the risk of farming is viewed as relatively high. Sheep farming is the dominant farming activity in the Karibib area with between 70-80% of stock farmed with being sheep and 20-30% goats and cattle, respectively (van der Merwe 1983). The stock density is estimated at <3sheep/km^2 (1.5% of total sheep in Namibia) and <1cattle/km^2 (1.3% of total cattle in Namibia) (van der Merwe 1983).

There are numerous existing tourism ventures in the area with the tourism potential viewed as relatively high (Mendelsohn et al. 2002). The socioeconomic activities in and around the Town of Karibib is dependent on mining, farming (small stock and cattle), tourism and trading.

2.4.2 Supporting Infrastructure and Services

The Mining Claims (MCs 75181 - 75188) is serviced by a number of internal local tracks and farm roads and can be mainly accessed through the B2 road connecting Okahandja and Swakopmund and some of the minor roads require high clearance 4 x 4 vehicles that may need to be upgraded as required. The following supporting infrastructures and services will be required:

(i) External and internal roads network: The Proponent will upgrade the already existing external and internal road networks and created additional new access road linking the quarries (mine) sites to the main access;
(ii) Water supply: Raw water will be sourced from local groundwater resources. The Proponent will utilise the existing boreholes and will also drill additional boreholes as nay be require;
(iii) Energy: Proposed mining operations on Mining Claims (MCs 75181 - 75188) will use onsite administrations and offices (supporting infrastructure): The Proponent will utilise
(iv) containerised systems;
(v) Staff transport arrangements from Karibib to the mine sites will be provided by the Proponent, and;
(vi) Karibib based staff accommodation services: Will use the already existing properties in the town of Karibib.

2.4.4 Waste (Domestic / Hazardous) Management

In terms of waste generation and management, the predominant type of waste that will be generated during the operations, in small volumes, is domestic waste i.e. packaging material (paper, wooden box and plastic sampling bags), waste rock and potentially hydrocarbons from storage and handling or fuels and lubricants onsite. Domestic waste must be stored in heavy duty garbage bags in specifically designated bins and disposed of correctly at the Karibib waste disposal site.

Domestic Waste: Different waste containers will be provided onsite for waste sorting and safe disposal of waste generated onsite. These will be collected on a monthly basis and sent to nearest approved waste management facility in the area such as Karibib.

Sanitation: Portable ablution facilities with septic tanks will be put up for sanitation purposes for the exploration and mining teams and will be emptied in good time according to manufacturers' instructions.

2.5. MINE CLOSURE, DECOMMISSIONING, REHABILITATION AND AFTERCARE

In line with the new regulatory requirements by the Ministry of Mines and Energy (MME), a Mine Closure Plan will be required to be submitted to the regulators. The Mine Closure will provide a detailed plan of actions and commitments including financial and human resources for effective management of the likely environmental liabilities at mine closure and aftercare stages of the proposed mining and ongoing activities in the Mining Claims (MCs 75181 - 75188).

Regular assessments and evaluation of the environmental liabilities during the mining stage shall be undertaken to ensure that adequate provision of the necessary resources towards good environmental management at mine closure and aftercare stages. The following is the summary of the activities to be associated with the mine closure and aftercare stages:

- Implementation of sustainable socioeconomic plan.
- Closure of open pits.
- Closure of solid waste transfer station.
- Backfill all excavated areas.
- Closure of the mined blocks storage area.
- Decommissioning of water and electricity infrastructure.
- Overall land reclamation and restoration of internal roads, and.
- Revegetation and aftercare as may be required.

2.5.1 Mine Closure Plan

The Mine Closure Plan activities consist of following five (5) steps that will be implemented by Proponent and where applicable in consultation with the key stakeholders:

(i) Ongoing rehabilitation: This will be implemented during the exploration phase and from day one (1) of the mine starting to produce coupled with the recruitment of a new workforce. Unwanted exploration and mine sites excavated or disturbed during the mine operation phase will not wait the final mine closure rehabilitation but will be attended to as ongoing activities and financed within an ongoing annual mine operational budget allocation to be detailed in the Mine Closure Plan Report.

(ii) Mine closure: Once production stops, the number of workers will be reduced and a small labour force will be retained to permanently shut down the mine. The mining company may have to provide re-training or early retirement options to their workers before the mine is closed. The cost of the re-skilling, early retirement and retrenchments will be funded from the final Mine Closure Plan budget allocations to be detailed in the Mine Closure Plan Report.

(iii) Decommissioning: Will be undertaken by a small crews or contractors who will be responsible for decommissioning or taking apart the mining supporting infrastructure and equipment. Pipelines will be drained, equipment and valuable parts will be cleaned and may be sold, buildings will be repurposed or demolished, warehouse materials will be recovered, and waste will be disposed of. The cost of the decommissioning will be funded from the final Mine Closure Plan budget allocations to be detailed in the Mine Closure Plan Report.

(iv) Final rehabilitation\Remediation\reclamation: The objective of reclamation will be to return the Mining Claims area to an acceptable standard of socioeconomic use, ensuring that any landforms and structures are stable, and any watercourses are of acceptable water quality. Reclamation will involve a number of activities such as removal of any hazardous materials, reshaping the land, restoring topsoil, and planting native grasses, trees, or ground cover as may be applicable. The cost of the remediation/reclamation will be funded from the final Mine Closure Plan budget allocations to be detailed in the Mine Closure Plan Report, and.

(v) Post-closure and aftercare including monitoring: Monitoring programmes will be used to assess the effectiveness of the reclamation measures and to identify any corrective action that may be needed during the post closure and aftercare stage. In addition, the project area Mining Claims (MCs 75181 - 75188) will also require long-term care and maintenance after mine closure such as periodic monitoring and maintenance of waste rock containment structures and secured hazardous areas, and monitoring any ongoing remediation technologies that have been implemented.

(vi) The aftercare period will run for period of between two (2) to five (5) years or as may be agreed with the stakeholders especially the land owners and relevant Government regulators such as MME, MEFT and MAWLR. The cost for post-closure and aftercare will be funded from the final Mine Closure Plan budget allocations to be detailed in the Mine Closure Plan Report

3. DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter of the Scoping Report provides an overview of the affected environment for the proposed exploration activities. The receiving environment is understood to include biophysical, socio-economic and heritage aspects which could be affected by the proposed development or which in turn might impact on the proposed development.

3.1 BIOPHYSICAL ENVIRONMENT

Namibia is characterized by four land type systems , the Namib, which runs along the entire west coast from the port town of Lüderitz, northwards into southern Angola; the Succulent Karoo which lies south of Lüderitz and extends across the Orange River into South Africa; the Nama Karoo which occurs immediately to the east of the previous two desert systems and covers most of the southern third of Namibia, tapering to a narrow belt from central Namibia northwards; and the Southern Kalahari which extends eastwards across to Botswana.

3.1.1 Climatic Conditions

The proposed mining project area is located in the Karibib District, Erongo Region in central Namibia with daytime warm to hot temperatures throughout the year, while the nights are mild to cool in winter (**Figure 5**). The mean annual rainfall is highly variable and may range between 200 - 300 mm in some parts of the ML Area.

The distribution of rainfall is extremely seasonal with almost all the rain falling in summer from November to April with occasional with mean annual gross evaporation of about 3300 mm. The local project area has the following three distinct seasons:

- A dry and relatively cool season from April to August with average daytime highs of 23°C and virtually no rainfall during this period.
- A hot and dry season from September to December with minimal and variable rainfall falling (<20mm per month) and average daytime highs of 30°C, which regularly exceed 40°C, and.
- A hot and rainy season from January through to March with >50mm per month falling during this period (although this is extremely variable) and average high temperatures of 29°C.

Figure 5: *The summary of the climate in the Omaruru surrounding of Erongo Region*

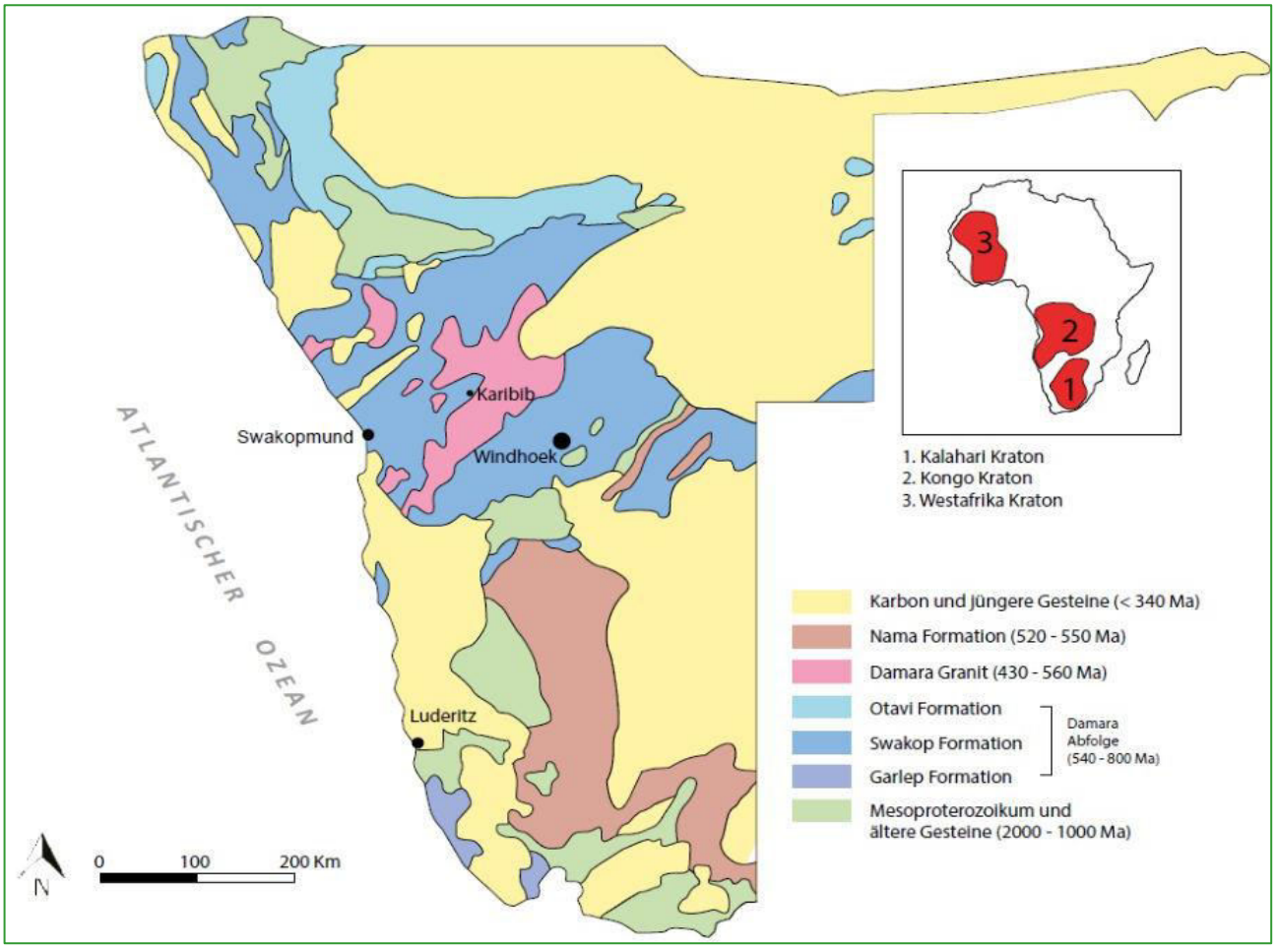
3.1.2 Geology

The targeted marble horizon in the ML 190 belong to the Karibib Marble Formation (Fig. 1.6). The marble-dominated Karibib Formation exhibits considerable thickness variations and conformably overlies the Arandis Formation. The local geology comprises the following lithology's (**Figure 6**): Quaternary (Qs) sediments comprising unconsolidated surficial deposits.

Etendeka basalts and lions Head arkose, shale, mudrock and sandstone covering the Sargdeckel and Jungfpau mountain peaks in the central parts of the ML area.

Metamorphic Complex augen gneiss, biotite silimatite gneiss covers a small part of the ML in the far northern corner. Diorite dominating the southwestern half of the ML area. Pegmatites belonging to the Namibia to Cambrian age cover the far south-eastern boundary of the ML area, and.
Marble with cal-silicate rocks and mica schists belonging to the Swakop Group Karibib Formation dominating the north-eastern half of the ML area. The marble is the main targeted geological horizon for dimensions stone mining operations

Figure 6: *Simplified geology of Simplified geological map of Namibia. Modified after Clifford (2008).*



The ML area falls within the western edge Great Escarpment. The area is characterised by relatively flat topography, with the exception of local ridges and hills where more competent rocks occur, forming conspicuous topographic elevated surface expressions (**Figure 7**). Small, ephemeral rivers that flow only when it rains and dry most of the year dominate the general drainage. The elevation above mean sea level ranges from 1350m for most parts of the ML area to 1600m and 1700m for the Sargdeckel and Jungfrau mountain summits respectively.

3.1.3 Terrestrial Ecology and Sensitivity

Namibia's vegetation and biomes are classified into five major types. These are, the Namib Desert, Nama Karoo, Succulent Karoo and the Trees and Shrub savannah. The proposed project area fall mainly within the Desert biome and thus the fauna and flora key receptors of environmental impact particularly in case of trampling and vehicle tracks, potential poaching and ground contamination resulting from the project activities.

Overall terrestrial diversity of plants and animals is highest in the north-eastern parts of Namibia (**Figure 8**, green map indicator), because of the higher rainfall and presence of wetlands and forest habitats that are not found elsewhere in the country. Many species in the north are also more tropical, with ranges that extend into neighboring countries to the north and north-east. Species richness is highest in Namibia's mesic wetlands and woodlands in the vertebrate classes particularly (Barnard 1998).

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

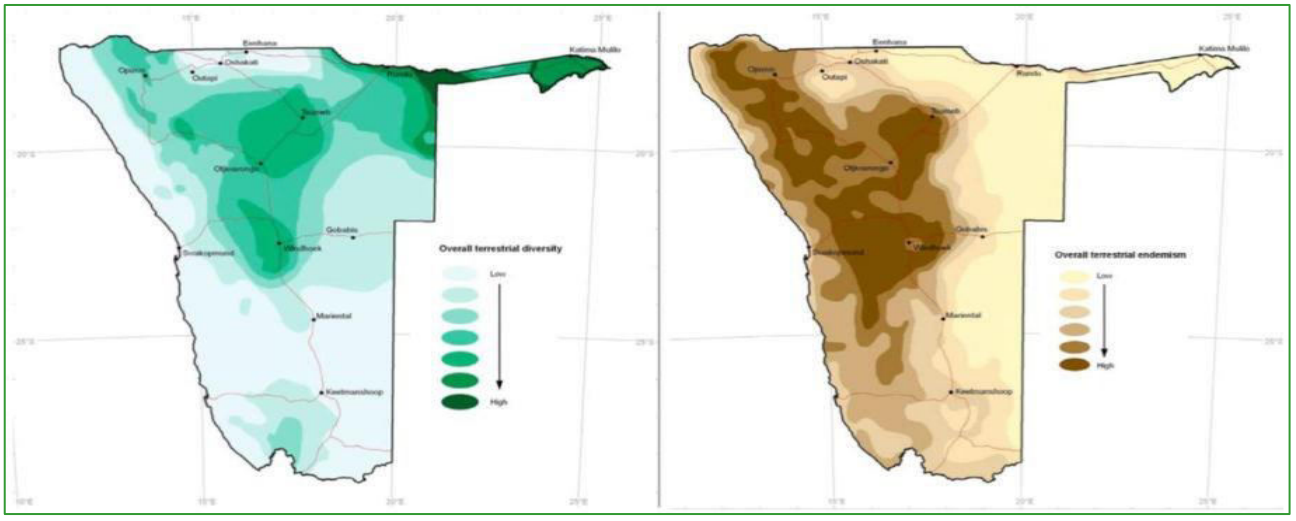


Figure 7: Shows a comparison of overall terrestrial species diversity (green) against overall endemism (brown)

According to Cunningham (2020), it is estimated that at least 75 species of reptile, 7 amphibian, 87 mammal, 217 birds, 74-101 larger trees and shrubs (**Figure** 8) and up to 80 grass species occur in the general/immediate Karibib area of which a high proportion are endemics (e.g. reptiles 45.3%).

Figure 8: Shows the predominant composition of vegetation species consisting mainly of woody plants

The following is the summary of the key habitats that have been identified:

(i) Hills / topographically high areas: Rocky areas generally have high biodiversity and consequently viewed as important habitat for all vertebrate fauna and flora. A hills area in the ML have a high density of Aloe litoralis (protected) as well as *Ficus cordata* (protected), *Sterculia africana* (protected) and *Commiphora glaucescens* (near endemic) individuals. A few isolated population of *Boscia albitrunca* species were also observed on this habitat.

(ii) Ephemeral drainage lines: The various ephemeral drainage lines are important habitat to larger trees, especially *Acacia erioloba* (protected), *Euclea pseudebenus* (protected),

(iii) Faidherbia albida (protected) and Ziziphus mucronata (protected).

(iv) Plains / Topographically low area: Topographically low areas are also important habitats with Acacia erioloba, *Albizia anthelmintica* and *Boscia albitrunca* being found in these areas. Vertebrate fauna species most likely to be adversely affected by the proposed mining and ongoing exploration activities in the ML 190 would be sedentary reptile species associated with specific geology marble ridges/hills/outcrop targeted for mining e.g. Pedioplanis husabensis and various Pachydactylus and Rhoptropus species. Important flora potentially adversely affected would be *Aloe asperifolia*, *A. namibensis*, various Commiphora species and *Lithops ruschiorum var. ruschiorum* and *L. gracilidelineata var. gracilidelineata*.

3.2 SOCIO-ECONOMICAL ENVIRONMENT

3.2.1 Demographic Profile

Until independence in 1990, the Erongo Region was almost fully supported by a tin and tantalite mine operated by a South African company in Uis town. The latter provided essential jobs and infrastructure and many families moved to Uis to sustain their livelihoods. The mine however closed in 1990, leaving the community residing in the township with no alternative economic activity.

As a result, unemployment, particularly among the youth, and poverty sharply rose and access to basic infrastructure remained very limited. From the last available census data, 46 % of the labor force is now unemployed, 22 % of people of 15 years and above have never attended school, while 57 % of households have no toilet facility (NPC 2003).

Apart from few local government positions, economic opportunities have become rare; households have had to resort, as a source of income, to small scale farming, illegal mining and informal small businesses, but also importantly to pensions and cash remittances (Mosimane 2000).

The Mining Claims (MCs 75181 - 75188) within the Karibib Constituency, Erongo Region in Namibia. The total area of Karibib Constituency covers 14 535.8 km² amounting to 22.8 percent of the total area of Erongo Region (National Planning Commission, 2006, 2007 and 2012). Karibib Constituency is among the least densely populated area in Erongo Region with a population density of approximately 0.9 persons per km2.

Karibib Constituency is bordered by the Omaruru Constituency in the north, Daures Constituency in the northwest, Arandis Constituency in the southwest and Otjozondjupa and Khomas Regions to the east. There are numerous existing tourism ventures in the area with the tourism potential viewed as relatively high (Mendelsohn et al. 2002). The socioeconomic activities in and around the Town of Karibib is dependent on mining, farming (small stock and cattle), tourism and trading.

With limited farming opportunities and the existence of unique cultural and natural resources that attracted a growing number of domestic and South African tourists since the beginning of the years 2000, tourism was increasingly seen as an opportunity to generate alternative critical income. Young people started selling semi-precious stones to tourists along the road and looked for any other income-generating activity based on local resources available (including small-scale mining).

3.2.2 Heritage and Culture Profile

In Namibia, archaeological resources are often vulnerable to developmental and mining impacts. Typical sites do not only include those found in the mountains, hills and outcrops but also those generally found in the flat areas (Namib Desert) and or in riverbeds. Others includes surface scatters of stone artefacts, rock shelters with evidence of occupation, including rock art, graves, stone features such as hunting blinds and huts, and more recent site such as colonial battlefields, road-works and historical mines.

Some of these site types are might be obvious to some observer, such as rock art or historical mines. Others are quite ambiguous and might appear less significant than they are, such as pre-colonial stone features. This means that it is very difficult for mining projects to avoid damage to archaeological heritage sites if they have not been located, identified and made known during EIA process.

According to Kinahan, (2017) the large assemblage of ceramic vessels from Habis represent an important addition to the regional archaeological picture. Evidence from the early colonial period relates to mining in the Karibib area and a combination of trade, missionary activity, and wagon repair in the Otjimbingwe area. Both Karibib and Otjimbingwe are centres of historical importance and have several National Monument sites recognized under the National Heritage Act.

It is safe to assume that Mining Claims (MCs 75181 - 75188) will have some sites of archaeological significance and that these will probably date to the late precolonial and early colonial periods Proponent must not disturb major natural cavities that may be unearthed because they could hold some highly significant historical or cultural sites that would require detailed documentation and possibly mitigation measures to be adopted in the event of encroachment by mining activity.

However, it remains necessary that in the absence of extensive heritage and culture studies in the region there remains a possibility of encountering numerous undeclared artefacts / sites of heritage importance. A search and find procedure (**Appendix C**) must be strictly followed in accordance with the stipulations of the Namibian National Heritage Act in the highly unlikely event that artefacts are found in the sand mining area.

4. APPROACH TO EIA PROCESS AND PUBLIC PARTICIPATION

This chapter presents the approach to the Environmental Scoping Assessment process, for the proposed Mr. Petrus's exploration activities and gives particular attention to the legal context and guidelines applicable to this assessment. The assessment approach and the steps in the Public Participation component of this scoping report were undertaken in accordance with Regulations 29 and 30 of Government Notice No. 30 of 2012. Overall, this section highlights information including the approach to stakeholder engagement, identification of issues, overview of relevant legislation, and key principles and guidelines that provide the context for this scoping assessment process. Hence, in a nutshell, the purpose of the environmental assessment is to:

- Address issues that have been identified through the Scoping Process;
- Assess alternatives to the proposed activity in a comparative manner;
- Assess all identified impacts and determine the significance of each impact; and
- Recommend actions to avoid/mitigate negative impacts and enhance benefits.

4.1 OVERVIEW OF APPROACH ADPTED FOR COMPILING THE SCOPING AND EMP REPORTS

The objectives of the environmental scoping assessment are noted in Section 1 of this Report. Section 6 of this Scoping Report includes a summary of the findings, the overall conclusions and the recommendations. The Scoping Report was made available for a 30-day I&AP and authority review period, as outlined in the EMA Regulations of 2012. Although adverts were put in local newspapers **Confidente** newspaper on **13 – 19** September **2024** and **20 – 26** September **2024,** and then in **The Villager** newspaper on the **13th** and **20th September 2024** in order to notify and inform the public of the proposed projects and invite I&APs to register.

As previously noted, the Scoping Report includes an Environmental Management Plan (EMP, **Appendix B**). The EMP is based broadly on global environmental management principles and embodies an approach of continual improvement and mitigation actions.
These are drawn primarily based on the identified potential impacts for both the construction and operational phases of Mr. Petrus's proposed operations. If the project components are decommissioned or re-developed, this will need to be done in accordance with the relevant environmental standards and clean-up / remediation requirements applicable at the time.

4.2 LEGAL CONTEXT FOR THIS EIA

In accordance with the provisions of the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 gazette and the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007), the activity to be undertaken by Mr. Michael I. T. Petrus may not be undertaken without an Environmental Clearance Certificate.

4.3 LEGISLATION AND GUIDELINES PERTINENT TO THIS ENVIRONMENTAL ASSESSMENT

As the main source of legislation, the Namibian constitution makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws (those of relevant to this project are listed in Table 2) intended to protect the natural environment and to mitigate adverse environmental impacts.

Namibia's policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies can be and are used in providing support to legal interpretation when deciding cases. Below are several of the key legislations applicable to the governance of certain component / aspects of the proposed operation activity. Key acts and policies currently in force include:

- Namibia's Environmental Assessment (EIA) Policy for Sustainable Development and Environmental Conservation (1995)
- Environmental Management Act (No. 7 of 2007);
- Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012)
- Namibia Agriculture Policy of 2015
- Namibia Vision 2030, and other national development plan e.g. Harambee Prosperity Plan
- Social Security Act, 1994 (Act No. 34 of 1994) and the Affirmative Action (Employment) Act, 1998 (Act No. 29 of 1998)

4.3.1 Environmental Management Act No. 7 of 2007

The environmental management act No.7 of 2007 aims to promote the sustainable use of natural resources and provides the framework for the environmental and social impact assessment, demands precaution and mitigation of activities that may have negative impacts on the environment and provision for incidental matters. Furthermore, the act provides a list of activities that may not be undertaken without an environmental clearance certificate.

The purpose of the Environmental Management Act is:

a) to ensure that people carefully consider the impact of developmental activities on the environment and in good time
b) to ensure that all interested or affected people have a chance to participate in environmental assessments
c) To ensure that the findings of environmental assessments are considered before any decisions are made about activities which might affect the environment see ***Figure*** 9.

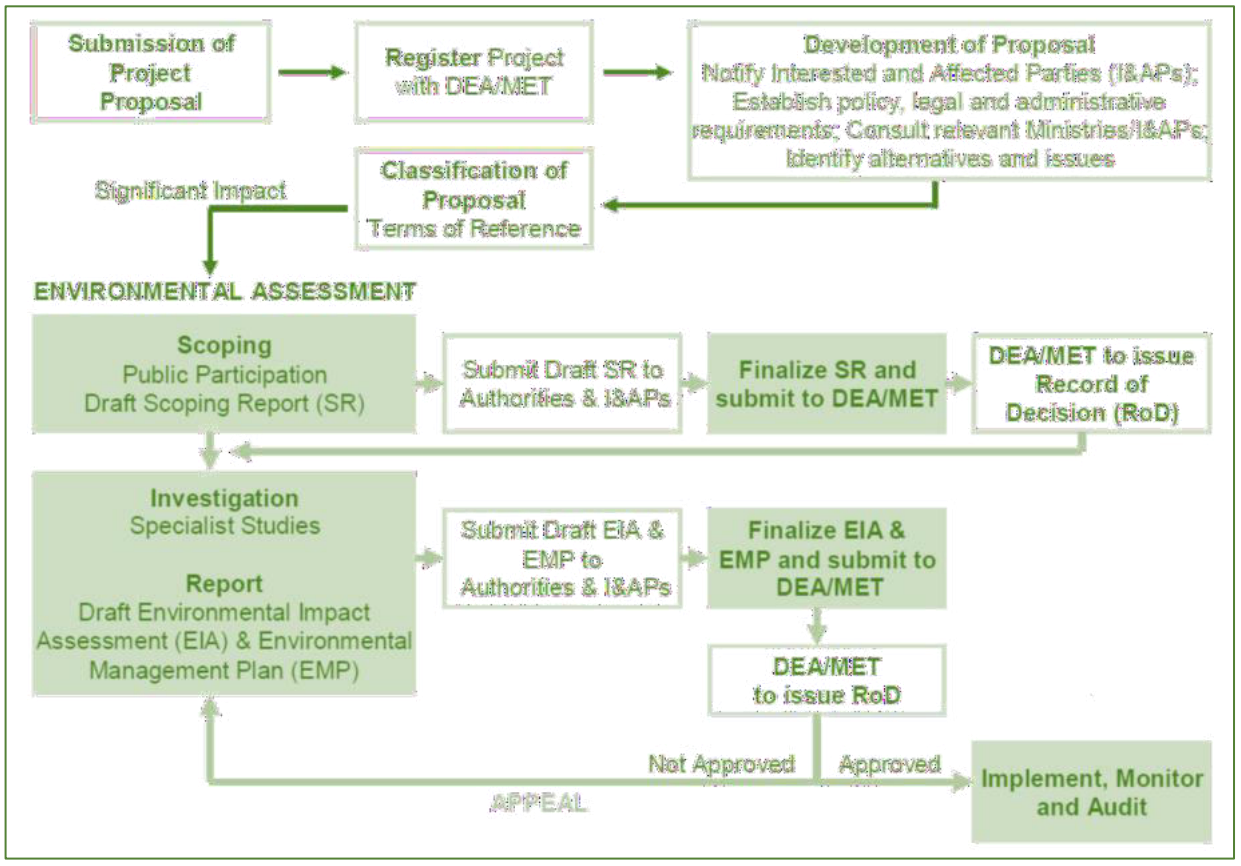


***Figure** 9: Illustration of the environmental assessment process in Namibia (Source: Risk Based Solution)*

4.3.2 Environmental Assessment Policy (1995)

The Environmental Assessment Policy for Sustainable development and Environmental Conservation emphasize the importance of environmental assessments as a key tool towards implementing integrated environmental management. Sets an obligation to Namibians to prioritize the protection of ecosystems and related ecological.
The policy subjects all developments to environmental assessment and provides guideline for the Environmental Assessment. The policy advocates that Environmental Assessment take due consideration of all potential impacts and processes mitigations measures should be incorporated in the project design and planning stages (as early as possible).

4.3.12 Minerals Act

This Act No. 33 of 1992 provides a legal framework for regulating and governing all activities that explicitly entails the prospecting, exploration and mining of minerals within the boundaries of Namibia and the Ministry of Mine and Energy is the competent authority in this regard.

It also makes explicit reference to the protection and conservation of the natural environment by requiring for the development of an environmental impact assessment and management plan in which measures to avoid and or mitigate potential impacts relating to minerals development activities are clearly considered.

4.3.3 Other Legal Requirements and relevance to the proposed activity

In addition to the EMA and the Environmental Assessment Policy, there exist other regulatory frameworks that Mr. Petrus must comply with. This is due to the supporting infrastructure that are needed to compliment the proposed logistics hub. As such, MDL will be required to obtain additional specific permits for the supporting infrastructure as listed in table 4 below. The process of obtaining the additional permits can be undertaken concurrently to the EIA process.

Furthermore, the proponent has the responsibility to ensure that the project activities conform to all other relevant legal documents and guidelines as listed in ***Table 5*** below).

Table 5: *Other relevant legislation and applicability thereof* (Source: Risk Based Solution)

Legislation	Relevance
Labour Act, 1992, (Act No. 6 of 1992) and Regulations Related to Health and Safety of Employees	• Labour matters, rights and duties of employees. • Health and Safety of Employees Construction safety; • Electrical safety; Machinery safety; • Hazardous substances; Physical hazards and general provisions;
Social Security Act, 1994 (Act No. 34 of 1994) and the Affirmative Action (Employment) Act, 1998 (Act No. 29 of 1998)	• Establishment of the Social Security Commission • Administration of a pension and incidental matters fund – affirmative employment opportunities
The Forest Act	• Declaration of protected areas in terms of soils and water resources • Proclamation of protected species of plants and the conditions under which these plants can be disturbed, conserved, or cultivated.
Nature Conservation Amendment Act	• Declaration of protected areas and protected species.
National Heritage Act	• Protection and conservation of places and objectives of significance, as all archaeological and paleontological objects belong to the state

4.3.4 Precautionary and Polluter Pays Principles

The Precautionary Principle is worldwide accepted when there is a lack of sufficient knowledge and information about proposed development possible threats to the environment. Hence if the anticipated impacts are greater, then precautionary approach is applied.

Equally, the Polluter Pays Principle ensures that the proponent takes responsibility of their actions. Hence in cases of pollution, the proponent bears the full responsibility and cost to clean up the environment.

4.4 PRINCIPLES FOR PUBLIC PARTICIPATION / CONSULTATION

The PPP for this Scoping Process was driven by a stakeholder engagement process that includes inputs from authorities, I&APs and the project proponent. In respect to provisions of the EIA Regulations, "Public Consultation" means a process referred to in regulation 21, in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters. This stems from the requirement that people have a right to be informed about potential decisions that may affect them and that they must be afforded an opportunity to influence those decisions. Effective public participation also improves the ability of the Competent Authority (CA) to make informed decisions and results in improved decision-making as the view of all parties are considered.

Contrary, it is important to recognize and highlight two key aspects of public participation which must be considered at the outset:

- There are practical and financial limitations to the involvement of all individuals within a PPP. Hence, public participation aims to generate issues that are representative of societal sectors, not each individual. Consequently, the PPP is designed to be inclusive of a broad range of sectors relevant to the proposed activity.

- The PPP will aim to raise a diversity of perspectives and will not be designed to force consensus amongst I&APs. Certainly, diversity of opinion rather than consensus building is likely to enrich ultimate decision-making. Therefore, where possible, the PPP will aim to obtain an indication of trade-offs that all stakeholders (i.e. I&APs, technical specialists, the authorities and the development proponent) are willing to accept with regard to the ecological sustainability, social equity and economic growth associated with the project.

4.5 PUBLIC PARTICIPATION PROCESS

The key steps and or approach adopted for this particular Scoping assessment has been confirmed with the DEA through the registration of the proposed activity / operations on their Online EA system.

All advertisements, notification letters and emails etc. served to notify the public and organs of state, on both the call for registration as I&APs and of the availability of the Scoping and EMP reports for an opportunity to comment or provide input on the reports. Although adverts were put in local newspapers **Confidente** newspaper on **13 – 19** September **2024** and **20 – 26** September **2024,** and then in **The Villager** newspaper on the **13th** and **20th September 2024** in order to notify and inform the public of the proposed projects and invite I&APs to register.

The correspondence sent to or received from I&APs and other competent authorities during the Scoping Phase were incorporated into the stakeholder engagement report appended to this report (**Appendix A**).

4.6 APPROACH TO IMPACT ASSESSMENT AND SPECIALIST STUDIES

Potential environmental impacts were identified through both desktop literature review and consultation with I&APs, regulatory authorities, specialist and Enviro-Leap Consulting. In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The impacts are discussed under issue headings in this section. The discussion and impact assessment for each sub-section covers the construction, operational, decommissioning and closure phases where relevant. This is indicated in the table at the beginning of each sub-section. Included in the table is a list of project activities/infrastructure that could cause the potential impact per mining phase.

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the ERCP report that is attached in **Appendix B**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only.

Both the criteria used to assess the impacts and the method of determining the significance of the impacts is outlined in ***Table 6***. This method complies with the method provided in the Namibian EIA Policy document and the draft EIA regulations. ***Part A*** provides the approach for determining impact consequence (combining severity, spatial scale and duration) and impact significance (the overall rating of the impact). Impact consequence and significance are determined from ***Part B*** and **C**. The interpretation of the impact significance is given in ***Part D***. Both mitigated and unmitigated scenarios are considered for each impact.

Table 6: Criteria for Assessing Impacts

PART A: DEFINITION AND CRITERIA		
Definition of SIGNIFICANCE		**Significance = consequence probability**
Definition of CONSEQUENCE		**Consequence is a function of severity, spatial extent and duration**
Criteria for ranking of the SEVERITY/NATURE of environmental impacts	**H**	Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action. Irreplaceable loss of resources.
	M	Moderate/measurable deterioration (discomfort). Recommended level will occasionally be violated. Widespread complaints. Noticeable loss of resources.
	L	Minor deterioration (nuisance or minor deterioration). Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints. Limited loss of resources.
	L+	Minor improvement. Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints.
	M+	Moderate improvement. Will be within or better than the recommended level. No observed reaction.
	H+	Substantial improvement. Will be within or better than the recommended level. Favorable publicity.
Criteria for ranking the DURATION of impacts	**L**	Quickly reversible. Less than the project life. Short-term
	M	Reversible overtime. Life of the project. Medium-term
	H	Permanent beyond closure – Long-term.
Criteria for ranking the SPATIAL SCALE of Impacts	**L**	Localized-Within the site boundary.
	M	Fairly widespread–Beyond the site boundary. Local
	H	Widespread – Far beyond site boundary. Regional/national

PART B: DETERMINING CONSEQUENCE					
SEVERITY = L					
DURATION	Long-term	H	Medium	Medium	Medium
	Medium term	M	Low	Low	Medium
	Short-term	L	Low	Low	Medium
SEVERITY = M					
DURATION	Long-term	H	Medium	High	High
	Medium term	M	Medium	Medium	High
	Short-term	L	Low	Medium	Medium
SEVERITY = H					
DURATION	Long-term	H	High	High	High
	Medium term	M	Medium	Medium	High
	Short-term	L	Medium	Medium	High
			L	M	H
			Localized Within site boundary Site	Fairly widespread Beyond site boundary Local	Widespread Far beyond site boundary Regional/national
			SPATIAL SCALE		

PART C: DETERMINING SIGNIFICANCE					
PROBABILITY (of exposure to impacts)	Definite/Continuous	H	Medium	Medium	High
	Possible/frequent	M	Medium	Medium	High
	Unlikely/seldom	L	Low	Low	Medium
			L	M	H
			CONSEQUENCE		

PART D: INTERPRETATION OF SIGNIFICANCE	
Significance	Decision guideline
High	It would influence the decision regardless of any possible mitigation.
Medium	It should have an influence on the decision unless it is mitigated.
Low	It will not have an influence on the decision.

*H = high, M = medium and L = low and + denotes a positive impact.

This section outlines the assessment methodology and legal context for specialist studies, as recommended by the DEA 2006 Guideline on Assessment of Impacts. In addition to the above, the impact assessment methodology includes the following aspects:

Spatial extent – The size of the area that will be affected by the impact/risk:

- Site specific;
- Local (<10 km from site);
- Regional (<100 km of site);
- National or International (e.g. Greenhouse Gas emissions or migrant birds).

Consequence – The anticipated consequence of the risk/impact:

- Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease);
- Severe (severe alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Substantial (substantial alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Moderate (notable alteration of natural systems, patterns or processes, i.e. where the environment continues to function but in a modified manner); or
- Slight (negligible alteration of natural systems, patterns or processes, i.e. where no natural systems/environmental functions, patterns, or processes are affected).

Duration – The timeframe during which the impact/risk will be experienced:

- Short term (less than 1 year);
- Medium term (1 to 10 years);
- Long term (the impact will cease after the operational life of the activity (i.e. the impact or risk will occur for the project duration)); or
- Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient (i.e. the impact will occur beyond the project decommissioning)).

Probability – The probability of the impact/risk occurring:

- Very likely or Likely;
- Unlikely or Very unlikely; and
- Extremely unlikely

5. ASSESSMENT OF ALTERNATIVES AND IMPACTS

5.1 ASSESSMENT OF IMPACTS AND MITIGATION

This chapter discusses the alternatives, as well as the selection process of the preferred alternatives that have been considered and assessed as part of the Scoping Phase. The 2012 EIA Regulations (GG4878) define "alternatives", in relation to a proposed activity, "as different means of meeting the general purpose and requirements of the activity, which may include alternatives to the:

- property on which or location where the activity is proposed to be undertaken;
- type of activity to be undertaken;
- design or layout of the activity;
- technology to be used in the activity; or
- operational aspects of the activity; and
- Includes the option of not implementing the activity".

The Scoping Report therefore provided a full description of the process followed to reach the proposed preferred activity, site and location within the site. It further includes the following as a minimum:

- The consideration of the no-go alternative as a baseline scenario;
- A comparison of the reasonable and feasible alternatives; and
- Providing a methodology for the elimination of an alternative.

5.1.1 NO-GO ALTERNATIVE

The no-go alternative assumes that the proposed project will not go ahead i.e. the proposed Mr. Petrus's proposed mineral prospecting does not realize. This alternative entails that the operations would not drive any environmental change and result in no additional environmental impacts on the mining license site.

It favors the *status quo* or baseline against which other alternatives are compared and will be considered throughout the report. However, the likely negative environmental impacts of other current and future user that may still happen in the absence of the proposed activities includes: Natural dust and generation of particulate matter during windy event particularly resulting from other regional economic activities such as construction, mining and tourism, pollution and environmental degradation associated with current land use along and around the proposed project route and sites.

Therefore, in terms of the "No-go Alternative", potential economic gains that may never be realized if the proposed project activities do not go-ahead include: loss in income for both the local community and the partnering investor, unemployment and the loss of socio-economic benefits derived from current and future export and import trading opportunities. Most importantly, is the reduced regional integration in terms of trade and investment, loss of direct and indirect contracts and employment opportunities, export earnings, foreign direct investments and various taxes payable to the Government.

5.1.5 CONCLUDING STATEMENT ON ALTERNATIVES

Namibia's industrial ambition is articulated in Vision 2030, which stipulates that the country should be an industrialized nation with a high income by the year 2030. In terms of the production and export structure, Namibia aspire to build the bridge from producing and exporting predominantly primary commodities to offering value added and service-orientated products. The production and export structure would also be more diverse, enabling the economy to better withstand exogenous shocks.

Despite the limited capacity to process minerals locally, Namibia is considered the preferred nation of choice in terms mining given its vast unexploited distribution of mineral resources. Alternative prospecting techniques and use equipment is recommended as far as enhancing environmental safety is concerned.

In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The No-Action Alternative comparative assessment, suggests that environmental impacts of a future in which the proposed activities do not take place, may be good for the receiving environment because there will be no potential negative or positive environmental impacts associated with the proposed activities (mineral exploration).

5.2 ASSESSMENT OF IMPACTS AND MITIGATION

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the EMP report that is attached in **Appendix B**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only

5.2.1 IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

Potential impacts in respect to the Biophysical (**Table 7**) environment involves particularly the terrestrial environments and relate mainly to the mineral prospecting and mining activities in regard to sampling (quarrying).

Potential impacts in respect to the Biophysical environments (**Table 7 - 9**) involves, given that the proposed activity entails non-invasive and consumptive mining development activities but rather limited to prospecting presents mainly secondary potential impacts. Geological surveys and rock sampling, and desktop research creates opportunity for the project staff members to access otherwise reserved park areas and thus temptations for poaching and collection of natural resources. Details of the potential impacts are demonstrated in the following tables:

Table 7: Impact on the Biophysical Environment – mining license site Access and use of vehicles

Impact Event	Disturbances on Biodiversity					
Description	Off-road driving is a major concern, particularly with regard to uncontrolled use of 4x4 vehicles and quad-bikes. This leads to physical degradation and the destruction of unique habitats, especially in environmentally sensitive areas					
Nature	Tracks leave scars that can remain for centuries, affecting the aesthetic qualities of the dunes and the surrounding gravel plains, reducing the attractiveness of the area as a recreational destination. Littering of the beaches and the desert due to increasing tourism is a general problem. Camping outside of designated areas occurs during peak holiday periods.					
Phases: Phases during which the project has implications of accessing the mining license area are highlighted below; Significance assessment was carried out on the use of access tracks which presents a short-term risk.						
Construction Phase	**Operational Phase**			**Decommissioning Phase**	**Post Closure**	
• No Construction envisaged at this stage	• Accessing of mining license area for surveys and sampling with project vehicles • Upgrading of access tracks (e.g. grading)			N/A	N/A	
Severity	Taken together, the disturbances will have a minimum to medium severity given that limited number of vehicles will be used and no new access track will be created, these can be drastically minimized to very low with mitigation measures.					
Duration	The Significance of the potential impacts is medium given the project location and surrounding land-uses					
Spatial Scale	Low, localized if activities are restricted to the known pegmatite belts area within the mining license thus limiting potential impacts spatially					
Probability	Low to Medium, especially in respect to wildlife / livestock collision and poaching as access / entry into the farm or the ML area will be controlled security					
Unmitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L-M	L	L	H	L	H
Mitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L	L	L	L	L	H
Conceptual Description of Mitigation Measures	• Strict compliance with the Relevant authorities guidelines and EMP is recommended in respect to managing incidental events; • Exploration activity must be limited to the pre-identified pegmatites belts within the mining license area • Unless necessary and agreed with the Relevant authorities, no new access tracks shall be created and no lodging shall be allowed in sensitive zones					

Table 8: Impact on the Biophysical Environment – Sampling / trenching for geological sampling

Impact Event	Disturbances on Biodiversity in respect to sampling and trenching activities					
Description	Should analyses by an analytical laboratory be positive, geological boreholes or trenches are drilled / dug and geological samples collected for further analysis. This will determine the depth of the potential mineralization. If necessary new access tracks to the drill sites will be created and drill pads will be cleared in which to set the rig. Two widely used sampling options may be adopted, these are the reverse circulation sampling and/or diamond-core sampling / trenching.					
Nature	Depending on the scale of sampling / trenching (intensity), potential impacts relating to vegetation clearing for access tracks and drill transects may arise from the project activities. Consequential impacts therefore are: • Noise from sampling machineries and potential spill of hydrocarbons • Disturbance of habitats (protected plant species) and species displacement • Potential littering with solid waste					
Phases: Phases during which the project has implications of sampling / impacts apply are highlighted below; Significance assessment was carried out on the sampling / trenching phase which presents a long term risk.						
Construction Phase	**Operational Phase**		**Decommissioning Phase**		**Post Closure**	
• No Construction envisaged at this stage	• Accessing of mining license area for surveys and sampling with project vehicles • Upgrading of access tracks (e.g. grading)		N/A		N/A	
Severity	Taken together, the disturbances will have a medium severity given that limited number of vehicles will be used and no new access track will be created, these can be drastically minimized to very low with mitigation measures.					
Duration	The Significance of the potential impacts is very high given the project location i.e. near a national park and within a town					
Spatial Scale	Low, localized if activities are restricted to the known pegmatite belts area within the mining license area thus limiting potential impacts spatially					
Probability	Low to Medium, especially in respect to wildlife / livestock collision and poaching as project staff will be at all times accompanied by Game Guards					
Unmitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	M	L	L	H	L	M
Mitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L	L	L	L	L	M
Conceptual Description of Mitigation Measures	• Strict compliance with the Forestry Act and Regulations in respect to vegetation clearing, Relevant authorities guidelines and EMP is recommended in respect to managing incidental events; • Exploration activity must be limited to the pre-identified pegmatites belts within the mining license area thus reducing the spatial impacts to key areas of the ML • Unless necessary and agreed with the relevant authorities, no new access tracks shall be created and no lodging shall be allowed in sensitive zones • Temporary bins and spill kits must be provided to ensure that all waste material including hydrocarbons are well contained prior to final disposal at approved sites in either Omaruru or Usakos • Unless in an emergency, no equipment (vehicles and drill rigs) should be serviced in the field thus preventing unnecessary spillage of hydrocarbons					

Table 9: *Impact on the Biophysical Environment – Waste Management (Effluent, Solid and Hydrocarbons)*

Impact Event	**Waste generation and disposal**					
Description	Operational activities relating to mainly the lodging and to a lesser degree the actual geological surveying and sampling activities present an opportunity for the generation of both solid waste (litter material) and hydrocarbons (fuel and lubricants).					
Nature	In general, prospecting activities generates very little domestic solid waste which includes but may not be limited to: • Litter materials i.e. plastic bags, cartons, food packages and • Effluents and sewer may only be generated in case where a base-camp is necessary and a bathroom with flushing toilets are used • Minor hydrocarbons spillage(fuels and lubricants), possible contamination of soils and groundwater, in case of hydrocarbon spillage mainly from maintenance of equipment and vehicles					
Phases: Phases during which the project has implications of waste generation are highlighted below; Significance assessment was carried out on the sampling / trenching phase which requires on-site stays.						
Construction Phase	**Operational Phase**		**Decommissioning Phase**		**Post Closure**	
• No Construction envisaged at this stage	• Lodging is envisaged at existing campsite / lodge within the park		N/A		N/A	
Severity	Taken together, waste generation in respect to the proposed activities presents impacts that are of very-low severity as in general little is generated.					
Duration	The duration of the potential impacts is bound to the duration of the proposed operations thus short-term in nature					
Spatial Scale	Low, waste generation shall be limited mainly to the lodging areas and subject to property owners and thus not entirely influence by the proposed project					
Probability	Very Low, shall be limited mainly to the lodging areas and subject to property owners and thus not entirely influence by the proposed project					
Unmitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L	**L**	**L**	**M**	**L**	**L**
Mitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L	**L**	**L**	**L**	**L**	**L**
Conceptual Description of Mitigation Measures	• Given that lodging is recommended to be at existing camp-sites and or lodges, this aspect shall be managed as part of the current property owners compliance requirements • In the field, hydrocarbon waste shall be contained (in spill kits) and stored in appropriate heavy-duty plastic cabbage , transported to the nearest waste-oil recycling / solid waste disposal facility in Omaruru or Usakos Towns • A sufficient number of spill kits shall be acquired and strategically placed, particularly near every sampling site to ensure that timely response to any potential fuel and lubricant spills is conducted (should the project require any sampling activities to be undertaken). These shall include an on-site used oil disposal bin(s) • Equally, effluent waste shall be managed in compliance with the lodging host's requirements, although during any sampling activities – temporary dry-pit toilet facility must be provided at every site.					

5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Table 10: *Environmental Impact: Human Health and Safety*

Impact Event	**Disturbances to the social environments**					
Description	During the exploration stage, social impacts are most likely to be minimal and often positive. At this stage, usually the level of interaction between project staff and or project equipment with the local community is significantly minimum and therefore potential health and safety risks very low. However, in a case of a pandemic it is recommended that all protocol in this respect are observed throughout the exploration phase.					
Nature	The inter-migration of project staff in-and-out of the region may present potential risks of disease transmission particularly in respect to Pandemic outbreak and other contagious diseases between the local community and project staff. The most significant impact in respect to health is the potential for increasing the strain on the already under capacitated local health services facility should project staff fall ill while in the field.					
Phases: Phases during which sources of social (health and safety) impacts apply are highlighted below;						
Construction Phase	**Operational Phase**		**Decommissioning Phase**		**Post Closure**	
N/A	• Use of the lodging and other social facilities, as well as other social interactions		N/A		N/A	
Severity	In the unmitigated scenario, the potential risk for transmission of contagious / infectious diseases is High					
Duration	The Significance of the potential impacts is subject to the compliance with national health protocols, however given the minimal interaction of project staff and the local community impacts are classified as incidental and short-term.					
Spatial Scale	Medium, in case of near-miss incidents (were cases are not detected) the risk may be medium to high but localized					
Probability	Low, especially given that there are clear guideline and protocols governing health and safety of both contagious diseases and if they are well observed					
Unmitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	H	**M**	**M**	**H**	**L**	**H**
Mitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	M-L	**L**	**L**	**M**	**L**	**H**
Conceptual Description of Mitigation Measures	• Strict compliance with the EMP is recommended in respect to managing incidental events; • It is strictly advised that project staff ensures that in respect to Pandemic outbreak, are tested prior to venturing in the field (and carries a health certificate indicating a negative result, which is not older than 72 hours) • Carry sufficient First Aid equipment to ensure that minor injuries reduces need to access local health facility and therefore minimizing potential strain on local services • Strict compliance with national health protocols as and when directive are issued in respect to any disease outbreak and or recurring pandemics such as HIV / AIDS and Pandemic outbreak • Strict ban on use of any toxic substances within and during the working environment must be prohibited and serious punitive actions taken against any transgressors is recommended.					

Table 11: *Impact on the Social Environment – Air and Noise Pollution*

Impact Event	**Disturbances to the social environment**					
Description	Should analyses by an analytical laboratory be positive, geological boreholes or trenches are drilled / dug and geological samples collected for further analysis. This will determine the depth of the potential mineralization. If necessary new access tracks to the drill sites will be created and drill pads will be cleared in which to set the rig. Two widely used sampling options may be adopted, these are the reverse circulation sampling and/or diamond-core sampling, and alternatively trenches may be dug for sampling.					
Nature	Depending on the scale of sampling / trenching (intensity), potential noise impacts relating to the use of large vehicles such as a drill rig truck and or excavator may be generated. Consequential impacts therefore are: • Noise from sampling / trenching machineries may be anticipated					
Phases: Phases during which sources of social (Air and Noise Pollution) impacts apply are highlighted below;						
Construction Phase	**Operational Phase**		**Decommissioning Phase**		**Post Closure**	
• Land preparation and setting-up of drill sites • Setting-up Base-camp for project staff	• Accessing of mining license area for surveys and sampling with project vehicles • Upgrading of access tracks (e.g. grading)		• Structure demolition and ground leveling activities • Temporary lodging for decommissioning staff		N/A	
Severity	Taken together, the disturbances will have a high severity in the unmitigated scenario. In the mitigated scenario, many of these disturbances can be prevented or mitigated to acceptable levels, which reduces the severity to low.					
Duration	The Significance of the potential impacts is subject to the proposed operation's life-time, however the identified impact's duration is incidental and short-term.					
Spatial Scale	Low, localized although cumulative as haulage along the designated routes may lead to increased traffic. The noise aspect is mainly limited to the feedlot facility site which far from residential areas.					
Probability	Very Low, the only noisy activities associated with the proposed operation are limited to the construction and decommissioning					
Unmitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L	**L**	**L**	**M**	**L**	**H**
Mitigated	**Severity**	**Duration**	**Spatial Scale**	**Consequence**	**Probability of Occurrence**	**Significance**
	L	**L**	**L**	**L**	**L**	**H**
Conceptual Description of Mitigation Measures	• Strict compliance with the EMP is recommended in respect to managing incidental events; • Noise complaint register must be kept and maintained regularly with mitigation measures adopted accordingly. • All excessive noise generating activities must be strictly carried out during the day between 08h00 (am) and 17h00 (pm) week days only. • Conditions of the Environmental Clearance Certificate and Surface-use Agreement (with the relevant Traditional Authority and Park) must be accordingly adhere to. • As much as possible, it is recommended that vehicles with the most minimum footprint are used such as smallest excavator and or portable drill rig (drawn on a trailer).					

Table 12: Impact on the Social Environment – Culture, Heritage and Scenic values

Impact Event	Disturbances to the heritage and scenic value of the environment					
Description	The rapid on-ground survey and desktop review for cultural and heritage sites, reveals that generally there were low/no occurrence of known cultural heritage or archaeological sites, hence the assumption is that the occurrence of undiscovered sites within the mining license area is low. However, evidence cultural heritage were observed at Omaruru or Usakos Towns.					
Nature	Any sites that did exist here would either have been discovered already during previous investigations (due to the accessibility of the site to archaeologists) or have been destroyed during previous exploration and mining operations and or other land-uses such farming and tourism undertaken in the area.					
Phases: Phases during which sources of social (cultural, heritage and scenic values) impacts apply are highlighted below;						
Construction Phase	Operational Phase		Decommissioning Phase		Post Closure	
• Land preparation and construction activities • Temporary lodging for construction staff	• Reconnaissance activities e.g. geological mapping, topographical and remote sensing mapping		• Structure demolition and ground leveling activities • Temporary lodging for decommissioning staff		N/A	
Severity	Severity is Low, disturbances relating to field-based will be low with extremely unlikely probability of occurrence without mitigations					
Duration	The significance of the potential impacts is subject to the proposed operation's life-time (in this case short-term), hence potential impacts is incidental in nature					
Spatial Scale	Localized, although chances of damaging artifacts are very high when encountered, the probability of finding these on the mining license area are low and may be limited to certain rock outcrops and along river valleys.					
Probability	Very Low, the nature of operation significantly limits exploration activities to one known pegmatite belt that falls within the mining area.					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	M	H	L	H
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	L	L	H	L	M
Conceptual Description of Mitigation Measures	• Strict compliance with the EMP is recommended in respect to managing incidental events • Contractors working on the site should be made aware that under the National Heritage Act, 2004 (Act No. 27 of 2004) any items protected under the definition of heritage found in the course of development should be reported to the National Heritage Council • The chance finds procedure as outlined in the EMP must be implemented at all times, and. • Detailed field survey should be carried out if suspected archaeological resources or major natural cavities / shelters have been unearthed during the proposed exploration and test mining operations. • A stakeholder complaint register must be kept and maintained regularly with mitigation measures adopted accordingly, recording all concerns relating impacts of the proposed exploration activities on the cultural and scenic value of the environment which may be reported by interested and affected parties.					

Table 13: Impact on the Economic Aspect

Impact Event	Disturbances on social and economic aspects					
Description	Potential economic gains that may never be realized if the proposed project activities does not go-ahead include: loss in potential alternative income for the town, unemployment and the loss of socio-economic benefits derived from future mining development opportunities.					
Nature	However, it is imperative that the community is made aware that a major possible impact of exploration is the unrealistic expectations about the development of a mine. It's important for local communities to bear in mind that most exploration activity will not advance to mine development.					
Phases: Phases during which sources of social (potential social and economic gain) impacts apply are highlighted below;						
Construction Phase	**Operational Phase**		**Decommissioning Phase**		**Post Closure**	
• Land preparation and construction activities	• Use of the lodging and other social facilities, as well as other social interactions • Potential Mine development		• Structure demolition and ground leveling activities		• Retrenchments, retirement and job losses due to closure	
Severity	In the unmitigated scenario, this implies in the case where the activity take not take effect, no economic benefits shall realize hence, the severity in respect to unemployment shall be very high. However, with the implementation of the proposed operations, the severity of unemployment shall be reduced to medium.					
Duration	The Significance of the potential impacts is subject to the proposed operation's life-time, with a long-term potential					
Spatial Scale	Low, localized and only limited to the Omaruru or Usakos Towns Settlement community					
Probability	Low – Medium, probability in respect to job creation on both the temporary (during exploration) and long-term (during Mine development and operation) phases					
Unmitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L-M	L	L	L	L	L
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance
	L	M+	M+	H+	H+	H+
Conceptual Description of Mitigation Measures	• It is critical that timely and continuous communication and dissemination of information with the local community is ensured to alleviate potential sense of social marginalization, drive gender equality and enhance the understanding and perception of the benefits associated with Mr. Michael I. T. Petrus activities • To enhance the positive impacts relating to marginal net benefits for the micro-economy (local residence of Omaruru or Usakos Towns Settlement and Erongo at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed • It is strictly recommended that Mr. Michael I. T. Petrus negotiates and signs a Surface Use Agreement detailing aspects of conduct and benefit distribution with all key stakeholder i.e. Traditional Authority, Park and other Operators or support institutions e.g. NGOs / CSOs)					

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

Namibia is an up-and-coming source country for critical minerals, which are important for renewable energy technologies. The country has the potential to develop new mining projects for cobalt and lithium, and therefore it has in recent years seen great interest towards the exploration and development of mineral commodities by foreign investor.

There are thus, many companies engaged in the exploration and mining activities for various metals / minerals including InterContinental Mining Namibia. This creates opportunities that attracts international investment to support increased exploration activities particularly with an interest in finding lithium. Mr. Michael I. T. Petrus, was presented an opportunity to undertaking an exploration programme in respect in respect to Dimension Stone (Marble)
While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socio-economic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. Therefore, to ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process.

A key consideration in respect to the proposed project alternatives, is that of mining license location / site particularly considering that it falls within a farming. Primarily, the key objective in respect to land-use here is generation of economic benefits from farming activities i.e. livestock and or game farming.

Hence, the pre-dominant land-use in these environments is usually non-intrusive and includes alternative tourism operations. However, tourism may have not proven to be the sole economically rewarding land-use option given the prolonged effects of natural disasters and pandemics. This has created an uncertainty which resulted in communities looking beyond farming and tourism for alternative income streams and thus increased mining activities are observed in the area.

In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The No-Action Alternative comparative assessment, suggests that environmental impacts of a future in which the proposed activities do not take place, may be good for the receiving environment because there will be no potential negative or positive environmental impacts associated with the proposed activities (mineral prospecting).
Overall, potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the field-based activities i.e. sampling and or trenching.

Below (**Table 14**) is a summary of the likely positive impacts that have been assessed for the different phases of the proposed Mr. Michael I. T. Petrus's mineral prospecting activities:

Table 14: Summary of key potential environmental concerns during the preparation (construction of quarry infrastructure), operational and, closure and decommissioning of the proposed mine development

Potential Source of concern	Description of Potential Concern	Assessment classification
Surface Ephemeral Watercourse and Groundwater Contamination		
Site preparation and construction activities	Potential release of sediments resulting in high concentration of total suspended solids in watercourse	Localised, Low negatives impacts
Construction of linear infrastructure i.e. access roads, water pipelines and powerlines	Potential for effects on aquatic ecosystem resulting from stream-crossing due to creation of access roads	Localised, Low negatives impacts
Fuel and Chemical storage, handling and haulage	Potential release of hydrocarbons form petroleum product and chemicals in an event of spillage may lead to contamination of waters	Localised, Low negatives impacts
Operation and maintenance of mine equipment on-site e.g. vehicles etc.	Potential release of sediments resulting in high concentration of total suspended solids in receiving water	Localised, Low negatives impacts
Terrestrial Biodiversity and Ecosystem disturbance		
Site preparation and construction activities associated with the proposed mining and exploration	- Clearing of vegetation around the mine site may impact on biodiversity i.e. in the case where rare, threatened or keystones are present in the ML area	Localised, Low negatives impacts
Construction of linear infrastructure i.e. access roads, water pipelines and powerlines	- Activities might dislocate or disrupt local wildlife and migratory species - Access to the area may also result in increased pouching of wildlife and natural resources	Localised, Low negatives impacts
Operation vehicles and Earth-moving equipment and other mine activities	- Operation of vehicles and equipment may result in collisions with wildlife - Some animals may be drawn to the mine site by lighting, odour etc. leading hazards to both the wildlife and workers	Localised, Low negatives impacts
Noise, Dust / Air Pollution		
Noise from construction and operational activities, including vehicles, blasting and drilling	- Noise may affect wildlife populations and other local receptors such as people living in nearby settlements / farms - Blasting may result in generation of excessive noise and vibrations	Localised, Low negatives impacts
Dust from construction and operational activities, including vehicles, blasting and drilling	Pits operations, haulage roads, waste-rock / stockpile, vehicle movement around and within the mine area can be a great source of dust	Localised, Low negatives impacts

Visual impacts and Waste generation		
Site selection during the pre-construction and construction of the quarry	The proponent must ensures that the quarry face is oriented in a North / South directions avoiding visibility from the D1930 Road	Localised, Low negatives impacts
Site layout, operation of the quarry and storage of the marble block	Scars on the mountain faces / topographic areas likely to be visible from the sky and along the D1992 Road across the mining license area	Localised, Low negatives impacts
Socio-economic concerns		
Development spin-off in the form of upgraded roads, water and energy benefits to local community	The development has the potential to contribute significantly toward rural development through upgrading of roads, provision of solar power for water supply	Localised, High positive impacts
Potential employment creation and uplifting of livelihoods of local community	The development has the potential to contribute toward employment creation and boost the micro-economy by supporting local SMEs	Localised, High positive impacts
Strain on Public gravel roads	The use of heavy trucks to move mined dimension stone blocks to processing and marketing facilities may result in long-term damage to the local gravel road, unless if they are upgraded to bitumen standard	Localised, Low-to-medium negatives impacts
Land disturbance and reclamation	The footprint of the mine and its associated infrastructure, as well as waste rock may represent major concern due to the area extent required for operations	Localised, Low-to-medium negatives impacts
Mine water requirement might put strain local supply	Mine water volume is subject to influence by local precipitation, surface and groundwater ingress. Mine waste water may contain high levels of metals content due to mobilized metals	Localised, Medium-to-high negatives impacts

6.2 RECOMMENDATONS

Enviro-Leap environmental practitioner confidently recommends that the proposed project can proceed and should be authorized by the DEAF. The proposed operations is considered to have, overall low negative environmental impacts and potential for the enhancement of socio-economic benefits provided all protocols including the proposed mitigation measures are adhered to.

Based on this, it recommended that the proponent must upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as stipulated in this Scoping Report, the earlier detailed EIA and it EMP (compiled by RBS, 2019) and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

6.3 STAKEHOLDER ENGAGEMENT AND MONITORING

It is important that channels of communication are maintained over the life-time of the proposed mineral prospecting project, and with all key stakeholders, members of the general public (including I&APs), as well as the local and traditional authorities, **Table 15** shows the stakeholders engagement recommendations.

Table 15: *Actions relating to stakeholder communication*

Issue	Management commitment	Phase
Development and maintenance of a Stakeholder engagement plan	On obtaining the Environmental Clearance Certificate and other relevant authorization it is recommended that the proponent undertakes a stakeholder engagement process to develop a Communication and Monitoring Plan for continuous reporting and feedback	All
Understanding who the stakeholders are	Maintain and update the stakeholder register, including stakeholders' needs and expectations. Ensure that all relevant stakeholder groups are included building on pre-identified and registered I&APs.	All
	A representative database would include all relevant local government, service providers and contractors, indigenous populations, local communities, Traditional Authorities (TAs), NGOs, shareholders, the investment sector, community-based organizations, suppliers and the media.	All
	Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process.	All
	Record partnerships as well as their roles, responsibilities, capacity and contribution to development.	All
Liaising with interested and affected parties at all phases in the mine life	Devise and implement a stakeholder communication and engagement strategy.	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On-contract)	

A stakeholder engagement plan is an important tool in ensuring that a good working relationship is maintained between the proponent and the community within which the activities are undertaken. It is crucial that this plan is developed in the same transparent manner and approach as the environmental assessment, and that it remains a living document which allows the stakeholder to engage with throughout the duration of the proposed activity.

Equally, it must be at all time readily available on request to all interested and affected parties for review and must provide clear procedures for how and where it can be accessed.

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APPENDIX A: ENVIRONMENTALMANGEMENT PLAN

OVERALL OBJECTIVES OF THE EMP

The following overall environmental objectives have been set for the Mr. Michael I. T. Petrus exploration and mining development project:

- To comply with national legislation and standards for the protection of the environment.
- To limit potential impacts on biodiversity through the minimization of the footprint (as far as practically possible) and the conservation of residual habitat within the mine area.
- To keep surrounding communities informed of mining activities through the implementation of forums for communication and constructive dialogue.
- To develop, implement and manage monitoring systems to ensure good environmental performance in respect of the following: ground and surface water, air quality, noise and vibration, biodiversity and rehabilitation.

KEEPING EMPS UP TO DATE

This Environmental Management Plan (EMP) document is designed to meet legal requirements and avoid or minimize the impacts associated with the implementation of Mr. Michael I. T. Petrus exploration and mining development. It is the intention that this EMP should be seen as a "living document" which will be amended during the operation, as the activities might change or new ones be introduced.

Should a listed activity(s) as defined in the Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) be triggered (as a result of future modifications/changes at the mine), this EMP will be updated as a result of another EIA process as stipulated in the regulations.

IMPACTS MANAGEMENT / MITIGATION MEASURES

Table 16. Impact on the Biophysical Environment – mining license site Access and use of vehicles

Issue	Management commitment	Phase
Understanding who the stakeholders are	• Maintain and update the stakeholder register, including stakeholders' needs and expectations. • A representative database would include all relevant local government, service providers, indigenous populations, Traditional Authorities (TAs), NGOs or community-based organizations • Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process. • Record partnerships as well as their roles, responsibilities, capacity and contribution to development.	All
Liaising with interested and affected parties at all phases in the mine life	Devise and implement a stakeholder communication and engagement strategy.	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 17. Impact on the Biophysical Environment – mining license site Access and use of vehicles

Impact Event	Disturbances on Biodiversity in respect to access tracks	
Desired mitigation outcome	The objective of the mitigation in respect to impacts on biodiversity is to ensure that as much as possible, disturbance on biodiversity is avoided and prevented while the proposed prospecting activities is undertaken.	
Proposed Mitigation Measures	• Strict compliance with the Relevant authorities guidelines and EMP is recommended in respect to managing incidental events; • Exploration activity must be limited to the pre-identified pegmatites belts within the mining license area • Unless necessary and agreed with the relevant authorities, no new access tracks shall be created and no lodging shall be allowed in sensitive zones	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 18. Impact on the Biophysical Environment – Bulk sampling and ore extraction

Impact Event	**Disturbances on Biodiversity in respect to sampling and trenching activities**	
Desired mitigation outcome	The objective of the mitigation in respect to impacts on biodiversity is to ensure that as much as possible, disturbance particularly on wildlife (poaching) and flora (clearing / damage) species is reduced and or prevented.	
Proposed Mitigation Measures	• Strict compliance with the Forestry Act and Regulations in respect to vegetation clearing, Relevant authorities guidelines and EMP is recommended in respect to managing incidental events; • Should the proponent require clearing, removal and transplantation of any protected plant species – services of an appropriately qualified botanist / ecologists must be sought and relevant permissions obtained prior to any such activity being undertaken • A plant survey must be conducted and all protected species clearly marked and protected prior to setting-up any sampling site and or digging any trench for geological sampling • Exploration activity must be limited to the pre-identified pegmatites belts within the mining license area thus reducing the spatial impacts to key areas of the EPL • Unless necessary and agreed with the relevant authorities, no new access tracks shall be created and no lodging shall be allowed in sensitive zones • Temporary bins and spill kits must be provided to ensure that all waste material including hydrocarbons are well contained prior to final disposal at approved sites in either Omaruru or Usakos • Unless in an emergency, no equipment (vehicles and drill rigs) should be serviced in the field thus preventing unnecessary spillage of hydrocarbons	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Table 19. Impact on the Biophysical Environment – Waste Management (Effluent, Solid and Hydrocarbons)

Impact Event	Waste generation and disposal	Phase
Desired mitigation outcome	The objective of the mitigation in respect to waste generation is to ensure that the best scenic value and integrity of the affected environment maintained and or enhanced by reducing chances of littering through proper use of waste management facilities.	
Proposed Mitigation Measures	• Environmental awareness is an important aspect of environmental management, therefore all project staff and service providers must be educated of the environmental compliance requirements and urged to comply accordingly on induction with the project site. • Given that lodging is recommended to be at existing camp-sites and or lodges, this aspect shall be managed as part of the current property owners compliance requirements • In the field, hydrocarbon waste shall be contained (in spill kits) and stored in appropriate heavy-duty plastic cabbage , transported to the nearest waste-oil recycling / solid waste disposal facility in Omaruru or Usakos Towns • A sufficient number of spill kits shall be acquired and strategically placed, particularly near every sampling site to ensure that timely response to any potential fuel and lubricant spills is conducted (should the project require any sampling activities to be undertaken). These shall include an on-site used oil disposal bin(s) • Equally, effluent waste shall be managed in compliance with the lodging host's requirements, although during any sampling activities – temporary dry-pit toilet facility must be provided at every site.	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 20. Environmental Impact: Human Health and Safety

Impact Event	Prevention and mitigation of any health and safety hazards / risks	Phase
Desired mitigation outcome	The objective of the mitigation in respect to health and safety hazards is to ensure that the health, safety and protection of both the project staff and community receive priority in terms of budgetary provision and compliance	
Proposed Mitigation Measures	• Strict compliance with the EMP is recommended in respect to managing incidental events; • Carry sufficient First Aid equipment to ensure that minor injuries reduces need to access local health facility and therefore minimizing potential strain on local services • Strict compliance with national health protocols as and when directive are issued in respect to any disease outbreak and or recurring pandemics such as HIV / AIDS and Pandemic outbreak • Strict ban on use of any toxic substances within and during the working environment must be prohibited	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 21: Impact on the Social Environment – Air and Noise Pollution

Impact Event	Disturbances to the social environment	Phase
Desired mitigation outcome	The objective of the mitigation in respect to ambient air quality and sense of place / noise and chance is to ensure that all possible receptors are identified and practical measures are put in place to reduce these impacts and or respond with appropriate mitigation to complaints	
Proposed Mitigation Measures	• Strict compliance with the EMP is recommended in respect to managing incidental events; • Noise complaint register must be kept and maintained regularly with mitigation measures adopted accordingly. • All excessive noise generating activities must be strictly carried out during the day between 08h00 (am) and 17h00 (pm) week days only. • Conditions of the Environmental Clearance Certificate and Surface-use Agreement (with the relevant Traditional Authority and Town) must be accordingly adhere to. • As much as possible, it is recommended that vehicles with the most minimum footprint are used such as smallest excavator and or Front-end loaders (drawn on a trailer).	
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 22: Impact on the Social Environment – Culture, Heritage and Scenic values

Impact Event	Disturbances to the heritage and scenic value of the environment	Phase
Desired mitigation outcome	The objective of the mitigation in respect to impacts on cultural and archaeological heritage integrity is to ensure that at all times, project staff are vigilant of the potential to intrude, disturb and or damage important artifacts and therefore must avoid wondering onto any protected and or sensitive known or identified site.	
Proposed Mitigation Measures	• Strict compliance with the EMP is recommended in respect to managing incidental events • Contractors working on the site should be made aware that under the National Heritage Act, 2004 (Act No. 27 of 2004) any items protected under the definition of heritage found in the course of development should be reported to the National Heritage Council • The chance finds procedure as outlined in the EMP must be implemented at all times, and. • Detailed field survey should be carried out if suspected archaeological resources or major natural cavities / shelters have been unearthed during the proposed exploration and test mining operations.	
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 23: Impact on the Economic Aspect

Impact Event	Disturbances on social and economic aspects	Phase
Desired mitigation outcome	The objective of the mitigation in respect to economic impacts relating to the proposed activity, is to ensure that potential negative economic impacts on other and existing land-use are prevented, reduced and or mitigated and the positive ones enhanced.	
Proposed Mitigation Measures	• It is critical that timely and continuous communication and dissemination of information with the local community is ensured to alleviate potential sense of social marginalization, drive gender equality and enhance the understanding and perception of the benefits associated with Mr. Michael I. T. Petrus 's activities • To enhance the positive impacts relating to marginal net benefits for the micro-economy (local residence of Omaruru or Usakos Towns Settlement and the region at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed • It is strictly recommended that Mr. Michael I. T. Petrus negotiates and signs a Surface Use Agreement detailing aspects of conduct and benefit distribution with all key stakeholder i.e. Traditional Authority, Park and other Operators or support institutions e.g. NGOs / CSOs)	All
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

Table 24: Site Closure and Rehabilitation

Impact Event	Disturbances on social and economic aspects	Phase
Desired mitigation outcome	The Proponent will commit to establishing a rehabilitation plan as part of the mine closure plan. A conceptual mine closure plan with costing is under development must be compiled by InterContinental Mining in association with Enviro-Leap and forms part of the environmental compliance and monitoring programme.	
Proposed Mitigation Measures	• Mr. Petrus 'shall submit regular (bi-annual or annual Environmental Reports) to the relevant Ministry stating the exploration activities and environmental performance of the project. • Staff of the MET or Ministry of Mines and Energy may at any time inspect the exploration area. Internal and external monitoring should involve InterContinental Mining's safety and environmental officer and members of the MEFT. • Should the decision be taken that the project is not economically viable the area will be rehabilitated. The rehabilitation measures that are set out in the Rehabilitation Plan (to be compiled and approved by MEFT) are binding to all personnel on site including the crew and contractors.	Closure
Responsibility	Mr. Michael I. T. Petrus and Enviro-Leap Consulting (On contract basis)	

APPENDIX B: PUBLIC CONSULTATION

Friday, 13 September 2024 The Villager NATIONAL NEWS 5

Capricorn Group Reports N$1.74 Billion Profit After Tax

Justicia Shipena

Capricorn Group has reported a robust financial performance for the year ending 30 June 2024, with profit after tax increasing by 9.9% year-on-year, reaching N$1.74 billion, up from N$1.58 billion in 2023.

The Group's return on equity also improved, rising to 17.9% from 17.6% in the previous year.

In its annual financial results released on Thursday, Capricorn Group emphasised its commitment to sustainability and value creation for stakeholders. Group CEO David Nuyoma highlighted the company's dedication to assessing its relevance and impact on the communities it serves.

"I am pleased that our commitment to improving lives through leadership in financial services, as Connectors of Positive Change, has positively impacted many lives this past financial year, resulting in significant value creation," said Nuyoma.

Capricorn Group's strong financial performance has significantly contributed to the socio-economic development of Namibia and Botswana.

The Group's overall value creation grew by 15.9%, reaching N$5.1 billion.

Of this amount, N$1.3 billion was allocated to staff remuneration and benefits, N$924 million to suppliers, and N$1.2 billion to the government through taxes.

Group Chief Financial Officer Johan Maass attributed the positive results to strong performances across the Group's businesses, which include Bank Windhoek, Bank Gaborone, Capricorn Asset Management, Entrepo Group, and Peo Finance.

Net interest income before impairment charges increased by 13.6% to N$3.1 billion, driven by higher interest rates and a 7.5% growth in the loan book.

Bank Windhoek's net interest income grew by 9.9%, supported by a 4.6% increase in its loan book and rising interest rates.

Bank Gaborone, a key subsidiary, saw a significant 40.8% rise in net interest income, spurred by continued loan growth and an improved interest margin.

Non-interest income also increased by 14.2%, primarily due to a rise in transaction-based fees, particularly through digital channels.

Capricorn Asset Management saw its asset management fees grow by 12.9%, driven by strong growth in assets under management.

However, operating expenses rose by 12.2%, surpassing inflation, largely due to a 22.9% increase in variable banking costs tied to higher transaction and trading volumes.

Excluding these costs, expenses rose by 11.2%, mainly due to staff recruitment in the IT sector and annual salary increases.

The Group's continued investment in digital and data-related projects led to a 22% rise in IT expenditure, further impacted by currency fluctuations.

Despite these rising costs, Capricorn Group improved its cost-to-income ratio to 50%.

Non-performing loans (NPLs) decreased due to large recoveries, with the NPL ratio improving from 4.5% in 2023 to 4.0%.

However, challenging macroeconomic conditions led to higher impairment charges, which rose to N$328.5 million from N$235.6 million the previous year.

Although the loan loss rate increased, it remains within industry norms.

Capricorn Group reported a 7.4% growth in gross loans and advances, reaching N$50.7 billion, driven primarily by term loans and asset finance.

The Group also prioritised liquidity, with liquid assets rising by 19.1% to N$18.5 billion.

Capricorn's risk-based capital adequacy ratio improved to 17.9%, well above the regulatory minimum.

The Group declared a final dividend of 64 cents per share, bringing the total dividend for 2024 to 112 cents – representing a 12% increase from the previous year.

Group CEO Thinus Prinsloo highlighted promising growth opportunities in Namibia, particularly in the oil and renewable energy sectors.

He noted that Capricorn Group is well-positioned to capitalise on these opportunities and has the resources to support sustainable growth in both Namibia and Botswana.

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CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINERAL EXPLORATION AND SMALL-SCALE MINING ACTIVITIES ON MINING CLAIMS ACTIVITIES ON MINING CLAIMS 75393, 75394, 75395, 75396, 75397, 75398 & 75399, ERONGO REGION

1. PROJECT SITE AND DESCRIPTION

Mr. Michael I. T. Petrus (the Proponent), intends to apply to obtain an Environmental Clearance Certificate for its proposed prospecting activities in respect to Dimension Stones, Industrial Minerals and Semi-Precious Stones on an approximate area of **100.08 Ha** in the Erongo Region. The key component of the proposed activity entails geological mapping and survey and manual sample collection for laboratory analysis, and small-scale mining operation. Access to the sampling or survey sites will be by existing tracks and on foot where vehicle access is limited.

2. PUBLIC PARTICIPATION PROCESS

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input. Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **04 October 2023.**

3. COMMENTS AND QUERIES

Please register and direct all comments, queries to:
Mr. Lawrence Tjatindi, Environmental Assessment Practitioner
Email: eap.trigen@gmail.com

ENVIROLEAP CONSULTING cc

CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR AN APPLICATION FOR ENVIRONMENTAL CLEARANCE FOR MINERAL EXPLORATION ON EXCLUSIVE PROSPECTIN LICENSE 8956, OTJOZONDJUPA REGION

1. PROJECT SITE AND DESCRIPTION

Ubuntu Holdings (PTY) Ltd (the Proponent), intends to apply to obtain an Environmental Clearance Certificate for its proposed prospecting activities in respect to Base and Rare Metals, Industrial Minerals and Precious Metals on EPL 6644 (area of **19,846.08 Ha**) in the Erongo Region. The key component of the proposed activity entails geological mapping and survey and manual sample collection for laboratory analysis. Access to the sampling or survey sites will be by existing tracks and on foot where vehicle access is limited.

2. PUBLIC PARTICIPATION PROCESS

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input. Interested and Affected Parties are herewith request to register by writing to us at the address below no later than 30 September 2023.

3. COMMENTS AND QUERIES

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Email: eap.trigen@gmail.com

ENVIROLEAP CONSULTING cc

NOTICE

NOTICE FOR THE ENVIRONMENTAL SCOPING ASSESSMENT (ESA) FOR:
THE PROPOSED EXPLORATION ACTIVITIES ON THE EXCLUSIVE PROSPECTING LICENCES (EPLs) No. 8617 LOCATED EAST OF ARANDIS IN THE ERONGO REGION NAMIBIA.

Junior Baiano Industrial Consultants CC (Environmental consultant)hereby gives notice to all potentially Interested and Affected Parties (I&APs) that an application for the Environmental Clearance Certificate (ECC) for the proposed exploration and prospecting activities on EPLs No. 9389 and 9390 will be made to Environmental Commissioner in terms of the Environmental Management Act (No 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 of 6 February 2012) for the following activities:

Brief Project Description: The environmental scoping process will identify potential positive and negative impacts of the proposed activities on EPL 8617 located about 10 km east of Arandis in the Erongo region. The target commodities on the EPL is Nuclear Fuel Minerals .

Proponent: Profile Energy Pty Ltd

Public members are invited to register as Interested and Affected Parties to comment/raise concerns or receive further information on the Environmental Assessment process.

Registration requests should be forwarded to Junior Baiano Industrial Consultants CC on the contact details below, before or on **27 September 2024.**

Contact: Mr Nghiyolwa Fredrich
Cell: +264 (0) 81 147 2029
Email: junior2006@gmail.com

Please note, the details of the public Consultation meeting will be communicated to all the registered I&APs.

junior baiano industrial consultants cc

Guterres Calls for Faster African Inclusion in UN Security Council


Photo:Contributed

Justicia Shipena

United Nations (UN) Secretary-General António Guterres says he wants to see Africa's representation on the UN Security Council accelerated once a decision on its reforms is finalised.

In a response to Eagle FM on Wednesday, Guterres discussed the progress on this issue ahead of the upcoming Summit of the Future and its "Pact of the Future" initiative.

The push for Africa's full representation on the Security Council has gained momentum, with leaders from across the continent advocating for meaningful reform.

At a recent Global Call during the Summit of the Future, Namibian President Nangolo Mbumba stressed the importance of Security Council reform to address Africa's exclusion.

Earlier this month, the United States voiced support for adding two permanent seats for African countries, alongside the creation of the first-ever non-permanent seat for a small island developing nation.

In May, the Security Council adopted a presidential statement aimed at strengthening Africa's role in addressing global security and development challenges.

The statement reaffirmed the Council's backing of the African Union (AU) and sub-regional organisations in promoting peace and security across Africa.

It also confirmed the Council's readiness to support AU-led peace operations on a case-by-case basis.

"And this means, work for the UN, and this means work also for the African Union, the African continent, in the selection of their representatives as soon as a decision of the reform is taken. And I hope that we are witnessing an acceleration in that direction that I would like to see with the results produced, in the short term," said Guterres.

Guterres highlighted the historic inequality in global governance, particularly toward Africa.

He noted that many international institutions were formed before African nations gained independence, leaving the continent underrepresented.

"Africa was impacted first by colonialism and then by the fact that many of these institutions were created before African countries gained their sovereignty," he explained.

This inequality is most evident in the Security Council, where three European nations hold permanent seats, while Africa has none. Guterres called this imbalance a reflection of an outdated system that doesn't align with today's global realities.

Reflecting on the time he joined the UN, Guterres recalled that it was once a taboo topic, with little progress in discussions. However, attitudes have shifted significantly, with increasing global recognition of the need for reform.

As discussions on the "Pact of the Future" continue, Guterres noted a strong commitment to UN reform, which, if approved, would enhance African representation on the Security Council.

"I think we have witnessed enormous change," he remarked, urging for effective action to ensure the reforms are implemented.

For the past 80 years, Africa's experience with the UN system has been marked by misrepresentation and underrepresentation.

While the continent represents 17% of the global population and comprises 54 of the UN's 193 member states, it remains the only region without a permanent seat on the Security Council.

In addition to two permanent seats, African leaders are also calling for five non-permanent seats.

Reforming the Security Council is long overdue.

The current structure consists of five permanent members with veto power and ten non-permanent members serving two-year terms, a model that many see as outdated in the face of Africa's growing influence on global affairs.

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CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

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1. PROJECT SITE AND DESCRIPTION

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2. PUBLIC PARTICIPATION PROCESS

Enviro-Leap Consulting invites all Interested and Affected Party (I & AP) to register and receive Environmental Assessment (BID, Scoping and EMP) documents relating to the proposed project for their comments and input. Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **04 October 2023.**

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Registration requests should be forwarded to Junior Baiano Industrial Consultants CC on the contact details below, before or on **27 September 2024.**

Contact: Mr Nghiyolwa Fredrich
Cell: +264 (0)81 147 2029
Email: juniorb2008@gmail.com

Please note, the details of the public Consultation meeting will be communicated to all the registered I&APs.

junior baiano

APPENDIX C: RESUME OF EAP

...a leap towards better environmental compliance.

PROFESSIONAL PROFILE

Mr. SHADRACK TJIRAMBA
Research and Environmental Management Specialist

ID Number :	80011910445	EMAIL:	eap.trigen@gmail.com
Country of Résidence :	Namibia	Cell:	+264-816229933
Nationality:	Namibian		

PROFESSIONAL OVERVIEW

Experience Internationally:

Countries worked: Namibia, South Africa.

Languages: English (*fluently written, spoken and read*);
Otjiherero (fluently spoken, written and read)
Afrikaans (*well spoken, fairly written and read*),

ACADEMIC QUALIFICATIONS:

2009	The University Western Cape	*Post-Graduate Diploma Sustainable Land Management (NQA Level 8) Sustainable Development, Resource Economics, 2009), South Africa*
2007	University of South Africa (UNISA)	*Bachelor of Laws (LLB)*
2005	Polytechnic of Namibia	*B-Tech Land Management, 2005*

EMPLOYMENT RECORD:

May 2020-Current: Enviro-Leap Consulting Cc
Position: Lead Consultant Environmental Management

- Compile and review environmental assessment reports (environmental scoping and management plans (EMP)) for our clients in accordance with the requirements of the Environmental Management Act, No.7 of 2007 and its regulations of 2012
- Compile and review environmental policies and audits
- Reviewed and updated the Solid Waste Management Policy for Dundee Metals Mining
- Conduct environmental compliance inspections and audits
- Facilitate stakeholder engagement
- Coordinate closure and rehabilitation of development projects, such as mining sites, hazardous substance spill sites
- Prepared training manuals and facilitated workshops for Communal Land Boards

August 2015 – July 2018 (fixed- term 3 years)
Position: Project Coordinator-Basket Fund, GIZ (Deutcshe Gesellschaft Fur Internationale) Responsibilities:

- Coordinate project activities in the Omaheke and Otjozondjupa Region's
- Provide technical expertise/advise to various regional councils, land boards, traditional authorities, local level planning committees
- Coordinate the processes of revising and developing the Namibian environmental legislations (plans, strategies, regulations and Act amendments), as well as dissemination of information on these tools
- Prepare tender documents
- Coordinate project procurement needs in line with GIZ procurement policies.
- Financial reporting in line with financial guidelines for grant agreement GIZ
- Coordinate, manage the planning and implementation of project consultants' key performance areas.
- Supervise project staff and resource allocation
- Reporting in line with donor requirements

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January 2019 – June 2019
Position: Social Policy Consultant – Gender Mainstreaming: Benguela Convention Commission. Responsibilities:

- Conducted and compiled a draft Situation Analysis Report, summarizing the findings of desk review, gender survey through the field mission and interviews
- Compiled a draft Action Plan for BCLME III Project and Gender Policy for BCC
- Hosted and facilitated a situation analysis findings validation workshop
- Produced final Situation Analysis Report, Gender Action Plan for BCLME III Project, including a proposed gender-responsive Project Results Framework with gender-responsible outputs, sex- disaggregated indicators, baseline and targets. Gender Policy for BCC

August 2011 to Dec 2012
Project Coordinator-MCA Agriculture & Environment:

- Managed the Millennium Challenge Accounts Namibia Agriculture and Environment project's activities.
- Co-Developed, implemented and monitored local-level integrated activities and annual work plans for the CBNRM.
- Undertook and provided training and technical support to the targeted conservancies as per the objectives of the CBNRM
- Ensured project compliance with donor requirements through production of and submission of technical reports according to Donor procedures trainings for land management for farmers

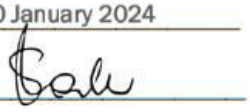
February 2004 – March 2009
Researcher: Land, Environment and Development Project-Legal Assistance Centre. June 2006 – November 2009

- Assist with desktop and field research on land, environmental and urban housing (informal settlements).
- Assist in the compilation of research questionnaires
- Conduct interviews
- Assist with project administration
- Laise with stakeholders NGO's, Government Agencies, Farmer's Associations, Ministry of Environment
- Draft research reports

CERTIFICATION

I, the undersigned, Shadrack Tjiramba, hereby certify to the best of my knowledge that the information provided herein correctly describe me, my qualifications and experience.

Date: 20 January 2024

Signature: 

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PROFESSIONAL PROFILE

Mr. LAWRENCE TJATINDI
Project Manager and Environmental Practitioner

ID Number :	82110710012	EMAIL:	eap.trigen@gmail.com
Country of Résidence :	Namibia	Cell:	+264-81-486-9948
Nationality:	Namibian		

PROFESSIONAL OVERVIEW

Experience Internationally:

Countries worked: Namibia

Languages: English (*fluently written, spoken and read*);
Otjiherero (fluently spoken, written and read)
Afrikaans (*well spoken, fairly written and read)*

Languages: Project Management
Tailings Risk and water balance
Waste water treatment technologies
Feasibility studies – Mining Projects
Water Supply and reticulation design

ACADEMIC QUALIFICATIONS:

2009	University of Stellenbosch	*Senior Management Development Program (Business School)*
2007	University of Cape Town	*Bachelor of Science in Chemical Engineering*

EMPLOYMENT RECORD:

May 2022 - Current: Enviro-Leap Consulting Cc
Position: Project Management and Environmental Practitioner

- Update stakeholder register and manage engagement plan
- Conduct environmental compliance inspections and audits
- Represent Enviro-Leap at stakeholder engagement meetings
- Coordinate closure and rehabilitation of mining development projects
- Attend site visits for new projects
- Meet with clients to align requirements with Enviro-Leap' s output.Compile and review environmental policies and audits

January 2018 – April 2022 (fixed- term 4 plus years)
Position: Senior Engineer – Water and Tailings Risk Management: Dundee Precious Metal Tsumeb Smelter
Responsibilities:

- Waste water treatment and effluent quality compliance monitoring
- Ensure compliance with water abstraction permit
- Internal auditing of Tailings compliance with corporate standards and international good practice
- Operationalization of recommendations from Expert reviews and mandatory audits.
- Ensure tailings operation is in line with design specifications
- Provide specifications that feeds into the tailings design tables

April 2015 – December 2017
Position: Senior Metallurgist – Product Recovery Section: Langer Heinrich Uranium Mine
Responsibilities:

- Technical advisor to the recovery section – Setting metallurgical Operating parameters
- Test work lead for Membrane technology – Nano Filtration, Ultra Filtration, Reverse Osmosis
- Test work lead for Ion exchange separation efficiency – NIMCIX and Fixed Bed ion exchange

August 2010 to July 2014
Position: Technical Metallurgist – Water Management and Tailings Planning: Rössing Uranium Mine
Responsibilities:

- Technical advisor to the tailings management team
- Recommend improvement initiatives for return dam solution
- Formulation of 5 year deposition planning

Position: Process Control Metallurgist
Responsibilities:

- Technical advisor for the recovery section of the refinery

Position: Test work Lead – Pre-feasibility study for heap leaching of low grade Uranium ore
Responsibilities:

- Lead the test work team for the feasibility study for Heap Leaching
- Write up of study findings
- Design test work program for the study

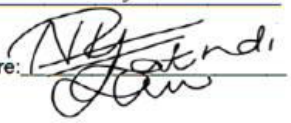
February 2007 – July 2010
Position: Graduate Metallurgist – Sulphuric acid and water treatment plant: Skorpion Zinc mine

- Completed graduate development program
- Junior area metallurgist for the acid and water section of the plant
- Custodian of water balance of the plant
- Metal accountant for the refinery section

CERTIFICATION

I, the undersigned, Shadrack Tjiramba, hereby certify to the best of my knowledge that the information provided herein correctly describe me, my qualifications and experience.

Date: 20 January 2024

Signature: 

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