# Environmental Scoping and Management Plan

Environmental Scoping and Management Plan for the Proposed Small-scale Mining and Exploration Activities in Respect to Industrial Mineral on Mining Claim 71621, in the Erongo Region



# MAY 6



DOCUMENT INFORMATION AND APPROVAL							
Title	Environmental Scoping and Management Plan for the Proposed Mining Claims Activities in Respect to Industrial Mineral						
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Proponent	Mr. Otniel Koujo P.O. Box 61397, Katutura Windhoek, Namibia						
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Approval – Client 2	0						
Mr. Otniel Koujo							
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No. 4878

#### ANNEXURE 1 FORMS

Form 1

#### REPUBLIC OF NAMIBIA

#### ENVIRONMENTAL MANAGEMENT ACT, 2007

#### (Section 32)

#### APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE



NS100

#### PART A: DETAILS OF APPLICANT

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	2. Business Registration /	
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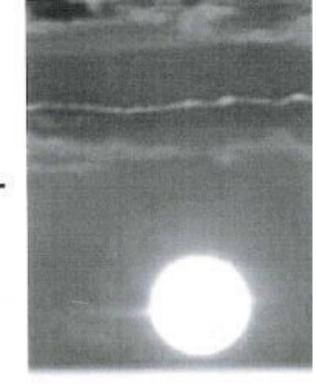
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# PROJECT BACKGROUND INFORMATION DOCUMENT

Environmental Scoping and Management Plan for the Proposed Mining Claims Activities in Respect to Industrial Mineral on Mining Claim 71621, in the Erongo Region







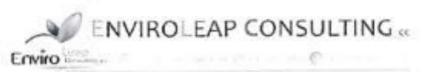
# NOVEMBER 9

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# executive summary

## **Project Overview**

Mr. Otniel Koujo (herein referred to as the proponent) is a registered Namibian company, with vested interest and business ventures in the mining sector. Mr. Otniel Koujo, in this respect obtained an-intend to issue of Mining Claims (**MC 71621**) by the Ministry of Mine and Energy, on grounds that they acquire an Environmental Clearance Certificate.

Their objective is to undertake exploration activities in order to obtain data on the presence of minerals for further mining development. While the proposed activity may stimulate future economic growth and possible rural development, and employment opportunities, it also present possibility of unprecedented negative environmental impacts.

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 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

Mr. Otniel Koujo seek to jointly operate their mining claim activities on MC 71621 within the Erongo Region, in respect to Industrial Mineral. Principally, the joint-venture intends to explore (desktop geological study, collection of samples and identification of previous activity in the area where copper mining were conducted) for copper and intends to mine these on a small-scale basis by use of hand-held equipment and to small degree drilling.

The proposed exploration activities mainly consist of the following prospecting activities: Geological mapping: this mainly entails a desktop review of geological area maps and ground observations.

- <u>Lithology geochemical surveys</u>: rock samples shall be collected and taken for trace element analysis. Also, trenches or pits may be dug (in a controlled environment e.g. fencing off and labelling activity sites) adopting manual or excavator to investigate the mineral potential. At all times, the landowner and other relevant stakeholder will be engaged to obtain authorisation where necessary.
- <u>Geophysical surveys</u>: entails data collection of the substrata, by air or ground, through sensors such as radar, magnetic and electromagnetic to detect any mineralization in the area.
- 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. If necessary new access tracks to the drill sites will be created and drill pads will be cleared in which to set the rig. However, at this stage the proponent does not intent to conduct any drilling activities.

# Need 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 socioeconomic 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. Otniel Koujo to undertake its operation in compliance with the environmental legislative requirements in Namibia.

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

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. Otniel Koujo 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 EPL 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. Otniel Koujo is 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				
СА	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				
ММЕ	Ministry of Mines and Energy				
MEFT	Ministry of Environment, Forestry and Tourism				
IMF	International Monetary Fund				
GPS	Geographical Positioning System				
UN	United Nations				

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## **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 handling, storage and transportation of fuel and mineral commodities 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**.

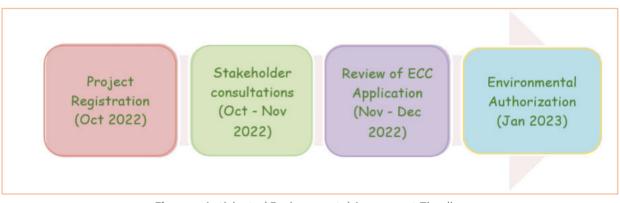


Figure 1: Anticipated Environmental Assessment Timeline

#### **1.1. PROJECT APPLICANT AND PROJECT OVERVIEW**

Mr. Otniel Koujo (herein referred to as the proponent), is solely owner of a fully registered, 100% Namibian owned company that ventures in small-scale exploration and quarrying of industrial mineral. Their aim is to take advantage of the opportunity for self-employment and job creation that exist in the small-scale mining sector of Namibia.

Mr. Otniel Koujo seek to jointly operate their business activities their two MC 71621 within the Erongo Region, in respect to Industrial Mineral. Principally, the joint-venture intends to explore (desktop geological study, collection of samples and identification of previous activity in the area where copper mining were conducted) for copper and intends to mine these on a small-scale basis by use of hand-held equipment and to small degree drilling.

#### 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. Otniel Koujo, were therefore presented an opportunity to venture into the sector by undertaking an exploration programme in respect in respect to Industrial Mineral.

#### 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 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 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 socioeconomic 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. Otniel Koujo 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. Otniel Koujo 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	Description of activity	Relevance to Mr. Otniel Koujo
Legislation		Investment Exploration Activities
Activity 3 (3.1 & 3.2) Quarrying and Quarrying Activities	<ul> <li>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.</li> <li>3.2 Other forms of quarrying or extraction of any natural resources whether regulated by law or not.</li> </ul>	And 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

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

#### 1.4. EIA TEAM

In order 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					
Vilho Pendainge Mtuleni	Enviro-Leap Consulting cc	External 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. Otniel Koujo 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 conceptual overview of the prospecting activities on MC 71621, sites and technology selection process for identifying the most suitable exploration techniques to be adopted.

#### 2.1. OVERVIEW OF THE PROPOSED EXPLORATION ACTIVITIES

The immediate focus of planned exploration focused on interpreting the pending rock and soil samples as well as the historical data. The company now proposes to undertake exploration bulk-sampling (as illustrated in **Figure 2**) on the broader MC 71621 by way of excavating previously hand-dug pits and extracting samples for further laboratory analysis, while also and if necessary the proponent may conduct drill sampling.



Figure 2: The life cycle of a mineral discovery development

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

- <u>Geological mapping</u>: this mainly entails a desktop review of geological area maps and ground observations. This includes the review of geological maps of the area and on-site ground traverses and observations and an update where relevant, of the information obtained during previous geological studies of the area.
- <u>Lithology geochemical surveys</u>: rock samples shall be collected and taken for trace element analysis to be conducted by analytical chemistry laboratories to determine if sufficient quantities of base & rare or precious metal or other minerals of interest are present. Also, trenches or pits may be dug depending on the commodity (in a controlled environment e.g. fencing off and labelling activity sites) adopting manual or excavator to further investigate the mineral potential.

These consists of small pits (±20cm X 20cm X 30cm) will be dug where 1 kg samples can be extracted and sieved to collect 50 g of material. As necessary, and to ensure adequate risks mitigation, all excavations will either be opened and closed immediately after obtaining the needed samples or the sites fenced off until the trenches or pits are closed. At all times, the landowner and other relevant stakeholder will be engaged to obtain authorisation where necessary. • <u>Geophysical surveys</u>: entails data collection of the substrata (in most cases service of an aero-geophysical contractor will be soured), by air or ground, through sensors such as radar, magnetic and electromagnetic to detect any mineralization in the area, and are conducted to ascertain the mineralisation.

Ground geophysical surveys shall be conducted, where necessary using vehicle-mounted sensors or handheld by staff members, while in the case of air surveys the sensors will be mounted to an aircraft, which then flies over the target area.

• <u>Bulk Sampling</u>: Evidence of previous mining activity or abandoned mine sites will be sought found within the EPL area, samples collected and sorted for further laboratory analysis to determine local concentration of (Ore containing Lithium, Tantalum and Copper and other mineral of interest) as per the sample analysis results (**Figure 3**).

A typical bulk-sampling site will consist of a front-end loaders and excavator equipment, and overburden material is excavated, lithium ore extracted and stored in large bags prior to being exported to and a drill equipment parking and maintenance yard (including a fuel and lubricants storage facility).

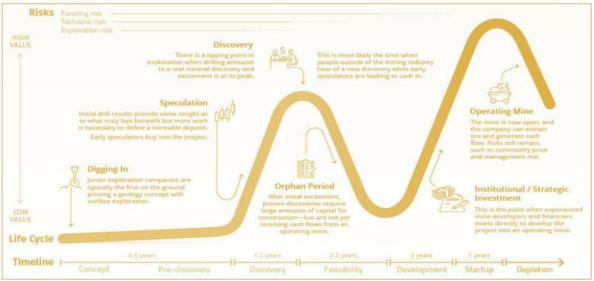


Figure 3: The life cycle of a mineral discovery development

• <u>Drilling Sampling</u>: 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. If necessary new access tracks to the drill sites will be created and drill pads will be cleared in which to set the rig. However, at this stage the proponent does not intent to conduct any sampling activities.

A typical drilling site will consist of a drill-rig, drill core and geological samples store and a drill equipment parking and maintenance yard (including a fuel and lubricants storage facility).

#### 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 MC 71621 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. Otniel Koujo, were therefore presented an opportunity to venture into the sector by undertaking an exploration programme in respect in respect to Industrial Minerals, Non-Nuclear Fuel Mineral and Industrial Mineral.

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 MC 71621 which extends over 17.82 Hectares are situated in Central-western Namibia, within the Erongo Region (**Figures 4** and **5**) and approximately 30 km northwest of Usakos Town, outside any gazetted conservancy area within the Omaruru District. The area predominantly, consist of a number commercial farms that ventures in either livestock and or Game Farming activities and to some degree tourism establishments in commercial conservancies.

The mining claims are directly accessible via the D1935 gravel road connecting Usakos to Okombahe Settlement communal settlements. Other section of the mining claim will only be accessed by foot to ensure minimum impacts on the receiving environment.

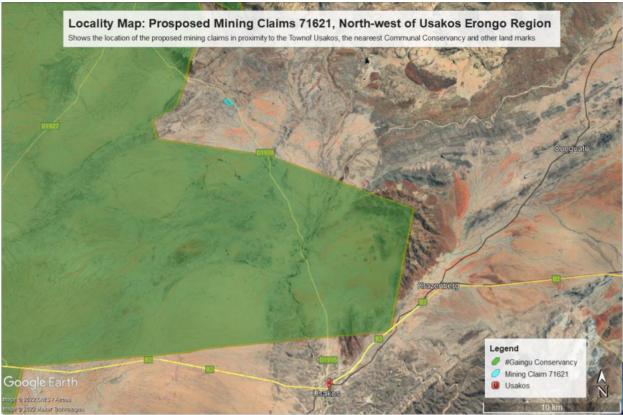


Figure 4: Locality map of the proposed exploration activity's site or area in the Erongo Region



Figure 5: Evidence of the proposed mining claims application on the Ministry of Mine's cadastre (MME, 2022)

Corner point	Latitude	Longitude					
A – Mining Claim 71621	-21.811955°	15.522217°					
B – Mining Claim 71621	-21.810554°	15.524452°					
C – Mining Claim 71621	-21.806965°	15.520586°					
D – Mining Claim 71621	-21.808385°	15.518349°					

#### Table 3: Corner coordinates of the proposed development site

#### 2.4. SUPPORTING INFRASTRUCTURE 2.4.1 Basecamp

Given the location of the mining claims and that it is situated in a region with high tourism activity, an entirely new base-camp is not primarily recommended but rather a suitable community campsite must be rented for the duration of the exploration and or mining activity. Otherwise, a suitable site must be identified in collaboration with all relevant authorities including the Traditional Authority. Where practical and possible, it is strictly recommended that for unskilled labour, local community members are employed and thus accommodated at their existing homestead to mitigate and reduce potential conflict with the conservancy wildlife and livestock management protocols.

During the prospecting and small-scale mining duration, it is anticipated that about 5 – 10 persons will be employed, with most of these employees coming from the local community and thus housed at their communal homesteads.

The project specialists such as geologists, field assistants, geo-technicians and sampling crew, will be hosted on either a daily or special visit basis in tented accommodation where necessary, and thus might not all be on-site simultaneously.

Therefore, it is highly recommended that temporary ablution facilities must be provided and limited to within the existing base-camp footprint pre-identified protected area campsites, and the necessary authorization must be obtained prior to installation of any such facility.

In terms of waste generation and management, the predominant type of waste that will be generated during the exploration activities, in small volumes, is domestic waste i.e. packaging material (paper, wooden box, plastic sampling bags), and potentially hydrocarbons from diesel oil should a power generator needed. Domestic waste must be stored in heavy duty garbage bags and disposed of correctly at the Keetmanshoop waste disposal site.

#### 2.4.2 Water supply

At this stage water will be mainly required for domestic consumption and to a small degree for operational purposes as cooling agent for the diamond-core drilling and for dust suppression. Water can be supplied through existing farm boreholes (with the permission of the land owners) and or if necessary new boreholes shall be developed explicitly for the exploration activities by Mr. Otniel Koujo in which case a permits must be obtained.

#### 2.4.3 Power supply

In respect to domestic power needs, a diesel generator shall be utilized to generate the needed power. However, the various machinery and equipment required for exploration e.g. vehicles are self-powered by means petrol / diesel engines and or generators, hence there is need for on-site fuel in either small mobile bowser or barrel drums on a concrete slab at the base-camp. The drill rigs will either be refuelled with Jerry cans or directly from the bowser.

#### 2.4.4 Access roads / tracks

As far as is practicable, all site particularly the base-camp and drill sites shall be accessed through existing tracks, therefore no new roads or tracks will be created. Additionally, it is highly recommended that motorised access is minimised as much as practically possible, especially during geological mapping, sampling and geophysical surveys. Overall, all access by vehicles must be limited to existing tracks while all new access routes to the drill sites should be identified, agreed upon with the landowners and demarcated prior to the commencement of drilling activities.

The mining claims are directly accessible via the D1935 gravel road connecting Usakos to Okombahe Settlement communal settlements. Other section of the EPL will only be accessed by foot to ensure minimum impacts on the receiving environment.

#### 2.4.5 Waste (Domestic / Hazardous) Management

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 Keetmanshoop.

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. DECOMMISSIONING AND CLOSURE PHASE

Taking into consideration that the proposed project does not involves any construction activities, decommissioning is not foreseen during the validity of the Environmental Clearance Certificate. Consequently, any impacts associated by default with this phase of a project are not applicable to the proposed activity.

However, should the proponent at any stage of the proposed project intend to construct any infrastructure, such must be subject to a separate environmental assessment and the mitigation measures to be identified in the appropriate Environmental Management Plan adhered to.

# **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. However, the Trans-Zambezi route only crosses through three of these, namely the Namib Desert, Nama Karoo and the tree and shrub savannah.

#### 3.1.1 Climatic Conditions

About 22% of Namibia's land is classified as desert (hyper-arid), 70% is classified as arid to semiarid and the remaining 8% is classed as dry sub-humid (Mendelsohn et al. 2003). The average maximum temperature at Uis Settlement which is the closest settlement to the study area, ranges between 30°C - 36°C during the hottest month (November – April) while the average minimum in winter ranges between 5°C and 25°C are common (Mendelsohn et al. 2003).

Rainfall is highly erratic and unpredictable with an inter-annual coefficient of variation that ranges from about 30% in the north-east to over 100% in the driest areas. Around the project area and across the desert biome, annual average rainfall ranges between 10 mm 120 mm per annum, and this decreases along the east-west gradient to annual averages of less 20 mm per annum. At Henties Bay, the prominent winds blows from South South-West (SSW) and East North-East (ENE, see **Figure 6**) at speeds reaching more than 22 km/s (Robertson et. al, 2012).

	rcast %				93%	(	clear				
pre	cipitation:	1.4 in					0.0 in				
	muggy:	2%				0%		dry			
	hot				v	/arm				hot	
6	.5		touri	sm score:	8.3						
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

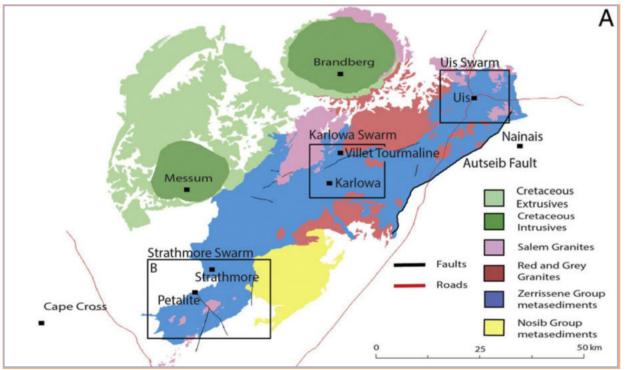
Figure 6: Usakos Climate by month (Weather Sparks, 2022)

All of Namibia, except for the coastal plains, experiences humidity of below 30% during the day for much of the year - in the north-east for about six months, the north-centre for seven months, the central area for eight months and in the south for all 12 months. High temperatures and low humidity result in high rates of evaporation. Evaporation rates from an open body of water inland of the coastal plains range from about 2000 mm to over 2660 mm per annum (Olivier, 1995).

#### 3.1.2 Geology

The NE-trending Damara Orogen formed during the Pan-African tectono-thermal event. Agedating of volcanic units within the Nosib Group indicates a span of activity between 750 Ma and 440 Ma (De Kock et al., 2000; Hoffman et al., 1996). The orogen represents a triple point between the Congo, Kalahari and Rio de la Plata cratons that amalgamated during the assembly of Gondwana (Gray et al., 2006; Martin and Porada, 1977; Miller, 1983, 2008; Miller and Frimmel, 2009).

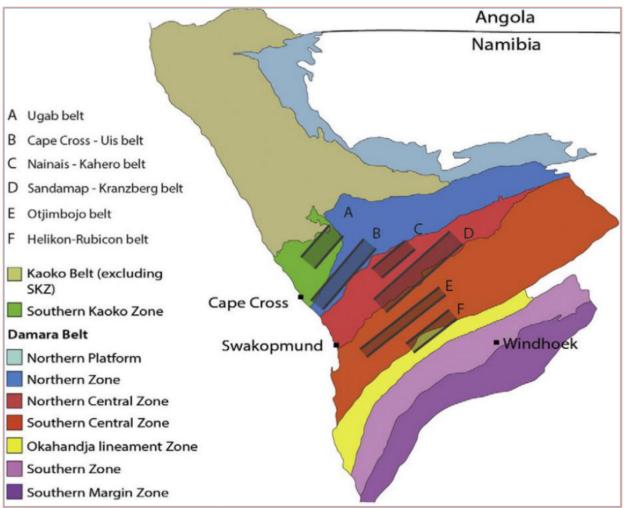
The Damara Orogen (Figure 5) represents a Wilson cyclewith extension during the breakup of Rodina, spreading, sedimentary deposition, subduction and orogenesis duringwhich metasediments and igneous rocks, including a large number of pegmatites, of the orogen formed (Prave, 1996; Trompette, 1997). Miller (1979, 1983, and 2008) divided the Damara Orogen into a number of tectono-stratigraphic zones based on variations in structure, stratigraphy, igneous activity andmetamorphic history (**Figure 7**). The various pegmatite belts roughly occur in different zones and therefore at different stratigraphic levels within the Damara Orogen. The Cape Cross-Uis pegmatite belt described in this paper lies in the Northern Zone (Richards, 1986).



**Figure 7:** Simplified geological map of the Cape Cross-Uis pegmatite belt, showing metasediments and igneous rocks of the Damara Orogen and post-Damaran magmatism

The distribution of lithium in Namibia, which significantly occurs primarily within pegmatites. These Precambrian and early Namibian pegmatites are restricted to two different areas respectively, the Damara Orogen in north-central Namibia and the Namaqua Metamorphic Complex in southern Namibia (**Figure 8**). Of particular interest to proposed EPL 8840 is Uis Settlement – Uis Pegmatite District – Erongo (Schneider 1992).

Topographically, the area is characterized by the presence of localized mountainous areas with flat Region in between covered by eroded sand. Relief elevation ranges from 800m towards the southeast to maximum heights of up to 1600m to the west. The tectonic structure of the area and the erosional processes, together with the climate have conditioned the formation of a peculiar elongated and folded-shape of the topography

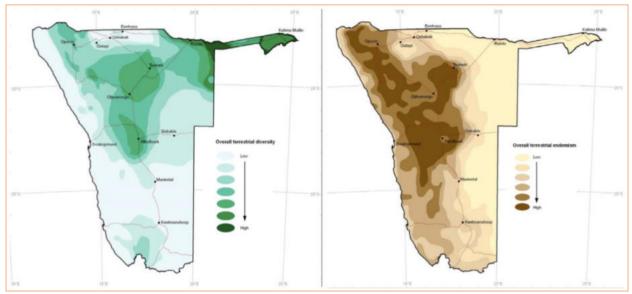


**Figure 8:** The tectono-stratigraphic zones of the Damara Orogen showing the approximate location of six of the main pegmatite belts (modified after Keller et al., 1999; Miller, 1983; Richards, 1986).

#### 3.1.3 Terrestrial Ecology and Sensitivity

Namibia's vegetation and biomes are classified into five major types, shown in. 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 9**, 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).



**Figure 9:** Shows a comparison of overall terrestrial species diversity (green) against overall endemism (brown), with the most endemism observed within the central to north western region

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).

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

The vegetation in the study area is diverse and includes a number of species endemic to the central and northern Namib (**Figure 10**) as well as various protected species such as Gomphocarpus fruticosus (milkweed), Zygophyllum simplex (simple Zygophyllum), Zygophyllum stapffii (dollar-bush), Arthraerua leubnitziae (pencil bush), Monechma cleomoides (Namib perdebos) and Kleinia longiflora (sjambok bush).

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



**Figure 10:** Shows a general composition of vegetation species types consisting mainly of annual grass and shrubs *Euphorbia damarana shrubland*, and in semi-mountainous gravel plains of the Erongo

In the Namib, endemics are associated with the dunes, rocky inselbergs and hills, and the gravel plains. For instance, approximately 60 reptile species (50% of all Namibian endemic *Euphorbia damarana* shrubland) reptiles) are endemic to, or found mainly in, Namibia's Namib Desert (Griffin 1998).

In birds, the greatest diversity of southern African endemics is centered on the arid savannah and Karoo biomes and extends into the escarpment (Brown et al. 1998). Highland areas of the country, including Waterberg, Khomas Hochland, Karas Mountains, Brandberg, inselbergs in the Sperrgebiet and the Karstveld are particularly important for many endemic plants (Mendelsohn et al. 2002).

#### 3.1.4 Protected Terrestrial Areas

Ecologically, the project area falls within the Tsiseb Conservancy, one of the smallest conservancies in the Erongo Region. Incorporating the Erongo Mountains and western escarpment, the Erongo Mountain Nature Conservancy extends over approximately 200 000 hectares, encompassing one of the most environmentally diverse areas in Namibia, and including cultural artefacts such as rock paintings, rock engravings and prehistoric settlements.

Overall, the Erongo Region harbours high densities of leopard and brown hyaena. The members of the conservancy are committed to reintroducing species that formally inhabited the area, such as black-faced impala and black rhino. In terms of endemic species, the Erongo environment is one of Namibia's hotspots, as it hosts a vast array of endemic and near-endemic plant, reptile, bird and mammal species. These include the Angolan dwarf python, White-tailed Shrike, Hartlaub's Spurfowl, Ruppell's Parrot, Rockrunner and Hartmann's zebra. Rare species that have found refuge in the Erongo Mountains include the Peregrine Falcon and Booted Eagle. The striking Verreaux's Eagle can also be seen breeding in the mountains.

#### 3.2 SOCIO-ECONOMICAL ENVIRONMENT

#### 3.2.1 Demographic Profile

Until independence in 1990, the area 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).

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 Industrial Mineral 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.

Some of these site 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 precolonial 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.

Therefore, given the nature, scope and scale of the proposed exploration activity and particularly that it entails minimum use mechanical equipment an archaeological specialist study was deemed not necessary although highly recommended for the next phase of the mine development projects.

Critically, the proponent is cautioned to at all time strictly adhere with the search and find procedure in accordance with the stipulations of the Namibian National Heritage Act (No. 27 of 2004) in the highly unlikely event that artifacts are found in the EPL area. 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 stipulations of 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. Otniel Koujo 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 **Confidente** newspaper on **04** -10 **Nov** and again **11** – **17 Nov 2022**, and then daily in the **Windhoek Observer** from the **02**<sup>nd</sup> till the **11**<sup>th</sup> **November 2022** in order to notify and inform the public of the proposed projects and invite I&APs to register, there were no particular responses or inputs received but registration by one I&AP (see **Appendix A** for detailed report).

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. Otniel Koujo 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. Otniel Koujo 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 8.*

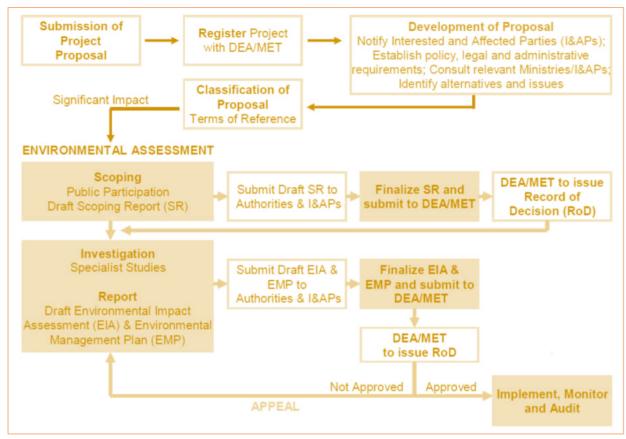


Figure 8: Illustration of the environmental assessment process in Namibia (Source: Risk Based Solution)

#### 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 MDL 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 8** below).

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

**Table 8:** Other relevant legislation and applicability thereof (Source: Risk Based Solution)

#### 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. Despite the national Lockdown due to the COVID19 pandemic, which affected the possibility for public meetings, adverts were placed consecutively (at 14 days interval) in local newspapers **Confidente** newspaper on **04** -**10 Nov** and again **11** – **17 Nov 2022**, and then daily in the **Windhoek Observer** from the **02**<sup>nd</sup> till the **11**<sup>th</sup> **November 2022** 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 AUTHORITY CONSULTATION DURING THE EIA PHASE

Authority consultation is integrated into the PPP, with additional one-on-one meetings held with the lead authorities, where necessary. A pre-application meeting was scheduled with the relevant competent authorities prior to the Lock-down, however were later cancelled. It is proposed that the Competent Authority (DEA) as well as other lead authorities be consulted as necessary and at various stages during the application review process of the DEA. During the Scoping phase, the following authorities were identified and consulted (see **Appendix C**) for the purpose of consultation:

#### 4.7 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 farming phase. The activities/infrastructure that are summarized in this chapter, link to the description of the proposed project (see Section 5 of the EIA report).

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 9**. 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 9: 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	н	Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action. Irreplaceable loss of resources.					
of environmental impacts	М	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+ M+ H+		Minor improvement. Change not measurable/will remain in the current range. Recommended level will never be violated. Sporadic complaints.					
		Moderate improvement. Will be within or better than the recommended level. No observed reaction.					
		Substantial improvement. Will be within or better than the recommended level. Favorable publicity.					
Criteria for ranking the	L	Quickly reversible. Less than the project life. Short-term					
<b>DURATION of impacts</b>	Μ	Reversible overtime. Life of the project. Medium-term					
	Н	Permanent beyond closure – Long-term.					
Criteria for ranking the	L	Localized-Within the site boundary.					
SPATIAL SCALE of	Μ	Fairly widespread–Beyond the site boundary. Local					
Impacts	Н	Widespread – Far beyond site boundary. Regional/national					

#### PART B: DETERMINING CONSEQUENCE

SEVERITY = L									
DURATION	Long-term	Н	Medium	Medium	Medium				
	Medium term	М	Low	Low	Medium				
	Short-term	L	Low	Low	Medium				
			SEVERITY = M						
DURATION	Long-term	Н	Medium	High	High				
	Medium term	М	Medium	Medium	High				
	Short-term	L	Low	Medium	Medium				
	·		SEVERITY = H						
DURATION	Long-term	Н	High	High	High				
	Medium term	Μ	Medium	Medium	High				
	Short-term	L	Medium	Medium	High				
			L	Μ	Н				
			Localized Within site boundary Site	Fairly widespread Beyond site boundary	Widespread Far beyond site boundary				
				SPATIAL SCALE					

PART C: DETERMINING SIGNIFICANCE								
	Definite/Continuous	Н	Medium	Medium	High			
(of exposure to	Possible/frequent	М	Medium	Medium	High			
impacts)	Unlikely/seldom	L	Low	Low	Medium			
			L	М	Н			
				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. Otniel Koujo 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 EPL 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 socioeconomic 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 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 (drilling and or bulk –sampling).

Potential impacts in respect to the Biophysical environments (**Table 7 - 8**) 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 – EPL 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 sensitive biophysical environments								
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.								
<b>Phases:</b> Phases during which the project has implications of accessing the EPL 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			
<ul> <li>No Construction envisaged at this stage</li> </ul>	survey project • Upgrad	<ul> <li>Accessing of EPL area for surveys and sampling with project vehicles</li> <li>Upgrading of access tracks (e.g. grading)</li> </ul>				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 very high given the project location i.e. near a protected area and within a town								
Spatial Scale	Low, localized if activities are restricted to the known pegmatite belts area within the EPL 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 L-M	Duration L	Spatial Scale L	Consequence H	Probabi Occurre		Significance H		
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probabil Occurre	-	Significance		
Conceptual Description of Mitigation Measures	L       L       L       H         • Strict compliance with the Park Management guidelines and EMP is recommended in respect to managing incidental events;       • Exploration activity must be limited to the pre-identified pegmatites belts within the EPL area         • Unless necessary and agreed with the Park management, 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				in respect to samp					
				cal laboratory be p					
	trenches	are drilled /	dug and	l geological sample	es colle	ected for fu	rther analysis.		
Description	This will determine the depth of the potential mineralization. If necessary new								
	access t	racks to the	drill site	s will be created a	and dr	ill pads will	be cleared in		
				ely used sampling					
		-		mpling and/or diam					
				ampling / trenchin					
	relating	to vegetation	n clearii	ng for access tracl	ks and	drill transe	ects may arise		
	from the	e project activ	ities. Co	onsequential impac	ts the	refore are:			
N	• No	ise from samp	oling ma	chineries and pote	ential s	pill of hydro	ocarbons		
Nature	• Dis	turbance of	habit	ats (protected	plant	species)	and species		
	dis	placement				. ,			
		tential litterin	ơ with s	olid waste					
Phases: Phases during			-		ctc an	ply are bigh	lighted below:		
Significance assessmen		, , , , , , , , , , , , , , , , , , , ,					0		
Significance assessment	c was carried	d out on the s		Decommissioni		presents a	iong terminak.		
<b>Construction Phase</b>	Oper	ational Phase		Phase	18	Pos	t Closure		
construction r mase	-	ing of EPL a		i nase		10.	it clobal c		
No Construction	for	0	and						
		2							
envisaged at this	-	ng with pro	ject						
stage	vehicles			N/A			N/A		
	Upgrading of access								
	tracks	(e.g. grading)	)						
		<u> </u>				severity given that limite			
Severity					and no new access track will be created,				
				o very low with mi					
Duration	0			tial impacts is very	high	given the p	oject location		
Duration		1		within a town	a		ite belte even		
Spatial Scale				re restricted to th ing potential impa			lite Delts alea		
Spatial Stale				respect to wildlife /			and posching		
Probability				mes accompanied			and podering		
	as proje		Spatial		-	ability of			
Unmitigated	Severity	Duration	Scale	Consequence		urrence	Significance		
0	M	L	L	Н		L	м		
			Spatial		Prob	ability of			
Mitigated	Severity	Duration	Scale	Consequence		urrence	Significance		
0	L	L	L	Ĺ		L	М		
	Strict	compliance	with th	e Forestry Act a	nd Re	egulations	in respect to		
	vegeta	tion clearing,	Park N	lanagement guidel	lines a	nd EMP is r	ecommended		
	in resp	ect to manag	ing incid	lental events;					
	-	-	-	be limited to the	pre-ide	entified per	matites belts		
	-			lucing the spatial in					
				d with the park mai					
		2	0	ging shall be allowe	0				
Conceptual			-	-					
Description of	-	-		kits must be prov					
Mitigation Measures		-		bons are well con	tained	I prior to fi	nal disposal at		
and build and bu	approv	ved sites in eit	her Usa	kos or Omaruru					
	approved sites in either Usakos or Omaruru								
	<ul> <li>Unless</li> </ul>	in an emerg	gency, r	no equipment (vel	hicles	and drill rig	gs) should be		

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

Impact Event	Waste g	eneration and	d disposa	ıl				
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).							
)	<ul> <li>In general, prospecting activities generates very little domestic solid waste which includes but may not be limited to: <ul> <li>Litter materials i.e. plastic bags, cartons, food packages and</li> <li>Effluents and sewer may only be generated in case where a base-camp is necessary and a bathroom with flushing toilets are used</li> <li>Minor hydrocarbons spillage(fuels and lubricants), possible contamination of soils and groundwater, in case of hydrocarbon spillage mainly from maintenance of equipment and vehicles</li> </ul> </li> <li>which the project has implications of waste generation are highlighted below;</li> </ul>							
Significance assessmen	t was carried	a out on the s	ampling	Decommissionin		i-site stays.		
<b>Construction Phase</b>	Opera	ational Phase		Phase	0	st Closure		
<ul> <li>No Construction envisaged at this stage</li> </ul>	Lodging is envisaged at				N/A			
Severity	Taken to	gether, wast	e genera	tion in respect to t everity as in genera				
Duration	The dura operatio	ition of the p ns thus short	otential -term in	mpacts is bound t nature	o the duration of	the proposed		
Spatial Scale	property	owners and	thus not	e limited mainly to entirely influence	by the proposed	project		
Probability			entirely i	inly to the lodging ofluence by the pro	posed project	ct to property		
Unmitigated	Severity L	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance		
Mitigated	Severity	Duration	Spatial Scale	Consequence	Probability of Occurrence	Significance		
Conceptual Description of Mitigation Measures	SeverityDurationScaleConsequenceOccurrenceSignificanceLLLLL•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 Usakos or Omaruru•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	Disturba	nces to the s	ocial e	envir	onments				
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, given the Corvid- 19 pandemic it is recommended that all protocol in this respect are observed throughout the exploration phase. The inter-migration of project staff in-and-out of the region may present								
Nature	other co most sig strain o	potential risks of disease transmission particularly in respect to Corvid-19 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 sourc	es of social (h	nealth				are highlight	ed below;	
Construction Phase		ational Phase			Decommissioning Phase	5	Post	t Closure	
N/A	<ul> <li>Use of the lodging and other social facilities, as well as other social interactions</li> </ul>				N/A		I	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 if for instance project staff undergo prior testing for Corvid-19 before coming for fieldwork. Low, especially given that there are clear guideline and protocols governing								
Probability Unmitigated	Severity	Duration	Spati Scal	ial	gious diseases and Consequence H	Prob	bey are well o bability of currence	Significance	
Mitigated	Severity M-L	Duration	Spati Scal	ial	Consequence		bability of currence	Significance	
Conceptual Description of Mitigation Measures	<ul> <li>incider</li> <li>It is stutested</li> <li>a nega</li> <li>Carry sto accesservice</li> <li>Strict</li> <li>Strict</li> <li>Strict</li> <li>enviro</li> </ul>	ntal events; rictly advised prior to vent tive result, w sufficient First ess local healt s compliance v in respect to IDS and Corvi ban on use	that p uring hich is Aid e h faci th faci any c id-19 of any pe pro	oroje in the quip lity a atior diseas y to hibit	MP is recommend ct staff ensures t e field (and carrie older than 72 hou ment to ensure the nd therefore minited thealth protoco se outbreak and co sic substances we ed and serious pure t.	hat ir s a ho nat m mizir ols a or rec	n respect to ealth certific inor injuries ng potential s and when curring panda and during	Corvid-19, are ate indicating reduces need strain on local directive are emics such as the working	

# Table 11. Impact on the Social Environment – Air and Noise Pollution

Impact Event	Disturba	nces to the s	ocial e	envir	onment				
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	impacts excavato	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 v	vhich source	es of social (Ai	ir and	Nois	e Pollution) impa	cts apply	/ are high	lighted below:	
Construction Phase	Opera	ational Phase			Decommissioni Phase			ost Closure	
<ul> <li>Land preparation and setting-up of drill sites</li> <li>Setting-up Base- camp for project staff</li> </ul>	<ul> <li>Accessing of EPL area for surveys and sampling with project vehicles</li> <li>Upgrading of access tracks (e.g. grading)</li> </ul>			<ul> <li>Structure demolition and ground leveling activities</li> <li>Temporary lodging for decommissioning staff</li> </ul>			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	0				I impacts is subje I impact's duratio				
Spatial Scale	Low, loc lead to in site whic	alized althou ncreased traf :h far from re	gh cur fic. Th sident	nula e no ial a	tive as haulage al ise aspect is mair	ong the Iy limite	designate d to the f	ed routes may feedlot facility	
Probability					decommissioning		roposed	operation are	
Unmitigated	Severity	Duration	Spati Scal		Consequence M		oility of rence	Significance H	
Mitigated	Severity	Duration	Spati Scal		Consequence		Dility of Trence	Significance H	
Conceptual Description of Mitigation Measures	<ul> <li>incider</li> <li>Noise of measu</li> <li>All exc day be</li> <li>Condit Agreer accord</li> <li>As must</li> </ul>	atal events; complaint reg res adopted a essive noise g tween o8hoo ions of the nent (with ingly adhere ch as possible int are used s	istern accord genera (am) Envir the re to.	nust lingly ating and ronn eleva reco	MP is recomme be kept and main /. activities must b 17hoo (pm) week nental Clearance int Traditional A mmended that ve allest excavator a	tained re e strictly days or Certifi Authority ehicles v	egularly w / carried o nly. cate and / and Pa vith the n	vith mitigation out during the d Surface-use ark) must be	

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

Impact Event			<u> </u>	nd scenic value of			
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 EPL area is low. However, evidence cultural heritage were observed at Mariental or Keetmanshoop Settlement, Messum Crater which falls outside the boundaries of the proposed MCS 73719 – 73727 AND 73825.						
Nature	previous have bee other lar	investigatior en destroyed nd-uses such f	ns (due t during p arming a	vould either have to the accessibility of revious exploration nd tourism undert	of the s n and n aken in	ite to arch nining oper the area.	aeologists) or rations and or
Phases: Phases during highlighted below;	, which sou	rces of social	(cultura			lues) impa	acts apply are
Construction Phase	Opera	ational Phase		Decommissionir Phase	-	Pos	st Closure
<ul> <li>Land preparation and construction activities</li> <li>Temporary lodging for construction staff</li> </ul>	<ul> <li>Reconnaissance activities e.g. geological mapping, topographical and remote sensing mapping</li> </ul>			Structure demoli and ground leve activities Temporary lod for decommissio staff	N/A		
Severity	Severity is Low, disturbances relating to field-based will be low with extremely						
Duration	unlikely probability of occurrence without mitigations 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						ntal in nature
Spatial Scale	encount be limite	ered, the pro ed to certain r	bability o ock outc	of damaging a of finding these on rops and along rive ion significantly lin	the EF rvalley	PL area are /s.	low and may
Probability Unmitigated	known p	Duration	t that fal Spatial Scale	s within the mining Consequence H	Proba	bility of Irrence	Significance H
Mitigated	Severity	Duration	Spatial Scale	Consequence		bility of	Significance
Conceptual Description of Mitigation Measures	Sevence       Defaultion       Scale       Consequence       Occurrence       Significance         L       L       H       L       M         • Strict compliance with the EMP is recommended in respect to managing incidental events       •						

Impact Event	Disturba	inces on soc	ial and	econo	mic 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									
	town, u	nemployme	nt and	the lo	oss of socio-ecc	onomic	benefits	derived from		
	future mining development opportunities.									
Nature	Howeve	However, it is imperative that the community is made aware that a major possible								
					listic expectatio					
					nmunities to bea					
					evelopment.			I		
Phases: Phases during					social and econ	nomic s	gain) impa	acts apply are		
highlighted below;	,									
				De	commissioning					
<b>Construction Phase</b>	Opera	tional Phase	e		Phase		Pos	t Closure		
		f the lodg								
		other so	0							
		es, as well								
• Land preparation and	other	SO	cial	Ctruz	ture demoliti		Retrenc	hmonte		
construction	interac	tions						,		
activities	<ul> <li>Potent</li> </ul>	ial M	ine	and	ground leveli	пВ		ent and job		
activities	develo	pment		activ	lues		losses due to closure			
				+ -:-:	mplies in the ca					
		0								
Soucrity					shall realize he					
Severity					h. However, wit					
					of unemployme					
	0				mpacts is subjec	tt to th	e propose	ed operation's		
Duration		, with a long								
			only lim	nited to	o the Mariental	or Kee	etmanshoo	op Settlement		
Spatial Scale	commur	,	1 1 111.				1 1 1			
					pect to job crea					
		exploration)	and lor	ng-terr	n ( during Mine	devel	opment a	nd operation)		
Probability	phases						1 111. 6			
	-	_	Spati				bility of			
Unmitigated	Severity	Duration	Scale	e	Consequence	Occu	irrence	Significance		
_	L-M	L	L	_	L		L	L		
			Spati	al		Proba	bility of			
Mitigated	Severity	Duration	Scale	e	Consequence		irrence	Significance		
Mitigated		M+	М		H+		H+	H+		
	L. 16 (m. 1									
					ntinuous commu					
					nunity is ensure		-			
	socia	l marginaliza	ation, di	rive ge	nder equality ar	nd enha	ance the ı	understanding		
	and p	perception o	of the be	enefits	associated with	h Mr. C	)tniel Kou	jo Investment		
	activi	ties								
	• To en	hance the p	ocitivo ir	mpact	s relating to marg	ainal na	t honofite	for the micro-		
		-			0	0				
		P 4			Mariental or Ke					
		o at large)	and na			-	-	provisions to		
		Erongo at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed								
			n and La	abour	Welfare must be	observ	ved			
Conceptual			n and La	abour	Welfare must be	observ	ved			
Conceptual Description of	Affirn	native Actio						regotiates and		
	• It is s	native Actio trictly recor	nmende	ed that	: Mr. Otniel Kou	ujo Inve	estment n	-		
Description of	<ul><li>Affirm</li><li>It is signs</li></ul>	native Actio trictly recor a Surface	nmende Use Ag	ed that reeme	: Mr. Otniel Kou nt detailing asp	ujo Inve pects c	estment n of conduc	t and benefit		
Description of	<ul> <li>Affirm</li> <li>It is s signs distril</li> </ul>	native Actio trictly recor a Surface bution with	nmende Use Ag all key s	ed that reeme stakeh	: Mr. Otniel Kou	ujo Inve pects c onal Au	estment n of conduc	t and benefit		

# 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. Otniel Koujo Investment, was presented an opportunity to undertaking an exploration programme in respect in respect to Base and Rare Metals, Dimension Stone, Industrial Minerals, Non-Nuclear Fuel Mineral and Precious Metals

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socioeconomic 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 EPL location / site particularly considering that it falls within a park environment and in proximity to the Tsiseb Conservancy. Primarily, the key objective in respect to conservancies or protected area is conservation of particularly wildlife, cultural / historical heritage and landscape scenic value. Hence, the pre-dominant land-use in these environments is usually non-consumptive and mainly in the form of tourism. However, tourism may have not proven to be most economically rewarding land-use option given the prolonged effects of natural disasters and pandemics. This has created an uncertainty which resulted in community in town looking beyond conservation for alternative income streams and thus increased mining activities are observed in communal conservancies.

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 is a summary of the likely positive impacts that have been assessed for the different phases of the proposed Mr. Otniel Koujo Investment's mineral prospecting activities:

- Socio-economic development and capacity building through partnering with foreign operators / investors, skills transfer and training on the mining development sector shall be achieved (Likely impacts are high).
- Creation of employment opportunities and strengthening /expansion of SME business
- Consequential Infrastructure development e.g. development of a Mine should viable deposit be discovered.

The following is a summary of the likely negative impacts that have been assessed for the different phases of the existing sand mining project:

- Ambient Air Quality and Noise Pollution (Likely impacts are Low).
- Ecological and biodiversity loss (Likely impacts are localized and low).
- Health and safety (Overall likely impacts are low with the adoption and compliance of appropriate mitigation measures).
- Accidental Spill of Hazardous substance (Likely impacts are low with proper implementation of the environmental management plan in place).
- Cultural Heritage, Archaeological and Scenic value (Likely impacts are low with proper implementation of the environmental management plan in place).

# 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 the Scoping Report 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 13** shows the stakeholders engagement recommendations.

## **Table 13:** Actions relating to stakeholder communication

Issue	Management commitment	Phase
Development and maintenance of a Stakeholder engagement	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	
plan	continuous reporting and feedback	All
	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
Understanding who the stakeholders are	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	Devise and implement a stakeholder communication and	
affected parties at all phases	engagement strategy.	All
in the mine life		
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On-contr	act)

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. Otniel Koujo Investment 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 farming 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. Otniel Koujo Investment 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

Issue	Management commitment	Phase
Understanding who the stakeholders are	<ul> <li>Maintain and update the stakeholder register, including stakeholders' needs and expectations.</li> <li>A representative database would include all relevant local government, service providers, indigenous populations, Traditional Authorities (TAs), NGOs or community-based organizations</li> <li>Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process.</li> <li>Record partnerships as well as their roles, responsibilities, capacity and contribution to development.</li> </ul>	
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. Otniel Koujo Investment and Enviro-Leap Consulting (On contract basis)	)

## Table 14. Impact on the Biophysical Environment – EPL site Access and use of vehicles

# Table 15. Impact on the Biophysical Environment – EPL 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 that as much as possible, disturbance on biodiversity is avoided and pre- while the proposed prospecting activities is undertaken.	
Proposed Mitigation Measures	<ul> <li>Strict compliance with the Park Management guidelines and EMP is recommended in respect to managing incidental events;</li> <li>Exploration activity must be limited to the pre-identified pegmatites belts within the EPL area</li> <li>Unless necessary and agreed with the park management, no new access tracks shall be created and no lodging shall be allowed in sensitive zones</li> </ul>	All
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract basis	)

Impact Event	Disturbances on Biodiversity in respect to sampling and trenching activ	/ities
Desired mitigation outcome	The objective of the mitigation in respect to impacts on biodiversity is to that as much as possible, disturbance particularly on wildlife (poachin flora (clearing / damage) species is reduced and or prevented.	
Proposed Mitigation Measures	<ul> <li>Strict compliance with the Forestry Act and Regulations in respect to vegetation clearing, Park Management guidelines and EMP is recommended in respect to managing incidental events;</li> <li>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</li> <li>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</li> <li>Exploration activity must be limited to the pre-identified pegmatites belts within the EPL area thus reducing the spatial impacts to key areas of the EPL</li> <li>Unless necessary and agreed with the park management, no new access tracks shall be created and no lodging shall be allowed in sensitive zones</li> <li>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 Usakos or Omaruru</li> <li>Unless in an emergency, no equipment (vehicles and drill rigs) should be serviced in the field thus preventing unnecessary spillage of hydrocarbons</li> </ul>	AII
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract bas	is)

## Table 16. Impact on the Biophysical Environment – Bulk sampling and ore extraction

# 5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

Table 8. 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 the best scenic value and integrity of the affected environment mainta or enhanced by reducing chances of littering through proper use of management facilities.	ined and			
Proposed Mitigation Measures	<ul> <li>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 to the project site.</li> <li>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</li> <li>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 Mariental or Keetmanshoop</li> <li>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)</li> <li>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.</li> </ul>	All			
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract ba	sis)			

Table 8. Impact on the Biophysical Environment – Waste Management (Effluent, Solid and Hydrocarbons)

# Table 9. 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 haza ensure that the health, safety and protection of both the project s community receive priority in terms of budgetary provision and complia	taff and
	• Strict compliance with the EMP is recommended in respect to	
Proposed Mitigation Measures	<ul> <li>managing incidental events;</li> <li>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</li> <li>Strict compliance with national health protocols as and when directive are issued in respect to any disease outbreak and or</li> </ul>	All
	<ul> <li>recurring pandemics such as HIV / AIDS and Corvid-19</li> <li>Strict ban on use of any toxic substances within and during the working environment must be prohibited</li> </ul>	
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract b	asis)

Table 10. 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	<ul> <li>Strict compliance with the EMP is recommended in respect to managing incidental events;</li> <li>Noise complaint register must be kept and maintained regularly with mitigation measures adopted accordingly.</li> <li>All excessive noise generating activities must be strictly carried out during the day between o8hoo (am) and 17hoo (pm) week days only.</li> <li>Conditions of the Environmental Clearance Certificate and Surface-use Agreement (with the relevant Traditional Authority and Town) must be accordingly adhere to.</li> <li>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).</li> </ul>		
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract basis)		

# Table 11. 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	<ul> <li>Strict compliance with the EMP is recommended in respect to managing incidental events</li> <li>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</li> <li>The chance finds procedure as outlined in the EMP must be implemented at all times, and.</li> <li>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.</li> </ul>
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract basis)

## Table 12. Impact on the Economic Aspect

Impact Event	npact Event Disturbances on social and economic aspects		
Desired mitigation outcome	The objective of the mitigation in respect to economic impacts relating to the		
		1	
Proposed Mitigation Measures	<ul> <li>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. Otniel Koujo Investment's activities</li> <li>To enhance the positive impacts relating to marginal net benefits for the micro-economy (local residence of Mariental or Keetmanshoop Settlement and the region at large) and national economy at larger, legislative provisions to Affirmative Action and Labour Welfare must be observed</li> <li>It is strictly recommended that Mr. Otniel Koujo Investment 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)</li> </ul>	All	
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contra	ct basis)	

## Table 13. Site Closure and Rehabilitation

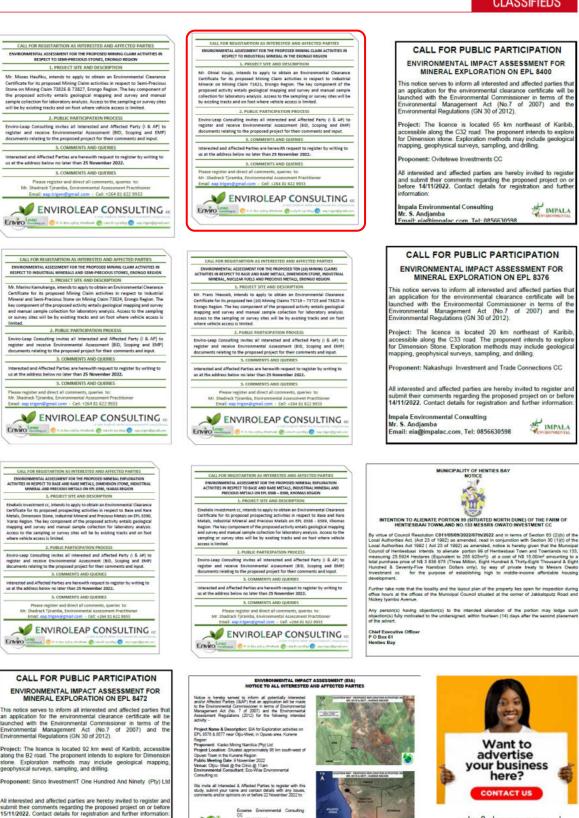
Impact Event	Event Disturbances on social and economic aspects		
Desired mitigation outcome mitigation plan as properties of the environmental compliance and reprogramme.		is under ation with	
Proposed Mitigation Measures	<ul> <li>Mr. Otniel Koujo Investment shall submit regular (bi-annual or annual Environmental Reports) to the relevant Ministry stating the exploration activities and environmental performance of the project.</li> <li>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.</li> <li>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.</li> </ul>	Closure	
Responsibility	Mr. Otniel Koujo Investment and Enviro-Leap Consulting (On contract basis)		

# APPENDIX B: PUBLIC CONSULTATION

#### @whkobserver

# WEDNESDAY 02 NOVEMBER 2022 | 11

## **CLASSIFIEDS**



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ental Consulting

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## CLASSIFIEDS



04 November - 10 November 2022

#### CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINING CLAIM ACTIVITIES IN RESPECT TO INDUSTRIAL MINERAL IN THE ERONGO REGION

### 1. PROJECT SITE AND DESCRIPTION

Mr. Otniel Koujo, intends to apply to obtain an Environmental Clearance Certificate for its proposed Mining Claim activities in respect to Industrial Mineral on Mining Claim 71621, 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.

#### 3. COMMENTS AND QUERIES

Interested and Affected Parties are herewith request to register by writing to us at the address below no later than **25 November 2022**.

#### 3. COMMENTS AND QUERIES

Please register and direct all comments, queries to: Mr. Shadrack Tjiramba, Environmental Assessment Practitioner Email: eap.trigen@gmail.com - Cell: +264 81 622 9933

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#### CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED TEN (10) MINING CLAIMS ACTIVITIES IN RESPECT TO BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERAL, NUCLEAR FUELS AND PRECIOUS METALS, ERONGO REGION

## 1. PROJECT SITE AND DESCRIPTION

Mr. Frans !Haoseb, intends to apply to obtain an Environmental Clearance Certificate for its proposed ten (10) Mining Claims 73719 – 73725 and 73825 in 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.

#### 3. COMMENTS AND QUERIES

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CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINING CLAIM ACTIVITIES IN RESPECT TO SEMI-PRECIOUS STONES, ERONGO REGION

#### 1. PROJECT SITE AND DESCRIPTION

Mr. Moses Haufiku, intends to apply to obtain an Environmental Clearance Certificate for its proposed Mining Claim activities in respect to Semi-Precious Stone on Mining Claim 73826 & 73827, 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.

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#### CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINING CLAIM ACTIVITIES IN RESPECT TO INDUSTRIAL MINERALS AND SEMI-PRECIOUS STONES, ERONGO REGION

## 1. PROJECT SITE AND DESCRIPTION

Mr. Marino Kamuhanga, intends to apply to obtain an Environmental Clearance Certificate for its proposed Mining Claim activities in respect to Industrial Mineral and Semi-Precious Stone on Mining Claim 73824, 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.

#### 3. COMMENTS AND QUERIES

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3. COMMENTS AND QUERIES

Please register and direct all comments, queries to:

Mr. Shadrack Tjiramba, Environmental Assessment Practitioner Email: eap.trigen@gmail.com - Cell: +264 81 622 9933



11 November - 17 November 2022

Page 17

#### CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINING CLAIM ACTIVITIES IN RESPECT TO INDUSTRIAL MINERAL IN THE ERONGO REGION

#### 1. PROJECT SITE AND DESCRIPTION

Mr. Otniel Koujo, intends to apply to obtain an Environmental Clearance Certificate for its proposed Mining Claim activities in respect to Industrial Mineral on Mining Claim 71621, 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.

## 3. COMMENTS AND QUERIES

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#### CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED TEN (10) MINING CLAIMS ACTIVITIES IN RESPECT TO BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERAL, NUCLEAR FUELS AND PRECIOUS METALS, ERONGO REGION

### 1. PROJECT SITE AND DESCRIPTION

Mr. Frans IHaoseb, intends to apply to obtain an Environmental Clearance Certificate for its proposed ten (10) Mining Claims 73719 – 73725 and 73825 in 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.

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## CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINING CLAIM ACTIVITIES IN RESPECT TO SEMI-PRECIOUS STONES, ERONGO REGION

### 1. PROJECT SITE AND DESCRIPTION

Mr. Moses Haufiku, intends to apply to obtain an Environmental Clearance Certificate for its proposed Mining Claim activities in respect to Semi-Precious Stone on Mining Claim 73826 & 73827, 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.

### **3. COMMENTS AND QUERIES**

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## CALL FOR REGISTARTION AS INTERESTED AND AFFECTED PARTIES

ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED MINING CLAIM ACTIVITIES IN RESPECT TO INDUSTRIAL MINERALS AND SEMI-PRECIOUS STONES, ERONGO REGION

### **1. PROJECT SITE AND DESCRIPTION**

Mr. Marino Kamuhanga, intends to apply to obtain an Environmental Clearance Certificate for its proposed Mining Claim activities in respect to Industrial Mineral and Semi-Precious Stone on Mining Claim 73824, 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.

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# **RESUME OF EAP**

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### **PROFESSIONAL PROFILE**

### Mr. SHADRACK TJIRAMBA Research and Environmental Management Specialist

ID Number : Country of Résidence : Nationality:	80011910445 Namibia Namibian	EMAIL: Cell:	eap.trigen@gmail.com +264-816229933
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		Post-Graduate Diploma Sustainable Land Management (NQA Level		
	Cape	8) Sustainable Development, Resource Economics, 2009), South		
		Africa		
2007	University of South Africa	Bachelor of Laws (LLB)		
	(UNISA)			
2005	Polytechnic of Namibia	B-Tech Land Management, 2005		

#### EMPLOYMENT RECORD:

## May 2020-Current: Enviro-Leap Consulting Co

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
- Provide technical expertise/advise to various regional councils, land boards, traditional additionals, local level planning committees
   Coordinate the processes of revising and developing the Namibian environmental legislations (plans,
- coordinate the processes of revising and developing the Namiolan environmental registations (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: Signature: