ENVIRONMENTAL SCOPING AND ASSESSMENT REPORT FOR THE PROPOSED MINERAL EXPLORATION ON EPL NO.7470

Uis District, Erongo Region

APP No. 22101000034

2023



COMPILED BY



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LIST OF ACRONYMS

- DEA Department of Environmental Affairs
- **EMP** Environmental Management Plan
- EA environmental assessment
- ECC Environmental Clearance Certificate
- EIA Environmental Impact Assessments
- EMA Environmental Management Act No. 7 of 2007
- ESA Environmental Scoping Assessment
- I&AP Interested and Affected Parties
- METF Ministry of Environment, Tourism and Forestry
- MME Ministry of Mines and Energy
- M-Meters
- ASL Above Sea Level

EXECUTIVE SUMMARY

The EPL 7470 was granted to Miss. Frieda Namutenya Nambahu (the proponent) on 14 February 2020 and expired on the 13th of February 2023. The status is pending renewal, and the license was transferred to (Uis-Chi Investment Namibia Close Corporation) the new proponent during the drafting of the ESA. The proponent is undertaking the EIA process as a part of the application process for obtaining an ECC for the proposed exploration activities as described in the subsequent chapters.

The EPL (7470) is located about 15 km south of Uis Settlement, within the Dâures Daman Constituency in the Erongo Region. Uis hosts Namibia's highest mountain, Brandberg which is (2,579 m). The EPL is accessible via C35 road from Uis, which passed through on the north-western flank of the EPL. The EPL is surrounded by three Mining Licences (ML), of which ML 129 and ML 134 are bounded to the eastern and northern boundaries of the EPL respectively. These MLs Belong to Andrada Mining formerly known as AfriTin Mining, the company is known to mine tin and tantalum. Like for many other developing economies with massive natural resources, the Namibian mining industry contribute about 10% towards the country's GDP in the past years. Furthermore, due to decline in economic growth caused by high unemployment rate and inequality, there is high demand to further explore mineral resources in the country.

The Environmental Management Act, 7 of 2007 and its 2012 Environmental Impact Assessment Regulation (GG No. 4878 GN No. 30) have listed activities that cannot be commissioned without an Environmental Clearance Certificate (ECC) because of the adverse impact they may cause to the environment. Exploration of mineral resources is one of these listed activities. Hence the scoping study is done to identify the potential environmental impacts caused by the proposed exploration project. The proponent is guided legally by various legislations and policies which include Minerals Act, EMA and others.

The proposed project entails exploration methods that will be Non-invasive and invasive, the work will be in their phases. The Non-invasive exploration methods will be geological desktop studies, aeromagnetic and remote sensing image processing and interpretation, geological field mapping, ground geophysical survey, surface rock and soil sampling. Conversely, invasive exploration methods are more about destructive methods of exploration such as reverse

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circulation or diamond drilling and pitting/trenching. In order for these methods to be undertaken, infrastructure and services such as water, electricity, roads network, accommodation and transportation are important components for the project.

The core reason for the EIA is to ensure minimal damage to the environment. To achieve this, it is critical to explore alternatives in which the project can be employed. The most common and crucial alternatives considered are the no-go option, location, services infrastructures, and exploration drilling methods. However, for this project, the no-go option was not considered due to the identified economic losses it may cause. Moreover, for the parts of the project that may be more sensitive to the environment, these parts will be identified as sensitive, and the no-go option will apply to them. The Location of the EPL is identified by the presence of the ore mineral potential (geology) in the area. Due to site determination resulting from mineral ores to be explored, which is primarily determined by the site geology and is area specific, no alternative location is considered viable. Additionally, the author has indicated various alternatives regarding the service infrastructure.

As per the Environmental Management Act 7 of 2007, It is crucial to engage with the public from the beginning of the EIA process. This implies that public consultation is one of the most important components of the EIA process. This is mainly because it creates space for the community and all registered interested and affected parties (I&Ap's) to submit their concerns and input they may have on the project. The assessment and decision-making on the granting of the Environmental Clearance Certificate (ECC) are made considering the comments and concerns of the I&Ap's on the project, as per the 2012 EIA Regulation. The public meeting happened in Uis on 17th of June 2023 at 12h00. The discussion on the activities that are likely to happen around the project provided the ECC is granted was the epitome of the meeting.

The committee stressed on the negative effect the exploration may have on the land. The meeting minutes and the attendance registers are attached in Annexure H. No other comments were received other than the ones noted within the meeting minutes The scoping report was made available to all I&APs for public review from 17th of July 2023 until 24th July 2022. There are also no further comments received on the draft report.

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Regionally the EPL7470 area falls in the Southern Kaoko Zone (SKZ) and a part of the northern Central Zone of the Damara belt. It lies between two NE trending crustal structures, the Khorixas Gasenairob Thrust (KGT) on the north and the Autseib Fault on the south. The EPL area occurs right on the junction of the Pan- African Kaoko and central Damara Belt (Passchier et. al, 2002). On a regional level, the zone is dominated by the Neoproterozoic Zerrissene Group turbidite system (Amis River Formation schists), Damaran granites, pegmatite, and late Cretaceous units (Brandberg Complex, Karoo sedimentary units and dikes). The intrusion of the Damara is mostly on the western end of the northern Central Zone and form a boundary between the NZ and the SKZ further west. However, the aeromagnetic data demonstrates that the NZ is rather ending abruptly against the granite, taper gradually to the SW.

Topographically the EPL area is relatively flat with an altitude between 850m ASL to 950m ASL from south towards the north. Although relative flat, small hills maybe seen in the north east top corner of the licenses.

The key biophysical environmental and social baseline for the project area is listed as follows: Climate, Water Resources: Surface and Groundwater, Fauna, and Flora, Archaeological and Heritage Resources, Social Environment, Social Demographics, Economy, and Land Use.

Mining has a vital role to play in the economic development of many developing countries, including Namibia. This is because, in most of these countries, minerals are a principal source of income. At first glance, mineral-rich developing economies have an advantage over those less well-endowed because minerals provide funds for economic development and poverty reduction. Noticeably, Namibia has been working on diversifying its economy so that the focus is not only on mining but other industries, like agriculture, renewable energy, etc. However, the mining industry is still leading the country's development as it contributes about 10 percent of Namibia's GDP every year.

Namibia's mining industry developed relatively early, based mostly on diamonds discovered at the turn of the century (Hartmann, 1986). Moreover, the mining sector has been growing recently, with the discovery of copper, gold, and uranium deposits in the central and southern parts of the country. With these resources, the country is still battling poverty and high unemployment rate among youth. Accordingly, there is a high demand to seek new mineral deposits to further facilitate economic growth through job creation and poverty eradication,

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just to mention a few. Mining is a significant source of revenue for the government of Namibia as well as a source of foreign exchange. Total job creation in the sector has been volatile due to commodity price fluctuations and technological advancement. As a result, this project will generate employment and development in the surrounding community by creating job opportunities, educational skills, and infrastructure development.

The possible positive and negative impacts that have been pointed out from the exploration activities are listed as follows:

Positive impacts:

- Recognition of possible economic mineral deposits
- Employment opportunities for the locals (primary, secondary, and tertiary employment).
- Benefits from Corporate Social Responsibility from Junior mining companies
- Heightening of the local and regional economic development.
- Open other investment opportunities and infrastructure-related development benefits.
- Local content through skill transfer

Negative impacts:

- Interference to the grazing area
- Land degradation and Biodiversity Loss.
- Dust pollution
- Water Resources Use
- Soil & Water Resources Pollution
- Waste Generation
- Occupational Health & Safety risks
- Vehicular Traffic Use & Safety

- Noise & Vibrations
- Disruption to Archaeological & Heritage Resources
- Impacts on local roads.
- Social Nuisance: local property intrusion & disturbance
- Social Nuisance: Job seeking & differing Norms, Culture & values.
- Impacts associate with closure and decommissioning of small-scale mining works.

The potential impacts identified were appraised and scaled in terms of probability (likelihood of occurrence), scale/extent (spatial scale), magnitude (severity), and duration (temporal scale), of which certain biophysical and social characteristics will be impacted by the proposed exploration activities.

To narrow an impact with a high significance rating to a low/medium significance rating, mitigation measures are implemented. These measures can only be employed provided that the impact with a medium significance rating can be sufficiently controlled. In addition, monitoring of the mitigation implementation must be done throughout the project lifetime to confirm that the significance of the impact is under control to maintain a low or medium significance rating.

In conclusion, it needs to be noted that the core potential biophysical impact in relation to the pre-operational, operational and maintenance and decommissioning phases of the proposed project activities have been identified and assessed. Appropriate mitigation measures were recommended, and the impacts can be summarised as follows:

- Impacts on biodiversity loss The probability of a loss of vegetation during the site clearing for the proposed project activities.
- Impacts on wildlife The EPL is situated in an area where lots of wild animals live. The exploration activities may disrupt their roaming patterns.
- Impacts on soil, surface, and groundwater Mishandling, storage and disposal of hydrocarbon products and hazardous materials at the site may result in soil and groundwater contamination, in case of spills and leakages. Should the exploration

activities end, and the excavated areas be rehabilitated, groundwater may be polluted if contaminated soils are used.

- Impacts of erosion Exploration activities may result in erosion from the clearance of vegetation which could impact water run-off and loss of topsoil.
- Impacts on waste Inappropriate discharging of waste materials at the site may lead to pollution of the site and environmental degradation.
- Impacts on health and safety Exploration activities may cause health and safety risks to employees on the site.
- Impacts on dust and noise Exploration activities may enhance dust and noise pollution.
- Impacts on archaeological and heritage resources The proposed exploration activities may impact areas that could potentially be home to archaeological and heritage resources. Should these be encountered during the exploration activities mitigation measures need to be in place to ensure that the heritage resources are not impaired.
- Impact on the social environment The proposed activity may create employment opportunities for the locals. Additional benefits may arise depending on the agreements reached between the communal farmers within the EPL area and the surrounding, and the proponent. Once the exploration activities are decommissioned those employed on a contract basis may get retrenched.

Provided that the following are met, it can be recommended that the project receive an ECC:

- That the implementation of the EMP and its monitoring is effectively done.
- The proponent is to consult with the affected communities and local and traditional authorities before the exploration activities commence.
- That once a target area has been identified all invasive work should be employed according to the EMP.

1 INTRODUCTION

1.1 Project Background

Miss. Frieda Namutenya Nambahu (The proponent) applied to undertake the EIA process on the 10 October 2022 as a part of the application process for obtaining an ECC for Exclusive Prospecting License (EPL) 7470. The Ministry of Mines and Energy (MME) granted the proponent an EPL 7470 granted on 14 February 2020 expired on 13 February 2023. The EPL status is pending renewal, and Uis-Chi Investment Namibia Close Corporation, Registration Number CC/2019/00176 is the new proponent as of 24 November 2022, during the drafting of the ESA. Nonetheless, the Environmental Consultant proceeded to submit the final report under the initial proponent. The license is for the exploration of industrials minerals, dimension stone, precious metals, base, and rare metals mineral groups respectively.

1.2 Locality

The EPL (7470) is located about 15 km south of Uis Settlement, within the Dâures Daman Constituency in the Erongo Region. The Uis settlement is located at an elevation of 801.17 m ASL. In general, the Erongo Region rises steadily from sea level to about 1000 meters across towards the east breadth of the Namib (Geological Survey of Namibia, 2012). Uis hosts Namibia's highest mountain, Brandberg that is (2,579 m) Figure 1-1. The EPL is accessible via C35 road from Uis, which passed through on the north-western flank of the EPL. Alternatively, access can be gained through a D1930 dirty road that passes through the EPL on its Eastern flank Figure 1-1. The EPL covers state land and a few communal farms have witnessed within the EPL.

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Figure 1-1: Google map showing the outline of EPL 7470 located south of Uis, the image also shows the road networks within the EPL area and the terrain of Brandberg mountain in the top left corner.

	Geographic Coordinates	
	Latitude	Longitude
1	21° 27' 35.84'' S	14° 50' 05.06'' E
2	21° 20' 58.15'' S	14° 51' 16.23'' E
3	21° 15' 44.69'' S	14° 49' 50.41'' E
4	21° 16' 25.01'' S	14° 50' 46.27'' E
5	21° 16' 56.98'' S	14° 50' 20.75'' E
6	21° 20' 52.15'' S	14° 55' 50.95'' E

Table 1: Corner coordinated for EPL 7470	Table 1: Corner	coordinated	for EPL	7470
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7	21° 17' 02.21'' S	14° 59' 05.02'' E
8	21° 17' 02.65'' S	15° 00' 04.94'' E
9	21° 17' 23.35'' S	15° 01' 11.41'' E
10	21° 25' 35.46'' S	14° 56' 23.24'' E
11	21° 25' 34.86'' S	14° 54' 43.84'' E
12	21° 28' 01.46'' S	14° 51' 32.65'' E

Table 2: Summary of EPL 7470 location details

Location	Approximately 15 km South of Uis
Area size	19036.7487 hectares.
Constituency	Dâures Constituency
Regional Administration	Erongo Region
Nearest Town	Uis Settlement

The EPL demarcated by 12 irregular shaped corner coordinates (Table 1) and covers an area of 19036.7487 hectares. The EPL is in proximity to three Mining Licences (ML), of which ML 129 and ML 134 bounded to the eastern and northern boundaries of the EPL respectively Figure 1-2. These MLs belong to Andrada Mining formerly known as Afritin Mining, the company is known to mine tin and tantalum. The land on which the EPL covers is state-owned and there is no commercial farm, however, a few communal farms are noticed in the nearby and surrounding areas.



Figure 1-2: Map showing the location of EPL 7470 in relation to existing Andrada Mining ML.

1.3 Need and Desirability of the Project

Like for many other developing economies with massive natural resources, Namibia's mining resource play an important role in the country's economic development. The Namibian mining industry contribute about 10% towards the country's GDP; (International Trade Administration, 2022). It further can be noted that, precious stone (diamond) mining has been the leading sub-sector of Namibia's mining industry, although there has been exponential growth in the discovery of other minerals like gold, copper, uranium, lithium, and tin. Due to decline in economic growth caused by high unemployment rate and inequality, there is high demand in further exploration of mineral resources in the country. Talking about Namibia, in recent years there has been an increase in search of battery mineral exploration especially lithium, graphite and manganese. There is growing adoption of electric vehicles is driving a rapidly increasing demand for rechargeable batteries and their input commodities – including lithium, cobalt, graphite, manganese (Mining Review Africa, 2023).

About lithium (Li) mineral deposits, Namibia is under-explored for Li and associated pegmatite mineralization, with only two known existing mines that have Li deposit. Which are Lepidico's Karibib Project and Andrada Mining formerly known as AfriTin Mining's Uis Tin Mine (which also contains lithium and tantalum). According to (Namibia Economist, 2022) Local-based tin producer, AfriTin Mining believes that its Uis mine, in the Erongo Region, could host one of the largest lithium resources globally, following initial results from a Lithium and Tantalum Infill Drill Programme which produced lithium grades surpassing expectations. It is for this reason that the proponent would like to explore for Li as world predicts an increase in global electric car stock expansion to almost 350 million vehicles by 2030 Figure 1-3.

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Figure 1-3: graph indicating the supply & demand for Li in the world from the year 2014-2040 (Source: Bloomberg NEF, Wood Mackenzie, Broker research, Benchmark Mineral Intelligence) In addition, according to Nambinga and Mubita (2021), Namibia mining has been the cornerstone of the economy for remote ages in view of having a positive impact on the economy measured through job creation and income generation, among others. Mining is an important source of government fiscal receipt and source of foreign exchange (Walser, 2000). Total job creation in the sector has been volatile due to fluctuation in commodity prices and technological advancement. Therefore, this project hopes to bring about employment and development within the area in form of job creation opportunities, educational skills and infrastructure development especially in Uis and within the surrounding communities. Additionally, the proponent wishes to discover Li mineral in order to foster for the projected growing Li deficit in the world as the electric cars stock expands.

1.4 Scope of Work

As per the Environmental Management Act (EMA) (No. 7 of 2007) and its 2012 EIA Regulations (GG No. 4878 GN No. 30), the scoping study is done to identify the potential environmental impacts caused by the proposed exploration project. As per regulation, the proposed project is not be undertaken without an ECC. Therefore, the process undertaken as required and guided by the Regulations. Furthermore, the ECC required by the MME for consideration to renew the expired EPL rights.

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Relevant environmental data was compiled by making use of secondary data from desktop work and fieldwork. Furthermore, EIA report and EMP are the guiding tools that help stakeholders and relevant Ministries to make informed decisions regarding the exploration activities from an environmental perspective.

The consultant compiled the report as a required output of an environmental assessment process after the ECC application was launched with the Competent Authority (MEFT). The ESA Report, together with the EMP and all its annexures will be submitted to the DEAF and MME. The document (Report) covers the following chapters or sections, in addition to the introductory chapter:

Description	Section of the Report
Legal Framework: The relevant legislation, policies and	Chapter 2
guidelines pertaining to the proposed project	
Description of The Project Activities: Overview of the	Chapter 3
different exploration methods to be undertaken once ECC	
is granted.	
Alternatives considered for the proposed project in terms	Chapter 4
of no-go option, location, exploration methods and services	
infrastructure	
The public consultation process followed (as described in	Chapter 5
Regulation 7 of the EMA Act) by which the interested and	
affected parties (I&APs) and relevant authorities are	
identified, informed of the proposed activity, and provided	
with a reasonable opportunity to give their concerns and	
opinions on the project;	
BIOPHYSICAL AND SOCIAL BASELINE: this chapters talks	Chapter 6
about the geological understanding of the project area and	
Understanding the impacts of the proposed activities and	
its effects to the environment and society	

Table 3: A summary of the contents covered by the present report.

The identification of potential impacts, impacts description,	Chapter 7
assessment, mitigation measures and recommendations	
Recommendations and Conclusions to the report	Chapter 8
References	Chapter 9

The next chapter will outline the Administrative and Legal framework of MEFT, and to give a description of the proposed project and its associated activities.

2 LEGAL FRAMEWORK: LEGISLATION, POLICIES AND GUIDELINES

This chapter outlines all the relevant Namibian legislation, policies and guidelines that need to be adhered to for an effective EIA process. The review of the legal framework helps to inform the Proponent, affected, and interested communities, and the decision makers at the MEFT: DEAF about the requirements and expectations, as laid out in terms of these instruments, to be met so that the exploration activities could be conducted.

2.1 Environmental Management Act No. 7 of 2007

This scoping assessment was carried out based on the Environmental Management Act No 7 of 2007 (EMA) and its Environmental Impact Assessment (EIA) Regulations of 2021 (GG No. 4878 GN No. 30), and following the conditions set by EMA for obtaining an ECC for permission to conduct certain listed activities. Which aims to ensure that the potential impacts of the development on the environment are considered carefully and in good time; that all interested and affected parties have a chance to participate in the environmental assessments and that the findings of the environmental assessments are fully considered before any decisions are made about activities, which might affect the environment.

The Act aims at promoting sustainable management of the environment and use of natural resources. The Environmental Management Act (EMA) is broad; it regulates land use development through environmental clearance certification and/or Environmental Impact Assessments. The Act provides for the clearance certification for "*mining and quarrying activities*".

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2.2 Minerals (Mining & Prospecting) Act No. 33 of 1992

The proponent must equally ensure adherence to the regulations put in place by the Minerals (Prospecting and Mining) Act No. 33 of 1992 (Minerals Act) about the exploration activities. This Act caters for the reconnaissance, prospecting, and mining for, and disposal of, and the exercise of control over, minerals in Namibia; and provides for matters incidental thereto.

The most applicable Sections to the project are as follows:

- Section 54 requires written notice to be submitted to the Mining Commissioner if the holder of a mineral license intends to abandon the mineral license area.
- Section 68 stipulates that an application for a mineral license shall contain the particulars of the condition of, and any existing damage to, the environment in the area to which the application relates and an estimate of the effect which the proposed prospecting operations may have on the environment and the proposed steps to be taken to prevent or minimize any such effect.
- Section 91 requires that rehabilitation measures should be included in an application for a mineral license.

Legislation/Policy/	Relevant Provisions	Implications	for	this
Guideline		project		
Environmental	Necessitate that projects with adverse environmental impacts are subject	EMA and its	regula	ations
Management Act (EMA)	to an environmental assessment process (Section 27).	should inform	and	guide
No. 7 of 2007	Details principles which must guide all EAs.	this EA process		
Environmental Impact	Details requirements for public consultation within a given			
Assessment (EIA)	environmental assessment process (GN 30 S21).			
Regulations GN 28-30 (GG	Details requirements for what should be part of the Scoping Report (GN			
4878)	30 S8) and an Assessment Report (GN 30 S15).			
Minerals (Prospecting and	To provide for the reconnaissance, prospecting, exploration and mining	The Propone	nt s	hould
Mining) Act No. 33 of 1992	for, and disposal of, and the exercise of control over, minerals in Namibia;	ensure compl	iance	with
	and to provide for matters incidental thereto.	the conditions	set i	n the
		Minerals Act	rega	arding
		exploration act	ivities.	
The Constitution of	According to Legal Assistance Centre (LAC), there is no clear right to	The Propone	nt s	hould
Namibia Act No. 1 of 1990	health in the Namibian Constitution. But based on Article 95 of the	ensure compl	iance	with
	Namibian Constitution that deals with Principles of State Policy, the	the conditions	of the	Act.
	Namibian Constitution states, "the state shall enact legislation to ensure			

 Table 4: Presents the full list of all applicable legislation identified and conducted during the EIA process:

	consistent planning to raise and maintain an acceptable standard of living	
	for the country's people" and to improve public health.	
Water Act No. 54 of 1956	The Water Resources Management Act 11 of 2013 is not yet gazetted;	The safety of ground and
	hence, the Water Act No 54 of 1956 is still in force:	surface water resources
	Interdict the pollution of water and implements the principle that a	must be a priority
	person disposing of effluent or waste has a duly of care to prevent	throughout all exploration
	pollution (S3 (k)).	activities.
	Provides for control and protection of groundwater (S66 (1), (d (ii)).	
	Liability of clean-up costs after closure/abandonment of an activity (S3	
	(1)).	
Water Resources	The act caters for the management, protection, development, use and	
Management Act No.11 of	conservation of water resources; and provides for the regulation and	
2013	monitoring of water services and to provide for incidental matters. The	
	objects of this Act are to:	
	Certify that the water resources of Namibia are managed, developed,	
	used, conserved, and protected in a manner accordant with, or conducive	
	to, the fundamental principles set out in Section 66 - protection of	
	aquifers, Subsection 1 (d) (iii) provide for preventing the contamination	
	of the aquifer and water pollution control (Section 68).	

Soil Conservation Act No.	The Act aim to prevent and control soil erosion and to protect, revamp,	At a time of soil sampling
76 of 1969	and conserve the soil, vegetation and water supply sources and	soil conservation must be
	resources, through directives declared by the Minister.	taken care of, and
		management measures
		must be part of the EMP.
Nature Conservation	To centralise and amend the laws relating to the conservation of nature;	The Proponent should
Ordinance No.4 of 1975	the establishment of game parks and nature reserves; the control of	ensure that any activities
	problem animals; and to provide for matters incidental thereto.	done in the project area do
		not in any way trade-off
		the wildlife and the
		ordinance requirements
		ordinance requirements are adhered to.
Agricultural (Commercial)	To provide for the acquisition of agricultural land by the State for the	ordinance requirements are adhered to. The Proponent should
Agricultural (Commercial) Land Reform Act No. 6 of	To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian	ordinancerequirementsare adhered to.TheProponentensurethatrelevant
Agricultural(Commercial)Land ReformAct No. 6 of1995(Agricultural)	To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian citizens who do not own or otherwise have the use of any or of adequate	ordinance requirements are adhered to. The Proponent should ensure that relevant regulations set under this
Agricultural (Commercial) Land Reform Act No. 6 of 1995 (Agricultural (Commercial) Land Reform	To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian citizens who do not own or otherwise have the use of any or of adequate agricultural land, and foremost to those Namibian citizens who have been	ordinance requirements are adhered to. The Proponent should ensure that relevant regulations set under this Act are always adhered to,
Agricultural (Commercial) Land Reform Act No. 6 of 1995 (Agricultural (Commercial) Land Reform Amendment Act No. 1 of	To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian citizens who do not own or otherwise have the use of any or of adequate agricultural land, and foremost to those Namibian citizens who have been socially, economically or educationally disadvantaged by past	ordinance requirements are adhered to. The Proponent should ensure that relevant regulations set under this Act are always adhered to, and that the project does
Agricultural (Commercial) Land Reform Act No. 6 of 1995 (Agricultural (Commercial) Land Reform Amendment Act No. 1 of 2014))	To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian citizens who do not own or otherwise have the use of any or of adequate agricultural land, and foremost to those Namibian citizens who have been socially, economically or educationally disadvantaged by past discriminatory laws or practices; to vest in the State a preferred right to	ordinance requirements are adhered to. The Proponent should ensure that relevant regulations set under this Act are always adhered to, and that the project does not disturb the roaming of
Agricultural (Commercial) Land Reform Act No. 6 of 1995 (Agricultural (Commercial) Land Reform Amendment Act No. 1 of 2014))	To provide for the acquisition of agricultural land by the State for the purposes of land reform and for the allocation of such land to Namibian citizens who do not own or otherwise have the use of any or of adequate agricultural land, and foremost to those Namibian citizens who have been socially, economically or educationally disadvantaged by past discriminatory laws or practices; to vest in the State a preferred right to purchase agricultural land for the purposes of the Act; to provide for the	ordinance requirements are adhered to. The Proponent should ensure that relevant regulations set under this Act are always adhered to, and that the project does not disturb the roaming of domestic animals from the

	purposes of the Act; to regulate the acquisition of agricultural land by	
	foreign nationals; to establish a Lands Tribunal and determine its	
	jurisdiction; and to provide for matters connected therewith.	
Forestry Act No. 12 of 2001	The Act cater for the management and use of forests and related	There are shrubs and trees
	products/resources. It provides protection to any living tree, bush or	within the proposed site to
	shrub growing within 100 meters of a river, stream or watercourse on	be explored. The
	land that is not surveyed or even of a local authority area. In such	proponent is therefore
	instances, a license would be required to cut and remove any such	required to obtain a permit
	vegetation.	from the Forestry office in
	These provisions are only guidelines.	Uis/Swakopmund, to
		remove protected species.
Atmospheric Pollution	This ordinance sets for the prevention of air pollution.	Measures should be set to
Prevention Ordinance No.		ensure that dust and
11 of 1976		fumes emanating from
		exploration activities is
		kept at acceptable levels.
Public Health Act No. 36 of	Section 119 states that "no person shall cause a nuisance or shall suffer	The Proponent and all its
1919	to exist on any land or premises owned or occupied by him or of which	employees/contractors
	he is in charge any nuisance or other condition liable to be injurious or	should adhere to the

Health and Safety	Details various requirements regarding health and safety of labourers.	provisions of these legal
Regulations GN 156/1997		instruments.
(GG 1617)		
The Regional Councils Act	This Act sets out the conditions under which Regional Councils must be	The relevant Regional
No. 22 of 1992	elected and administer each delineated region. From a land use and	Council are considered to
	project planning point of view, their duties include, as described in	be I&APs and must be
	section 28 "to undertake the planning of the development of the region	consulted during the
	for which it has been established with a view to physical, social and	Environmental
	economic characteristics, urbanisation patterns, natural resources,	Assessment (EA) process.
	economic development potential, infrastructure, land utilisation pattern	The Erongo Regional
	and sensitivity of the natural environment."	Council (Karibib
	The main objective of this Act is to initiate, supervise, manage and	Constituency) is the
	evaluate development.	responsible Regional
		Authority of the area in
		which the proposed
		activity will be undertaken,
		therefore should be
		consulted for this EA.
Labour Act No. 6 of 1992	Ministry of Labour (MOL) aim to ensure harmonious labour relations	The Proponent should
	through promoting social justice, occupational health and safety and	ensure that the proposed

	enhanced labour market services for the benefit of all Namibians. This	activity does not
	ministry insures effective implementation of the Labour Act no. 6 of 1992.	compromise the safety
		and welfare of workers.
Best Practice Guide:	Outlines the regulatory and legislative requirements for exploration in	The proponent should be
Environmental Principles	Namibia.	guided by this framework
for Mining in Namibia-	Serves as a guiding framework for the exploration phase of the mining	for best practice mining
Exploration	life cycle.	and exploration activities
		in Namibia.
National Heritage Act (27	Part V Section 46 of the Act prohibits removal, damage, alteration or	The project must ensure
of 2004)	excavation of heritage sites or remains. Section 48 off sets out the	that no heritage resources
	procedure for application and granting of permits such as might be	are damaged and/or
	required in the event of damage to a protected site occurring as an	removed during its
	inevitable result of development. Section 51 (3) sets out the	operations. All protected
	requirements for impact assessment. Part VI Section 55 Paragraphs 3 and	heritage resources (e.g.
	4 require that any person who discovers an archaeological site should	human remains, paintings
	notify the National Heritage Council. Heritage sites or remains are	etc.) discovered, need to
	defined in Part 1, Definitions 1, as "any remains of human habitation or	be reported immediately
	occupation that are 50 or more years old found on or beneath the	to the National Heritage
	surface".	Council (NHC) and require

	а	permit	from	the	NHC
	be	fore	hey	may	be
	re	moved a	and/or	reloca	ated.

3 DESCRIPTION OF THE PROJECT ACTIVITIES

3.1 Planned Exploration Techniques

Prior to undertaking the proposed activities on the EPL (mobilizing to site and undertaking any groundwork), the Proponent will be required to sign land use agreements and consent with the affected landowners / custodian such as the Daure-Daman Traditional Authority, and the Tsiseb Conservancy. The consents of land use have been obtained from the two custodians and attached hereto as Annexure K. it should be noteworthy that the exploration programmes are based on an iterative, results-driven and phased nature. Therefore, it is not possible at an early stage of exploration to give an exact duration of the exploration activities (Resilient Environmental Solutions, 2019). Moreover, the minerals exploration activities can take up to a maximum of seven years, with different projects at various stages of the exploration phase (Resilient Environmental Solutions, 2019).

The proposed project entails exploration for industrials minerals, dimension stones, precious metals, base, and rare metals mineral groups within EPL 7470. Non-invasive and invasive exploration methods will be applied during the exploration activities. Non-invasive exploration methods aim at geological desktop studies, aeromagnetic and remote sensing image processing and interpretation, geological field mapping, ground geophysical survey, surface rock and soil sampling. Conversely, invasive exploration methods are more about destructive methods of exploration such as reverse circulation or diamond drilling and pitting/trenching. Non-invasive exploration activities will be undertaken first to expound on whether more invasive activities are needed or not. Should non-invasive exploration techniques yield positive results, detailed site-specific drilling, trenching, and sampling will then be undertaken.

The application of the proposed exploration activities will be divided into three phases. The first phase will shed light on the initial desktop exploration activities, tailed by phase two which will focus on the initial reconnaissance field-based exploration activities, and the final stage of exploration will be on detailed field-based activities.

Phase 1: Desktop study and prospecting activities

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The description of the proposed desktop and prospecting activities to be implemented by the proponent are described as follow:

- Continuous engagement with the relevant authorities to obtain land access to the license area,
- Detail study and thoroughly understating of the infrastructure needed in support of the project and socioeconomic environment.
- Interpretation of satellite and topographic images to initiate target area for field reconnaissance work,
- Purchase, process, and interpretation of existing Government high aerial hyperspectral, resolution magnetics and radiometric geophysical data.
- Interpretation of all data and delineating of potential targets for future reconnaissance local 1:5000 field-based activities.
- This phase is completely on desktop studies and no invasive work will be conducted at this stage of the proposed exploration activities that will take about 3 months.

Phase 2: Initial Field-Based Activities

This phase will entail different methods of exploration as revealed in the previous sub-section. However, most invasive methods like trenching, pitting, sampling, and drilling will only be employed depending on the findings of phase 1?

Phase 2 of the project will execute the following:

- Detailed geological mapping with the focal point of identifying the rock units on the subsurface of the license area, targets based on the results of the first phase of exploration analysis undertaken. The geological mapping is to be conducted at a scale of 1:5000.
- Geochemical sampling pinpointing feasible drill targets based on the analytical results of the collected samples. Sampling is to be conducted at a spacing of 100m*500m
- Laboratory analysis of all the samples collected and interpretation of the results and delineating of potential targets for further infill sampling.

This phase will take up to 12 months, and will give insight depth information, based on the results as to whether the minerals available within the area are economical viable or not, and whether to continue with phase three (3), which is the last phase of exploration or not.

Phase 3: Detailed Field-Based Activities

This phase demands detail exploration activities.

Provided the economic and viable targets are found, the following detailed outline of the proposed local field-based exploration activities will be implemented as per the EIA report.

- Access preparation and related logistics to support activities.
- More geochemical sampling infills to help in confirmation of the prospectively of the target/s mapped out during the initial field-based activities.
- Ground geophysical survey, trenching, drilling, and trenching/pitting (Subject to the positive outcomes of the previous points).

To further assess the economic viability of the target/s, it may require an extension of the scope and scale of the possible field work. Additionally, the type of drilling method (RAB, RC, or Diamond drilling) to be applied will be chosen based on the type of material onsite whether its consolidated or not and also based on the expected. Any drilling method opted for usually only requires truck-mounted rigs and one or two support vehicles to transport the drill rods and air compressor (NSW Mining, 2013).

3.2 Projects Resources, Infrastructure and Services

Apart from the exploration methods to be undertaken for the project, the indispensable infrastructure and services such as water, electricity, roads network, accommodation and transportation are important components for the project and were considered during this EIA. Noteworthy, phases 1 and 2 will use very limited infrastructures and services, and this means only phase 3 will require most of these services daily. Prior to the commencement of phase 3, the temporary campsite for the contractors will be set up. The camp site will be within the EPL area and should adhere to the EMP provisions to ensure minimal damage to

the environment. The size of the exploration camp will be of very limited footprint during the exploration phase although it is expected to expand in the event that an economic mineral discovery is made.

3.2.1 Water

Water will be required during phase 2 and 3 exploration related activities such as: ground geophysical surveys, dust suppression, washing of equipment, drilling, domestic (drinking, cooking, and ablution). For exploration related activities such as cooking, drinking and personal use, about 300 litres of water will be required per week (1,200 litres per month). Exploration drilling, specifically diamond requires a lot of water, and it would require approximately 10,000 to 25,000 litres (10 to 25m3) per day, in instances where for example fractured formations are encountered) per hole during drilling A few communal farms have been observed in surrounding areas. The main source of water is borehole water which is located a few kilometres away from these farms. The water is drawn via water pipes from the borehole to the nearby farms. If sufficient, with the agreement between the proponent and the farmers, water can be drawn from these nearby communal farms water tanks, or deployed in from the Namwater water facility from the UIs municipality. Water will be sourced from existing boreholes on nearby farms and piped to the operating sites, subject to necessary agreements with landowners. Alternatively, water could be sourced from the Uis Municipality. To ensure that the already low potential local groundwater resources are not stressed or significantly impacted by the project activities such as drilling, the Proponent will be carting water from outside the area (where water supply is not an issue). The water will then be stored in relevant industry standard water storage tanks onsite that will be refilled as and when necessary.

3.2.2 Power

The main power source is diesel-powered generators which will be used to power the project during the duration of the operation. The proponent will ensure that in addition to the dieselpowered generator other sources of power will be used to limit the amount of carbon dioxide released into the atmosphere and in turn mitigate the global warming.

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On the other hand, various machinery and equipment required for drilling have their own power supplies and or generators attached. Fuel (diesel) will be stored in small mobile bowser where needed. The drill rigs will be refuelled either with Jerry cans or directly from the bowser. The world is transitioning to clean energy; therefore, this project will consider the use of solar energy to power the camp sites and activities. Diesel fuel will be used to power machinery onsite and to fuel vehicles. Additionally, considering the Dâures Green Hydrogen Pilot project undertaking, the project may benefit from the use of green hydrogen as a source of power in the near future.

3.2.3 Road Access

The EPL can either be accessed via C35 road from Uis, which passed through it on the Northwestern side of the EPL or through D1930 dirty road that passes through the EPL on its Eastern side. Two farmhouses are discovered on the flat side of (Western side) of the EPL. There are two gravel road that pass through the EPL area: one at the Northern end side, and the other on the South-eastern part of the EPL and quite several existing car tracks. Hence, the same roads can be used to have access to the EPL. All the access routes to the exploration's sites (or target areas) have not yet been determined, however, the shortest route is usually the preferred option

3.2.4 Contractors' Accommodation

It is anticipated that the workforce will be housed in temporary site camps or may reside in Uis throughout the exploration activities. if a decent temporary campsite is to be erected for the contractors and some employees, it will be setup at suitable locations within the EPL area in line with the EMP provisions. The camp site footprint will be limited at exploration level, but provision for extension will be made in case the project carries on with the test mining and mine development phases in an event of a discovery of economic minerals resources. The camp will have temporary facilities erected and will consist of showers, ablution facilities, cooking area and waste dumpsite. The showers and ablution facilities will be constructed in such a way that there are separate facilities for women and for men. The presence of these facilities will ensure that the exploration site is clean and tide.
3.2.5 Transportation

The first two phases of the project will be limited to a usage of 4x4 pickups for the everyday exploration activities. For the last phase (phase 3) additional vehicles will include trucks and drilling machines. The trucks will be used to deliver water for the exploration activities and contractors if needed. To avoid major road damages, water trucking will be done once or twice a month. The 4 by 4 pickups will be used for everyday exploration activities, whereas the drilling machines will be stationed at the site being drilled and only moved when moving to the next drilling site.

3.2.6 Domestic and hazardous waste

The domestic waste will be collected on site and it is to be placed in the ideal waste bins which will be placed on site. These waste bins will be emptied on a regular basis and the waste will be disposed to the nearest demarcated waste dump. No wastes of any sort will be burned on site.

On the other hand, hazardous waste generated is to be transported to and disposed of at the approved hazardous waste site in the nearest town (Uis) equipped for the disposal of hazardous waste to ensure that the area is not polluted.

3.2.7 Resources and Working Team

The project will recruit various geological consultants, and contractors during different exploration stages, to ensure the resources are explicitly defined. This will include a geophysics to conduct geophysical ground surveys. In addition, a drilling contractor will be appointed, and it is expected that they will have their drilling crew. Furthermore, temporary employment will potentially be available for a senior geologist, graduate Geologists (2 positions) and Technicians (4 positions) for the purpose of geological mapping and geochemical surveys. The number might increase as the project time line increases. The nearest populated town is Uis from which skilled and unskilled labour will be sourced primarily.

3.2.8 Health and Safety

The following measures will be implemented onsite to ensure safety and security:

- Adequate and appropriate Personal Protective Equipment (PPE) will be provided to every project personnel and visitor/inspector while on and working at site and visiting the site, respectively.
- First aid: A minimum of two first aid kits will be readily available at exploration and camp sites to attend to potential minor injuries, while major injuries will need to be attended to further by transporting the injured to the nearest health center for treatment. At least 2 personnel will be trained on administer first aid.
- Potential Accidental Fire Outbreaks: As a control measure for accidental fire outbreaks, a basic firefighting equipment, i.e., a fire extinguisher will be readily available in vehicles, at the working sites and campsite (accommodation units). The site personnel will be trained on and provided with firefighting skills.
- Open exploration trenches and boreholes: The trenches dug for sampling will be temporary fenced off to prevent potential injuries of mainly wildlife in the area. Once sampling is completed, the trenches will be progressively backfilled and levelled and fencing removed for storage or donation to the land custodians for the communities. Similarly, for exploration boreholes that are no longer required after rock samples, they will be backfilled and closed off.

Warning signage at hazardous site areas such as open trenches will be erected.

4 PROJECT ALTERNATIVES CONSIDERED

Alternatives are defined as "different means of meeting the general purpose and requirements of the activity" (Environmental Management Act 7 of 2007) of Namibia and its regulations (2012)). This chapter discussed different ways in which the project can be undertaken, as well as identify the alternatives that, in a practical way, can be applied to ensure minimal damage to the environment.

Different alternatives for proposed exploration activities have been identified. The most common and most important alternatives considered are the no-go option, location, services infrastructure, and exploration drilling methods. These alternatives are discussed as follows.

4.1 No-Go Option

The "No-Go" alternative refers to the alternative where the project has no provision to commence. With this option, any activities proposed for the EPL area will not take place, and hence none of the potential impacts (positive and negative) identified would occur. This implies that the area will not be explored, and all the potential mineral ores present will remain unidentified. With the No-Go option, the key losses that may never be realized if the proposed project does not go ahead include:

- Loss of insight geological knowledge and understanding of the site area regarding the targeted commodities.
- Loss of potential income to the local and national government through land lease fees, license lease fees, and various tax structures.
- Loss of foreign direct investment.
- Loss of potential employment opportunity; hence, there will be no local, regional and national economic contribution from the project.
- Socio-economic benefits such as skills acquisition to local community members would be not realized.

Considering the previous points, this alternative was not opted for the project. However, for certain areas of the project site that may be considered environmentally sensitive and/or protected, this alternative will be applied.

4.2 Alternative Project Location

It's worth mentioning, the location of the EPL is identified by the potential economic deposits in an area; geology specific. Due to the site determination resulting from mineral ores to be explored, which is area specific and primarily determined by the site geology, no alternative location is considered viable. From the literature/ desktop studies, the area is defined as an area with potential economic mineral resources that this project is proposing to explore, in

the country. It is for this reason that this location was chosen, and hence there is no other alternative area for this project.

4.3 Services Infrastructure

The EIA process has identified the services that may be required for the proposed exploration activities. Table 3 below presents the alternatives for the identified services.

Table 5: Alternatives considered in terms of	f services infrastructure.
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Services	Proposed source	Alternative source
Water	Obtaining water from the communal farms'	Hauling water from the nearest NEWater pump
	sources within the EPL or from Uis.	station near the project or from Uis with
	The proposed source will be used to ensure	permission from the municipality and local
	that the project will not generate depletion on	authority.
	the water level/availability of the sources that	
	the local community uses.	
Power for equipment	Diesel power generators will be used to power	Alternatively, the project will put up solar panels
	the project.	on site, to ensure that it does not entirely depend
		on the generator for power. The solar can be used
		for instance, cell phone charging and lighting.
Power for cooking and lighting for the	For cooking purposes, Gas stoves will be used	Firewood (purchased from permit holding
campsite	during the project activities. Using gas stove	suppliers) will be used in cases of emergencies (for
	ensure that the contractors will not use any	instance when the gas is unexpectedly fished).
	firewood from the area which would increase	Gas lamps will be an alternative lighting source.
	deforestation. Lighting system for the campsite	
	will be via portable solar lamps that will be	
	erected on site.	

Workers' accommodation	A temporary limited-sized campsite will be	In cases where there is an absence of a suitable site
	constructed within the boundary of the EPL.	for a camp, accommodation in the nearest town
	The campsite will be developed in the EPL area	i.e. Uis will be an option. The workers will be
	that is far from the close by farms to minimise	accommodated at any facility with the necessary
	noise pollution. ablution and electricity infrastructure.	
Waste Management	·	·
Sewage	Portable toilet – these are easily transportable	
	and have no direct impact on the environment	
	and ecology (if properly disposed). These are	
	chosen at the drill sites.	
Domestic waste	Onsite waste bins, regularly emptied at the	Driving waste to the nearest town landfill which is
	nearest landfill is the chosen option. This will	Uis is an alternative, but not viable as it can result
	prevent an everyday drive from and to the	in road damaging.
	nearest town for waste disposal, which can	
	damage the road and disseminate dust within	
	the area.	
Drilling waste (chemicals)	Waste generated is to be transported to and	In cases of emergencies, organic chemicals will be
	disposed of at an appropriate facility in the	used.
	nearest town equipped for the disposal of	

hazardous waste to ensure that the area is not	
polluted.	

5 PUBLIC CONSULTATION

5.1 Objective

It is one of the EIA's objectives to ensure that public consultations are done from the very beginning of the EIA process and throughout the project's life cycle. Public engagement is therefore a ground that opens opportunities for all the I&AP to comment on and/or raise their concerns and apprehensions regarding the proposed project. All raised comments and concerns are considered as an important part of the assessment process as per the EMA and its 2012 EIA Regulations and must therefore be included in that final scoping report and used as one of the determinant factors in the ECC decision making.

Furthermore, to ensure that possible social risks of project activities are identified, it is important to share information about the project at an early stage with the I & AP and hold consultations to discuss such risks. Customarily, the public knows their community better than anyone else thus, their input adds value to the identification of all potential impacts and to what extent further investigations are needed. Also, public consultation aids the process of identifying possible ways of impacts monitoring and mitigations measures.

5.2 Approach

The process for the public participation is shepherd by the public consultation definitions and guidance given by the MET as per the regulation 21 of the EIA.

a) Interested and Affected Parties (I&APs)

Relevant and applicable national, regional, and local authorities, and other interested members of the public were identified. Pre-identified I&APs were contacted directly via email and telephonically, while other parties who contacted the Consultant after project advertisement notices in the newspapers, were registered as I&APs upon their request.

I&APs are the people who are affected by the project development, directly and indirectly. These are considered interested in and/or affected by the proposed exploration activities. In addition, more I&APs were added to the stakeholders list as

they registered for the project, in response to the invitations for public participation. The complete list of I&APs is provided in Annexure C.

b) Communication with I&APs

Regulation 21 of the EIA Regulations details the process that should be undertaken during a given public consultations and this has been used in guiding the public consultation process. Communication with I&APs about the proposed development was facilitated through the following means and in this order:

- c) A Background Information Document (BID) containing descriptive information about the proposed exploration activities was compiled (Annexure D) and circulated with both pre-identified and registered I&APs between the 26th of October 2022 to 22nd of February 2023.
- d) Advertisements were placed in the Republikein Newspaper in the Market Watch section on the 20th of October 2022 and 27th of October 2022, and in the New Era newspaper dated 19th and 26th October 2022. The aim was to notify the public about the project by briefly explaining the activities to be conducted and its locality. (Annexure E).
- e) A site notice was fixed at Brandberg Multisave Super Market and at the Regional Councils offices (see Annexure G).

5.3 Public consultation

Communication with I&APs about the proposed development was facilitated through the following means. Below is subsequence of events that followed and in this order:

- The first public consultation meeting was scheduled for the 5th of November 2022 as per the Newspaper advertisements (Annexure E).
- It was then postponed due to the Paramount Gaob of the ≠Nukhoen/Damara which was hosting the annual Gaob Festival in Okombahe from the 4th to the 6th of November 2022.
- After consultation with the affected parties a second meeting was than scheduled for 17th of December 2022 (Figure 5-1). Although the consultants undertook a trip to Uis, the meeting ended up not taking place as the I&AP parties requested to meet the

proponent. The proponent was on maternity and thus could not attend the meeting. Which than resulted to no public consultation not taking place.

- A meeting was held with the on the 10th June 2023 with the Dâures Daman Traditional Authority and the proponent.
- Whereas an official public consultation was held on 17th June 2023 at the constituency offices in Uis (Figure 5-2).

During the meeting, the environmental practitioner discussed the main reason for the environmental impact assessment, and why it is being done in the area. The exploration activities that are likely to happen in the area provided the Environmental Clearance Certificate is granted have been discussed, including the impacts, they will have on the area. The scoping report was made available to all I&APs for public review from 17th of July 2023 until 24th July 2023.

The conservancy stressed on the negative effect that the exploration may have on the land. The meeting minutes and the attendance registers attached in Annexure H. No other comments were received other than the ones noted within the Annexure H. There are also no further comments received on the draft report.

The main concerns expressed by the I&AP during the consultation meeting are summarised below:

- a) How will their farmers be accommodated and well alerted before hand
- b) Pollution from the exploration companies
- c) Employment should be provided to the community members
- d) The members had concerns about their small scale miners and how they will be affected
- e) The members of the committee asked that they be given sometime so that they may be able to talk to the affected farm owners within the area so that there can be some sort of agreement and arrangement.

The environmental baseline (features) of the project area and the surrounding areas are presented and discussed in the following chapter.



Figure 5-1: Initial meeting at the members of Dâures Daman Traditional Authority at their offices.



Figure 5-2: Public consultation meeting in Uis on the 17th June 2023.

6 BIOPHYSICAL AND SOCIAL BASELINE

Exploration activities are always undertaken in an environment with specific conditions, which get impacted by these activities in one way or another. For this reason, it is always critical to have a thorough understanding of the pre-project conditions before commencement. Additionally, it is equally vital to ensure that a baseline understanding of the area is formed and to make effective decisions on certain issues that may come up through or after the project's operations. The next subchapters outline the biophysical, environmental and social baseline for the project area.

6.1 Geology

6.1.1 Regional geology

Regionally the EPL7470 area falls in the Southern Kaoko Zone (SKZ) and a part of the northern Central Zone of the Damarabelt (Miller, 2008). It lies between two NE trending crustal structures, the Khorixas Gasenairob Thrust (KGT) on the north and the Autseib Fault on the south. The EPL area occurs right on the junction of the Pan- African Kaoko and central Damara Belt (Passchier et. al, 2002). On a regional level, the zone is dominated by the Neoproterozoic Zerrissene Group turbidite system (Amis River Formation schists), Damaran granites, pegmatite, and late Cretaceous units (Brandberg Complex, Karoo sedimentary units and dikes). The intrusion of the Damara is mostly on the western end of the northern Central Zone and form a boundary between the NZ and the SKZ further west. However, the aeromagnetic data demonstrates that the NZ is rather ending abruptly against the granite, taper gradually to the SW.

6.1.2 Local geology surrounding EPL 7470

The main units spotted within the EPL are the undifferentiated Damaran Granites, greywacke (now metamorphosed to schists) of the Amis River Formation (Zerrissene Group) and the stanniferous late Damara pegmatites. Other units discovered in the vicinity of the EPL area are the Cretaceous units of Brandberg Massif and Karoo Group including both sediments and dolerite dikes. The pegmatites are usually intruded within structures and low-pressure zones (fractures, joints, or faults within the Damaran granites and in low pressure zones within the Zerrissene schists, predominantly along the regional foliation or at a low angle with the

foliation) ad they are the target units that host tin and lithium in the area. Apart from the schists, there are predominant thin zones of amphibolites within the Amis River Formation. These amphibolites are usually boudinaged and they can be distinguished from the schists on Remote Sensing images by their very dark to black colours (Miller, 2008).

Damaran granitoids in the area ranges from diorites, granodiorites to leucogranites whereas the rare metal bearing (Sn, Li, Ta, Cs etc.) pegmatites are the most evolved and the youngest of all other granitoid rocks in the area. In the Amis River Formation metasediments, pegmatites occur as both concordant (mainly) and discordant bodies in relation to the regional foliation. The age of these late tectonic Damaran pegmatites vary between 510 and 490 Ma (Ashworth, 2014) although younger ages of Jurassic-Cretaceous periods have been postulated (Diehl, 1986). During the geological investigation on the EPL area, it is discovered that mineralized pegmatites are largely dipping against the foliation. Several thin Karoo dolerite dikes occur within the area, generally trending N-S to NE-SW. These mafic dikes are coeval with Cretaceous ring complexes. Younger superficial cover of the Kalahari Group including calcrete and unconsolidated sand conceal some of the geology. Some surficial sediments in paleochannels are reported to contain alluvial tin and tungsten and could also be future exploration targets on the EPL area.



Figure 6-1: Local geology map around EPL-7470.

6.2 Landscape and Topography

The EPL area is relatively flat with an altitude between 850m ASL to 950m ASL from south towards the north. Although relative flat, small hills maybe seen in the north east top corner of the licenses. The EPL area is sporadically covered by river streams, as well as sand with



Figure 6-2: Contour map for EPL 7470.



Figure 6-3: Images showing EPL 7470 landscape and topography.

6.2.1 Climate

The license area falls within a Subtropical desert climate (Weather and Climate, Namibia). The area's yearly temperature is recorded with an average maximum of 31.21°C and a minimum of 14.57 °C which is it is -3.72% lower than Namibia's averages. It usually receives about 9.83 millimetres of precipitation and has 19.39 rainy days (5.31% of the time) annually. The maximum wind recorded is 27.05 Km/h while the minimum is at 8.32 Km/h.

6.2.2 Water Resources: Surface and Groundwater

The area is very dry and there is no observed surface water around except the ephemeral Uis river, which is a tributary to the Ugab river, that passes through the settlement. It is recorded that currently the settlement draws its water from the Nei-Neis aquifer located in the Omaruru River. It has recently been reported by The Namib Times Newspaper of January 24,2023 that currently, the settlement is experiencing water crisis. The Newspaper indicated that the infrastructure distributing the water to the settlement is dilapidated but was being repaired and there is not an updated news whether the crisis has been resolved or not. It also indicated that the water crisis in Uis will take longer to be resolved completely.

Noteworthy, the farms in the EPL have a borehole that they get their water from. This borehole has never dried up, and because it is for a domestic use and domestic animals, the farmers indicated that the borehole does not have a record of the rate of water pumped per day. The farmer also indicated that they have been using the same borehole for over 10 years now, and it continues to supply enough water.

6.2.3 Fauna and Flora

The research done by (P. Craven1 & D. Craven, 2000) on The flora of the Brandberg, Namibia, has shed light to the crucially of the occurrence of granite in the area is very in the existence of certain vegetation present. (Miller, 2008) has indicated that many of the perennial species are restricted to one or other geological formations for the rocks that are found in the area. Large areas of Uis are covered by rock plates, which do not retain water. These plates play a crucial role in the discussion of the vegetation in the area. This is because the run-off from these plates contributes to an increase or decrease in vegetation. Within the EPL 7470, which

is about 35Km South-east of Brandberg, a few trees were recorded during the site visit. These the Adenolobus gariepensis, Baccharis tola, and the Camel thorn tree.



6.2.4 Archaeological and Heritage Resources

Erongo region is one of the regions in Namibia that are believed to be home to many archaeological and heritage resources. Due to the location of the project and the destructive tendency of the exploration activities, which may include earth moving/ land alteration operations, it is a pre-requisite to conduct an Archaeological and/ or Heritage Impact Assessment (AIA). This is as per the National Heritage Act No. 27 of 2004 and the Environmental Management Act No. 7 of 2007. Based on the above grounds, OTAH and ESM Cultural Heritage Consultants (JV) was appointed to undertake an archaeological/heritage assessment for EPL 7470, which took place on the 15th to 18th of October 2022

The main assignment of the archaeological survey and assessment was to identify and capture all sensitive archaeological sites within the limits of EPL 7470 that could be negatively affected by the exploration activities of the proposed project. The assessment also objects to establish heritage significance of possible resources and assess their vulnerability. It also aims to estimates the extent of the possible impacts and establish mitigation measures.

The AIA has, therefore, been conducted the EPL 7470 to fulfil the following objectives:

- To identify, capture and document cultural/ archaeological materials and sites within and around the project area.
- Assess the nature and magnitude of risks and impacts the exploration project will have on heritage resources.
- To suggest possible conservation strategies for the cultural heritage resources, present in the EPL area which can be destroyed during the project activities.

It is worth noting that no cultural or archaeological materials and site was identified within the EPL area. The AIA has been submitted to the National Heritage Council (NHC), and the NHC has issued the proponent with a consent letter. See Annexure J.

6.3 SOCIAL BASELINE

6.3.1 Social Environment

Uis settlement is the closest settlement to the area of the EPL. According to UNESCO Institute for statistics, in 2020, the settlement has a low population of 2587. The settlement has two schools (one primary and a secondary school) with about 300 learners in total, one private doctor facility as well as a public health clinic. Because of the Uis Tin Mine, most people (more than 50%) within the settlement work for the mine, with a few public civil servants, while others focus on their small businesses. There are also a few farmers in the surrounding of the EPL area who depend on their communal land for food and wages.

Current land uses are such as heritage, conservation, communal farming, and tourism activities being undertaken within the neighbouring farms.

6.3.2 Social Demographics

Uis has a very low population of about 2587Based (UNESCO Institute of Statistics, 2020), and it is located within the former Damaraland. The settlement was established in 1958 by artisanal miners who settled there to exploit tin deposits within the area.

6.3.3 Economy

Extrapolating from the national unemployment statistics, the constituency has an unemployment rate of 33.40% and youth unemployment rate of 46.10% (Namibia Central

Bureau of Statistics, 2019). Hence, Economically, Uis is generally known for its mining and tourism activities. The area is also recognised due to the presence of various rare earth and industrial mineral deposits. Wages and salaries are the main source of income in Erongo region, and this is true for Uis. While other income sources include farming, and business it should be noted that most of the resident of Uis are mine workers. For the farmers in the vicinity of the EPL, farming is their main source of income. Also, the highest, famous Brandberg mountain which is a home to the worlds famous White Lady rock printing that is believed to be over 20 000 years old and set a foot to a lot of tourism which is a resident of Uis.

6.4 Land Use

Uis is known for its local mineral wealth. The settlement is also located in the shadow of the highest mountain Brandberg, and the well-known archaeological rock painting named White Lady, which exposed it to tourism. Apart from the presence of mining and several exploration activities happening in the area, it must be known that outside the settlement, apart from mineral exploration and exploitation, a large portion of land around Uis is used for communal farming and noted that the farmers depend on their vegetables and livestock for survival. The settlement in itself is formed up by businesses (super markets, restaurant, accommodation facilities, service stations, and bars), residential houses, educational facilities, and government offices.

7 IMPACTS IDENTIFICATION, DESCRIPTION AND ASSESSMENT

7.1 Impact Assessment

The methodological required to identify and assess the impacts that the project has on the environment must be frugal, and sensitive to the environmental factors. For this reason, this section aims to assess and identify the impacts of the project on the environment, that are likely to be adverse and permanent. There are methodologies used is listing and addressing certain quantifiable aspects of these impacts. The quality of the assessment and the identification of these impacts made it possible to draw up the possible, potent mitigation

measures to diminish the immensity of the impacts that would be expected from the numerous activities that comprise the proposed mineral exploration on EPL 7470.

It is important to note that the proposed project is associated with both positive and negative environmental impacts. However, the cynosure for this environmental assessment is mainly on the negative impacts. This is done to ensure that these impacts are properly addressed with competent mitigation measures in place, and that the impacts' significance is brought under control, while enhancing the positive impacts during exploration. The potential positive and negative impacts that have been identified from the exploration activities are listed as follow:

Positive impacts:

- The project will create employment opportunities for the locals
- Discovery of potential mineable mineral resource
- Addressing of Local, and regional socio-economic development through mining activities
- Open other investment opportunities/ business and infrastructure-related development benefits.
- The project will primarily look at employing local community and using local services (tracks for water hauling, local companies for waste disposal, etc.) were possible. This will in turn Improve local content.

Negative impacts:

- Disturbance to the grazing area
- Land degradation and biodiversity Loss.
- Causation of dust
- Water resources use
- Soil and possible water resources pollution
- Waste generation
- Occupational health & safety risks

- Vehicular traffic use & safety
- Generation of noise
- Disturbance to Archaeological & Heritage Resources
- Impacts on local Roads
- Social Nuisance: local property intrusion & disturbance
- Social Nuisance: Job seeking & differing Norms, Culture & values.
- Impacts associated with the closure and decommissioning of small-scale mining works.

EIA is much more than a process for obtaining an ECC. It aims to minimize, avoid, or offset the environmental impacts of a proposed development project. If done properly, it can promote sustainability in the area where the project is being implemented. To ensure this, the identified and evaluated impacts were assessed qualitatively, in terms of their chances of occurrence, scale/extent (spatial scale), magnitude (severity), and duration (temporal scale) to aid the development of sound mitigation measures. Certain biophysical and social features will be impacted by the proposed exploration activities as presented in Table 6, Table 7, Table 8, Table 9, and Table 10. The degree of impacts with numerical values has been used to facilitate a scientific approach. This approach determines the environmental impact significance. The methodology ensures consistency and that potential impacts are addressed in a rational manner, allowing comparison of a wide range of impacts.

It is elementary to predict the risks associated with the impacts when the significance of magnitude of the identified impacts is known. Each potential impact will be subjected to the following process:

- a) Provision of a concise explanation of the impact.
- b) Assessment of the pre-mitigation significance of the impact and
- c) Description of prescribed mitigation measures.

The mitigation measures are drawn to suit each potential impact identified, and if effectively executed and monitored, contribute to the project's attainment of environmental and social sustainable operational conditions.

The following criteria were applied in this impact assessment:

7.1.1 Extent (spatial scale)

Extent is an indicator of the physical and spatial scale of the impact. Table 6 shows rating of impact in terms of extent of spatial scale.

Table 6: Extent or spatial impact rating

1014 (1)	Low/Medium (2)	Madium (2)	Medium/High	High (5)
LOW (1)		weatum (3)	(4)	
Impact is in the site	Impact is beyond	Impacts felt	Impact extends	Impact
boundary: Site only	the site	within adjacent	far beyond site	ubiquitous on a
	boundary: Local	biophysical and	boundary:	national level or
		social	Regional	over
		environments:		international
		Regional		boundaries

7.1.2 Duration

Duration is defined as the time frame over which the impact is expected to occur, measured in relation to the lifetime of the project. Table 7 shows the grading of impact in terms of duration.

Table 7: Duration impact rating

Low (1)	Low/Medium (2)	Medium (3)	Medium/High (4)	High (5)
Immediate mitigating	Impact can be	Reversible over	Long-term	Long term; past
measures, instant progress	reversed within a	time; medium	Impact	closure;
	short	term (5-15 years)		permanent;
	period/fast,			irreplaceable or
	short-term			irretrievable
	impacts (0-5			commitment of
	years)			resources

7.1.3 Intensity, Magnitude / severity

Intensity refers to the significance or severity to which the impact calibrates the functioning of an element of the environment. The significance of the adjustment can either be positive or negative. Noting this, the positivity or negativity of the adjustment significance was therefore taken into consideration during the assessment of the impacts' severity. Table 8 shows the rating of impact in terms of intensity, magnitude, or severity.

Table 8: Intensity, magnitude, or severity impact rating

Type of	Negative				
criteria	H-	M/H-	M-	M/L-	L-
	(10)	(8)	(6)	(4)	(2)
Qualitativ	Very high	Substantial	Moderate	Low	Minor
e	chances of	retrogression	retrogression	retrogression	retrogression
	retrogression	, death,	, discomfort,	, slight	, nuisance or
	, high	illness or	partial loss of	perceptible	irritation,
	quantity of	injury, loss of	habitat /	alteration in	minor change
	deaths, injury	habitat /	biodiversity	habitat and	in species /
	of illness /	diversity or	or resource,	biodiversity.	habitat /

tot	tal loss of	resource,	moderate	Little loss in	diversity or
ha	abitat, total	severe	change	species	resource, no
alt	teration of	alteration, or		numbers	or very little
ec	ological	disturbance			quality
pro	ocesses,	of important			deterioration
de	eclining of	processes			•
rar	re species				

7.1.4 *Probability of occurrence*

Probability reveals the possibility of the impacts to occur. This revelation is determined by the evaluation of the previous experience with similar projects and/or based on professional judgment. See Table 9 for impact rating in terms of probability of occurrence.

Table 9: Probability of occurrence impact rating

Low (1)	Medium/Low (2)	Medium (3)	Medium/High (4)	High (5)
				Definite
unlikely; low	Likelv to occur	A possible, definite	likely if mitigating	(regardless of preventative
seldom. No	from time to	possibility,	measures are not	measures), highly
known risk or	time with risk or	frequent. Low to	Medium risk of	probable, and
vulnerability to	vulnerability to	medium risk or	vulnerability to	continuous. High
natural or	natural or	vulnerability to	natural or	risk or
hazards.		induced hazards.	induced hazards.	natural or
				induced hazards.

7.1.5 Significance

The above listed attributes determine the gravity of the Impacts the project will have to the environment. The significance of the impact "without mitigation" is the core determinant of the identity and degree of mitigation needed to avoid or minimise the impact. As stated in the introduction to this chapter, for this assessment, the significance of the impact without commanded mitigation actions was measured.

Once the above factors (Table 6, Table 7 Table 8 and Table 9) have been ranked for each potential impact, the impact significance of each is assessed using the *scale of magnitude* formula:

Significance (SP) = (magnitude + duration + scale) x probability

The maximum value per potential impact is 100 significance points (SP). Potential impacts were rated as high, moderate or low significance, based on the following significance rating scale (Table 10).

SIGNIFICANCE	ENVIRONMENTAL POINTS	SIGNIFICANCE	COLOUR CODE
High (positive)	>60		Н
Medium (positive)	30 to 60		М
Low (positive)	<30		L
Neutral	0		Ν
Low (negative)	>-30		L
Medium (negative)	-30 to -60		Μ
High (negative)	>-60		Н

Table 10: Significance rating scale

For the identified impacts to be avoided or minimised, there is a need to ensure that mitigation measures are applied for the identified impacts. This helps in combating the impacts by reducing their significance. Monitoring the application of the mitigation measures throughout the project's lifetime is the only way of confirming that the significance of the impacts is reduced to as low or medium as they should and are under control.

The impact assessment for the proposed exploration activities is displayed in the following subchapters.

7.2 Pre-operational Phase Impact Assessment

This is an assessment done in the project area prior or at the beginning of to phase 2 of exploration activities. This impact assessment is centred around the impacts identified in the process of the preparation of the exploration activities' site. The potential impacts during this phase include biodiversity impacts.

7.2.1 Impact Assessment of Biodiversity Loss

The vegetation within the area is disseminated, however, the clearance of the exploration site can still impact the biodiversity in the area to an extent. Moreover, the construction of roads and tracks to access specific areas within the EPL may have an additional impact on the area's biodiversity. To ensure minimal damage to the environment, it is important that the removal of vegetation for site preparation is done with care, and all the endemism removal will be avoided. The impact on biodiversity expected from the project will not be of such high degree and/or significance that it will have irreversible effects on the biodiversity and endemism of the area and Namibia as a whole. The assessment of this impact is presented in Table 11.

Table 11: Assessment of the impacts of the exploration activities on biodiversity loss

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L/M – 2	M – 2	M – 6	M – 3	M – 30

Post-	L-1	L- 1	M/L- 4	M/L-2	L – 16
mitigation					

7.2.1.1 Mitigations and recommendations to biodiversity loss

To avoid adverse impacts, the vegetation must only be cleared when required. Although there are no protected endemic or near-endemic found in the area, in case they are encountered during the exploration activities the number of protected, endemic, and near-endemic species removed should be documented.

- Trees with trunk diameters of 150 mm or greater should be surveyed, traced with paint (that is easily visible), and protected.
- Trees and plants protected by the Forest Act No. 12 of 2001 may not be removed unless accompanied by a valid permit from the local Department of Forestry.

7.2.1.2 Impact Assessment of Archaeological and Heritage Resources

An archaeological specialist was appointed, and a detail archaeology and heritage assessment has been conducted. The preparation of the site for the proposed exploration activities may involve clearing certain areas on site, which may impact areas that could potentially be home to archaeological and heritage resources. The construction of roads to access certain areas on the EPL may also expand the impact on these resources. Although there was no archaeological material found in the area during the AIA, it is necessary that the proponent and workers thereof are careful of hidden, or buried archaeological material that might be exposed as the project proceeds. Should any of the archaeological and heritage resources be discovered during the exploration activities mitigation measures need to be employed and adoption of the archaeological Chance Finds procedure should be incorporated in the project EMP, to make sure that these resources are not impacted. It is required that for a discovered hidden or buried archaeological material, the workers must ensure that no further ground disturbance must occur around the material area, and the area should be demarcated and reported to the heritage council for further assessment. For this reason, the pre-mitigation impact is assessed to be "medium" in significance and after mitigation, the impact is assessed to have a "low" significance. The assessment of this impact is presented in Table 12.

Table 12: Assessment of the impacts of the exploration activities on archaeological and heritage resources

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L/M – 2	L/M - 2	M – 6	H – 5	M – 50
Post- mitigation	L – 1	L- 1	M- 6	L/M – 2	L-16

7.2.1.3 Mitigations and recommendation to archaeological and heritage resources

- An archaeological expert was appointed and undertake a detailed archaeological survey. Once targets have been identified for drilling and/or other mechanically assisted exploration, and prior to the commencement of any such activities, an archaeological site inspection should be done prior to commencement of any of these activities
- All works are to be immediately ceased if an archaeological or heritage resource are encountered during activities on site.
- The project should adopt an Archaeological Chance Finds Procedure (Annexure
 K) to cater for unexpected discoveries of archaeological remains during exploration.
- The National Heritage Council of Namibia (NHCN) should advise and give a consent with regards to the removal, packaging, and transfer of the potential resource.

7.3 Operational Phase Impact Assessment

The potential impacts related to the operational phase of the exploration activities have been identified and assessed under this subchapter. The key impacts identified are impacts on

wildlife, soil and groundwater, waste, social, archaeological resources and health and safety. Short term potential impacts identified include dust and noise impacts.

7.3.1 Impact Assessment of Wildlife

Even though there was no wildlife observed within the area at the time of field assessment, nor were there footprints of the wildlife identified, it cannot be concluded that there is no wildlife that roam within the EPL area. Also, the impact on the wildlife may occur beyond the EPL boundary due to increase in vehicle traffic and machinery noise pollution. This implies that the wildlife roaming will be affected by the exploration activities taking place. The impact at the project site, is however not expected to be of such magnitude and/ or significance that it will have irreversible impacts on the biodiversity and endemism of the area and Namibia at large. This is because most of the wild animals within the surrounding are likely to roam at night, when there are no any exploration activities happening. The assessment of this impact is presented in Table 13.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M – 3	M – 3	M – 6	M – 3	M – 36
Post- mitigation	L/M – 2	L/M- 2	L/M- 4	L/M – 2	L-16

Table 13: Assessment of the impacts of the exploration activities on wildlife

7.3.1.1 Mitigations and recommendations to wildlife impacts

- Working hours should be restricted to 8h00 to 17h00 only to enable the wildlife to roam freely at night.
- Snaring, hunting, or capturing of wildlife is prohibited.
- A no-theft policy should be in place for the duration of the exploration activities and should strictly be adhered to.

7.3.2 Impact Assessment of Soil, Surface, and Groundwater

Improper handling, storage and disposal of hydrocarbon products and hazardous materials at the site may result in soil, surface, and groundwater contamination, in case of spills and leakages. As part of the waste management plan, the proponent and contractors or/and employees will ensure that there is material for spills absorption and suitable containers for hazardous material disposal. The pre-mitigation impact is therefore assessed to be "medium" in significance and after mitigation the impact is assessed to have a "low" significance. The assessment of this impact is presented in Table 14.

Table 14: Assessment of the impacts of the exploration activities on soil, surface, and groundwater

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M/H – 4	M/H – 4	M/H – 8	M – 3	M – 48
Post- mitigation	M – 3	L/M- 2	M- 6	L/M – 2	L – 22

7.3.2.1 Mitigations and recommendations to soil, surface, and groundwater impacts

- Effective training must be given to all employees to ensure that they can all correctly handle and store hydrocarbons.
- Vehicles and machinery must be parked in bounded areas when not in use or a drip tray should be placed beneath potential leakage points.
- Spill control preventative measures should be established to control soil contamination.
- Employees should be equipped with training in spill management.
- All potential contaminants (e.g. hydrocarbons) which might be carried by run-off should be contained on-site in the appropriate manner (e.g. temporary storage in designated containers, installation of oil-water separators etc.) and disposed of as hazardous waste, so that they do not contaminate soil or groundwater.

- Felicitous storage and handling of hydrocarbons on site must be applied.
- An emergency response plan should be in place for major / minor spills at the site during for the duration of the project (with consideration of air, groundwater, soil, and surface water) and during the transportation of the product(s) to the site.

7.3.3 Impact Assessment of Erosion

Exploration activities will demand removal of vegetation to an extent because of the creation of roads, setting up of temporary camps, and field excavation for exploration purposes. This removal may lead to erosion resulting from the impact on water run-off and loss of topsoil due to ground disturbance caused by vehicles, exploration activities e.g. excavation and trenches Minimal tranches will be required during exploration activities, and existing roads will be used to minimise creation of new roads in the area. Hence, the pre-mitigation impact is assessed to be "medium" in significance and thereafter of a "low" significance when the mitigation measures are employed. The assessment of this impact is presented in *Table 15*.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M/H – 4	M/H – 4	M/H – 8	M – 3	M – 48
Post- mitigation	M – 3	L/M- 2	M- 6	L/M – 2	L – 22

Table 15: Assessment of the impacts of the exploration activities on erosion

8.1.1.1. Mitigations and recommendations to erosion

- Where possible, the destruction of habitat (e.g. large trees or bushes) and/or degradation of the environment, including the sensitive drainage lines and other vegetated areas must be avoided.
- Ensure erosion control and prevention measures are in situ when vegetation is removed.
- Avoid drainage lines when planning for access routes/tracks.

7.3.4 Impact Assessment of Waste

Improper disposal of waste and hazardous materials (. e.g. fuel, solid waste, etc.) at the site may lead to pollution of the site and resultant environmental degradation. This impact is medium because there will be waste bins on site, labelled according to the waste to be disposed there. All the waste bins will be emptied and disposed at an approved waste disposal dump site in Uis. The assessment of this impact is presented in Table 16 **Error! Reference s ource not found.**.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M/L – 2	M/L – 2	M/L – 4	M – 3	L – 24
Post- mitigation	L-1	L- 1	L- 2	M/L – 2	L-12

Table 16: Assessment of the impacts of the exploration activities on waste

7.3.4.1 Mitigations and recommendations to waste

- Waste generated on site must be collected and disposed of daily at the nearest licensed landfill.
- Separate waste bins for domestic and hazardous waste should be placed on site.
- No waste may be buried or burned on site or anywhere else.

7.3.5 Impact Assessment of Health and Safety

Exploration activities have potential to cause health and safety risks to people operating on the site. The health and safety impact can result from dust caused by project activities and traffic, mishandling of equipment, fire, etc. All workers will ensure that they always have their PPE, and ear plugs for safety. No firewood will be used for cooking, and burning of wastes is prohibited. Fire extinguisher must be available on site for emergency, and safety training should be conducted by all employees as part of emergency preparedness plan. With all these in place, the pre-mitigation impact on health safety can be avoided and hence is assessed to

be "medium" in significance and after mitigation the impact is assessed to have a "low" significance. The assessment of this impact is presented in Table 17.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M/L - 2	M/L – 2	M – 6	M/H – 4	M – 40
Post- mitigation	L - 1	L- 1	M/L- 4	M – 3	L – 18

Table 17: Assessment of the impacts of the exploration activities on health and safety

7.3.5.1 Mitigations and recommendations to Health and Safety

- Health and safety training must be offered to workers, including an effective training on how the risks associated with hydrocarbon handling and storage can be prevented and controlled.
- During the works to be conducted, workers should be properly equipped with the appropriate personal protective equipment (PPE) to ensure that they are safe.
- Regular health and safety training should be carried out to help workers understand of the risks and the need to be vigilant when conduct any exploration work.
- Safety meetings should take place every morning before work starts as a reminder to the employees of the safest way of carrying out their duties.
- First aid kits? Firefighting equipment?

7.3.6 Impact Assessment of Dust

Dust generation will occur during exploration activities due to traffic, and drilling or /and trenching Dust suppression on the roads will always employed on the roads and around the drill rig to minimise dust. Driving vehicles will be restricted to only when its needed. The premitigation impact is assessed to be "medium" in significance and after mitigation the impact is assessed to have a "low" significance. The assessment of this impact is presented in Table 18.

Table 18:Assessment of the impacts of the exploration activities on dust generation

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L/M - 2	L/M – 2	M/H – 8	M – 3	M – 36
Post- mitigation	L - 1	L- 1	M- 6	M/L – 2	L – 16

7.3.6.1 Mitigations and recommendations to dust generation

- Dust dwindling techniques should be executed e.g., spraying of water, as needed.
 However, caution should be taken during times of low water availability then waterless dust suppression means (e.g. water absorbing salts) should be considered.
- Exploration workers should wear dust masks during exploration works if needed.

7.3.7 Impact Assessment of Noise

Exploration equipment and machinery produces high levels of noise during operations. On the level, the use of aircraft for remote sensing techniques during exploration over large areas may disrupt animals and human activity due to excessive noise. The pre-mitigation impact is assessed to be "medium" in significance and after mitigation, the impact is assessed to have a "low" significance. The assessment of this impact is presented in *Table 19*.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L/M – 2	L/M – 2	M/H – 8	M - 3	M – 36
Post- mitigation	L – 1	L- 1	M- 6	L/M - 2	L – 16

Table 19: Assessment of the impacts	of the exploration activities on noise
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8.1.1.2. Mitigations and recommendations to noise

• Exploration activities should not take place between dusk and dawn unless otherwise arranged with neighbouring farms

- Avoid flying aircraft directly over human settlements.
- Permitting for flights by NCAA?
- Consult with the relevant stakeholders about the best suited time to fly prior to commencing with the flights.
- Noise levels should adhere to the South African National Standards (SANS) regulations 10103.

7.3.8 Impact Assessment of Archaeological and Heritage Resources

Although the AIA done on the area indicated that there are no archaeological materials observed, the proposed exploration activities; drilling and trenching can have impacts on the possible hidden or subsurface archaeological and heritage resources. The EPL lies in a region of inferred archaeological sensitivity, with a high likelihood that it will contain archaeological sites. If any of archaeological sensitive area is approached during the exploration activities, there should be quality mitigation measures that ensure that these resources are not curtailed or destroyed. The assessment of this impact is presented in *Table 20*.

Table 20:	Assessment	of the	e impacts	of	the	exploration	activities	on	archaeological	and
heritage r	esources									

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L/M – 2	L/M – 2	M - 6	H – 5	M – 50
Post- mitigation	L-1	L- 1	M- 6	L/M – 2	L-16

7.3.8.1 Mitigations and recommendation to archaeological and heritage resources

 An archaeological expert must be appointed to undertake a detailed archaeological assessment and surveying once drilling targets, and/or other mechanically assisted exploration are identified. This must be done prior to the commencement of any of

these activities. Moreover, continuous monitoring and auditing must be done by the expert throughout the project's lifetime.

- All works are to be immediately ceased should an archaeological or heritage resource be discovered during activities on site.
- The project should adopt an Archaeological Chance Finds Procedure (Annexure K) to cater for unexpected discoveries of archaeological remains during exploration.
- The National Heritage Council of Namibia (NHCN) should advise and give a consent with regards to the removal, packaging, and transfer of the potential resource.

7.3.9 Impact Assessment of Social Environment

The proposed exploration development will benefit the affected communities by creating employment opportunities for community within proximity of the exploration site. Additional benefits may arise depending on the agreements reached between the farmers and the proponent. The assessment of this impact is presented in *Table 21*.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L – 1	L/M – 2	L – 2	M - 3	L – 15
Post- mitigation	L – 2	M- 3	M- 6	M/H - 4	M – 44

Table 21 :Assessment of the impacts of the exploration activities on social environment

7.3.9.1 Mitigations and recommendations to the social environment

• Affected Communities should be the first beneficiaries for any job opportunities that may arise from the project development.

7.3.10 Impact Assessment of Local Water

The project will be supplied with water from the local borehole. This may have an impact on the groundwater recharge of the aquifer, and its level thereof. It is therefore vital that the borehole pump testing, and water level check is done by a qualified hydrogeologist before
any water abstraction for exploration activities. This will tell if the bore hole can source the project with water. In case the borehole cannot supply water to the exploration project efficiently, the tracks will be used to haul water from Namwater in Uis. The assessment of this impact is presented in *Table 22*.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	L-1	L/M – 2	L - 2	M - 3	M- 50
Post- mitigation	L – 2	M- 3	M- 6	M/H - 4	L-16

Table 22: Assessment of the impacts of the exploration activities on Local Water

7.3.10.1 Mitigations and recommendations to the Local Water

- A qualified hydrogeologist will have to do the pump test prior to any exploration activities. This will ensure that the borehole current pump rate is efficient to supply water to the exploration activities, and if it cannot, find out if the pumping rate can be increased or not, and the maximum amount of water it can source for the project.
- In a case where the borehole cannot supply water efficiently, the project will be sourced by Namwater.

7.4 Decommissioning Phase

Once the exploration activities are decommissioned, the key potential impacts are groundwater pollution and the retrenchment of the employees.

7.4.1 Impact on Groundwater

In times where the exploration activities will be decommissioned, and the exploration area be rehabilitated. During rehabilitation, the disposal of waste and hazardous spill out may cause contaminate the soil. For this reason, pollution may occur given that contaminated soils are utilized during rehabilitation. The assessment of this impact is presented in *Table 23*.

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M/H – 4	M/H – 4	M/H - 8	M – 3	M – 48
Post- mitigation	M – 3	L/ML- 2	M- 6	M/L – 2	L-22

Table 23 : Assessment of the impacts of decommissioning of exploration activity on groundwater

7.4.1.1 Mitigations and recommendations on groundwater impacts

- Rehabilitation of the site to acceptable standards should be ongoing parallel to the exploration activities, as opposed to waiting for the exploration activities to cease.
- Landowners should be consulted to indicate acceptance of the rehabilitation.

7.4.2 Impact on Employment

At the decommissioning of the exploration activities, employees may lose their jobs via retrenchment. The pre-mitigation impact is assessed to be "medium" in significance and after mitigation the impact is assessed to have a "low" significance. The assessment of this impact is presented in *Table 24*.

Table 24 :Assessment of the impacts of decommissioning of exploration activity on employment

	Extent	Duration	Intensity	Probability	Significance
Pre- mitigation	M/HL/M – 4	M/H – 4	M/H – 8	M – 3	M – 48
Post- mitigation	L/M – 3	L/M- 2	M- 6	L/M – 2	L-22

7.4.2.1 Mitigations and recommendations on loss of employment

- The Proponent should inform the employees well in advance about the possibility of ending the exploration activities expected. This will allow the employees to start looking out for other job opportunities.
- The Proponent should make it known to the employees of the possibilities for work in other related sectors if possible. In light of this, the employee must also draft recommendation/reference letters for the employees to increase their chances of being short listed for any job position that they may apply for.

8 CONCLUSION AND RECOMMENDATIONS

8.1 Conclusion

The ESA Study for the proposed exploration activities on EPL-6990 was undertaken in accordance with the EMA and its 2012 EIA Regulations. The EIA process for the EPL 7470 entailed a detailed evaluation of the environmental impacts of the planned exploration project and identified alternatives, compared to the baseline conditions.

The public was notified as required by Section 21 to 24 of the EIA Regulations by placing adverts in three newspapers (*Die Republikein, and New Era*). Various consultation meetings with directly affected and key stakeholders were held in Uis on 17th of December 2022 and

10th June 2023 with the Dâures Daman Traditional Authority and the proponent, lastly on the

17th June 2023 at the constituency offices in Uis. The stakeholders made some comments to the proposed project activities. These comments were addressed and incorporated into this Report and EMP for inputs .

This included potential positive and negative impacts were identified. The key negative impacts were described, assessed and appropriate management and mitigation measures made thereof for implementation by the Proponent, their contractors, and workers. Some key qualitative descriptions such as measuring high, medium, and low impacts. The assessment of the impacts of the planned activities on the environment, including impacts on biodiversity, air, water, vegetation, and ecology has been included in this EIA scoping report. This includes all impacts related to the pre-operational, operational and maintenance and

decommissioning phases of the proposed project activities have been identified and assessed. Once the detailed assessment of the impacts was complete, and all the impacts are identified and evaluated, mitigation measures to reduce or avoid impacts were identified as follow:

- Impacts on biodiversity loss: There will be loss of vegetation during the site preparation for the proposed activity. However, the impact can be adequately addressed by the recommendations given in the report and management actions given in the EMP.
- Impacts on wildlife: The site is located within an area that is possibly a home to wild animals. The project activities may thus disturb their roaming patterns. The impact can be adequately addressed by the series of management plans given in the report and management actions given in the EMP.
- Impacts on soil, surface, and groundwater (during operational and decommissioning phase: If hydrocarbon products and hazardous materials at the site are not sufficiently handled, stored, and disposed, this may lead to soil and groundwater contamination, in case of spills and leakages. Should the exploration activities be decommissioned, and the excavated areas be rehabilitated, groundwater may be polluted if contaminated soils are used. The impact can be adequately addressed by the management plans given under report and the management actions given in the EMP.
- Impacts of erosion: Exploration activities may result in erosion from the removal of vegetation which could have an impact on water run-off and loss of topsoil. The impact can be efficiently addressed by the recommendations given in the report and management actions given in the EMP.
- Impacts on waste (during field operational phase): Improper disposal of waste materials at the site may lead to pollution of the site and resultant environmental degradation. The impact can be efficiently addressed by the recommendations given in the report and management actions given in the EMP.
- Impacts on health and safety: Exploration activities may cause health and safety risks to people operating on the site resulting from conducting work in an unsafe way. The impact can be adequately resolved by the mitigation measures given in the report and management actions given in the EMP.

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- Impacts on dust and noise: Exploration activities may create dust and generate noise around the site area. The impact can be sufficiently addressed by the recommendations given in the report and management actions given in the EMP.
- Impacts on archaeological and heritage resources: The proposed exploration activities may impact areas that could potentially house archaeological and heritage resources. Should these be encountered during the exploration activities mitigation measures need to be in place to ensure that these resources are not harmed. The impact can be efficiently resolved by the mitigation measures given in the report and management actions given in the EMP.
- Impact on social environment: The proposed activity may create employment for the local people. Additional benefits may arise depending on the agreements reached between the farmers and the proponent. Once the exploration activities are decommissioned those employed on contract basis may lose their jobs. The impact can be adequately addressed by the recommendations given in the report and management actions given in the EMP.

8.2 Recommendation

The Consultant is confident that the potential negative impacts associated with the proposed project activities can be managed and mitigated by the effective implementation of the recommended management and mitigation measures and with more effort and commitment put on monitoring the implementation of these measures. It is therefore, recommended that the proposed prospecting and exploration activities be granted an Environmental Clearance Certificate, and provided that:

- All the management and mitigation measures provided herein are effectively and progressively implemented.
- All required permits, licenses and approvals for the proposed activities should be obtained as required. These include permits and licenses for land use agreements, services provision agreements (water provision) to explore and ensuring compliance with these specific legal requirements.
- The Proponent, their project workers or contractors comply with the legal requirements governing their project and its associated activities and ensure that

project permits and or approvals required to undertake specific site activities are obtained and renewed as stipulated by the issuing authorities.

• Site areas where exploration activities have ceased are rehabilitated, as far as practicable, to their pre-exploration state. This includes the levelling of stockpiled topsoil, backfilling of exploration trenches and closing/capping of exploration holes.

Based on the information provided in this report, SS Consultants believes that the identified risks and impacts associated with the proposed exploration activities can be reduced to bearable levels and ensure nominal harm to the environment, should the measures recommended in the EMP be implemented and monitored effectively.

It is therefore recommended that the project receives an ECC, on the following conditions:

- That the EMP be effectively implemented and monitored
- The proponent must engage with the conservancy, local and traditional authorities prior to the commencement of the exploration activities.
- That once a target area has been identified all invasive work should be conducted in accordance with the EMP.

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ANNEXURE A: CV_ ANNA MT NEKUTA



ANNA NEKUTA

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SUMMARY

Anna Nekuta is and outstanding researcher and an International Energy and the Environment specialist, with more than 50% distinctions scores in the masters of science research papers (some published), skilled at gathering information. analyzing data, and executing knowledge leading to industry growth and Excellency. She also has a sound knowledge in Geology with five years of exploration experience in base and previous metals. Energetic critical-thinker, creative, focused on prioritization of projects while developing detailed, quality research for reports, data interpretation and good decision-making.

SKILLS

•	Exp	lorations	execution
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- Completing research
- Report preparation
- Conducting Research

- Environmental Impact Assessment Report Writing
- GIS Software
- Data collection and analysis
- Networking

EXPERIENCE

SS Consultant Senior Geologist	 To Ensure clients comply with the mining legislations;
05/2020-Present	 Compilation of Mineral Rights applications;
	 Compilation of various reports (i.e. geological mapping, desktop study, quarterly, QA/QC and progress reports);
	 Compilation of Environmental Impact Assessments;
	 Generating project data using ArcGIS Software;
	 To identify new mineral prospecting projects for clients;

• Supervision of the junior stuff;

B2Gold Exploration Namibia Exploration Geologist	 Leveraged Map Info and GIS software for accurate geological data gathering, and interpretation that led to finding a new deposit.
06/2013 - 02/2018	QA/QC control
	Ore Spotting
	 Aided planning by executing detailed mapping explorations, which produced Drilling positions and directions leading to positive results on the deposits being sought for.
	 Created timely, accurate and thorough research reports to support effective decision making for Exploration projects
	 Established and managed data gathering, interpretation and submission techniques for field projects to finding deposits.
	 Sighting for chips and core drilling
	Drilling Supervision
	 Core logging and geological Structures Interpretation

EDUCATION AND TRAINING

University of Dundee Scotland | Dundee, Scotland, United Kingdom Master's oEf Science in International Energy Studies and the Environment 06/2019

- MSc Cum laude graduate
- Dissertation: Diversification Strategies of electricity market: An Exploratory Study on the Success of Generation-Mix Strategies of Electricity Market; with Special Reference to Namibia.
- Scored Distinction in more than 50% of the Energy Studies Research Paper

University of Namibia Windhoek | Namibia Bachelor of Science in Geology

04/2013

ACTIVITIES AND HONOURS

- Member, Alumni Association (both for University of Namibia and Dundee University)
- Part of the Exploration group that worked and found Wolshag Deposit (part of B2gold Otjikoto project)

1. Dr Rafael Macatangay

Lecturer: Dundee University, Scotland Email: <u>r.e.a.macatangay@dundee.ac.uk</u>

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ANNEXURE B: ENVIRONMENTAL MANAGEMENT PLAN (EMP)

ENVIRONMENTAL SCOPING ASSESSMENT (ESA) FOR THE EXPLORATION OF INDUSTRIAL MINERALS, DIMENSION STONE, PRECIOUS METALS, BASE AND RARE METALS MINERAL GROUPS ON EPL NO.7470, LOCATED IN UIS DISTRICT, ERONGO REGION – NAMIBIA

COMPILED BY



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Proponent:

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1. OVERVIEW

1.1. Project Background

The Ministry of Mines and Energy (MME) has granted the EPL 7470 to the proponent to undertake mineral exploration activities for the mineral groups of industrials minerals, dimension stone, precious metals, base, and rare metals mineral. As per the Environmental Management Act, the proponent needs an Environmental Clearance Certificate (ECC) to be able to conduct the exploration. According to the Minerals (Prospecting and Mining) Act No. 33 of1992 (Minerals Act), Section 67(1)(a) denounce that an EPL is for the purpose of conducting of mineral resource exploration. The mineral groups consist of various elements that fall under each group, and it has been listed in the Minerals Act Schedule 1.

The Environmental Management Act (EMA) (2007) and its 2012 Environmental Impact Assessment (EIA) Regulations, requires that the proponent conducts an EIA for the project to identify and evaluate all the possible impacts it may have on the environment. The severity of the impacts helps in drafting effective Environmental Management Plan (EMP) that would help to manage the impacts by implementing the identified mitigation measures. If the EIA and EMP are not done, then this implies that the proponent cannot be awarded the Environmental Clearance Certificated required to undertake the listed activity, in this case the exploration activities.

EPL 7470 is situated about 15 km south of Uis town, Daures Constituency, Erongo Region. The EPL covers a total area of approximately 19036.7487 hectares of state land and can be accessed via C35 road from Uis, which passes through on the EPL on north-western side or via the D1930 road that passes through the EPL on its eastern side. The locality of the EPL is depicted **Error! Reference source not found.**.





Figure 1-1: Locality Map for EPL 7470.

1.2. Purpose of the EMP

The Environmental Management plan (EMP) is a guidance tool that provides a detailed plan of actions needed in the implementation of the mitigation measures invented for proposed project. EMP is a legally binding document and a person who breaches the provisions of this EMP may face imprisonment and/or a fine. The document aims to minimize and maximize the identified negative and positive impacts respectively. It also provides the management actions with roles and responsibilities for the successful implementation of the environmental management strategies by the proponent (Miss Frieda Namutenya Nambahu). It is mandatory that a draft of the Environmental Management Plan (EMP) is included as part of the scoping Environmental Assessment (EA) process. In short, a 'management plan' is defined as:



"...a plan that describes how activities that may have significant environments effects on the environment are to be mitigated, controlled and monitored."

The risks and impacts identified in the EIA are relate to the needed environmental management plan on the ground. Continuous EMP management should be adopted throughout the project's life to ensure that the implementation of the mitigations that are responsive to any change that may occur is effective and that the result of monitoring is positive throughout the project's life cycle.

The overall objectives of the EMP:

- To implement measures that will help avoid and/or minimise the adverse impacts of the proposed project.
- To ensure that regulatory authority stipulations and guidelines are adhered to.
- To develop measures that boost the value of environmental components where possible.
- To establish actions that protect environmental resources (biodiversity, ecosystem, natural resources, and social aspects).
- Responding to unpredicted events and providing feedback for continual improvement in environmental performance.

The following phases are addressed in this EMP:

- Phase 1: Initial Desktop study and prospecting activities Before the exploration activities start, preliminary legislative and administrative arrangements must be carried out. This is done to prepare for the proposed exploration activities.
- **Operation** the period during which the exploration activities will be operational.
- Decommissioning This phase is implemented when the proposed development's lifetime ends.



1.3. Environmental Assessment Practitioner (EAP)

SS Consultants is an independent environmental consultant, and it was appointed by the proponent (Miss Frieda Namutenya Nambahu) to undertake the required Environmental Assessment (EA) and an EMP for the proposed development. Following the Environmental Act of 2007, it is a requirement that the EMP is submitted to the Environmental Commissioner at the Department of Environmental Affairs (DEA) of the Ministry of Environment, Forestry and Tourism (MEFT), together with the scoping EA report as supporting document to the application for an Environmental Clearance Certificate (ECC). The EMP will also be used by Contractors as well as the Proponent to direct them during the proposed exploration operations to ensure that impacts on the environment are avoided where possible or limited altogether? as well as in the process of EIA scoping report review for decision making.

1.4. Legal Requirements

For the EMP to be considered, it must meet the requirements of Section 8 (j) of the EIA Regulations. The review of the legal framework aims to inform the Proponent, affected, and interested communities, and the decision makers at the MEFT: DEAF about the requirements and expectations sought out from the EMP. The EMP does not only adhere to the Environmental Management Act, but also accommodates other regulations that speak to the project activities like the Minerals (Prospecting and Mining) Act No. 33 of 1992 (Minerals Act) with regards to the exploration activities. This Act caters for the reconnaissance, prospecting, and mining for, and disposal of, and the exercise of control over, minerals in Namibia; and provides for matters incidental thereto.

The EMP must also address all the identified potential environmental impacts of the proposed activities throughout the project life cycle. On the same level, the EMP must include a system for assessment of the effective monitoring and management arrangements after implementation. It is the responsibility of the proponent to make sure that the proposed activity as well as the EIA process comply with the principles of Environmental Management



Action Plan (EMAP) and must ensure that any contractors appointed by them also conform to the Acts and regulations.

1.5. Assumptions and Limitations

This EMP has been developed with the acknowledgement of the following assumptions and limitations:

- This EMP has been developed based on the scoping-level of Environmental Impact Assessment (EIA) conducted for the proposed exploration on EPL 7470 inclusive of an Archaeological and Cultural Heritage Impact Assessment Report.
- The mitigation measures recommended in this EMP document are based on the risks/impacts in the scoping report which were identified based on the provided project description and site investigation. It is important to note that the EMP is not a explicitly document and can be amended throughout project development and if the scope of the project changes. This means that for any change in the scope of the project, the impacts will be reassessed, and the mitigation measures will be formulated correspondingly.

2. ROLES AND RESPONSIBILITIES

Mitigations implementation and monitoring are critical in ensuring the fulfilment of all the commitments made in the EMP regarding the avoidance and minimising of the identified impacts. The EMP and its monitoring programme is a continuous process that starts right at project's design, and continues through to development, operation, and decommissioning (if considered). It hence essential that the proponent carries the entire responsibility to ensure that the EMP is sufficiently implemented, as deem necessary, and make sure that sound monitoring is done. The delegated responsibility for the effective implementation of this EMP will rest on the following key individuals which may be fulfilled by the same person:

• Proponent's Representative



- Environmental Control Officer
- Contractors and Subcontractors.

2.1. Proponent's Representative

The Proponent can choose to manage all aspects of the planning and design, operation and decommissioning activities throughout the above-mentioned phases referred to in this EMP or choose to assign the responsibility to a suitably qualified individual referred to in this plan as the Proponent's Representative (PR). The Proponent may decide to assign the role of a PR to one person for all phases of exploration, or separate PR for each component i.e. planning and design, operation, and decommissioning phase.

The following are the responsibilities for the PR:

- Act as the on-site project manager and implementing agent.
- Appoint the Environmental Control Officer (ECO);
- Ensure that the Employer's tasks and responsibilities are properly implemented and are in compliance with the relevant legislation and the EMP for the project. ;
- Ensure that all the necessary environmental authorizations and permits have been obtained prior to any project's work that is related to such permits.
- Assist the Contractor in finding environmentally responsible solutions to challenges that may arise (in cases where serious threats occur, or high impacts to or on the environment caused by the project, the workers may stop work.)
- The Employer must be informed of the reasons for the stoppage as soon as possible.
- The PR has the authority to issue fines for transgressions of basic conduct rules and/or contravention of the EMP;
- Should the Contractor or his/her employees fail to show appropriate consideration for the environmental aspect related to the EMP, the PR can have person (s) and/or equipment removed from the site or work suspended until the matter is resolved.
- Report to the Employer on the implementation of this EMP on site (with input from the



ECO and/or independent environmental auditor);

- Maintain open and direct lines of communication between the Employer, ECO, Contractor and I&Aps with regards to environmental matters, and;
- Attend regular site meetings and inspections.

2.2. Environmental Control Officer

As part of the EMP implementation management, the proponent is required to assign responsibility for managing the on-site implementation of the EMP, from the planning and design phase to the operation and decommissioning phase, to a designated person, named herein as Environmental Control Officer (ECO). The Proponent or the PR may choose to assign this role to one person for all phases or assign separate individual ECOs to oversee the implementation of the EMP during each phase. The ECOs will have the following responsibilities:

- Manage the EMP and facilitate communication between the Proponent, PR and Interested and Affected Parties (I&APs) regarding this EMP.
- Implementation of site inspections (recommended minimum frequency is monthly during exploration and bi-annually during decommissioning) of all areas with respect to the implementation of this EMP (monitor and audit the implementation of the EMP);
- Biannual reporting to MEFT
- Making suggestions to the PR with respect to the issuing of fines for contraventions of the EMP; and
- Conducting the internal auditing of the EMP and recommending additions and/or changes to this document.
- Assist the PR in ensuring that all the necessary environmental authorizations and permits have been obtained.



- Assist the PR and Contractors in finding environmentally responsible solutions to challenges that may arise;
- Conduct environmental monitoring as per EMP requirements;
- Monitor the Contractor's environmental awareness training for all new personnel coming onto site;
- Keep records of all activities related to environmental control and monitoring;
- Attend regular site meetings.

2.3. Contractors and Subcontractors

The responsibilities of the Contractors and Subcontractors include:

- Comply with the relevant legislation and the EMP for the proposed exploration project;
- Prepare and submit to the proponent the following Management Plans:
 - ✓ Environmental Awareness Training and Inductions;
 - ✓ Emergency Preparedness and Response;
 - ✓ Waste Management;
 - ✓ Health and Safety, and;
 - ✓ Electric and Magnetic Fields (EMF) Safety.
- Ensure effective environmental awareness training for senior site personnel;
- Environmental awareness induction must be given to all site personnel prior to work commencement;
- Keep record of all the environmental awareness training and induction presentations, and;
- Attend regular site meetings and environmental inspections;



3. ENVIRONMENTAL MANAGEMENT PLAN ACTIONS

The Environmental Management Plan, described in this Report, is established from the findings of the scoping report. The EMP must be continuously updated during the implementation of the proposed project, and must incorporate the Namibian Environmental regulations and policies, and other local and international environmental best practices in exploration projects. The management measures proposed to mitigate the potential impacts are detailed in the action plans below.

3.1. Key Potential environmental impacts to be managed

From the EA, potential impacts per project phase have been identified and are summarised in the tables under subchapters 3.1, 3.2 to 3.5 as well as in the Scoping Report.

	Project Phase	Potential impacts identified in the EA	
1	Pre-Operation	Biodiversity and archaeological impacts	
2	Operation	Health and safety, soil, surface and groundwater contamination, wildlife disturbance, dust, noise,	
		environmental degradation, erosion, archaeological and social impacts.	
3	Decommissioning	Loss of employment and soil, surface and groundwater contamination.	

Table 3-1:Summary of key potential environmental impacts per project phase

Management actions must be implemented to manage the potential impacts. The potential impacts rated in the EA and carried out for the proposed exploration development are presented in the following tables. The management actions were formulated based on the three project phases:



- Planning and design phase (pre-exploration) (Table 3-2).
- Operation and maintenance phase management actions (during exploration activities)
- Table 3-3).
- Decommissioning phase (Table 3-4)

The proponent or the delegated personnel should evaluate these measures in detail and concede their commitment to the specific management actions detailed in the table of the next subchapters.



3.2. Phase 1: Planning and Design Management Actions

The management requirements detailed in **Table 3-2** must be implemented prior to any exploration activities commencement on site. Also, necessary preliminary legislative and administrative arrangements must be set up in preparation for the proposed exploration activities.

Table 3-2: Planning and design management actions

Aspect	Management Requirement	Responsible PERSON/S	TARGET DATE
Labour	Provisions mapped out to minimise the use of local labour should be	Miss Frieda Namutenya	Ongoing
Recruitment	inclusive within tenders concerning the:	Nambahu (the Proponent)	
	 Facilitation to aid the equitable treatment, non-discrimination, and equal opportunity of workers, and to establish, maintain, and improve the worker-management relationship, and promote compliance with national employment and labour laws. Provision stating that all unskilled labour is derived from local communities and should be included within tenders concerning the exploration operations. 		

	 Specific employment procedures ensuring local firms enjoy preference during tender adjudication should be included within tenders that have to do with the exploration operations. Provisions promoting gender equality pertaining to recruitment should be included within tenders concerning the exploration operations. 		
Occupational Health and Safety	 Preparation and submitting of the Emergency Preparedness and Response Plan. Comply to all the Namibian Health and Safety Regulations under the Labour Act and Exploration and Mining Safety Regulations. Employees must be trained on Occupational health and Safety Training. There should be always a qualified first aid. Ensure that the Personal Protective Equipment (PPE) are actively and effectively used. 	PR/ECO/Contractors	• Ongoing

EMP Implementation and Monitoring	 Ensure that all the details related to the EMP are executed during all exploration project phases. Adhering effectively to all relevant legislation and this EMP. Conducting regular meetings as a reminder of all the EMP details and doing site inspections. 	• PR/ECO/ Contractors	• Ongoing
Consultation with affected communities	 There should be an ongoing informed consultation and participation with the affected communities (community, local and traditional authorities) prior to any exploration activities commencement and throughout the activities to provide them with the following information. Detailed work plan with regards to the exploration activities. Discussion of access agreements. Discussion of compensation (as necessary). 	 Miss Frieda Namutenya Nambahu/ PR/ ECO 	• Ongoing

	 Any other concerns or information requirements that the farmers may have. Implementing the grievance mechanism with the affected communities to ensure that all the concerns and grievances related to the project are received, noted, and resolved. Resolve the affected communities' issues and concern promptly and transparently and in a culturally fitting way. An allegiance by the exploration company for the rehabilitation of the site when exploration activities are decommissioned. 		
Archaeology	 An archaeological expert must be appointed to conduct a detailed archaeological survey and monitoring once targets have been identified for drilling and/or other mechanically assisted exploration. 	 Miss Frieda Namutenya Nambahu 	 During phase two and

Once the exact locations of the exploration sites are determined,	phase
and should a heritage or archaeological site be uncovered, an	three
Archaeological Chance Finds Procedure should be applied as	
outlined in Appendix K of the Scoping Report.	



3.3. Phase 2: Operational Phase Management Actions

The management actions for the operational phase during which the exploration activities are listed in

Table 3-3.

Table 3-3:Operation phase management actions

Environmental	Potential	Management Actions	Responsible Person(s)	Target Date
Feature	Impact			
Waste	Visual impact	• The exploration site and its	PR/ECO/Contractors	Ongoing
Management	and soil	surrounding should always be kept		
	contamination	tidy.		
		• All domestic and general waste		
		accumulated daily should be		
		cleaned and contained daily.		
		• No waste may be buried or burned.		
		• Waste containers (bins) should be		
		emptied regularly and removed		

		from site to the nearest municipal	
		waste disposal site.	
		All recyclable waste needs to be	
		taken to the nearest recycling	
		depot.	
		Several, separate waste containers	
		(bins) for hazardous and domestic /	
		general waste must be provided on	
		site.	
		• Employees should be sensitised to	
		dispose of waste in a responsible	
		manner and not to litter.	
		All the wastes must be removed	
		from site after the completion of	
		the project.	
Hazardous	Soil and	All heavy operation vehicles and PR/ECO/Contractors	• Phase two and
Waste	groundwater	equipment on site must be supplied	Phase three of
	contamination	with a drip tray.	the project
		All heavy operation vehicles should	

		 be maintained regularly to avoid oil leakages. Maintenance and washing of operation vehicles must happen only at a designated workshop.
Groundwater	Groundwater contamination	 The use of the toilets instead of the veld must be strictly adhered to. If grey water can be collected from ablution facilities at the contractors' camp it should be recycled and: Used for dust suppression; Used to water vegetable gardens or to support a small nursery in local communities (as and when agreed upon by such communities); and/or Used to clean equipment.

All run off materials such as	
hydrocarbons wastewater and	
other potential contaminants	
should be contained on site	
appropriately and disposed of in	
accordance with municipal	
wastewater discharge standards, so	
that they do not reach to ground or	
surface water systems.	
 Wastewater (excluding sewage) 	
should be drained into lined /	
impermeable catch pits, big	
enough for daily / weekly usage	
without overflowing. Water from	
these catch pits should be	
removed from site to the nearest	
wastewater treatment facility by	
an approved wastewater removal	
company.	

	Employees must be equipped	
•	Employees must be equipped	
	with an appropriate groundwater	
	impact awareness training.,	
•	There must be an established and	
	maintained emergency	
	preparedness and response	
	system that facilitates space for	
	responding to any accidental and	
	emergency situations to prevent	
	and mitigate any harm to people	
	and the environment. This can	
	account for major / minor spills	
	and firefighting at the exploration	
	site during exploration activities	
	(with consideration of air,	
	groundwater, soil and surface	
	water).	


Soil	Soil	Spill control preventative	• PR/ECO	Ongoing
	contamination	measures should be put in place		
		to control soil contamination.		
		• An impermeable liner should be		
		placed on site to preven	:	
		contamination from reaching to		
		surrounding soils and		
		groundwater systems.		
		• Potential contaminants such a	5	
		hydrocarbons and wastewate		
		should be placed in appropriate	2	
		containers on site and be	2	
		disposed of in accordance to		
		municipal wastewater discharge	2	
		standards to ensure that they de		
		not contaminate soils in the area		
		Soil contamination should be	2	
		monitored on site daily by PR and		

	monthly by ECO.	
•	ECO(s) should ensure that	
	enough number of drip trays are	
	available on-site and that these	
	are utilised in the event of	
	leakage from construction trucks	
	or vehicles.	
•	Contaminated soils onsite that	
	may have resulted from	
	leakage/spillage from	
	construction vehicles or	
	equipment should be removed to	
	a depth dependent on the size of	
	the spill, and disposed at a	
	designated landfill. The removed	
	soil must be replaced with clean	
	soil.	

Biodiversity	Loss of	•	Recommendations and	PR/ECO/Contractors	Ongoing
	Biodiversity		mitigation hierarchy as provided		
			by the vegetation study with		
			regards to the protection of		
			biodiversity in the area should be		
			adhered to and monitored during		
			exploration activities.		
		•	Trees with a trunk size of 150 mm		
			and bigger should be surveyed,		
			marked with paint (readily visible)		
			and protected.		
		•	The Proponent should only, when		
			necessary, remove trees within		
			the actual footprint of the specific		
			exploration activities with		
			permission if required. Trees that		
			are not within the footprint		
			should be left to preserve		

		biodiversity in the area.		
		• If cleared, the numbers of		
		protected, endemic and near		
		endemic species removed should		
		be documented.		
		• Trees and plants protected under		
		the Forest Act No 12 of 2001 must		
		not be removed without a valid		
		permit from the local Department		
		of Forestry.		
Terrestrial	Noise and	• The dust generated during the	PR/ECO/Contractors	Ongoing
environment	dust	exploration activities should be		
		reduced by means of water spray.		
		• If feasible, wastewater should be		
		treated to an acceptable water		
		quality level, so that it can be		
		used for dust suppression.		
		Noise levels during exploration		

activities should be kept within	
the allowable standards for urban	
areas.	
• Noise levels should adhere to the	
SANS restrictions on noise.	
• The working hours should be	
restricted to daytime due to the	
use of heavy equipment, power	
tools and the movement of heavy	
vehicles.	
Noisy equipment should be off	
when not used to avoid noise	
pollution on site and its	
surroundings.	
• Workers performing noisy tasks	
should wear ear plugs and should	
be rotated regularly to avoid	
exposing them to excessive noise	

		•	for a long period of time in a day. Workers should be equipped with personal protective equipment (PPE) such as earplugs to reduce noise exposure. Workers should ensure that they always wear the PPE on work		
			sites.		
Health and Safety	Health and safety impacts	•	The contractor(s) should ensure that all personnel are equipped with personal protective equipment (PPE), such as coveralls, gloves, safety boots, safety glasses and hard hats always. Workers should ensure that they always wear their PPE at work, in an appropriate way.	PR/ECO/Contractors	Ongoing

	Alcohol should be prohibited
	during working hours.
	No workers should be allowed on
	site if under the influence of
	drugs and alcohol.
	An appropriate location should
	be indicated on the site for the
	parking of operation vehicles.
	Public access to the exploration
	site should be prohibit.
Exploration	The Proponent should ensure Miss Frieda Ongoing
labourers	that locals got the priority for Namutenya
	employment of any unskilled Nambahu
	labour.
	 Portable toilets (i.e., easily
	transportable) should be
	available on site.
	 Separate bathrooms or toilets

· ·	
	should be available for men and
	women and should clearly be
	indicated as such.
	 Sewage waste needs to be
	removed on a regular basis to the
	nearest approved sewage
	disposal site.
	Workers responsible for cleaning
	the toilets should be provided
	with latex gloves, rubber boats,
	overalls, masks and all the
	necessary PPE for cleaning.
	No workers may reside on-site for
	the entire duration of the
	exploration period. Only a
	security guard will be allowed to
	sleep on-site (if there will be any).
	 The proponent or contractor
	should draft a Communication

Plan, which should outline as a	
minimum the following:	
 How stakeholders, 	
who require ongoing	
communication for	
the duration of the	
exploration period,	
will be identified and	
recorded and who will	
manage and update	
these records.	
o How these	
stakeholders will be	
engaged throughout	
the project lifetime.	
o Provision should be	
made for a grievance	
mechanism – outlining	
how to discover and	

assess the issues	
raised and determine	
how to address them,	
inclusive of further	
steps of arbitration if	
feedback is deemed	
unsatisfactory.	
o There should be	
continues	
engagement with the	
stakeholders and	
affected communities	
to ensure they are	
aware of the relevant	
communication	
channels and that	
they are part of the	
project decision	
making where	

		needed.		
Water	Groundwater	No wastewater / effluent should	PR/ECO/Contractor	Ongoing
	contamination	be allowed to leave the site		
		premises without proper control.		
		 These should be disposed in 		
		accordance with municipal		
		wastewater discharge standards.		
		• Daily maintenance of exploration		
		equipment and vehicles should be		
		done to detect early spills or		
		leakages.		
		 An emergency responsive plan 		
		should be available for major /		
		minor spills at the exploration site		
		during operation (with		
		consideration of air, groundwater,		
		soil and surface water) to prepare		
		the workers on how to respond to		
		any emergency.		

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		Groundwater impact awareness			
		should be raised among the			
		employees involved in this phase.			
Wildlife and	Disturbance of	Working hours should be Miss Frieda	٠	Prior	to the
Stock animals	wildlife and	restricted to during the day so that Namutenya		project	
	stock theft	the wildlife can roam freely at Nambahu/		comme	ncement
		night. PR/ECO/Contractors		(in	the
		• The contractor is to compile a		employ	ment
		Non-Theft Policy to which all		contrac	t).
		workers are to comply with.	٠	Ongoin	3
		 All exploration workers are to 			
		cohere to the Non- Theft Policy.			

Phase 4: Rehabilitation and Decommissioning Management Actions

The table below presents the management action for decommissioning phase.

 Table 3-4:
 Decommissioning phase management actions

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Environmental	Impact	Management Actions Responsible Person/s	Target date
Feature			
Employment	Loss of	The Proponent should inform Miss Frieda Namutenya	• At least 6
	employment	the employees well in advance, Nambahu	months before
		of any intentions to end the (proponent)/PR/ECO/Con	the project
		exploration activities, and the tractors	closure
		expected date of such.	Ongoing
		The Proponent should motivate	
		and raise awareness of the	
		possibilities for work in other	
		industrial sectors.	
		 Implement a skills training 	
		programme during the	
		operations phase.	
Rehabilitation	Groundwater	During the initial prospecting PR/ECO/Contractors	Throughout
	contamination	phase, only limited surface rock	the entire
		and soil sampling will take place	phase 2 and
		and it is unlikely that any	Phase 3.
		damage be left by this activity.	

• All waste, inoperative samples,	
and any other remains from the	
site must be removed.	
• All sample bags, plastic waste.	
survey pegs, materials used for	
sump creation etc. from site at	
completion of compliant	
completion of sampling	
schedule must be detached.	
Site should be retroverted to as	
close as possible to its original	
condition.	
Re-contour and rip the drill site	
before the site is finally	
decommissioned.	
• Fill holes, rip up, rake track, and	
spread stockpiled topsoil back	
over the entire new tracks	
made, to allow re-vegetation.	
• Make sure that the ECO did a	

site inspection prior to and after	
rehabilitation to check	
rehabilitation efforts of each	
drill site.	



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Site closure and rehabilitation

Rehabilitation is an action for recovering damage done by exploration activities. The core reason for rehabilitation is to revive a damaged/ disturbed environment close to its pre-exploration state. It is also planned to accommodate the access road, vehicle tracks around the site, vegetation removal, abandoned exploration drill holes, and restoration of areas covered by sampling stockpile and rock piles. The disturbed areas will be covered by the collected topsoil and spread evenly. Also, where possible, all the removed native plant species in disturbed areas will be replanted. The closure vision for the proposed project is to establish a safe, stable, and non-polluting post- prospecting landscape that can facilitate integrated, self-sustaining and value generating opportunities, thereby leaving a lasting positive legacy.

Site closure and rehabilitation activities

All waste (such as hazardous and domestic) will be transported offsite for disposal in licensed landfills in Uis or other surrounding towns like Hentisbay or Omaruru. Damaged or/and contaminated areas will be cleaned up, treated where necessary and recovered to its pristine state.

- ✓ Obliteration of camping structures.
- ✓ Unfastening of equipment on site.
- Removal of associated infrastructures such as storage tanks, solar panels and heavyduty generators.
- ✓ Where access tracks have been established in cases where there are no roads, these will be rehabilitated and closed as part of normal closure actions in consultation with landowners.
- Existing secondary roads in the area should be used to prevent damages of the main road.
- The recovered topsoil and subsoil should be employed to develop the original soil profile.

The rehabilitation actions deliberated to be employed during the recommissioning of the

proposed exploration activities are described below.

Remediation of Contaminated Areas

All soil contaminated with hydrocarbons will be removed, excavated, and disposed in accordance with nearest town council disposal requirements at appropriate sites.

- ✓ Removed soils will be managed as determined by the nature and degree of the contamination.
- ✓ All equipment in which chemicals have been stored or transported will be cleaned and disposed of in a suitable disposal facility.

Waste Management

Waste management activities will include:

- ✓ Hazardous waste will be managed, properly handled, classified and disposed.
- ✓ No burring and burying of waste.
- ✓ Nonhazardous substances will be disposed in the nearby landfill sites.
- ✓ If required, temporary salvage yards will be fenced for security reasons, particularly where these are located close to public roads.

3. CONCLUSION

Based on the recommendation given in this EMP, SS Consultants is confident that the proposed exploration activities, as described in the EA report be granted an Environmental Clearance Certificate, if adhere to EMP. The project should be monitored and all the legal requirements pertaining to this development must be complied with.

The Environmental Management Plan should be used as an on-site and on-going guiding document during all phases of the proposed project, and auditing should take place in order to ensure effective implementation of the EMP. Parties responsible for transgression of the EMP should be held responsible for any rehabilitation that may need to be undertaken. Overall, the severity of potential environmental impacts of the proposed project activities on the receiving environment (physical, biological, socioeconomic environments and ecosystem

functions) will have low probability of occurrence, localized extent, and low magnitude and temporally duration. This report should be viewed as a framework for merging mitigation measures and applicable legal tools to ensure both compliance and protection of the environment and its ecosystem. It is therefore important that the proponent provide sufficient support for human and financial resources, for the execution of the proposed mitigations and effective environmental management during the planned exploration activities.

Based on the recommendation given in this EMP, SS consultants is confident that the proposed exploration activities, as described in **Chapter 2** of the scoping report may be granted an Environmental Clearance Certificate, provided that the EMP is implemented and that all the legal requirements pertaining to this development are complied with.

3.4. Recommendations for Monitoring

For the environmental impacts to be avoided and/or minimized, the monitoring measures below must be implemented:

- Monitoring of the implimentation of mitigation measures to ensure success as set out in the EMP has been complied with.
- Non-compliance is to be recorded and discussed at weekly site meetings and timeous remedial actions taken.
- Should dust and noise complaints be received, moderation measures should be implemented such as water spraying, and continued communication should be held with the aggrieved parties until the noise and dust matters are clarified.

4. **REFERENCES**

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ANNEXURE C: LIST OF INTERESTED AND AFFECTED PARTIES



PROJECT TITLE: ENVIRONMENTAL SCOPING ASSESSMENT REORT FOR THE PROPOSED EXPLORATION ACTIVITIES ON EPL 7470

Table 1: THE LIST OF THE REGISTERED INTERESTED AND AFFECTED PARTIES I&AP

NAME AND SURNAME	ORGANISATION	POSTAL ADRESS	CONTACT NUMBER	EMAIL
1. Gerson Gurirab			+264 817732335	ghragerson@gmail.com
2. Adelma Uises (Secreatary)	Daures Daman Traditional Authority		+264813702167	dauredaman@gmail.com
3. Gotty Gaoseb				ggaoseb@gmail.com
4. Eric Xaweb (Manager)	Tsiseb Conservancy		+264813479255	tsisebconservancy@gmai l.com
5. Solly Brown				Sollybrown476@gmail.co m
6. Upon (vice Chairperson)	Conservancy		+264813396692	uisesviola@gmail.com
7. Jeseja Goseb	Tsiseb Conservancy		+264813348186	
8. Mr. Uiseb			+264813402077/0814582 322	
9. Pastor	0816393173			

ANNEXURE D: BACKGROUND INFORMATION DOCUMENT



BACKGROUND INFORMATION DOCUMENT (BID)

ENVIRONMENTAL SCOPING ASSESSMENT (ESA) FOR THE PROPOSED INDUSTRIALS MINERALS, DIMENSION STONE, PRECIOUS METALS, BASE AND RARE METALS MINERAL EXPLORATION ACTIVITES ON EXCLUSIVE PROSPECTING LICENCE (EPL) 7470 LOCATED IN UIS DISTRICT, ERONGO REGION, NAMIBIA

PURPOSE OF DOCUMENT

The purpose of Background Information Document (BID), is to provide basic detailed information about the proposed listed activities and to be shared with all registered potential Interested and Affected Parties (I&APs) during public consultation as part of the EIA process. Further BID aims to outline the EIA process and public consultation methods to be followed.

Hence, BID aims to provide:

- An overview of proposed exploration activities on EPL 7470 for industrial minerals, dimension stone, precious metals, base and rare metals mineral groups respectively.
- An overview of the Environmental Impact Assessment process; and
- Guidance on how members of public can participate in the EIA process

I&APs comments and concerns are vital to the success of the EIA process and potential public members are encouraged to register and participate.

Please register / complete registration form and submit to SS Consultants CC on or before the 28th of **October 2022**:

Attention: Ms. Anna Nekuta Address: Unit 24, Bougain Villa, Sam Nuuyoma Road, Windhoek, Namibia Email: admin@ssconsultants.co Cell: +264814304609

INTRODUCTION

SS CONSULTANTS CC (hereafter referred to as the consultant), is an independent mineral resource and environmental consulting company has been appointed by Frieda Namutenya Nambahu (here after referred to as Proponent) to undertake an environmental scoping assessment process and obtain environmental clearance certificate on behalf of the latter for the proposed mineral exploration activities on EPL 7470.

The proposed exploration activities fall in the listed activities under the Environmental Management Act 7 of 2007 - activities which may not be undertaken without Environmental Clearance Certificate. Hence the proponent is expected to obtain an Environmental Clearance Certificate from the Environmental Commissioner prior to the commencing of these exploration activities.

The proposed development is therefore related to the specific listed activities as outline by relevant sections in EMA Regulations of 2012:

• Construction of facilities for any process or activities which requires a license, right or other form of authorisation, and the renewal of a license, right or other form of authorisation, in terms of the Minerals (Prospecting and Mining Act), 1992 (Section 3.1);

• Other forms of mining or extraction of any natural resources whether regulated by law or not (Section 3.2);

• Resource extraction, manipulation, conservation, and related activities (Section 3.3);

• Abstraction of ground or surface water for industrial or commercial purposes (Section 8.1).

• Manufacturing, storage, handling, or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974 (Section 9.1).

• Any process or activity which requires (Section 9.2).

1. Project Description

The license was issued to Frieda Namutenya Nambahu by the Ministry of Mines and Energy MME to explore for various mineral groups as described in the previous sections. The license was granted on 14/02/2020 and will expire on 13/02/2023. The license tenure may be extended for further two years by renewal of the rights if the Minister of MME is satisfied with the previous demonstrable progress shown as per Section 72. The project area is made up of one EPL license which may be converted to Mining License (s) if an economically viable deposit is discovered and the licensing requirements of the latter are met. The proposed activities of exploration will involve both non-invasive and invasive exploration methods. Non-invasive exploration methods usually include remote sensing, geological field mapping, ground geophysical survey and surface soil sampling. whereas invasive exploration methods include techniques such as reverse circulation or diamond drilling and pitting/trenching. Non-invasive exploration activities will be undertaken first in order to define the need for more invasive activities. Should the results from the non-invasive activities be positive the detailed sitespecific drilling, trenching, and sampling will be undertaken. The license falls within a well serviced area with infrastructure, such as water line, national roads, railways, telephones, petrol stations (Usakos, Arandis, Swakopmund, Walvis Bay) and 3-phase electricity from NamPower. Therefore the applicant will use the exisiting water and electrical infrastructure in the area.

Therefore, to define the resource various geological consultants and contractors will be appointed during different exploration phases. The various exploration methods will produce results which will then determine the next method to be used. Therefore, a geophysics expert will potentially be contracted during exploration to conduct geophysical surveys whether it is on the ground or air. In addition, drilling will be executed by an appointed registered drilling contractor, and it is expected that they will have their own workforce (drilling crew). Furthermore, temporary employment will potentially be available for graduate Geologists (2 positions) and Technicians (2 positions) for the purpose of geological mapping and geochemical surveys. The nearest populated towns are Arandis, Swakopmund and Walvis Bay from which unskilled labour can be sourced from. It is anticipated that the workforce will be housed in temporary site camps or may reside in the nearest towns throughout the exploration.

2. Project Location

EPL 7470 is situated south of Uis town in **Erongo Region** and it covers a total surface area of **19036.7487 hectares** Figure 1. The main land use of the area within and outside the EPL is predominated by state land and other forms of human settlements.



Figure 1: Map depicting the coverage of EPL 7470 and corner coordinates of the license area



Figure 2: Google image showing the locality for EP 7470.

3. Environmental Impact Assessment process

The EIA process follows the general guideline as outlined in the 2012 EIA regulations of the EMA. The process followed is summarized below.



4. Potential Impacts

Below are the potential impacts have been identified from the proposed exploration activities on the license area:

• **Temporary job creation** this is the hiring of workers non-skilled to skilled workers from the area to be involved during the clearing of the fauna and flora in order to access target sites, and to also assist during pitting and trenching as well as drilling and associated exploration works.

- Impact on vegetation and fauna: some vegetation may need to be removed to create access roads, pitting and trenching, geophysical lines as well as drilling sites. This may also lead to habitat destruction for some fauna.
- **Traffic safety:** very slow drilling rigs and associated vehicles may compromise traffic safety in the area.
- Environmental degradation through different types of waste generated on the site.
- Soils and water contamination from chemicals and other substances used in drilling fluids.
- Noise and dust generated by pitting and trenching as well as drilling vehicles and activities.
- Health and safety risks which may result to workers operating on site.
- Archaeological and Heritage Impacts if these sites are located close to the planned exploration area.

5. Public consultation

Public participation is an essential part of any Environmental Assessment process. Interested and Affected Parties (I&APs) include any person or organization that will be directly or indirectly involved and/or affected by the project.

Registered I&APs will be kept informed of the Public Participation Process throughout the Environmental Assessment process, they will be given the opportunity to review and comment on the EIA reports and documents, will also receive feedback on how comments have been taken into account, and will be informed of the outcome of the assessment. All comments will be recorded and presented to the project team and competent authority by means of the Project Comments and Responses Register (CRR).

Notices for public invitation to participate in the process will still be placed in the local newspaper as well as at strategic public places (notice boards). The date and venue for the public consultation meeting will be communicated..

If you categorize yourself as an I&AP who wishes to receive information regarding the abovementioned project and/or provide input into the Environmental Impact Assessment process, you are hereby invited to register using the Form on Page 5. You may also communicate with SS Consultants via email, or telephone to obtain further information or comment on the proposed project.

Contact details:

Ms. Anna Nekuta

Environmental Specialist (Environmental Assessment Practitioner)

SS Consultant CC

Physical Address: Unit 24B, Bougain Villa, Sam Nuuyoma Road, Windhoek, Namibia

Email: admin@ssconsultants.co

Mobile number: +26481 430 4609



REGISTRATION OF INTERESTED AND AFFECTED PARTIES (I&APs)

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE PROPOSED INDUSTRIALS MINERALS, DIMENSION STONE, PREVIOUS METALS, BASE AND RARE METALS MINERAL GROUPS EXPLORATION ACTIVITIES ON EPL No.7470 LOCATED IN UIS DISTRICT, ERONGO REGIONS, NAMIBIA

Ms. Anna Nekuta				
Environmental Specialist (Environmental Assessment Practitioner)				
SS Consultant Cc Physical Address: Unit 24, Bougain Villa, Sam Nuuyoma Road, Windhoek, Namibia Email: <u>admin@ssconsultants.co</u>				
	Cell: +264 81	430 4609		
Title (Mr/Ms/Dr/Prof)		Name/Initials		
Surname		l		
Interested Parties or		Affected Parties?		
Physical Address and or		•		
Postal Address				
Tel No:		Cell No:		
Email Address:				
Comments/Issues/Concerns	(Please if the space is	s not enough, use additi	onal separate sheet)	

ANNEXURE E: NEWSPAPER ADVERTS



Wednesday 26 October 2022 NEW ERA

SPORT 21



the Environmental Commissioner, in line with provisions of Environmental Management Act 7 of 2007 and its Regulation ns of 2012, in respect of proposed exploration Repaidons of 2012, in respect to projection advites for industrials minerals, dimension stone, precious metals, base and rare metals mineral deposits.
Project Location: EPI, 7470 is located about 8 km SSW

m Uis Settlement, Erongo Regions and it covers state

land, Proponent: Ms. Frieda Namutenya Nambahu All Interested and Affected Parties (I&APs) are cordially invited to participate in public consultation meeting on the 4th of November 2022 in Uis: Registration, as well as submissions of I&APs comments (including the request for the Background Information Document), must be done on or before 28th of October 2022, to:

0

SS conductor

Ms. Anna Nekuta

11000

onmental Spec SS Consultants CC Cell: 081 430 4609 ist (EAP) Email n@ssconsultants.co REPUBLIC OF HAMIDA MINISTRY OF INDUSTRIALISATION AND TRADE, LUDUR ACT, 1998 NOTICE OF APPLICATION TO A COMMITTEE IN FERMS OF I'NE LIQUOR ACT, 1998 (regulations given that an application in stems of the Lapor Act, 1998, page is meaks to the Regional Lupor Learning Conventiles, Region OMUSATI 1 Harma and potal adabtas of 1 Harma of potal adabtas of

1 Name and postal address of applicant, HAIFETE SEBULON, OSHIFO RUACANA ne of bu Name of business or propos siness to which applicant rela N. S. HAIFETE SHEBEEN ddress/Location of premis which Application relates OSHIFO LOCATION IN RUACANA AREA

 Nature and details of application SHEBEEN LIQUOR LICENCE
 S. Clark of the court with whom Application will be lodged OUTAPI MAGISTRATE COURT Lodged 17-31 OCTOBER 2022 te of meeting of Committee i ich appleation will be heard 14 DECEMBER 2022 besties or written admission

bjection or written submous of section 28 of the Act in re-pplicant must be seni or de excetany of the Committee to retary not less lihah 23 days a of the meeting of the Com-to the execting of the Com-

BXB ELITE AUCTION -DIGITAL AND ON-SITE TUESDAY, OS NOVEMBER 2022 AGRA / BANK WINDHOEK - WINDHOER 18:00 OFFER: 25 Bulls 28 Fernale BREEDERS Aurora Braunwieh Dorka Braunwieh Endeleta Chianina colorado Bonsmara Etobra Brahman Boserf Brahman JLB Brahman

ENQUIRIES: Paul Klein 081128 6731 AGRA WINDHOEK 061290 9226 AGRA Auction

Fernando Alonso says the result of Alpine's appeal will dictate whether Formula 1 is go in the right direction for the future. Phone Nampu AP Franchitti calls for FIA clampdown

- Dario Franchitti on Monday warned that Fernando Alonso was lucky to survive a high-speed crash in Sunday's United States Grand Prix - and called for a clampdown on

triumph, dedicated to team founder and co-owner Dieter Mateschitz, which clinched the constructors' title for Red Bull, much focus switched to

two Safety Car interventions and several high-speed duels, many seasoned observers drew attention

the straight are going to kill someone," said Franchitti, a Scot who won the IndyCar series in 2007, 2009, 2010 and 2011 and the Indianapolis 500 in

time to sort out this behaviour once and for all. It has bled down to junior

incident on lap 22 of the 56-lap race when Aston Martin's Lance Stroll jinked ahead of his future team-mate, two-time world champion Fernando Alonso, causing the Alpine driver to

airborne by Stroll's rear wheels and skewed into a frightening brush with the barriers at high speed, escaping unhurt and able to re-join the race after a pit-stop. Stroll retired from the race and was

later given a three-race grid penalty for this week's Mexican Grand Prix (30 Oct).

"Wow," said 1996 world champion Damon Hill, commenting on the crash. "Another close call there for the boys... A bit of a naughty late jink I think from Stroll."

Another former F1 driver, Giedo van der Garde, tweeted: "Too aggressive by Lance - thank god they're both alright."

In a thrilling race, there were several exciting duels that raised eyebrows

including those between the victorio Verstappen, who reprised his 2021 scrap with seven-time champion Lewis Hamilton of Mercedes, and four-time champion Sebastian Vettel, ---of Aston Martin, with Haas driver Kevin Magnussen.

Alonso, 41, admitted he had been frightened by his experience.

"It was not nice because when you are up in the air obviously you are not aware of where you are on track," he said.

"I felt that I was much more on the left, and obviously if you catch the lateral fence, the metallic one, then you spin in the air 360. You see this kind of accident a lot in IndvCar -- and they are quite dangerous.

So I thought that I was ending up on that fence I'm happy to be here talking with you because I could surely be in the medical centre. So, I'm happy that I'm not ...

He accepted that the crash was a racing incident.

"We were lucky with the first Safety Car and then, on the restart, I tried to take Stroll's slipstream. I moved to the side, to leave the slipstream, and he also moved ... It was a bit of bad luck that we didn't understand each other.' Alonso finished the race in a

remarkable seventh place, but afterwards another drama unfolded when rivals Haas protested that his right-side mirror had been broken and flapped dangerously before falling off.

He was given a 30-seconds time penalty that relegated him to 15th. Alpine responded by protesting the validity of the Haas protest as it was

lodged 24 minutes after the permitted deadline.

They added that Alonso's car was deemed to be safe by the race stewards. Team chief Otmar Szafnauer said:

"It's ridiculous. It's obviously accident damage and cars are allowed to finish with accident damage - it happens all the time."

Alonso was merely glad to be alive. "It was my best race of the season," he said. "But the fear is still in my stomach. I couldn't stop thinking about it. I just wanted to finish." - Supersport.com



» 86 completed in September CoW approves 237 building plans

Year-to-date, 1904 building plans worth N\$1.41 billion have been approved.

STAFF REPORTER

total of 237 building plans A were approved by the City of Windhoek in September, rep-resenting a 2.2% month-on-month increase from the 232 building plans approved in August, according to LJG Securities.

In value terms, the approvals were valued at N\$149.4 million, a 34.0% month-on-month decline from the N\$226.3 million approved in August. Year-to-date, 1 904 building plans worth N\$1.41 billion have been approved.

Additions to properties once again made up the largest portion of ap-provals in both number and value terms. In September, 169 additions to properties were approved valued at N\$57.7 million, the same number as last m onth, but 60.9% month-onmonth lower in value terms. The month-on-month drop in the value of additions was somewhat expect-ed given that last month's data contained N\$100 million worth of addions to the Lady Pohamba Hospital which was an outlier, IJG pointed

New residential units were the second largest contributor to the



number and value of building plans approved. 62 new residential units were approved in September com-pared to the 55 recorded in August. In value terms N\$48.6 million worth of residential units were approved during the month, representing a 19.0% month-on-month rise from

the N\$40.9 million approved in August but declining by 44.1% on a year-on-year basis. Year to date, 606

55 CONSULTANTS

residential units valued at N\$568.7 million were approved, represent-ing an 8.7% year-on-year drop in number terms and a 27.3% yearon-year decline in value terms, IJG added

Approvals of commercial and industrial units remained in the singledigit territory as has been the case since February 2020. 6 new commercial and industrial units valued

at N\$43.1 million were approved in September, the highest value record-ed since October last year.

Year-to-date, 36 commercial and industrial buildings valued at N\$101.1 million were approved up until the end of the third quarter of 2022, compared to the 29 commer-cial buildings worth N\$94.8 million at the end of the third quarter of 2021, IJG said.



Innovation

The Namibia Investment Promoti and Development Board (NIPDB), in partnership with the World Bank Group and Startup Namibia, launch the Innovation Bridge Portal (IBP). The IBP is a platform that exists to develop a digital marketplace for accelerators, angel investors, venture capitalists, corporations, entrepreneurs, academia, and public sector support programs. Pictured is Dino Balloti, Executive for MSME Development Innovation and Acceleration at NIPDB. OTO PHILLEPUS UUSIKU

SS CONSULTANTS



covers state land Ms. Frieda Namutenya Nambahu Proponent:

All Interested and Affected Parties (I&APs) are cordially invited t An interession and Annexed Particular Contract and Contains Martical to participate in public consultation meeting on the 4° of November 2022 in Uis. Registration, as well as submissions of I&APs comments (including the request for the Background Information Document), must be done on or before 28° of October 2022, to:

Ms. Anna Nekuta Environmental Specialist (EAP) SS Consultants CC Cell: 081 430 4609



Ms, Anna Nekuta Environmental Spec S5 Consultants CC cialist (EAP) Cell: 081 430 4609

Email: adminibasconsultants.co

EPL 7469 is located roughly 20 km SW from Uis settlement, Erongo Regions an covers state land. Ms. Frieda Namutenya Nambahu

Propo

All Interested and Affected Parties (I&APs) are cordially invited t An Interesson and Affected Parties (URAP3) are contailly invited to participate in public consultation meeting on the 4th of November 2022 in Uis. Registration, as well as submissions of I&AP3 comments (including the request for the Background Information Document), must be done on or before 28th of October 2022, to:

Environmental Specialist (EAP) SS Consultants CC Cell: 081 430 4609 Email: admin.il sscore.de







ANNEXURE F: EMAIL CORRESPONDENCE

Re: INFORMATION

Anna Nekuta Admin @ SS Consultants <admin@ssconsultants.co>

Thu 20/10/2022 20:49

To:WALTER ERWIN GAROEB <oryxminingeng@gmail.com>

3 attachments (3 MB)

Background Information Document BID_EIA for EPL_7469.pdf; Background Information Document BID_EIA for EPL_7470.pdf; Background Information Document BID_EIA for EPL_7498.pdf;

Good Evening Mr Garoeb,

Please find attached the BiDs for 7469, 7470, and 7498 as per your request.

I would also want to find out if you want to be registered as an interested and affected party.

Regards Anna

Get Outlook for iOS

From: WALTER ERWIN GAROEB <oryxminingeng@gmail.com>
Sent: Thursday, October 20, 2022 8:31:49 AM
To: Anna Nekuta Admin @ SS Consultants <admin@ssconsultants.co>
Subject: INFORMATION

Hi Anna

Will you please forward me about the following EPL'S

7469 7470 7498

--

Regards Mr.ERWIN WALTER GAROEB WALTER MINING & ENGINEERING SUPPLIES cc Reg_No: CC/2020/04139 Vat No: 11218903-015 P O BOX 70737 KHOMASDAL WINDHOEK NAMIBIA #+264814128352 #+264852038225(WhatsApp) #+264812038225


Public Meeting 17/12/2022

Anna Nekuta Admin @ SS Consultants <admin@ssconsultants.co> Fri 16/12/2022 13:42 To:Gotty Gaoseb <ggaoseb@gmail.com>;dauredaman@gmail.com <dauredaman@gmail.com>;Gerson Gurirab <ghragerson@gmail.com> Cc:SS Consultants <info@ssconsultants.co> Dear Registered I&APs

This email serves to inform you that our **PUBLIC MEETING** for the Environmental Impact Assessments for **EPLs 7469,7470,7498, and 8100** that are in the area of Uis as discussed before will take place tomorrow, the 17th of December 2022.

VENUE: Head office in Uis Time: To be specified

Please inform those that you may think are interested or/and affected.

Kind Regards Anna Nekuta Senior Geologist & Environmental Specialist From: Anna Nekuta Admin @ SS Consultants
Sent: Friday, 4 November 2022 10:33 am
To: SS Consultants
Cc: Anna Nekuta Admin @ SS Consultants
Subject: Postponement of the public consultations for EPL Nos: 7469, 7498, 7470, 7576 & 8100

Dear Potential Interested and Affected Party

SS Consultants hereby gives notice to all potentially Interested and Affected Parties (I&APs) that it intends to postpone the public consultations that were scheduled for the 4th of November in Usakos and the 5th of November in Uis. Public consultation forms part of the Environmental Impact Assessment (EIA) process. As part of the public consultation process, you have registered as a potential interested and affected party with respect to the proposed activity, which is why you are receiving this email. Please also find attached the Background Information Document (BID) on these activities for your perusal.

The reason for the postponement is that only a few I&AP have reached out to the company and the other reason is that the Paramount Gaob of the ≠Nukhoen/Damara is hosting the annual Gaob Festival in Okombahe from the 4th to the 6th of November 2022. Therefore, due to the reasons stipulated above we would like to inform the I&APs that the public consultation will be postponed till further notice. The new dates will be communicated via national radio and other means of media.

Should you or anybody you know wish to register as an I&AP and/or send us any potential issues or comments that you would like to be considered as part of the impact assessment process and addressed in the scoping report, please register and/or send us your inputs before the end of business on 21 November 2021.

Once the scoping stage is completed, SS Consultants will provide all registered I&APs with access to the draft scoping report, for your review, and you will have another opportunity to submit comments based on your review.

Please do not hesitate to contact us should you have any questions regarding the proposed activity and its EIA process.

Kind regards, Anna Nekuta Environmental Specialist From: Anna Nekuta Admin @ SS Consultants Sent: Monday, 20 February 2023 5:45 pm To: Hoaebgustav42@gmail.com Subject: Public Consultation Meeting

Dear Mr. Gustavo,

As per the telephonic discussion with Mr. Silvanus today, who promised to send you an official correspondence and meeting request for the public consultation to discuss the Exclusive Prospecting License (EPL No. 7576) Environmental Assessment in order to obtain a Environmental Clearance Certificate ECC to be able to conduct exploration activities on the EPL area. the proposed date is Saturday, 25th February 2023 in Usakos, the venue is yet to be decided and will be communicated in due course.

In the mean tie i have attached a Backround Information Document for your perusal and in due course i will share the EA report as well. kindly take note that the initial consultation was scheduled for the 4th of November in Usakos but it was postponed because only a few I&AP have reached out to the company and the other reason is that the Paramount Gaob of the #Nukhoen/Damara is hosting the annual Gaob Festival in Okombahe from the 4th to the 6th of November 2022.

Regards, SS

Anna Nekuta Senior Geologist & Environmental Specialist

Public Meeting 17/12/2022

Anna Nekuta Admin @ SS Consultants <admin@ssconsultants.co>

Fri 12/16/2022 1:42 PM

To:Gotty Gaoseb <ggaoseb@gmail.com>;dauredaman@gmail.com <dauredaman@gmail.com>;Gerson Gurirab <ghragerson@gmail.com>

Cc:SS Consultants <info@ssconsultants.co>

Dear Registered I&APs

This email serves to inform you that our **PUBLIC MEETING** for the Environmental Impact Assessments for **EPLs 7469,7470,7498, and 8100** that are in the area of Uis as discussed before will take place tomorrow, the 17th of December 2022.

VENUE: Head office in Uis Time: To be specified

Please inform those that you may think are interested or/and affected.

Kind Regards Anna Nekuta Senior Geologist & Environmental Specialist

ENVIRONMENTAL IMPACT ASSESSMENT PROCESS FOR THE PROPOSED EXPLORATION ACTIVITIES ON EXCLUSIVE PROSPECTING LICENSE (EPL) 7470 IN THE ERONGO REGION

SS Consultants <info@ssconsultants.co>

Mon 7/17/2023 9:51 PM

Cc:Anna Nekuta Admin @ SS Consultants <admin@ssconsultants.co>

Bcc:uisesviola@gmail.com <uisesviola@gmail.com>;Sollybrown476@gmail.com <Sollybrown476@gmail.com>;Tsiseb Conservancy Conservancy <tsisebconservancy@gmail.com>;ggaoseb@gmail.com <ggaoseb@gmail.com>;dauredaman@gmail.com <dauredaman@gmail.com>;ghragerson@gmail.com <ghragerson@gmail.com>;Hilya Amukwa <hamukwa@gmail.com>;Martha Haludilu <marthahaludilu@gmail.com>;Shifotoka Gerhard <gmgerrad15@gmail.com>

2 attachments (4 MB)
 Emp report for EPL_7470_final.docx; ESA Report for EPL_7470_FINAL.docx;

Dear Interested and Affected Party,

Following our previous communications from admin@ssconsultants.

SS Consultants CC (SS) hereby gives notice to all Registered I&APs that the Draft Environmental Scoping Report (DESR) is now available for the above proposed project for public comment from the **17th of July 2023 until the 24th of July 2023.** An electronic copy of the full reports are available and thus attached to the email.

Should you wish to comment on the proposed project, kindly do so in writing on or before 24th of July 2023 at the below contact information.

Anna Nekuta

E-mail: <u>info@ssconsultants.co</u> Tel: +264812409124

Kind Regards, SS

ANNEXURE G: SITE NOTICES

1. Uis Multisave supermarket site notice



Caption 2: Caption: Front View of UIs MultiSave Supermarket. with the public notice pasted on the entrance door



Caption 1: Caption: A person reading the public Notice right after it has been pasted at the MultiSave Supermarket.



Caption: Public Notice for EPL 7470 on the entrance door of the MultiSave Supermarket

2. SITE NOTICE: OKOMBAYE REGIONAL COUNCIL





Caption 3: Front View of Okombahe Regional Council

Caption:

Caption 4: EIA public notices on the noticeboard of the Okombahe regional council

Caption: Noticeboard inside the Okombahe regional Council



Caption 5: The public notice for EPL No. 7470 on the regional Council's noticeboard



3. SITE NOTICE: OKOMBAYE TRADIONAL AUTHORITY

Caption 6: The EPLs Public Notices right beside the Traditional Authority Entrance



Caption 7: Front View of the Okombaye Tradional Authority



Caption 8: Close picture for the EPLs No: 7470,7498, and 8100 beside the entrance of Okombahe Local Authority

ANNEXURE H: MEETING MINUTES AND MEETING ATTENDANCE REGISTER



17 June 2023

MINUTES OF THE MEETING HELD IN UIS AT TSIBEB CONSERVANCY OFFICES HELD 17 June 2023

QUORUM: Tsibeb Conservancy Uis IN ATTENDANCE (See attendance register)

The meeting Commenced at Uis

The Consultants welcomed everyone present at the meeting.

The senior environmentalist took the chair of the meeting.

- 1. Concerns raised by the committee members
 - How will their farmers be accommodated and well alerted before hand
 - Pollution from the exploration companies
 - Employment should be provided to the community members
 - The members had concerns about their small scale miners and how they will be affected
 - The members of the committee asked that they be given sometime so that they may be able to talk to the affected farm owners within the area so that there can be some sort of agreement and arrangement.

2. CLOSING:

There being no other business, the meeting closed at 17:30.

Attendance Register for EPL 7470

Exploration application for environmental clearance certificate

Tel: +264 64-504162 Fax: +264 64-504182 tsisehconservancy@amail.co

Name	Surname	Organization	Email	Cell phone Number	Signature
Kating Rika	Garises	Isiseb	an seskating la Rama Licon		oignature
Samuel Bornan	"Areesel	Trisch	Prise le grant de grant de se	08/88156499	Alleccel
Monica.L	matsuis	Tsiseb	-	0813908685	MATERIS
Gregory N	Huses	live Secretary	nelwinbuses el queil cen	OTIESTIA	HATCH
Nola U.	Lises	Vice Chair person	-	0813396697	Cultings
NELSON SEIBER	SEIBER	TEIBEB (ON)	nseibebogmal.com	ngizzaru	Ita
Immenuel	Tunele.	TRActilional Authority	Suzetunde 1935 @ gmeil con	DR12112364	th
ERIC	XaWEB	7SISEB V	tsisebcingeringo smal.	0813479255	12 L
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TSISEB CONSERVANCY PO Box 72 Uis, Namibia

2023 -03- 17

ANNEXURE I: ARCHAEOLOGICAL DESK ASSESSMENT

ARCHAEOLOGICAL AND CULTURAL IMPACT ASSESSMENT REPORT FOR MINERALS EXPLORATION ON AN EXCLUSIVE PROSPECTING LICENSES (EPLs) NO. 7469, 7470, 7498, 8100 IN UIS ERONGO REGION, NAMIBIA

Compiled by:

Henry Nakale [Bachelor of Arts Honours Degree in Archaeology,

Museums and Heritage Studies] (GZU), [Bachelor of Social Science in

Heritage and Museum Studies] (UP), [Masters of Social Science in

Tangible Heritage Conservation & Management] (UP)

And

Dr. Mowa Eliot, Maritime Archaeology University of Bristol. PhD

Archaeology (UP).

Compiled for:

EPL Numbers	Proponent
7498, 7470 & 8100	Uis – Chi Investment Namibia CC
7469	Frieda Namutenya Nambahu

Item	Description
Proposed development and	Exploration activities on Exclusive Prospecting Licenses (EPLs) NO. 7469,
location	7470, 7498 and 8100 to explore for various mineral resources. The EPLs
	are located in Uis district, Erongo region, Namibia on state owned
	communal land.
Title	ASSESSMENT REPORT FOR MINERALS EXPLORATION ON AN
	EXCLUSIVE PROSPECTING LICENSE (EPL) (EPL) NO. 7469,7470,
	7498, 8100 UIS ERONGO REGION, NAMIBIA
Purpose of the study	The purpose of this document is an Archaeological and Heritage Impact
	Assessment report that describes the cultural values and heritage factors that
	may be impacted on by the proposed exploration activities.
Coordinates	See project description and location on page 12
Maniainalitian	Lie District
Municipanties	
Predominant land use of	Farming
surrounding area	
Proponents	Frieda Namutenya Nambahu & Uis-Chi Investment Namibia Pty Ltd
Heritage Consultant	Omapipi Tageya Heritage Consultancy & ESM Cultural Heritage
	Consultants
Date of Report	16 January 2022
Contact person	Henry Nakale +264816680633
Author(s) identification	Henry Nakale, and Dr. Eliot Mowa (Archaeologists and Heritage
	specialists)

Copyright

Authorship: This A/HIA Report has been prepared by Mr. Henry Nakale and Dr. Eliot Mowa. The report is for the review of the National Heritage Council of Namibia.

Copyright: This report and the information it contains is subject to copyright and may not be copied in whole or part without written consent of the authors.

This report can however be reproduced by IDT and The National Heritage Council of Namibia for the purposes of the Archaeological and Heritage Management in accordance with the National Heritage Act, 27 of 2004

Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a hand-held Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Maps: Maps included in this report use data extracted from the NTS Map and Google Earth Pro.

Disclaimer: The Authors are not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared.

The Archaeological and Heritage Impact Assessment Study was carried out within the context of tangible and intangible cultural heritage resources as defined by the National Heritage Council Regulations and Guidelines as to the authorisation of proposed exploration project being proposed by **the proponents**.

DECLARATION

We hereby declare that we do:

- have knowledge of and experience in conducting archaeological assessments, including knowledge of Namibian legislation, specifically the National Heritage Act (27 of 2004), as well as regulations and guidelines that have relevance to the proposed activity;
- 2. perform the work relating to the application in an objective manner, even if this results in views and findings that are not favorable to the applicant;
- 3. comply with the aforementioned Act, relevant regulations, guidelines and other applicablelaws. We also declare that we have no interests or involvement in:
 - (i) the financial or other affairs of either the applicant or his consultant; and
 - (ii) the decision-making structures of the National Heritage Council of Namibia.

Signed by:

HNakale

Acronyms

Abbreviation	Description
AIA	Archaeological Impact Assessment
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
LIA	Late Iron Age
NHA	Nation Heritage Act, Act 27 of 2004
SM	Site Manager
NHCN	National Heritage Council of Namibia
ESA	Later Stone Age
EPL	Exclusive Prospecting License
ECC	Environmental Clearance Certificate
CFP	Chance Find Procedure
EMA	Environmental Management Act

Key Concepts and Terms

Periodization Archaeologists divide the different cultural epochs according to the dominant material finds for the different time periods. This periodization is usually region-specific, such that the same label can have different dates for different areas. This makes it important to clarify and declare the periodization of the area one is studying.

These periods are nothing a little more than convenient time brackets because their terminal and commencement are not absolute and there are several instances of overlap. In the present study, relevant archaeological periods are given below;

Early Stone Age (~ 2.6 million to 250 000 years ago)

Middle Stone Age (~ 250 000 to 40-25 000 years ago)

Later Stone Age (~ 40-25 000, to recently, 100 years ago)

Early Iron Age (~ AD 200 to 1000)

Late Iron Age (~ AD1100-1840)

Historic (~ AD 1840 to 1950, but a Historic building is classified as over 60 years old)

Definitions Just like periodization, it is also critical to define key terms employed in this study. Most of these terms derive from Namibian National heritage legislation and its ancillary laws, as well as international regulations and norms of best-practice. The following aspects have a direct bearing on the investigation and the resulting report:

Cultural (heritage) resources are all non-physical and physical human-made occurrences, and natural features that are associated with human activity. These can be singular or in groups and include significant sites, structures, features, Eco facts and artefacts of importance associated with the history, architecture or archaeology of human development.

Cultural significance is determined by means of aesthetic, historic, scientific, social or spiritual values for past, present or future generations.

Value is related to concepts such as worth, merit, attraction or appeal, concepts that are associated with the (current) usefulness and condition of a place or an object. Although significance and value are not mutually exclusive, in some cases the place may have a high level of significance but a lower level of value. Often, the evaluation of any feature is based on a combination or balance between the two.

Isolated finds are occurrences of artefacts or other remains that are not in-situ or are located apart from archaeological sites. Although these are noted and recorded, but do not usually constitute the core of an impact assessment, unless if they have intrinsic cultural significance and value.

In-situ refers to material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Archaeological site/materials are remains or traces of human activity that are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures. According to the Namibia National Heritage Act (NNHA) (Act No. 27 of 2004), no archaeological artefact, assemblage or settlement (site) and no historical building or structure older than 60 years may be altered, moved or destroyed without the

necessary authorization from the National Heritage Council or a provincial heritage resources authority.

Historic material are remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

Chance finds means archaeological artefacts, features, structures or historical remains accidentally found during development.

A grave is a place of interment (variably referred to as burial) and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery (contemporary) or burial ground (historic).

A site is a distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

Heritage Impact Assessment (HIA) refers to the process of identifying, predicting and assessing the potential positive and negative cultural, social, economic and biophysical impacts of any proposed project, which requires authorization of permission by law and which may significantly affect the cultural and natural heritage resources. Accordingly, an HIA must include recommendations for appropriate mitigation measures for minimizing or circumventing negative impacts, measures enhancing the positive aspects of the proposal and heritage management and monitoring measures.

Impact is the positive or negative effects on human well-being and / or on the environment.

Mitigation is the implementation of practical measures to reduce and circumvent adverse impacts or enhance beneficial impacts of an action.

Mining heritage sites refer to old, abandoned mining activities, underground or on the surface, which may date from the pre-historical, historical or the relatively recent past.

Study area or 'project area' refers to the area where the developer wants to focus its development activities (refer to plan).

Phase I studies refer to surveys using various sources of data and limited field walking in order to establish the presence of all possible types of heritage resources in any given area,

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EXECUTIVE SUMMARY

An archaeological impact assessment was carried out focusing on the proposed exploration activities on EPLs 7469,7470, 7498, 8100 which are situated south of Uis' settlement in Erongo Region, through a field-based survey and desktop study. The assessment therefore reviewed the archaeological records, historical documents from the previous studies surrounding the area, interviews with local farmers and stakeholders, GIS spatial data, field survey as a basis of inference regarding the archaeological and heritage significance of the project site, and their likely sensitivity to be disturbance in the course of exploration activities. These sources were used to conclude that damage or disturb sites or materials protected under the National Heritage Act (27 of 2004) is likely to occur, especially within the area of EPL 7469. The area where the proposed project will take place is highly archaeologically sensitive and deemed to be a cultural landscape as there are evidence of pre – historic rock paintings within the boundaries of EPL 7469. Furthermore, no significant archaeological sites, cultural or heritage was located in EPLs 7470, 7498 & 8100, apart from a community burial and a stone cairn within EPLs 7470 & 7478. However, due to the possibility that buried archaeological remains could come to light in the course of exploration activities with these EPLs, the proponents are advised to adopt the Chance Finds Procedure attached as Appendix 1 to this report.

1.0 Introduction

The Government of Namibia recognizes that the exploration and development of its mineral wealth could best be undertaken by the private sector. The government, therefore, focuses on creating an enabling environment through appropriate competitive policy and regulatory frameworks for the promotion of private sector investment coupled with the provision of national geo-scientific databases essential for attracting competitive exploration and mining (Draft Minerals Policy of Namibia, MME).

It is with this background that Ms. Frieda Namutenya Nambahu and Uis-Chi Investment Namibia Pty Ltd herein referred to as the (proponents) are proposing to conduct exploration activities on Exclusive Prospecting Licenses (EPLs) 7469,7470, 7498, 8100 to explore for industrials minerals, precious metals, base and rare metals mineral. The Proponents wants to carry out these exploration activities i.e., geological mapping, geochemical soil sampling, ground geophysics, trenching and drilling with the hope that if they delineate a mineral ore body then a feasibility study will be conducted. At this stage, however, the exploration activities are aimed at establishing the availability of mineable mineral resources likely to be found within the four (4) above mentioned EPLs.

The laws of the Republic of Namibia are clear regarding this in that it requires an Environmental Clearance Certificate. Such a certificate is issued in line with the Environmental Management Act (2007). The proponents have appointed SS Consultants cc to carry out an environmental impact assessment (EIA) study to obtain an environmental clearance certificate as per the requirements of the Ministry of Mines and energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT) in terms of mining activities and clearance of land.

In this respect, SS Consultants cc has then appointed the undersigned OTAH and ESM Cultural Heritage Consultants (JV) to provide an archaeological/heritage assessment as envisaged under the provisions of the National Heritage Act (27 of 2004). This report presents the results of an archaeological/heritage field survey of the area, focusing on EPLs 7469,7470, 7498, 8100. The report suggests mitigation measures that would be in keeping with the applicable laws and policies governing the preservation of archaeological remains in Namibia.

Due to the destructive tendency of such exploration activities, which may include earth moving/ land alteration operations, it is a pre-requisite to conduct an Archaeological and/ or Heritage Impact Assessment (AIA) as obligated by the National Heritage Act, Act No. 27 of 2004 and, in part, by the Environmental Management Act, Act No. 7 of 2007. The main thrust of the provisions of the aforementioned legislations is to protect and salvage cultural/ archaeological and environmental resources from potential destruction resulting from exploration or mining activities. It was against this background that an Archaeological Impact Assessment (AIA) was carried out on the EPLs **7469,7470, 7498, 8100** to fulfill the following objectives:

a) To identify and document cultural/ archaeological materials and sites occurring in the area within and around the EPLs.

b) To assess the nature and scale of archaeological impact of the exploration activities to heritage resources,

c) To suggest some conservation strategies for the cultural heritage resources that might occur in the area proposed for explorations which can be potentially destroyed in the course of such activities.

1.1 Project Description and Location

Project Description

The proposed exploration activities on the four EPLs will involve both non-invasive and invasive exploration methods. Non-invasive exploration methods usually include remote sensing, geological field mapping, ground geophysical survey and surface soil sampling. whereas invasive exploration methods include techniques such as reverse circulation or diamond drilling and pitting/trenching. Non-invasive exploration activities will be undertaken first in order to define the need for more invasive activities. Should the results from the non-invasive activities be positive the detailed site-specific drilling, trenching, and sampling will be undertaken. The license falls within a well serviced area with infrastructure, such as water line, national roads, railways, telephones, petrol stations (Usakos, Arandis, Swakopmund, Walvis Bay) and 3-phase electricity from Nampower. Therefore, the applicants will use the existing water and electrical infrastructure in the area.

Project Location

The four (4) EPLs 7469,7470, 7498, 8100 are situated south of Uis settlement in Erongo Region and covers a total surface area of EPL **7469** (8387.8111 ha), **7470** (19036.7487 ha), **7498** (5346.3145 ha) and **8100** (13,445.929) respectively. Both EPLs are overlaying each other as shown in figure 1.



Figure 1; Locality map for both 4 EPLs (source: SS Consultants 2022).

EPL		Corner Coordinates
7469		21° 18" 2.96" S 14° 43' 49.69" E
7470	1.	21° 27' 35.84" S 14° 50' 05.06" E
	2.	21° 20' 58.15" S 14° 51' 16.23" E
	3.	21° 15' 44.69" S 14° 49' 50.41" E
	4.	21° 16' 25.01" S 14° 50' 46.27" E
	5.	21° 16' 56.98" S 14° 50' 20.75" E
	6.	21° 20' 52.15" S 14° 55' 50.95" E
	7.	21° 17' 02.21" S 14° 59' 05.02" E
	8.	21° 17' 02.65" S 15° 00' 04.94" E
	9.	21° 17' 23.35" S 15° 01' 11.41" E

Table 1; Center coordinates for the four EPLs

	10.	21° 25' 35.46" S 14° 56' 23.24" E
	11.	21° 25' 34.86" S 14° 54' 43.84" E
	12.	21° 28' 01.46" S 14° 51' 32.65" E
7498		
	1.	21° 24' 49.26" S 15° 17' 16.76" E
	2.	21° 23' 41.55" S 15° 11' 56.29" E
	3.	21° 24' 15.26" S 15° 11' 10.82" E
	4.	21° 23' 55.21" S 15° 10' 45.91" E
	5.	21° 23' 30.36" S 15° 11' 03.26" E
	6.	21° 22' 48.94" S 15° 07' 49.95" E
	7.	21° 25' 33.46" S 15° 07' 57.17" E
	8.	21° 25' 37.27" S 15° 07' 58.89" E
	9.	21° 25' 41.15" S 15° 08' 59.72" E
	10.	21° 25' 36.83" S 15° 08' 59.81" E
	11.	21° 25' 46.87" S 15° 16' 36.95" E
8100	1	21° 25' 32.95" S 14° 56' 25.86" E
	2.	21° 20' 55.12" S 14° 59' 09.68" E
	3.	21° 22' 12.24" S 15° 00' 22.87" E
	4	21° 20' 53.84" S 15° 01' 59.44" E
	5.	21° 20' 52.05" S 15° 07' 44.44" E
	6.	21° 25' 35.57" S 15° 07' 57.10" E
	7.	21° 23' 50.20" S 15° 06' 39.60" E
	8.	21° 26' 22.32" S 15° 02' 47.05" E
	9.	21° 25' 31.59" S 15° 02' 29.42" E



Figure 2; Locality Maps of EPL 7469. (Source: SS Consultancy cc 2022).



Figure 3; Locality Maps of EPL 7470. (Source: SS Consultancy cc 2022).



Figure 4; Locality Maps of EPL 7469. (Source: SS Consultancy cc 2022).



Figure 5; Locality Maps of EPL 8100. (Source: SS Consultancy cc 2022).

2.0 Legislations

In most cases where the aspect of mining is involved, cultural and archaeological evidence located within areas earmarked for development or mining usually face the danger of either complete erasure or total destruction. The legal instrument for the protection of heritage sites and objects in Namibia is the National Heritage Act (No. 27 of 2004).

In order to ensure that this unique heritage of our past is protected and well documented, the National Heritage Act 27 of 2004 and EIA Terms of Reference in relation to the assessment of impacts of the proposed development on the cultural and heritage resources associated with the receiving environment shall be used to guide the exploration exercise. The statutory mandate of heritage impact assessment studies is to encourage and facilitate the protection and conservation of archaeological and cultural heritage sites, in accordance with the provisions of the National

Heritage Act, Act 27 of 2004 and Environmental Management Act (EMA) No. 7 of 2007 and its 2012 EIA Regulations. The National Heritage Act (Section 1 of 2004) defines heritage resources as those of geological and rare objects; paleontological; archaeological; ethnographic objects; historical objects/sites; maritime heritage; built monuments; mining sites as well as objects of scientific interests.

3.0 Approach to study

3.1 Terms of Reference

The main task of the archaeological survey and assessment was to identify and record all sensitive archaeological sites within the limits of EPLs **7469**,**7470**, **7498**, **and 8100** that could be negatively affected by the proposed exploration activities. The assessment also intended to establish heritage significance of possible resources and assess their vulnerability, estimates the extent of the possible impacts and establish mitigation measures. This study is intended to satisfy the requirements of the Environmental Management Act (7 of 2007), and those of the National Heritage Act (27 of 2004).

3.2 Methodology

This Heritage & Archaeological Impact Assessment was carried through desktop-based assessments and a field survey. These methodologies are standards for environmental and heritage assessment in Namibia, which are in line with international best practices. Desktop information was fashioned from current and existing heritage archives, which were taken from existing heritage records comprising those from National Heritage Council, archaeological GIS spatial data and record that has been substantially exposed during the last decades, by a series of detailed archaeological assessments carried out in the during the mineral investigation and mining operations, and the development of infrastructure required by these operations. These sources were then supplemented by a field site visit work within EPLs **7469,7470, 7498, and 8100**.

Sensitivity and susceptibility rating scales, aimed at establishing the nature of vulnerability and sensitivity of heritage resources that are likely to be impacted by the exploration activities, were adopted as per assessment objectives. Their vulnerability to the disturbance in the course of
exploration that includes drilling was evaluated according to parallel 0-5 scales, abridged in Table 2.

Table 2; Rating scales for the assessment of archaeological significance and vulnerability as developed by the QRN.

Significance Rating 0 No heritage significance Disturbed or secondary context, without diagnostic materials 1 2 Isolated minor finds in undisturbed primary context, with diagnostic materials 3 Archaeological and paleontological site (s) forming part of an identifiable local distribution or group 4 Multi-component site (s), or central site (s) with high research potential 5 Major archaeological or paleontological site (s) containing unique evidence of high regional significances **Vulnerability Rating** 0 Not vulnerable No threat posed by current or proposed development activities 1 2 Low or indirect threat from possible consequences of development (e.g., soil erosion) 3 Probable threat from inadvertent disturbance due to proximity of development High likelihood of partial disturbance or destruction due to close proximity of 4 development Direct and certain threat of major disturbance or total destruction 5

Concerning each specific source of impact risk to heritage resources, the assessment methodology estimated the extent of the impact, the magnitude of impact, and the duration of these impacts. The scales of estimation are set out and explained in Table 3.

CRITERIA CATEGOR **DESCRIPTION** Y **Extent** or National Within Namibia spatial Regional Within the Region influence of Local On site or within 200 m of the impact site impact impact High Social and/or natural functions and/ or processes are Magnitude of impact (at Medium severely altered the indicated Social and/or natural functions and/ or processes are Low Very Low notably altered spatial scale) Zero Social and/or natural functions and/ or processes are slightly altered Social and/or natural functions and/ or processes are negligibly altered Social and/or natural functions and/ or processes remain unaltered Short Term Duration of Up to 3 years Medium impact 4 to 10 years after construction Term More than 10 years after construction Long Term

Table 3; Assessment criteria for the evaluation of cumulative impacts on archaeological sites developed by the QRN.

Table 4; Reversibility Ratings Criteria

Reversibility Ratings	Criteria		
Irreversible	The impact will lead to an impact that is		
	permanent.		
Reversible	The impact is reversible, within a period of 10		
	years		

4.0 Assumptions and Limitations

This heritage impact assessment described here relies on desktop studies and it's supported by field assessment undertaken. It is possible to predict the likely occurrence of further archaeological sites with some accuracy and to present a general statement of the local archaeological site distribution. Nevertheless, it is critical as a precautionary measure and best practice, the author recommends the proponent to strictly follow the chance find procedure as the project progresses should any archaeological objects be found during geological mapping, drilling or trenching. The Chance finds procedure is outlined in the National Heritage Council booklet, (2017) and the proponent will be supplied with a copy. Failure to follow and implement such procedure will result in appropriate action being taken against the proponent as per the Heritage Act of 2004.

5.0 Description of the study area in relation to its heritage and geological setting

5.1 Brief heritage setting of the Project Area

Erongo Region is a highly significant archaeological landscape in Namibia (**Figure 6**) where mineral resources represent irreplaceable evidence of global importance. Its archaeological record is reported to have evidence of human occupation dating during the Pleistocene and Holocene periods, roughly in the last 800 000 years to 2000 BP (Kinahan, 2011). Such evidence is reflected in materials records such as surface scatters of stone artefacts, rock shelters with evidence of occupation, including rock art, graves, stone features such as hunting blinds and huts, and morerecent sites such as colonial battlefields, old road-works and historical mines.

These material cultures demonstrate evidence of significant human evolutionary and technological advancements as well as their incredible adaptations to extreme aridity and environmental uncertainty of central Namib attributed mainly to the hunter- gatherers and nomadic pastoralists, and their interaction with early European tradingmissions (Kinahan 2011).



Figure 6; The modified map indicating the distribution of recorded archaeological sites in the Erongo region concerning the generally known sites distribution in Namibia. (Source: Kinahan 2021:7).

6.0 Fieldwork Findings and Observations

A reconnaissance survey was carried out over the four EPLs from the 15TH to 18TH of October 2022 in the Erongo Region. The field survey was aimed at recording and locating the most important archaeological features (if found) that might be negatively impacted by the proposed exploration activities within the boundaries of EPLs 7469,7470, 7498, 8100 and beyond. This survey was also meant to come up with mitigation measures that will safeguard and protect such heritage resources. The field survey involved a combined approach which included foot survey within and around the EPLs and interviews with the locals. A total of six (6) potential archaeological/heritage sites were recorded within these EPLs during the field survey. The site locations are set out below together with brief remarks on their significance. The vulnerability of

these sites is also given. Since no target areas for explorations were provided, the identified sites require mitigation measures to be taken to ensure their conservation.

6.1 Detailed field findings

Within EPL 7469

Heritage resources	Status/findings	Level of impact by proposed	
		explorations	
Buildings, structures, and	None	None	
places of cultural significance			
Areas to which oral tradions	None	None	
are attached or which are			
associated with intangible			
heritage			
Historical buildings	None	None	
Landscapes and natural	Granite rock bolder/shelter	Severe	
features of cultural	and a small cave.		
significance			
Archaeological and	Rock paintings, scattered (out	Severe	
paleontological sites	of context) OES and Lithic		
Graves and burial grounds	None None		
Movable objects	None None		

Site 1;

Site coordinates: 21° 18' 54.15" S 14° 43' 46.79" E

Description: Outcrop (Granite Rock bolder) Fauna remains, Lithics and Ostrich egg shells on the surface see fig 7 & 9.

Records: Photographs and fieldnotes

Significance rating: 4

Vulnerability rating: 5

Reversibility rating: Irreversible



Figure 7; Granite Rock bolder (source: Authors 2022)

Site 2;

Site coordinates: 21° 18' 53.13" S 14° 43' 47.21" E

Description: On the same outcrop on a rock bolder there's a rock painting of 1 animal figure Red in color. The rock painting is very fragile with some small pieces of the rock falling off,

Records: Photographs and fieldnotes

Significance rating: 5

Vulnerability rating: 5

Reversibility rating: Irreversible

Condition assessment: poor condition (not well preserved)



Figure 8; Site 2; Animal figure (source: Authors 2022).

Site 3;

Site coordinates: 21° 18' 51.46" S 14° 43' 47.20" E

Description: Small cave with 3 human figures rock paintings, red in color / red pigment and surface looks fragile. There are a few scattered stone tools and ostrich egg shells around the cave. This site is situated about 12km from Brandberg mountain.

Records: Photographs and fieldnotes Significance rating: 5 Vulnerability rating: 5 Reversibility rating: Irreversible Condition assessment: fair condition



Figure 9; Site 3; small cave and scattered stone tools on the surface within EPL7469 (Source: Authors 2022)

Field findings within EPL 7470

Heritage resources	Status/findings	Level of impact by proposed
		explorations
Buildings, structures, and	None	None
places of cultural significance		
Areas to which oral tradions	None	None
are attached or which are		
associated with intangible		
heritage		
Historical buildings	None	None
Landscapes and natural	None	None
features of cultural		
significance		
Archaeological and	None	None
paleontological sites		
Graves and burial grounds	A stone cairn	Mild
Movable objects	None	None

Site coordinates: 21° 18' 2.30" S 14° 58'3.10" E

Description: A stone cairn /stone marking (man-made). Possibility marked as the end of this EPL since it is located at the north east of the EPL boundaries.

Records: Photographs and fieldnotes

Significance rating: 3

Vulnerability rating: 3

Reversibility rating: Irreversible



Figure 10; the only recorded site within EPL 7470, a stone cairn /stone marking (man-made) source: Authors 2022).

EPL 7498

Field findings within EPL 7498

Heritage resources	Status/findings	Level of impact by proposed
		explorations
Buildings, structures, and	None	None
places of cultural significance		
Areas to which oral tradions	None	None
are attached or which are		
associated with intangible		
heritage		
Historical buildings	None	None
Landscapes and natural	None	None
features of cultural		
significance		
Archaeological and	None	None
paleontological sites		
Graves and burial grounds	Burial site	Mild
Movable objects	None	None

Site 1;

Site coordinates: 21° 24' 38.63" S 15° 07' 50.72' E **Description:** A community burial site, fenced off.

Records: Photographs and fieldnotes

Significance rating: 3

Vulnerability rating: 3

Reversibility rating: Irreversible



Figure 11; A community burial site, fenced off (source: Authors 2022).

EPL 8100

Field findings within EPL 8100

Heritage resources	Status/findings	Level of impact by proposed
		explorations
Buildings, structures, and	None	None
places of cultural significance		
Areas to which oral tradions	None	None
are attached or which are		
associated with intangible		
heritage		
Historical buildings	None	None
Landscapes and natural	None	None
features of cultural		
significance		
Archaeological and	None	None
paleontological sites		
Graves and burial grounds	Burial site	Mild
Movable objects	None	None

Site 1;

Site coordinates: 21° 24' 26.94'S 15° 07' 39.55E

Description: a ruins (building)

Records: Photographs and fieldnotes

Significance rating: 3

Vulnerability rating: 3

Reversibility rating: Irreversible



Figure 12; A ruined building structure (source: Authors 2022).

7.0 Results of Desktop Research

Information from the NHC shows that the project area falls under the cultural landscape occurring in Erongo Region. Erongo region has 37 heritage sites which are listed as national monuments.

8.0 Recommendations and Conclusions

8.1 Management recommendations

At this stage it is important that the clients are made aware of the fact that archaeological/heritage sites within the area under study are protected under the National Heritage Act (27 of 2004). When prospecting is underway, the proponents should make sure that all personnel and contractors are aware of the protected nature of archaeological sites as well as the legal obligation to report any new finds to the National Heritage Council as soon as possible. The proponent should take steps to avoid either direct damage to the sites or to their immediate landscape setting. Based on the

desktop assessment and subsequent field investigation highlighted in this report and with professional confidence and satisfaction, we recommend approval of a heritage consent by the NHC authority but strictly subject to conditional inclusion of heritage monitoring measures and Chance Finds Procedure that will be incorporated into the project's **EMP**.

The area around EPL 7498 & 8100 did not really yield any sensitive archaeological and heritage resources as compared to the area around EPLs 7469, & 7470, which has extensive sensitive archaeological remains of early Pre - colonial era as described in the field findings above. These include graves, few painting and artifacts such as, stone tools and ostrich egg shell scatters. With all that evidence, it is it is possible that subsurface remains might be exposed during site preparation and explorations, thus we further recommend the following:

That all sensitive sites recorded in this report should be demarcated off during the exploration phase, this site's locations must also be incorporated within the project EMP and GIS.

- a) The granite rock outcrop (with the small cave and rock paintings) in EPL 7469 should be treated as a no-go area and a creation of a 500 m radius buffer zone free from exploration activities is recommended.
- b) Site inspections by the heritage council on the buffer zone to ensure the proponent abide by the conditions as set by the heritage council and further research and documentation of the rock paintings and cave in EPL 7469 is highly recommended.
- c) The project proponents or contractors should adopt the Chance Finds Procedure attached here as Appendix 1, so that any buried archaeological remains that might be discovered may be handled following the provisions of Part V Section 46 of the National Heritage Act (27 of 2004).
- d) The foot print impact of the proposed exploration activities should be kept to minimal, to limit the possibility of encountering chance finds within servitude.
- e) The Environmental Management Plan is to ensure that all the existing archaeological reference guidelines (Chance Find Procedure Guideline by NHC (2017) is shared with the proponent for guidance. So that, any buried archaeological remains that might be discovered during the prospecting phase are handled following the provisions of Part V Section 46 of the National Heritage Act (27 0f 2004).

- f) The developer or contractor should show overall commitment and compliance by adapting a zero-damage approach.
- g) A creation of a 50 m buffer zone for both sites in EPLs 7498 and 8100.

8.2 Conclusion

The literature review and field study confirmed that the project area is situated within a contemporary cultural landscape dotted with settlements with long local history. Field survey established that the affected project area is degraded by environmental clearance. Although the area is degraded, there is a possibility that subsurface archaeological material can be discovered.

This report concludes that the proposed exploration activities on EPL **7470**, **7498**, **8100** may be approved by NHCN to proceed as planned subject to recommendations herein made and Chance Find Procedures are followed. The measures are informed by the results of the HIA study and principles of heritage management enshrined in the NHA, Act 27 of 2004.

The proposed exploration activities within EPL **7469**, will affect an area of archaeological and cultural heritage significance and the project may threaten some archaeological assets worthy of mitigation measures. The identified and recorded sites within EPL 7469 will require mitigation measures to be decided by the National Heritage Council. These measures may include demarcation of the sites (buffer zones) free from exploration activities and possible excavation. This report provides only a phase 1 survey and assessment of the project which can be followed by a phase 2 mitigation exercise if required.

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Appendix 1)

The proponent is advised to implement the following management actions on the way forward:

1. Chance Finds Procedure (CFP) management guideline:

Areas of proposed development or mining activities are subject to heritage survey and assessment at the planning stage. These surveys are based on surface indications alone, and it is, therefore, possible that sites or items of heritage significance will be found in the course of development work. The procedure set out here covers the reporting and management of such finds.

Scope: The "chance finds" procedure covers the actions to be taken from the discovery of a heritage site or item to its investigation and assessment by a trained archaeologist or other appropriately qualified people.

Compliance: The "chance finds" procedure is intended to ensure compliance with relevant provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): "a person who discovers any archaeological Objectmust as soon as practicable report the discovery to the Council". The procedure of reporting set out below must be observed so that heritage remains reported to the NHC are correctly identified in the field.

A. Responsibilities:

OperatorTo exercise due caution if archaeological remains are foundForemanTo secure site and advise management timeouslySuperintendent To determine safe working boundary and request inspectionArchaeologistTo inspect, identify, advice management, and recovers remain

B. Procedure:

Action by the person (operator) identifying archaeological or heritage material

- If operating machinery or equipment: stop work
- Identify the site with flag tape
- Determine GPS position if possible

- Report findings to foreman
- C. Action by foreman:
 - Report findings, site location and actions are taken to the superintendent
 - Cease any works in the immediate vicinity
- D. Action by superintendent
 - Visit the site and determine whether work can proceed without damage to findings;
 - Determine and mark the exclusion boundary
 - Site location and details to be added to the Archaeological Heritage database system
- E. Action by archaeologist
 - Inspect site and confirm the addition to AH database system;
 - Advise National Heritage Council and request a permit to remove findings;
 - Recovery, packaging and labeling of findings for transfer to National Museum
- F. In the event of discovering human remains
 - Actions as above;
 - Field inspection by archaeologist to confirm that remains are human;
 - Advise and liaise with NHC Guidelines; and
 - Recovery of remains and removal to National Museum or National Forensic Laboratory, or as directed.

SITE REF	HERITAGE ASPECT	POTENTIAL IMPACT	MITIGATION MEASURES	RESPONSIBLE PARTY	PENALTY	METHOD STATEMENT REQUIRED
Chance Finds (Archaeologic al and Burial Sites)	General area where the proposed project is situated is a historic landscape, which may yield archaeological, cultural property, remains. There are possibilities of encountering unknown archaeological sites during subsurface construction/exploration work which may disturb previously unidentified chance finds.	 Possible damage to previously unidentified archaeological and burial sites during exploration phase. Unanticipated impacts on Archaeological sites where project actions inadvertently uncovered significant archaeological sites. Loss of historic cultural landscape; Destruction of burial sites and associated graves Loss of aesthetic value due to exploration work Loss of sense of place Loss of intangible heritage value due to change in land use 	 In situations where unpredicted impacts occur exploration activities must be stopped and the heritage authority should be notified immediately. Where remedial action is warranted, minimize disruption in exploration scheduling while recovering archaeological data. Where necessary, implement emergency measures to mitigate. Where burial sites are accidentally disturbed during exploration, the affected area should be demarcated as no-go zone by use of fencing during exploration, and access thereto by the exploration team must be denied. Accidentally discovered burials in development context should be salvaged and rescued to safe sites as may be directed by relevantheritage authority. The heritage officer responsible should secure relevant heritage and health authorities' permits for possible relocation of affected graves accidentally encountered during exploration work. 	 Contractor / Project Manager Archaeologist Project Environmental Control Officer (ECO) or Site Manager 	Fine and or imprisonment under the NHA	Monitoring measures should be issued as instruction within the project EMP. PM/EO/Archaeologists Monitor exploration activities on sites where such exploration project commence within the farm.

Appendix 2 Archaeological and Heritage Monitoring Measures

Appendix 3) Archaeological Management Plan (AMP)

Objectives of Archaeological Management Plan (AMP)

- Protection of archaeological sites and land considered to be of cultural value.
- Protection of known physical cultural property against vandalism, destruction and theft; and
- The preservation and appropriate management of new archaeological finds should these be discovered during exploration and mining operations.

Archaeological Management Plan (AMP)

Archaeological Management Plan (AMP)								
Area and Site	Mitigation Measures	Phase	Timeframe	Responsibility party for implementation	Monitoring party	Accountable party	Monitoring system (performance indicators)	Target
	If potentially human remains, NHC and Namibian Police should be contacted	Throughout the project	The project life	Operational staff or any person employed by the proponent	Site Manager (SM)	Proponent	Checklist/Progress report	Place Ordinance 27 of 1966
NB! The procedure to be followed during the operation, decommissioning and rehabilitation phases are the same as they were during the exploration phase.								

ANNEXURE J: CONSENT LETTERS (NATIONAL HERITAGE COUNCIL, TRADITIONAL AUTHORITY AND CONSERVANCY)



Tsiseb Conservancy Office P.O. Box 72 Uis Namibia Tel: +264 64 504162 Fax: +264 64 504182 Email: <u>tsisebconservancy@gmail.com</u>

Enquiries: Eric Xaweb Manager

17 June 2023

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Uis-Chi investments Namibia CC

P.O. Box 3250

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Email: Uis Chi investment@yahoo.com

RE: PROPOSED PROSPECTING AND EXPLORATION ON EPL No: 7469,7470,7498,7576 and 8100 WITHIN CONSERVANCY AREA

Tsiseb Conservancy herewith gives consent towards EPL 7469,7470,7489,7576 and 8100 which is located in Uis District in the Erongo Region within the conservancy boundaries to further their process with the relevant institution.

However, once your Environmental Clearance Certificate (ECC) is issued and before any proposed prospecting and exploration commence the Project Proponent and the Conservancy Management Committee should enter into MOU with reference on the meeting which was held on the 17 June 2023 as platform of engagement.

Kindly take into due considerations to comply at all times with the provisions of Environmental Management Act of 2007 during the prospecting and exploration phase

JESAJAS B. GOSEB	TSISEB CONSERVANCY PO Box 72 Uis, Namibia
	2023 -06- 17
Tsiseb CMC Members: J Goseb (Chairperson), V /Uises (Vice Chairperso R Garises, M Matsuis, R.!Guims, G /Huseb, S //Areseb, N	on) Tel: +264 64-504162 Seibeb Fax: +264 64-504182 tsisebconservancy@gmail.com

DÂURE DAMAN TRADITIONAL AUTHORITY



SAMI #GAUB DAURE DAMAN

P.O. Box 114, Uis, NAMIBIA Head Office: Farm #Nu-Danab, Uis District, Erongo Region, NAMIBIA dauredaman2017@gmail.com

Enq: Ms. Adelma /Uises 0813702167

Uis-Chi Investment Namibia CC

P. O. Box 3250

Windhoek

Namibia

Attention: Mrs. Illovo

RE: CONSENT IN SUPPORT OF THE EXPLORATION AND ENVIRONMENTAL SCOPING ASSESMENT REPORT FOR UIS-CHI INVESTMENT NAMIBIA CC ON EPLS 7469,7470, AND 8100.

The above matter refers:

The Dâure Daman Traditional Authority is hereby established by Act of Parliament Traditional Authorities Act, Act 25 of 2000 Section. 2(1) and Government recognized and Gazette, and is having jurisdiction over two regions, being Erongo Region, within Dâures Constituency, and Kunene Region within Khorixas Constituency.

This letter serves to inform the Ministry of Mines and Energy that the Dâure Daman Traditional Authority acknowledge and support the planned EPL application by Uis-Chi Investment Namibia CC, in my area of jurisdiction (Erongo region, Dâures constituency).

We fully welcome and support your wish to bring about development and socio-economic upliftment to this area through the desired mining exploration.

Upon your application to the Ministry of Mines and Energy being successful, kindly be mindful of the following, namely that:

- Preference should be given to the inhabitants of this area, in respect of employment opportunities;
- b. An Environmental Impact Assessment must be completed;
- All parties affected or likely to be affected must be taken into cognizance, including (but not limited to) MEFT, NACOMA, Conservancy and the SRT;
- d. The interests of small miners and small mining activities within the area be protected and/or be considered favorably at all times. Existing claim holders be protected, by excluding their areas from the EPL applied for.
- e. Applicable rules and regulations are followed and adhered to.
- f. This letter is not in any way intended to undermine, overrule, or disregard the legal processes that the government has in place to control the activities.
- g. That there is to be signed an agreement between the Applicant and the Dâure Daman Traditional Authority, which has to be honored by both parties.

26/06/2023

In conclusion, we foresee that Uis-Chi Investment Namibia CC will benefit the region as a whole, and enhance the livelihood of local community, by means of job creations, education and new skills development through training prospects for the short, medium- and long-term prospects.

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Counting on your timely and positive consideration in the above regard. Best regards, -06- 2.6 14 **Chief Zacharias Seibeb** Dâure Daman Traditional Authority



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National Heritage Council of Namibia 52 Robert Mugabe Avenue, Windhoek Private Bag 12043, Ausspannplatz, Windhoek, Namibia Tel: (061) 244 375 • Fax: (061) 246 872 • E-mail: info@nhc-nam.org

CONSENT

(Section 55(9) of the National Heritage Act, 2004 (Act No. 27 of 2004)) Consent is hereby given to:

13th March 2023

Consent Number No: 30/2023/25

Name of applicant: Uis-Chi Investment Namibia cc

(Title and full name of the applicant)

Address of applicant: P. O. Box 3250, Windhoek, Namibia.

(Address of the applicant and of the applying institution (if applicable)

For: Exclusive Prospecting License (EPL) 7498, 7470 and 8100 for the exploration of Base and Rare metals, Precious metals, and Industrial minerals.

(Type of Activity applied for)

Of: Ruins of historical buildings in EPL 8100, a burial site in EPL 7498 and no heritage resources recorded in EPL 7470

(Description of Heritage Resources)

From: The EPLs are all located South-East of the Brandberg mountain, Erongo region, Namibia. The EPLs covers a combined surface area of 37 827 Hectares.

(Description of the site, location as in the application)



In accordance with: Heritage Impact Assessment conducted on Exploration Prospecting License (EPL) 7498, 7470 and 8100, for the exploration of Base and Rare metals, precious metals, and Industrial minerals. The EPLs are all located South-East of the Brandberg mountain, Erongo region, Namibia.

Permit application date: 03/02/2023

(Specify relevant documentation and Permit application date)

The following conditions (imposed in terms of Section 55(9) of the Act.) apply to this permit:

- a) A buffer zone of 50m should be created and maintained around the stone cairn in EPL 7470.
- b) A buffer zone of 100m should be created and maintained around the ruins of the historical building in EPL 8100.
- c) A buffer zone of 100m should be created and maintained around the community burial site in EPL 7498.
- d) A buffer zone of 15 km radius should be maintained around the Brandberg mountain. This should be regarded as a NO-GO area and the proponent should comply with this.
- e) As per Section 55 (9) (a) the activity authorized by this consent be supervised by a person with appropriate professional qualifications or experience.
- f) Chance Find Procedures is proposed if buried or hidden remains are found during course of development.
- g) Monitoring and evaluation inspection will be carried out on the area during the course of the year.
- h) The consent holder is to report back to the National Heritage Council every six (6) months on compliance with the conditions of this consent.
- This Consent does not exempt the holder from any conditions that may be imposed by owners, hosts or any other relevant authorities in consultation with NHC who have a stake in the project area.

- j) NHC shall not be liable for any losses, damages or injuries to persons or properties as a result of any activities related to this permit.
- k) This Consent is subject to the provisions of the National Heritage Act (Act 27 of 2004). Should any of the conditions contained herein conflict with the Act; the provisions of the Act as per Section 55 (10) shall prevail.
- This consent is renewable, upon submission of an application at least two months before the current permit lapses.

(List any conditions that the Council may see fit to impose in terms of section 55 (9) of the act.

This Consent will be valid from 13th March 2023 to 12th March 2024.

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Director: National Heritage Council of Namibia