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DRAFT ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE:

**PROPOSED PROSPECTING AND EXPLORATION ACTIVITIES ON
EXCLUSIVE PROSPECTING LICENSE (EPL) 7233 NEAR OMATJETE IN
THE ERONGO REGION**

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Proponent: Otombawe Mining CC

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Environmental Consultant)**

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DOCUMENT INFORMATION

Title: Draft Environmental Management Plan (EMP) for the Proposed Prospecting and Exploration Activities on Exclusive Prospecting License (EPL) 7233 near Omatjete in the Erongo Region

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TABLE OF CONTENTS

DOCUMENT INFORMATION	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	ii
LIST OF TABLES	ii
LIST OF ABBREVIATIONS	iii
1 INTRODUCTION.....	1
1.1 Background and Project Location	1
1.2 Aim of the Draft EMP and Contents	1
2 BRIEF PROJECT DESCRIPTION AND ACTIVITIES.....	4
2.1 Proposed Prospecting and Exploration Methods.....	4
2.1.1 Human, and Technical Resources & Services.....	4
3 LEGAL OBLIGATIONS: PERMITTING AND LICENSING.....	6
4 DRAFT EMP IMPLEMENTATION, ROLES & RESPONSIBILITIES	10
4.1 Competent Environmental Monitoring Authorities (DEAF and Others)	10
4.2 The Exploration Manager (or the Proponent)	10
4.3 Environmental Control Officer (ECO).....	11
4.4 Public Relation Officer (PRO)	11
4.5 Archaeology: Chance Finds Procedure (CFP) Implementation Roles.....	11
5 ENVIRONMENTAL IMPACTS, MANAGEMENT & MITIGATION MEASURES	12
5.1 The Key Potential Adverse Environmental Impacts.....	12
5.2 Environmental and Social Management & Mitigation Measures	13
6 DECOMMISSIONING AND REHABILITATION.....	36
6.1.1 Post-Exploration Rehabilitation	36
7 RECOMMENDATIONS AND CONCLUSIONS.....	37

LIST OF FIGURES

Figure 1: Locality map of EPL 7233 near Omatjete in the Erongo Region	2
Figure 2: Significant Land Uses around EPL 7233	3

LIST OF TABLES

Table 1: Approximate GPS coordinates of EPL 7233.....	1
Table 2: The legal requirements for the permitting and licensing of certain activities to be undertaken on EPL 7233	7
Table 3: The key issues (adverse impacts) for which management and mitigation measures were developed	12
Table 4: The Environmental Management and Mitigation Measures for the Planning, Prospecting & Exploration Phases	13

LIST OF ABBREVIATIONS

Abbreviation	Meaning
AHIA	Archaeological & Heritage Impact Assessment
CFP	Chance Find Procedure
DEAF	Department of Environmental Affairs and Forestry
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPL	Exclusive Prospecting License
GPS	Global Positioning System
HIV/AIDS	Human Immunodeficiency Viruses and Acquired Immune Deficiency Syndrome
I&APs	Interested and Affected Parties
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
NHC	The National Heritage Council (NHC) of Namibia
PPE	Personal Protective Equipment

1 INTRODUCTION

1.1 Background and Project Location

Otombawe Mining CC (hereinafter referred *The Proponent*) has been granted an Exclusive Prospecting Licence (EPL) No. 7233 by the Ministry of Mines and Energy (MME) on the 14th of May 2019 and expires on the 13th of May 2022. The Proponent intends to prospect and explore on the 15,158-hectare (ha) EPL. The EPL of interest is located about 25km northwest of Omatjete Village in the Erongo (**Figure 1**) and covers a part of (within) the Otjohorongo Reserve - **Figure 2**. The approximate corner coordinates of the EPL are presented in **Table 1** below. The EPL has potential for commodities such as Base & Rare Metals, Dimension Stone, Industrial Minerals, and Precious Metals, but the commodity of interest for the planned prospecting and exploration activities is Dimension Stone only.

Table 1: Approximate GPS coordinates of EPL 7233

Point Number	GPS Coordinates
1	20°47'32" S 15°23'19" E
2	20°47'31" S 15°31'48" E
3	20°50'35" S 15°31'51" E
4	20°51'54" S 15°31'17" E
5	20°52'01" S 15°26'53" E
6	20°54'41" S 15°27'34" E
7	20°54'46" S 15°24'35" E
8	20°53'29" S 15°23'19" E

1.2 Aim of the Draft EMP and Contents

This Draft EMP has been developed to fulfil the requirements of Regulation 8(j) of the EIA Regulations (2012). This Regulation requires that a draft Environmental Management Plan (EMP) shall be included as part of the Environmental Assessment (EA) scoping report. 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."

An EMP is one of the most important outputs of the EA process as it synthesizes all the proposed mitigation and monitoring actions, set to a timeline and with specific assigned responsibilities. It provides a link between the impacts identified in the EA process and the required mitigation measures to be implemented during operation. It is important to note that an EMP is a statutory document and a person who contravenes the provisions of this EMP may face imprisonment and/or a fine. This EMP is a living document and can be amended to adapt to address project changes and/or environmental conditions and feedback from compliance monitoring.

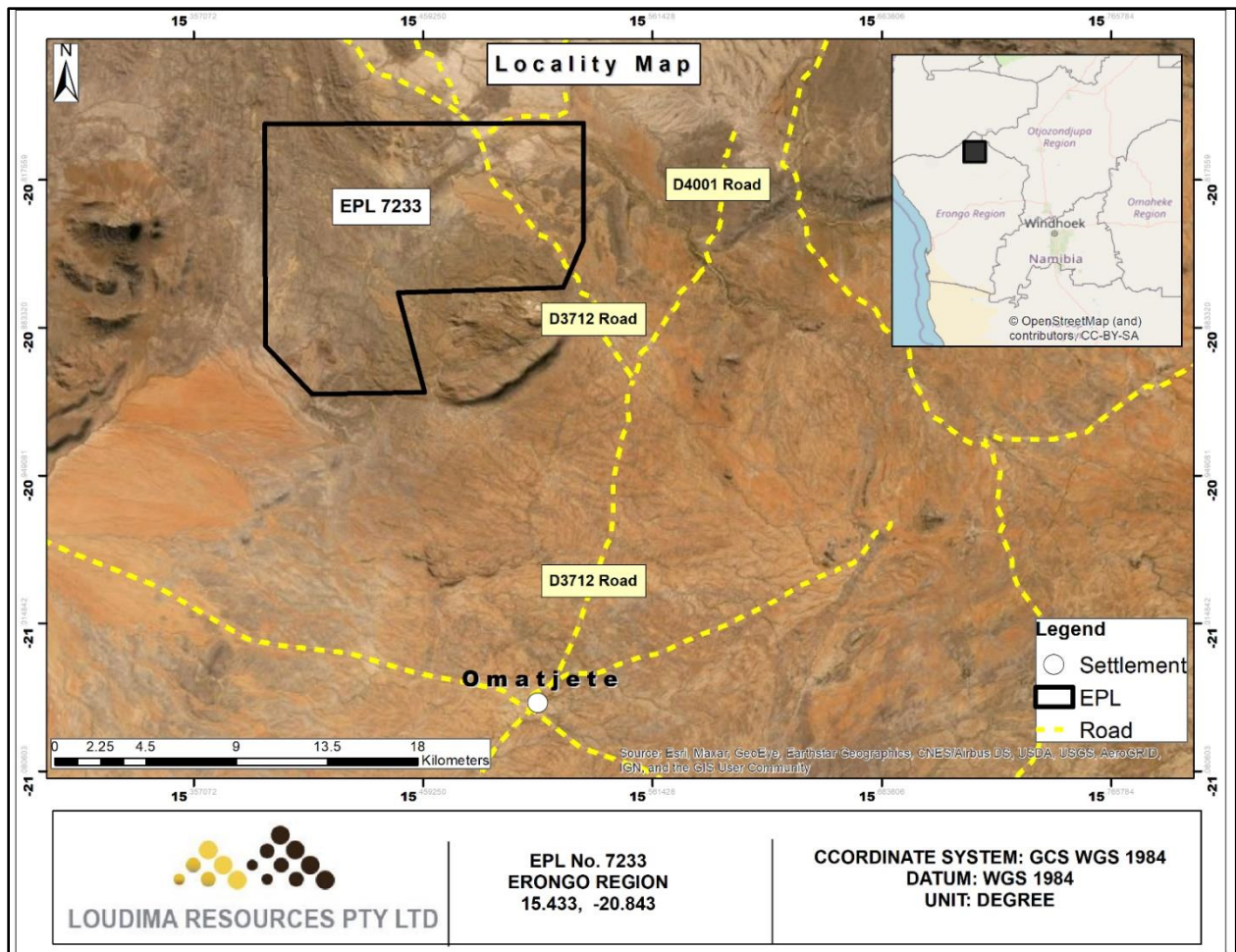


Figure 1: Locality map of EPL 7233 near Omatjete in the Erongo Region

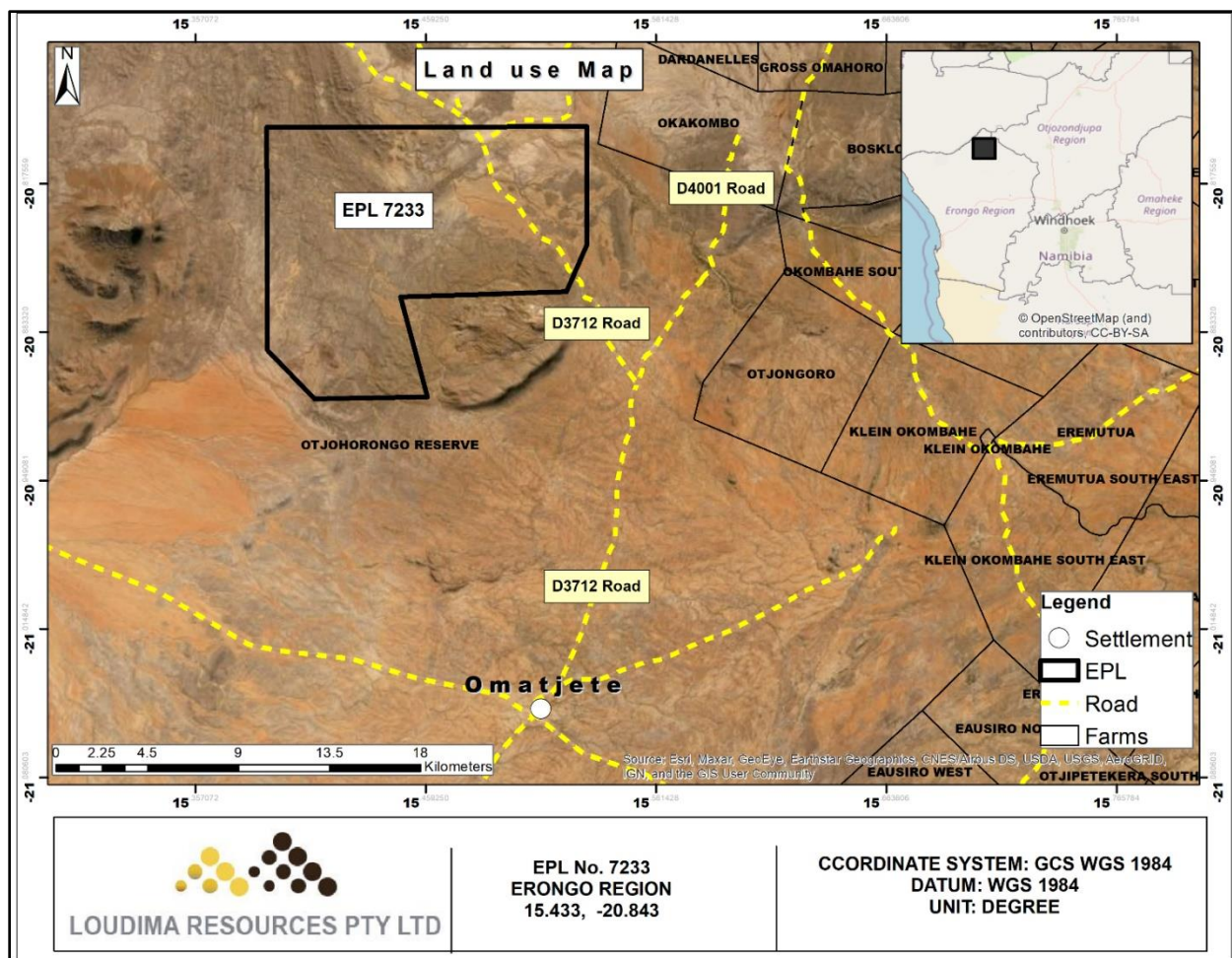


Figure 2: Significant Land Uses around EPL 7233

The purpose of the Draft EMP is to ensure that the proposed project activities are undertaken in an environmentally friendly and sustainably manner. This would be done through the effective implementation of recommended environmental management and mitigation measures contained in the EMP, for which the aim is to avoid and or minimize the adverse identified impacts.

The chapters contained in this Draft EMP are:

- The Brief description of proposed project activities (**Chapter 2**).
- Legal Obligations of the proposed project activities in terms of permits and licenses required before, and throughout the project (**Chapter 3**).
- Draft EMP implementation roles and responsibilities (responsible parties) – **Chapter 4**.

- Environmental Management and Mitigation measures. This includes the affected aspects of the environment, measures to be implemented, responsibilities of implementation (by who?), key performance indications of implementation, resources (if any) and timelines (when they should be implemented) - **Chapter 5**.
- Decommissioning and Rehabilitation of explored site areas- **Chapter 6**.
- The recommendations and conclusions (**Chapter 8**).

2 BRIEF PROJECT DESCRIPTION AND ACTIVITIES

The proposed prospecting and exploration activities are anticipated to last between two and four months.

2.1 Proposed Prospecting and Exploration Methods

The Proponent intends to adopt a systematic prospecting approach as presented under the following subsections:

- **Desktop (Non-invasive method):** This will entail geological mapping, reviewing of existing geological maps and historical drilling data and / or exploration data for the area (literature review).
- **Field Evaluation and Detailed Exploration (Stripping):** In addition to the literature review (desktop study) above, fieldwork (lithological (soil/rock) mapping and sampling) will be conducted to verify desktop work. At this stage, there will be no physical soil/land disturbance yet. Field evaluation is then carried out by simple collection of sample blocks on target areas. The blocks will then be exported and showcased in target markets.
- **Feasibility Study / Detailed Exploration and Quarrying: (A) Stripping & Drilling Equipment.** The first process of opening a test quarry (in this case a 2 to 3m sample block) is to remove the material between the surface and the minerals or materials that is needed for extraction. This is done by surface stripping. Surface stripping is done with crawler tractors, which are large-scale bulldozers. Wheel Loaders (machines equipped with a hydraulic arm and bucket) are then used to load dirt that is moved by crawler tractors or blasting technicians.

2.1.1 Human, and Technical Resources & Services

The project will require and utilize the following services:

- **Water:** For exploration, about 10,000 litre of water will be required every 2 days. The water will be supplied through carting from the nearest water supply area (Omaruru). Therefore, no exploration related water abstraction will be done onsite or within the site area to prevent unnecessary pressure on the local resources. The water will be stored in two 10,000-litre industry standard water storage tanks onsite, and these will be refilled as and when necessary. The required water will be used for cooling down and washing of equipment, exploration related activities, and ablution.

Similarly, potable water will also be made available for the exploration crew (workers) on site. Based on the comments made in the public consultation meeting in October 2021, some community members suggested that if the project cannot get all its water needs from the surrounding boreholes, then they should consider buying some water from the community, even for drinking to also ensure that the community benefits from the project activities through water provision purchasing agreements.

- **Fuel supply: (for personnel use to cook):** The Proponent will provide firewood or fuel to be used for food preparation by the site workers. No firewood will be collected on the farms or neighbouring land, without the owners or authority's permission.
- **Fuel Supply (machinery and equipment):** Diesel will be used for machinery and equipment and fuel generator. A trailer mounted and bunded 10,000-litre fuel tank will be onsite to ensure an interrupted fuel supply.
- **EPL Accessibility (roads):** The EPL is accessible from the district road, D3712 from Omatjete to the north or D2344 from the south and then via local access (gravel) roads. Therefore, the exploration vehicles will be using these existing roads to access the project site. It is also anticipated that, if necessary, onsite new tracks to the different targeted site areas within the EPL will be created. The Proponent may need to do some upgrade on the site access road to ensure that it is fit to accommodate project related vehicles, such as heavy trucks.
- **Waste management**
 - **Sewage** - A minimum of two portable ablution facilities with septic tanks will be provided on site and emptied according to manufacturers' instructions. The wastewater will then be transported offsite to the nearest wastewater treatment facility such as Omaruru.
 - **General and domestic (solid) waste** - enough waste bins (containers) will be made available at both exploration sites and campsite for waste storage. The bins will be emptied into the main onsite container for disposal at the nearest landfill site, such as Omaruru, upon reaching an agreement with the Omaruru Municipality.
 - **Hazardous waste** - All vehicles, machinery and fuel consuming equipment will be provided with drip trays to capture potential fuel spills and waste oils. The waste fuel/oils will be carefully stored in a standardized container until such a time that it can be disposed of at the nearest approved hazardous waste management facility.
- **Health, Safety and Security**
 - **Occupational personal health and safety:** all construction workers will be supplied with appropriate and adequate personal protective equipment (PPE) while carrying project activities onsite.

- **First aid kits:** At least two first aid kits will be made available on site; one at the working sites and the second one at the site campsite. One or two of the exploration crew members will be equipped with basic first aid kit administrating skills to attend to other during site injuries and call for necessary further medical attention.
- Management of accidental fire outbreaks: A minimum of basic firefighting equipment, i.e., two fire extinguishers will be readily available in vehicles, at the working sites and campsite (accommodation units).
- **Site fencing:** The whole EPL area will not be fenced off, but only certain explored site areas that will be considered risky and hazardous (such as exploration boreholes, open trenches, or small test quarries) to the surrounding communities, these will be demarcated and fenced off with temporary mesh wires accompanied by clear and visible warning / "danger" signs in both English and the local language (Otjiherero). The mesh will prevent unauthorized public access and protect the vulnerable community members such as unsuspecting children as well as preventing local animals from falling into hazardous bodies such as exploration trenches/pits or boreholes.

3 LEGAL OBLIGATIONS: PERMITTING AND LICENSING

The legal requirements provided herein are these in terms of permits or licensing that the Proponent will need to obtain prior to the site works and or renewal of permits throughout the prospecting and exploration phase. These legal requirements are provided under **Table 2**.

Table 2: The legal requirements for the permitting and licensing of certain activities to be undertaken on EPL 7233

Legislation/Policy/Guideline	Relevant Provision	Implication for the Project and Contact Institution/Person
Environmental Management Act (EMA) No. 7 of 2007	<p>The Act requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27).</p> <p>The Act details principles which are to guide all EAs.</p>	<p>The EMA and its regulations should inform and guide this ESA process.</p> <p>Should the ECC be issued to the Proponent, it should be renewed every 3 years, counting from the date of issue.</p>
Environmental Impact Assessment (EIA) Regulations Government Notice 28-30 (Government Gazette 4878))	<p>Details requirements for public consultation within a given environmental assessment process (Government Notice 30 Section 21).</p> <p>Details the requirements for what should be included in a Scoping Report (Government Notice 30 Section 8) and an Assessment Report (Government Notice 30 Section 15).</p>	<p>Contact details at the Department of Environmental Affairs and Forestry (DEAF), Ministry of Environment, Forestry and Tourism (MEFT)</p> <p>Office of the Environmental Commissioner (Attention: Mr. Timoteus Mufeti)</p> <p>Tel: +264 (0) 61 284 2701</p>
Minerals (Prospecting and Mining) Act (No. 33 of 1992)	<p>Section 48 (3): To enable the Minister to consider any application referred to in section 47 the Minister may (b) require the person concerned by notice in writing to (i) carry out or cause to be carried out such environmental impact studies as may be specified in the notice.</p> <p>Section 54(2): details provisions pertaining to the decommissioning or abandonment of a mine.</p>	<p>The Proponent should ensure that all necessary permits/authorization for these EPL are obtained from the Ministry of Mines and Energy (MME).</p> <p>Contact person and details at the MME (Mining Commissioner)</p> <p>Mr. Erasmus Shivolo</p> <p>Tel: +264 61 284 8167</p>

Legislation/Policy/Guideline	Relevant Provision	Implication for the Project and Contact Institution/Person
Traditional Authority Act (Act No. 25 of 2000)	The Act also stipulates that Traditional Authorities (TAs) should ensure that natural resources are used on a sustainable basis that conserves the ecosystem. The implications of this Act are that TAs must be fully involved in the planning of land use and development for their area. It is the responsibility of the TA's customary leaderships, the Chiefs, to exercise control on behalf of the state and the residents in their designated area.	<p>The EPL considered under this project is predominantly located in Omatjete which is mainly communal land under the Zeraeua Traditional Authority. Therefore, this TA should be consulted throughout the project and to grant land access and use consent, when and where required.</p> <p>Contact details of the TA' Office:</p> <p>Chief Manasse Zeraeua and Hon. Senior Traditional Councillor Fabianus Uaseuapuni,</p> <p>Tel: +264 64 571 053</p>
Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001)	Regulation 3(2)(b) states that "No person shall possess or store any fuel except under authority of a licence or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area"	<p>The Proponent should obtain the necessary authorisation from the MME for the storage of fuel on-site.</p> <p>Mr. Carlo Mcleod (Ministry of Mines and Energy: Acting Director – Petroleum Affairs),</p> <p>Tel: +264 61 284 8291</p>
Forestry Act 12 of 2001, Amended Act 13 of 2005	Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22 (1)). The Act prohibits the removal of and transport of various protected plant species.	<p>Should there be protected plant species, which are known to occur within the actual project site footprint, and require to be removed, a Permit should be obtained from the nearest Forestry Office (MEFT) prior to removing them.</p> <p>Contact Details at MEFT (Forestry Division Head Office),</p> <p>Acting Director of Forestry: Mr. Fillemon Kayofa</p> <p>Tel: +264 (0) 61 208 7320</p>
National Heritage Act (Act No. 27 of 2004)	The Act makes provision for the protection and conservation of places and objects of heritage significance and the	

Legislation/Policy/Guideline	Relevant Provision	Implication for the Project and Contact Institution/Person
	<p>registration of such places and objects. Part V Section 46 of the Act prohibits removal, damage, alteration, or excavation of heritage sites or remains, while Section 48 sets out the procedure for application and granting of permits such as might be required in the event of damage to a protected site occurring as an inevitable result of development. Part VI Section 55 Paragraphs 3 and 4 require that any person who discovers an archaeological site should notify the National Heritage Council. Section 51 (3) sets out the requirements for impact assessment.</p> <p>Should any objects of heritage significance be identified during the site clearing and excavations, the work must cease immediately in the affected sites and the necessary steps taken to seek authorisation from the Council.</p>	<p>The Proponent should ensure compliance with this Acts' requirements. The necessary management measures and related permitting requirements must be taken. This done by consulting with the National Heritage Council (NHC) of Namibia. An Archaeological & Heritage Impact Assessment (AHIA) should be done for the EPL, and a Report submitted to the NHC for evaluation and issuance of a consent letter/permit.</p> <p>Contact: The Director of the National Heritage Council of Namibia (NHC): Mrs. Erica Ndalikokule</p> <p>OR Regional Heritage Officers at the NHC</p> <p>Mr. Manfred Gaeb and Ms. Agnes Shiningayamwe</p> <p>Tel: +264 (0) 61 301 903</p>
<p>The National Monuments Act No. 28 of 1969</p>	<p>The Act enables the proclamation of national monuments and protects archaeological sites.</p>	
<p>The Road Traffic and Transport Act No. 52 of 1999 and its 2001 Regulations</p>	<p>Provides for the control of traffic on public road and the regulations pertaining to road transport, including the licensing of vehicles and drivers.</p>	<p>Mr Eugene de Paauw (Roads Authority- specialist Road legislation), Tel: +264 (0) 61 284 7072</p>

4 DRAFT EMP IMPLEMENTATION, ROLES & RESPONSIBILITIES

This chapter presents the person(s) responsible for the implementation of management and mitigation measures contained in this EMP.

It should be noted that the project Proponent, Otombawe Mining is ultimately responsible for the implementation of the EMP. However, they may delegate this responsibility at any time, as they deem necessary during the project phases (usually an environmental control officer or safety, health, and environmental person). The roles and responsibilities of all the parties involved in the effective implementation of this EMP are as follows:

4.1 Competent Environmental Monitoring Authorities (DEAF and Others)

The Department of Environmental Affairs and Forestry (DEAF) of the Ministry of Environment, Forestry and Tourism (MEFT) as the environmental custodian is responsible for enforcing compliance with the EMA, its regulations and full implementation of this EMP. The authority is also responsible for the reviewing of bi-annual reports submitted by the Proponent and grant ECC renewal after every 3 years following an environmental audit.

Further Monitoring institutions include but not limited to:

- **The National Heritage Council of Namibia:** for archaeological and heritage resources (sites and objects).
- **Ministry of Mines and Energy:** for compliance to the relevant prospecting and exploration requirements, including work progress on site, petroleum products' storage and handling on site, etc.

4.2 The Exploration Manager (or the Proponent)

This Manager who may also be the Proponent, will be responsible for the following:

- Development and management of schedules for daily activities in compliance with the EMP.
- Managing/overseeing the implementation of this EMP and updating and maintaining it when necessary.
- Ensure that relevant commitments contained in the EMP Action Plans are adhered to.
- Ensure the relevant staff is trained in procedures entailed in their duties.
- Through consultations and cooperation with the ECO, issuing fines to individuals who may be in breach of the EMP provision and if necessary, removing such individuals from the site.
- Setting up and managing the schedule for the day-to-day activities.
- Ensuring all incidents are recorded and documented.
- Undertaking an annual review of the EMP and amending the document when necessary.

4.3 Environmental Control Officer (ECO)

The ECO will be responsible for ensuring that project activities are completed on time, efficiently and sustainably. The ECO's duties and responsibilities will include:

- The ECO will be responsible for the following activities:
- Planning and carrying out site inductions to the workers on-site and visitors to the worksite(s).
- Ensuring compliance with relevant environmental and related authorisations and license conditions.
- Ensure that the requirements of the EMP are carried out during applicable activities throughout the project life span.
- Monitor the overall implementation of the EMP.
- Identifying and appointing of appropriately qualified specialists (were necessary) to undertake the programmes in a timeous manner and to acceptable standards.

4.4 Public Relation Officer (PRO)

The Public Relation Officer will be responsible for the following tasks:

- Liaison between the affected farmers (property owners) and/or occupiers of land as well as Traditional Authority, other stakeholders, and Otombawe Mining.
- Ensure effective communication with stakeholders (affected farmers or landowners or occupiers of land), media (if necessary) and the public.
- Managing public relations issues.
- Preparing and submitting public relations reports, if required.
- Collaborating with personnel and maintaining project-related open communication among personnel.
- Cooperate with all relevant interested and affected parties/stakeholders.

4.5 Archaeology: Chance Finds Procedure (CFP) Implementation Roles

The following personnel have been assigned responsibilities as per the Chance Finds Procedure (Appendix 1) as per the provided Archaeological and Heritage Assessment Studies conducted for the proposed activities:

A. Operator

To exercise due caution if archaeological remains are found

B. Foreman

To secure site and advise management timeously

C. Superintendent

To determine safe working boundary and request inspection

D. Archaeologist

To inspect, identify, advise management, and recover remains.

5 ENVIRONMENTAL IMPACTS, MANAGEMENT & MITIGATION MEASURES

The environmental and social measures provided to manage and mitigate the potential adverse impacts associated with the proposed project activities are presented under this chapter. The aim of these plan actions is to avoid these potential impacts where possible, and where avoidance is impossible, measures are provided to reduce the impacts' significance throughout the project lifecycle.

5.1 The Key Potential Adverse Environmental Impacts

The following potential negative impacts (in **Table 3**) are anticipated as identified by the Environmental Consultant and the public (interest d and affected parties) from the consultation process.

Table 3: The key issues (adverse impacts) for which management and mitigation measures were developed

Issue Type	Key Issues for which the management and mitigations measures were made
Combined issues from the Public Consultation Meeting and Otjohorongo Community	Poor compensation of workers, Health and safety, lack of rehabilitation of disturbed sites, Archaeological and heritage impact (the destruction of rock paintings (archaeological & heritage resources), Lack of visible Corporate Social Responsibility (CSR) being implemented in communities, Damaging of local services infrastructure (roads), and Disturbance to (loss of) pastoral land (grazing areas)
Pre-identified potential adverse impacts/issues by the Environmental Consultant	<ul style="list-style-type: none"> -Potential disturbance of existing pastoral systems, -Archaeological and heritage impact, -Physical land / soil disturbance, -Impact on local biodiversity (fauna and flora) and habitat disturbance, -Potential impact on water resources and soils, -Air quality (compromise the surrounding air quality), -Visual impacts due to land scars from exploration (stripping for demonstration blocks), -Potential occupational health and safety risks, -Vibrations and noise associated with dimension stone test quarrying, -Vehicular traffic safety & impact on services infrastructure (e.g., local roads), -Environmental pollution (waste generation), and -Potential social nuisance and conflicts due to land use

5.2 Environmental and Social Management & Mitigation Measures

The management and mitigation measures for the potential adverse impacts during the project’s planning, and prospecting and exploration phases are provided in **Table 4**. These have been presented in terms of (a) Environmental aspect and issues for which management actions are required, (b) proposed impact mitigation measures, (c) key performance indicator (KPI) for monitoring success levels of management actions, (d) responsible person(s) for implementing the proposed management actions, (e) resources required for implementing management actions and monitoring and (f) implementation timeframes for the proposed management actions

Table 4: The Environmental Management and Mitigation Measures for the Planning, Prospecting & Exploration Phases

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
PLANNING PHASE (PRE-EXPLORATION WORKS ON SITE)						
EMP implementation and training	Lack of EMP awareness and implications thereof	-A Comprehensive Health and Safety Plan for the project activities should be compiled. This will include all the necessary health, safety, and environmental considerations applicable to respective works on sites. -The Proponent should appoint an ECO to be responsible for managing the EMP implementation and monitoring.	-All required Plans and systems are compiled and in place -Environmental Control Officer (ECO) is appointed	-Proponent	-Records of EMP implementation Plans and Systems	Pre-exploration (project activities)
Authorizations	Lack of Agreements, Permits/ Licenses	-All the required agreements and licenses or permits should be applied for and signed, respectively before commencement of work on the EPL, or as required. -The permits, agreements referred to herein include land access & use (by land/farm or property owners or representatives of the occupiers of	-Applicable permits and licenses to obtained from relevant authorities and kept on site for records keeping and future inspections -Agreements signed and obtained from	-Proponent	-Permits and Licenses	Prior to exploration

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		land) for exploration by the landowners/custodian, as well as petroleum storage permits from Ministry of Mines and Energy (MME).	landowners or occupiers of land on time, minimum of 2 months prior to planned commencement date of onsite works -Onsite petroleum storage permits obtained		Signed Land Access and Use Agreements	
Communication between the Proponent and landowners or occupiers of land	Lack of communication (proper liaison) between farmers and Proponent with regards to land use	-The Proponent should appoint a Public Relation Officer (PRO) to liaise with the farmers/landowners. -A clear communication procedure/plan which should include a grievance mechanism should be compiled. -The Proponent should keep a clear and transparent communication with the communities before and throughout the project.	-A PRO is appointed, and their contact details provided to local community leaders for easy communication during the exploration activities. -Ongoing Stakeholders' and Public Engagement & Consultation throughout the project cycles, when and as required	-Proponent	-Complaint's logbook -PRO contact details to be provided to the affected farmers/landowners -Records of Stakeholders' and Public Consultations	PRO appointment (Prior to project activities) and their responsibilities throughout the rest of the project phases
Employment	Creation of employment opportunities to the locals	-Preference of local people for employment for jobs should be implemented, i.e., permanent residents from the local area (in and around Okamajere and Omutianduko Villages) should be employed for the unskilled labour preferentially to out-of-area people (outsiders) where possible. Out-of-area employment should be	-Number of locals employed for exploration activities -Consultation with the constituency councillor's office and local development committee -Notification via the Constituency Office	-Proponent in collaboration with the Exploration Manager (if necessary)	-Record of employees -Constituency Council office to assist in identifying unemployed people	Pre-project activities and when necessary, throughout the prospecting & exploration phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>justified, for example by the unavailability of local skills only.</p> <p>-Equal opportunity should be provided for both men and women, when and where possible.</p>				
Specialised procurement of services	Exploration contractors and other services providers	<p>-All services related to exploration activities such as drilling that the Proponent may need, preference should be given to local providers of such services. If not available locally, the services search should be extended to a regional level (Erongo Region) and lastly, nationally, or international, if all efforts truly yield no success.</p> <p>-Opportunities such as small tenders for instance should be awarded through the established committee.</p>	-Number of hired contractors	-Proponent	<p>-Record of hired or contracted companies or services providers</p> <p>-Local Development Committee</p> <p>-Office of the Constituency Councillor</p>	Pre-project activities and when necessary, throughout
Corporate Social Responsibility (CSR)	Social commitment failures	-The Proponent should consider providing and or donating services such as water supply boreholes to the community they are operating in through the identification of people in need. This can be done by if they drill a borehole for the project's water supply, they can then donate it to the communities upon completion of works.	-Visible commitment to ensure that the local community benefits from the project	-Proponent	<p>-Office of the Constituency Councillor</p> <p>-Local Development Committee to monitor implementation of the CSR</p>	Throughout the prospecting & exploration phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-Infrastructure such as campsite/accommodation unit and field workstation structures should be donated to the community through the Traditional Authority post-exploration for distribution/allocation to the needy communities.</p> <p>-The Proponent should consider collaborating with other operators in the area to help in maintaining and improving the public roads they are using so that they community (especially those with small vehicles) can also continue utilize the roads with ease during and after exploration and mining vehicles are no longer operating in the area.</p> <p>-The project owner (Proponent) should fulfil their promises of CSR, upon proper consultation with the local development committees to establish what the community really needs and then provide for them accordingly however, they can afford to.</p>				
PROSPECTING AND EXPLORATION PHASE						

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
Pastoral land	Impact on grazing areas	<p>-Any unnecessary removal or destruction of grazing land, due to exploration activities should be avoided.</p> <p>-Vegetation found on the site, but not in the targeted exploration areas should not be removed but left to preserve biodiversity and grazing land.</p> <p>-Workers should refrain from driving off road and creating unnecessary tracks that may contribute to soil erosion and loss of grazing land.</p> <p>-Environmental awareness on the importance of the preservation of grazing land for local livestock should be provided to the workers</p>	<p>-Little damage on grass cover and vegetation</p> <p>-Maximum effort implemented to curb loss of grazing areas with the EPL</p>	<p>-Exploration Manager</p> <p>-ECO</p>	-None	Throughout the phases
Land use (physical soils)	Land degradation	<p>-Overburden should be handled more efficiently during exploration works to avoid erosion when subjected erosional processes.</p> <p>-Prevent creation of huge piles of waste rocks by performing sequential backfilling, especially for dimension stone test quarrying exploration.</p> <p>-Stockpiled topsoil and overburden waste rocks should be used to</p>	<p>-No proliferation of informal vehicle tracks.</p> <p>-No new erosion gullies.</p>	<p>-Exploration Manager</p> <p>-ECO</p>	-Complaint's logbook	Throughout the exploration phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>backfill the explored and disturbed site areas/spots.</p> <p>-Soils that are not within the intended and targeted footprints of the site areas should be left undisturbed and soil conservation implemented as far as possible.</p> <p>-Project vehicles/machinery should stick to access roads provide and or meant for the project operations but not to unnecessarily create further tracks on site by driving everywhere resulting in soil compaction.</p>				
Water resource	Over-abstraction (Water demand and availability)	<p>-Water abstracted from boreholes or supplied from other local water sources such as schemes (boreholes) as well as carting should be used efficiently, and recycling and re-using of water on certain site activities should be encouraged, where necessary and possible.</p> <p>-The Proponent should consider carting water from elsewhere outside the site area to relieve pressure of the available resources. Agreements of water supply should be made between the willing water supplier and the Proponent, particularly for domestic purposes (drinking, cooking, and washing).</p>	<p>-Proof/ recording/ quantification of water saving efforts</p> <p>-No complaints of water level drops and short in supply from local water users</p>	<p>-Exploration Manager</p> <p>-ECO</p>	-Permit issuance (or water purchasing agreements for carting to site)	<p>Water supply agreements to be obtained prior to exploration phase</p> <p>Throughout the phases</p>

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-Water reuse/recycling methods should be implemented as far as practicable such that the water used to cool off exploration equipment should be captured and used for the cleaning of project equipment, if possible.</p> <p>-Water storage tanks should be inspected daily to ensure that there is no leakage, resulting in wasted water on site.</p> <p>-Water conservation awareness and saving measures training should be provided to all the project workers in both phases so that they understand the importance of conserving water and become accountable.</p>				
Soil and water resources	Soil and water resources pollution	<p>-Spill control preventive measures should be in place on site to management soil contamination, thus preventing and or minimizing the contamination from reaching water resources bodies. Some of the soil control preventive measures that can be implemented include:</p> <p>(a) Identification of oil storage and use locations on site and allocate drip trays and polluted soil removal tools suitable for that specific surface (soil or hard rock cover) on the sites.</p>	<p>-No complaints of pollutants on the soils and eventually in the water due to exploration activities</p> <p>-No visible oil spills on the ground or contaminated/polluted spots.</p>	-ECO	<p>-Complaint's logbook</p> <p>-Waste containers</p> <p>-Non-permeable material to cover the ground surface at areas where hydrocarbons and potential pollutants are utilized.</p>	Throughout exploration phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>(b) Maintain equipment and fuel storage tanks to ensure that they are in good condition thus preventing leaks and spills.</p> <p>(a) The oil storage and use locations should be visually inspected for container or tank condition and spills.</p> <p>(b) Maintain a fully provisioned, easily accessed spill kit. Spill kits should be located throughout the active project sites contain the floor dry absorbent material and absorbent booms, pads, mats. These would be suitable for ground surface areas that are covered mainly by hard rocks.</p> <p>-All project employees should be sensitized about the impacts of soil pollution and advised to follow appropriate fuel delivery and handling procedures.</p> <p>-The Proponent should develop and prepare countermeasures to contain, clean up, and mitigate the effects of an oil spill. This includes keeping spill response procedures and a well-stocked cache of supplies easily accessible.</p> <p>-Exploration site areas where hydrocarbons will be utilized, the surface should be covered with an impermeable plastic liner (e.g., an HDPE liner), carefully placed to</p>				

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>minimize risk of puncturing, to prevent any spillages from getting into direct contact with the soils and prevent eventual infiltration into the ground.</p> <p>-Project machines and equipment should be equipped with drip trays to contain possible oil spills when operated on site.</p> <p>-In cases of accidental fuel or oil spills on the soils from site vehicles, machinery and equipment, the polluted soil should be removed immediately and put in a designate waste type container for later disposal as per the preceding bullet point. The removed polluted soil should either be completely disposed of or cleaned and returned to where it was taken from on site or can be replaced with a cleaner soil. This is to ensure that the pollutants contained int the soil does not infiltrate into the site soils and eventually reach to groundwater.</p> <p>-Although fuel (diesel) required for exploration equipment will be stored in a tank mounted on a mobile trailer, drip trays must be readily available on this trailer and monitored to ensure that accidental fuel spills along the tank trailer path/route around the exploration</p>				

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>sites are cleaned on time (soon after the spill has happened).</p> <p>-Polluted soil must be collected and transported away from the site to an approved and appropriately classified hazardous waste treatment facility.</p> <p>-Washing of equipment contaminated hydrocarbons, as well as the washing and servicing of vehicles should take place at a dedicated area, where contaminants are prevented from contaminating soil or eventually runoff to water resources, especially during rainy seasons.</p> <p>-Toilet water should be treated using by discharging into chemical toilets and periodically emptied out before reaching capacity and transported to a wastewater treatment facility.</p>				
Biodiversity	Loss of Fauna and Flora	<p>Flora:</p> <p>-The unnecessary removal of vegetation should be avoided to promote a balance between biodiversity and project activities.</p> <p>-Vegetation found within the EPL, but not in the targeted exploration site areas should not be removed but left to preserve biodiversity on the site.</p>	<p>-Incident reports of illegal hunting of wildlife by the project crew/workers.</p> <p>-No complaints of livestock theft, snaring or killing of livestock and wildlife by the project personnel</p>	-ECO	-Complaint's logbook	During site set up, and throughout the exploration phase

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-Shrubs or trees found near selected sampling or quarrying spots should not be unnecessarily removed.</p> <p>-The movement of vehicle and machinery should be restricted to existing roads and tracks to prevent unnecessary damage to the vegetation.</p> <p>-No onsite vegetation should be cut or used for firewood related to the project activities. The Proponent should provide firewood for his onsite camping workers from authorized firewood producer or seller.</p> <p>-Design access roads appropriately in a manner that disturbs minimal land areas as possible.</p> <p>-Make use of the existing road network as much as possible and avoid off-road driving.</p> <p>-Vegetation clearing to be kept to a minimum. The vegetation of the site is largely low and open and therefore whole-sale vegetation clearing should only be applied where necessary and within the development footprint.</p> <p><u>Fauna (domestic and wild)</u></p> <p>-Workers should refrain from disturbing, killing or stealing</p>	<p>-No disturbance to unmarked areas.</p> <p>No complaints from locals regarding unauthorised vegetation removal or cutting down of trees</p>		<p>-Anti-poaching unit of the Namibian Police Force</p>	

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>domestic and wild animals and killing small soil and rock outcrops' species found on site.</p> <p>-Poaching (illegal hunting) of wildlife from the area is strictly prohibited.</p> <p>-Environmental awareness on the importance of biodiversity preservation should be provided to the workers.</p>			-MEFT's Wildlife Protection Unit	
Visual and Tourism	Visual impact on tourists, locals, and travellers	<p>-The Proponent should consider the implementation of continuous rehabilitation programme, by using overburden waste rocks from exploration works, particularly test quarrying.</p> <p>-The Proponent to utilize waste rubble to rock blind exposed rock faces and stockpiled topsoil to partially back fill site areas used for test quarrying.</p> <p>-The Proponent should carry out progressive working and restoration/rehabilitation over the shortest timescale possible, to avoid excessive areas of disturbance.</p> <p>-Consider a phased exploration and direct placement of overburden (topsoil and waste rocks) and other site-derived materials to allow progressive restoration around the margins of the explored site areas</p>	<p>-Visible rehabilitation efforts</p> <p>-little to no complaints of visual nuisance</p>	<p>-Proponent</p> <p>-Exploration Manager</p> <p>-ECO</p>	<p>-Topsoil</p> <p>-Overburden rocks or rubbles</p> <p>-Local vegetation for re-vegetation purposes</p>	Throughout the phases

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>especially where demonstration blocks are taken from.</p> <p>-Drilling/cutting for Dimension Stone exploration should be done away from the crests of the mountain and outcrops as possible particularly for the EPL areas where demonstration blocks will be taken.</p> <p>-Consider setting up the campsite and associated facilities further from the road parts of the EPL to reduce the structure sight from road users.</p> <p>-The temporary exploration structures such as campsites and field offices should be set up further from the roads and should in a colour that is not too distinctive from the surrounding environment (to maintain the natural appearance of the area).</p>				
Air Quality	Air quality (dust)	<p>-Exploration vehicles travelling on access roads should not be driven at a speed more than 40 km/h to avoid dust generation around and within the site area, which will in turn minimise air quality concerns to any potential receptors, particularly the residents south of the site.</p> <p>-The Proponent should ensure that the exploration schedule is limited to the given number of days of the week, and not every day. This will</p>	<p>-Dust suppression measures implemented</p> <p>-Visible efforts to curb dust</p>	<p>-Exploration Manager</p> <p>-ECO</p>	<p>-Grievance logbook</p> <p>-Dust suppression water tanks</p>	Throughout the phases

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>keep the vehicle-related dust level minimal in the area.</p> <p>-Dust control measures such as reasonable amount of water spray should be used on gravel roads and near exploration sites to suppress the dust that may be emanating from certain exploration areas on the EPL such as drilling sites and movement of heavy trucks.</p> <p>-Dust masks, eye protective glasses and other respiratory personal protective equipment (PPE) such as face masks should be provided to the workers on site drilling areas, where they are exposed to dust.</p> <p>-Drilling and excavating equipment should be regularly maintained to ensure drilling and excavation efficiency and so to reduce dust generation and harmful gaseous emissions</p> <p>-Project vehicles and heavy machines should not be left idling when not in use, such that they emit air polluting gases.</p>				
Waste management	Environmental pollution	<p>-Project workers should be sensitized to dispose of waste in a responsible manner and not to litter.</p> <p>-After each daily works, there should not be waste left scattered</p>	<p>-A register of all waste generated on site is kept on site.</p> <p>-All waste disposal permits from relevant</p>	<p>-Proponent</p> <p>-Exploration Manager</p> <p>-ECO</p>	<p>-Funds to acquire waste storage bins/ drums; and transport all waste from the site.</p>	<p>Throughout the phases.</p>

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>on site, but rather be disposed of in allocated site waste containers.</p> <p>-No waste may be buried or burned on site or anywhere else throughout the project lifecycle.</p> <p>-The exploration site should be equipped with separate waste bins for hazardous and general/domestic waste.</p> <p>-All domestic and general waste produced daily should be contained until such that time it will be transported to designated waste sites on a weekly basis.</p> <p>-Hazardous waste, including emptied chemical containers should be safely stored on site where they cannot be accessed and used by uniformed locals for personal use. These containers can then be transported to the nearby approved hazardous waste sites for safe disposal. No waste should be improperly disposed of on site or in the surroundings, i.e., unapproved waste sites.</p> <p>-A penalty system for irresponsible disposal of waste on site and anywhere in the area should be implemented.</p>	<p>authorities are available on site.</p> <p>-No littering on and around the project site</p>		<p>-Waste storage containers</p>	
	<p>Wastewater generated by exploration</p>	<p>-Washing of hydrocarbon contaminated equipment, as well as the washing and servicing of</p>	<p>-Adequate toilet facilities on site.</p>	<p>-Exploration Manager</p>	<p>-Chemical toilets, waste treatment agents/chemicals</p>	<p>At site setup and throughout exploration phase</p>

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
	workers living on-site.	<p>vehicles should take place at a dedicated area, where contaminants are prevented from contaminating soil or water resources.</p> <p>With regards to sanitation, the site should be equipped with enough portable toilets that should be emptied in accordance with their manufacturers' instruction.</p> <p>-Sewage waste should be stored as per the portable chemical toilets supplied on site and regularly disposed of at the nearest wastewater treatment facility...</p>		-ECO	-Wastewater discharge permits	
Noise	Noise	<p>-Noise from project vehicles and equipment on the working sites of the EPL should be at acceptable levels.</p> <p>-Exploration hours should be restricted to between 08h00 and 17h00 to avoid noise and vibrations generated by exploration equipment and the movement of vehicles before or after hours, thus disturbing the tranquillity in the area during the night or early morning hours.</p>	<p>-Noise generating activities such as drilling, and test quarrying limited to weekdays only.</p> <p>-PPE provided to workers operating noisy equipment and in noisy site areas.</p>	<p>-Exploration manager</p> <p>-ECO</p>	<p>-Clearly written placards with operational hours in a day placed at one of the visible access roads to sites</p>	Throughout the project phases

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-When operating the drilling machinery onsite, workers should be equipped with personal protective equipment (PPE) such as earplugs to reduce exposure to excessive noise.</p> <p>-The transportation of exploration materials, equipment and machinery should be limited to once or twice a week only, but not every day.</p> <p>-Target exploration sites that may be found to be within less than 1 km from the residences (village homes) should be avoided at all costs. This is done to preserve tranquillity of the residents.</p>				
Health and Safety	Occupational & Community Health and Safety	<p>-The site safety of all personnel will be the Proponent's responsibility and should be adhered to as per the requirements of the Labour Act (No 11 of 2007) and the Public Health Act (No. 36 of 1919).</p> <p>-The heavy vehicle, equipment and fuel storage area should be properly secured to prevent any harm or injury to the Proponent's personnel or local people or even their animals.</p> <p>-Heavy vehicle, equipment and fuel storage site should be properly secured, and appropriate warning signage placed where visible.</p>	<p>-Compilation of Comprehensive Health and Safety Plan</p> <p>-Regular health screening of workers</p> <p>-Bi-annual health and safety audits done.</p> <p>-All onsite workers and visitors equipped with PPE.</p>	<p>-Exploration Manager</p> <p>-Proponent</p> <p>-ECO</p>	<p>-Health and Safety Policies</p> <p>-Funds to acquire health and safety related equipment. and to pay for employee medical services</p> <p>-First Aid training for at least 1 personnel at each work site</p>	

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-As part of their induction, the project workers should be provided with an awareness training of the risks of mishandling equipment and materials on site as well as health and safety risk associated with their respective jobs.</p> <p>-All onsite project employees and authorized site visitors (including inspectors) should be properly equipped with adequate personal protective equipment (PPE) such as coveralls, gloves, safety boots, earplugs, dust masks, safety glasses, etc.</p> <p>-An emergency preparedness plan should be compiled, and all personnel appropriately trained.</p> <p>-Workers should not be allowed to drink alcohol prior to and during working hours as this may lead to mishandling of equipment which results into injuries and other health and safety risks.</p> <p>-Explored site areas that will be considered risky and hazardous (such as exploration boreholes, open trenches, or small test quarries) to the surrounding communities, should be demarcated and fenced off with temporary mesh wires accompanied by clear and visible warning / "danger" signs in both</p>				

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>English and the local language (Otjiherero).</p> <p>-The workers should be engaged in health talks and training about the dangers of engaging in unprotected sexual relations which results in contracting HIV/AIDS and other sexual related infections.</p>				
Fires	Accidental fire outbreak	<p>-Portable fire extinguishers should be provided on sites (per vehicle and working sites).</p> <p>-No open fires should be created by project personnel.</p> <p>-Potential flammable areas and structures such as fuel storage tanks should be marked as such with clearly visible signage</p>	-No Fires recorded (due to presence of workers)	<p>-Exploration Manager</p> <p>-ECO</p>	-Fire extinguishers (1 per vehicle) and 1 per working site	Throughout the phases
Archaeology and heritage	Accidental disturbance and destruction of archaeological or heritage objects and sites	<p>-The Proponent and Contractors should adhere to the provisions of Section 55 of the National Heritage Act in event significant heritage and culture features are discovered while prospecting and exploring.</p> <p>-No-Go-Area should be put in place where there is evidence of archaeological site, historical, rock paintings, cave/rock shelter or past human dwellings. It can be a demarcation by fencing off or avoid the site completely by not working closely or near the known site.</p>	<p>-Preservation of all artefacts that are discovered around project area</p> <p>-Cessation of work upon discovery/unearthing of unknown objects</p>	<p>-Exploration Manager</p> <p>-ECO</p> <p>-Archaeologist</p>	<p>-Technical Consultant (Archaeologist to help identify and advise on heritage object discovery)</p> <p>-Salvage equipment</p> <p>-Flag tapes</p> <p>-GPS (site marking)</p>	-Archaeologist to be present on-site during excavations

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-On-site personnel (s) and contractor crews must be sensitized to exercise and recognize "chance finds heritage" in the course of their work.</p> <p>-During the prospecting and exploration works, it is important to take note and recognize any significant material being unearthed and making the correct judgment on which actions should be taken (refer to CFP).</p> <p>-The footprint impact of the proposed prospecting and exploration activities should be kept to minimal to limit the possibility of encountering chance finds within the EPL boundaries. The Proponent should keep a buffer of 50 meters on all the archaeological/cultural sites observed within the project site and broader area throughout their stay (duration of their presence) in the area.</p> <p>-A landscape approach of the site management must consider culture and heritage features in the overall planning of exploration infrastructures within and beyond the license boundaries.</p> <p>-Subject to the recommendations herein made and the implementation of the mitigation measures and adoption of the</p>				

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>project AMP/EMP should be complied.</p> <p>-An archaeologist or Heritage specialist should be onsite to monitor all significant earth moving activities that may be implemented as part of the proposed project activities.</p> <p>-When the removal of topsoil and subsoil on the site for exploration purposes, the site should be monitored for subsurface archaeological materials by a qualified Archaeologist.</p> <p>-Show overall commitment and compliance by adapting "minimalistic or zero damage approach".</p> <p>-In addition to these recommendations above, there should be a controlled movement of the contractor, exploration crews, equipment, setting up of camps and everyone else involved in the prospecting and exploration activities to limit the proliferation of informal pathways, gully erosion and disturbance to surface and sub-surface artifacts such as stone tools and other buried materials etc.</p>				
Vehicular Traffic	Traffic safety	-The transportation of exploration materials, equipment and machinery should be limited to once or twice a week only, but not	-Site access road permits obtained, and requirements fulfilled	-Exploration Manager	-Vehicular traffic compliance to be included in the annual	Throughout the phases.

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>every day to reduce the pressure on local roads.</p> <p>-The heavy truck loads should comply with the maximum allowed speed limit for respective vehicles while transporting materials and equipment/machinery on the public and access roads (40km/h).</p> <p>-The potential carted water to the site (from other source of water supply) should be done once or twice a week in container that can supply and store water for most of the week, thus reducing the number of water-carting trucks on the road daily.</p> <p>-Drivers of all project phases' vehicles should be in possession of valid and appropriate driving licenses and adhere to the road safety rules.</p> <p>-Drivers should drive slowly (40km/hour or less) and be on the lookout for livestock and wildlife as well as locals.</p> <p>-The Proponent should ensure that the site access roads are well equipped with temporary road signs conditions to cater for vehicles travelling to and from site throughout the project's life cycle.</p> <p>-Project vehicles should be in a road worthy condition and serviced</p>	<p>-No complaints from members of the public regarding vehicular traffic issues related to the project</p> <p>-All personnel operating the project vehicles and machinery are appropriately licensed and possession of valid driving licenses.</p> <p>-The vehicles are driven at the recommended speed.</p> <p>-Demarcated areas for parking, offloading, and loading zones are on sites</p>	<p>-ECO</p>	<p>environmental audit reporting</p>	

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>regularly to avoid accidents owing to mechanical faults.</p> <p>-Vehicle drivers should only make use of designated site access roads provided and as agreed.</p> <p>-Vehicle's drivers should not be allowed to operate vehicles while under the influence of alcohol.</p> <p>-To control traffic movement on site, deliveries from and to site should be carefully scheduled. This should optimally be during weekdays and between the hours of 8am and 5pm.</p>				
Local resources and services infrastructure	Overuse of existing roads	<p>-The heavy trucks transporting materials and services to site should be scheduled to travel at least twice or thrice a week to avoid daily travelling to site, unless on cases of emergencies.</p> <p>-The Proponent should consider collaborating with existing operators to frequently maintain local roads around and to ensure that the roads are in a good condition for other roads users from and outside the area.</p>	<p>The local roads are frequently maintained by the Proponent and movement of heavy trucks is limited</p> <p>-Wate saving measures are implement</p>	<p>-Proponent</p> <p>-Exploration Manager</p>	<p>-Road maintenance excavator/bulldozer</p> <p>-onsite water storage tanks</p>	Throughout the phases

6 DECOMMISSIONING AND REHABILITATION

Decommissioning referred to herein is the cessation of exploration activities and decommissioning of structures and services onsite, upon completion of the project activities.

To ensure that they do their best to rehabilitate the disturbed or explored site areas, the Proponent **should mostly importantly make provision for technical and funds** to rehabilitate the disturbed sites within the EPL upon completion of their work.

The decommissioning activities **as the sole responsibility of the Proponent** will include:

- Dismantling and removal of all infrastructures and structures such as camping sites, storage tanks, onsite temporary offices, ablution facilities and other supporting structures erected for exploration. These will be transported to designated storage facilities offsite.
- Removal of all project related vehicles, machinery, and equipment from site to designated parking and storage sites off site, respectively.
- Carrying away the waste storage containers and disposal of waste to designated and approved waste management sites.

Some of the post-exploration solutions provided by Lintukangus *et al.*, (2011) and that are also recommended for implementation by the Proponent to rehabilitate the disturbed area include:

6.1.1 Post-Exploration Rehabilitation

Since exploration of sites will lead to the narrowing down of target sites that yield favourable outcomes for future mining and development of the quarry, it may not be possible to implement progressive rehabilitation on all explored sites. The only possible progressive rehabilitation work to be carried out done are as follows:

- Backfilling of all exploration pits, test quarries, and boreholes that will no longer be required for mining purposes (if found to be worthy of mining consideration).
- Levelling of stockpiled topsoil, backfilling of all excavated pits, test quarries and trenches as well as closing & capping of exploration boreholes that will no longer be required for mining purposes (if the exploration results found certain sites of the EPL to be worthy of mining in future).
- Fencing of hazardous areas that cannot be completely and successfully rehabilitated.
- Removal or re-location of project structures, vehicles, and equipment from the site to designated offsite storage facilities. The areas on which these structures were set up will also be rehabilitated to pre-exploration state.
- Closure of all access roads that may have been created for the exploration works and no longer required even by the local communities.

- The returning of overburden waste rocks to exploration spots where demonstration blocks were taken from, as much as possible

The better way to ensure an improved success of rehabilitating explored sites within the EPL will be doing it progressively. This is to say that towards the end of each exploration activity on explored sites of the EPL, the Proponent backfilling, levelling, and capping of trenches, topsoil, and boreholes, respectively. In other words, as soon as the work is completed at a certain site area, rehabilitation is done immediately and not wait until the 3 or 4 months of completion of all works. The aim is to ensure that the disturbed sites are left close to their pre-exploration state as much as possible.

7 RECOMMENDATIONS AND CONCLUSIONS

The Environmental Consultant is confident that the potential negative impacts associated with the proposed project activities can be managed and mitigated by effectively implementing the recommended management and mitigation measures contained herein and with more effort and commitment put on monitoring the implementation of these measures.

It is therefore recommended that the proposed prospecting and exploration and associated activities be granted an Environmental Clearance Certificate, provided that:

- All respective management measures (mitigations) provided herein be effectively and progressively implemented and backed up by consistent site monitoring of environmental components listed in the Draft EMP to achieve full EMP implementation compliance.
- All required permits, licenses and approvals for the proposed activities should be obtained as required (please refer to the Permitting and Licensing **Table 2**. These include permits and licenses for land use (access) agreements to explore and ensuring compliance with these specific legal requirements.
- Site areas where exploration activities have ceased should be rehabilitated, as far as practicable, to their original state.
- Environmental Compliance monitoring reports should be compiled and submitted to the DEAF Portal as per provision made on the MEFT/DEAF's portal.

In conclusion, with that being done, it is crucial for the Proponent and their contractors as well as to effectively implementation of the recommended management and mitigation measures to protect both the biophysical and social environment throughout the project duration. All these would be done with the aim of promoting environmental sustainability while ensuring a smooth and harmonious existence and purpose of the project activities in the community and environment at large.

APPENDIX A: CHANCE FINDS PROCEDURE (CFP)

Areas of proposed 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 during 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 person.

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.

Manager/Supervisor must report the finding to the following competent authorities:

- National Heritage Council of Namibia (061 244 375)
- National Museum (061 276800),
- National Forensic Laboratory (061 240461).

Archaeological material must NOT be touched. Tempering with the materials is an offence under the heritage act and punishable upon conviction by the law.

Responsibility:

Operator: To exercise due caution if archaeological remains are found

Foreman: To secure site and advise management timeously

Superintendent: To determine safe working boundary and request inspection

Archaeologist: To inspect, identify, advise management, and recover remains

Procedure:

Action by person identifying archaeological or heritage material:

- a) If operating machinery or equipment stop work
- b) Identify the site with flag tape

- c) Determine GPS position if possible
- d) Report findings to foreman

Action by foreman

- a) Report findings, site location and actions taken to superintendent
- b) Cease any works in immediate vicinity

Action by superintendent

- a) Visit site and determine whether work can proceed without damage to findings
- b) Determine and mark exclusion boundary
- c) Site location and details to be added to project GIS for field confirmation by archaeologist

Action by Archaeologist

- a) Inspect site and confirm addition to project GIS
- b) Advise NHC and request written permission to remove findings from work area
- c) Recovery, packaging and labelling of findings for transfer to National Museum

In the event of discovering human remains

- a) Actions as above
- b) Field inspection by archaeologist to confirm that remains are human
- c) Advise and liaise with NHC and Police
- d) Recovery of remains and removal to National Museum or National Forensic Laboratory, as directed.