

ENVIRONMENTAL MANAGEMENT PLAN REPORT FOR:

**THE PROPOSED INDUSTRIAL MINERAL, PRECIOUS, BASE AND RARE
EARTH ELEMENTS MINERAL GROUPS EXPLORATION ON EPL
NO.7498**

OKOMBAHE, ERONGO REGION – NAMIBIA

COMPILED BY




SS CONSULTANTS

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1. OVERVIEW

1.1. Project Background

The Environmental Management Plan (EMP) presented in this section demonstrates how the Proponent intends to manage all the exploration, possible mining and processing operations within the EPL area that will significantly impact on the receiving environment, or that may potentially be of high risk in the long-term. By implementing this management plan, the Proponent will minimize the likely negative effects and maximize the positive effects of its operations in the EPL area. In line with the company's Environmental Policy and the implementation of the EMP, the proponent commits to responsible and sound environmental management of all its exploration, test mining and processing activities within the EPL area.

Joyce Mwiya Musweu (referred to as the proponent) has been granted a license by the Ministry of Mines and Energy (MME) to conduct mineral exploration activities encompassing industrial minerals, precious metals, base metals, and rare metals. This authorization is in alignment with the provisions of the Environmental Management Act (EMA) of 2007 and its associated 2012 Environmental Impact Assessment (EIA) Regulations. Prior to initiating any exploration endeavors within the designated area, the proponent is obligated to secure an Environmental Clearance Certificate (ECC) as stipulated by the EMA and its EIA Regulations.

The geographical location of the Exploration Prospecting License (EPL) is situated in the northwestern region of Namibia. Specifically, it is positioned approximately 40 kilometers southeast of the Uis settlement and 20 kilometers southwest of Okombaye village, both situated within the Daures District of the Erongo Region. The spatial coverage of the EPL encompasses a vast expanse of land, totaling 5346.3145 hectares. Refer to Figure 1 on the map for a visual representation of the EPL's exact location.

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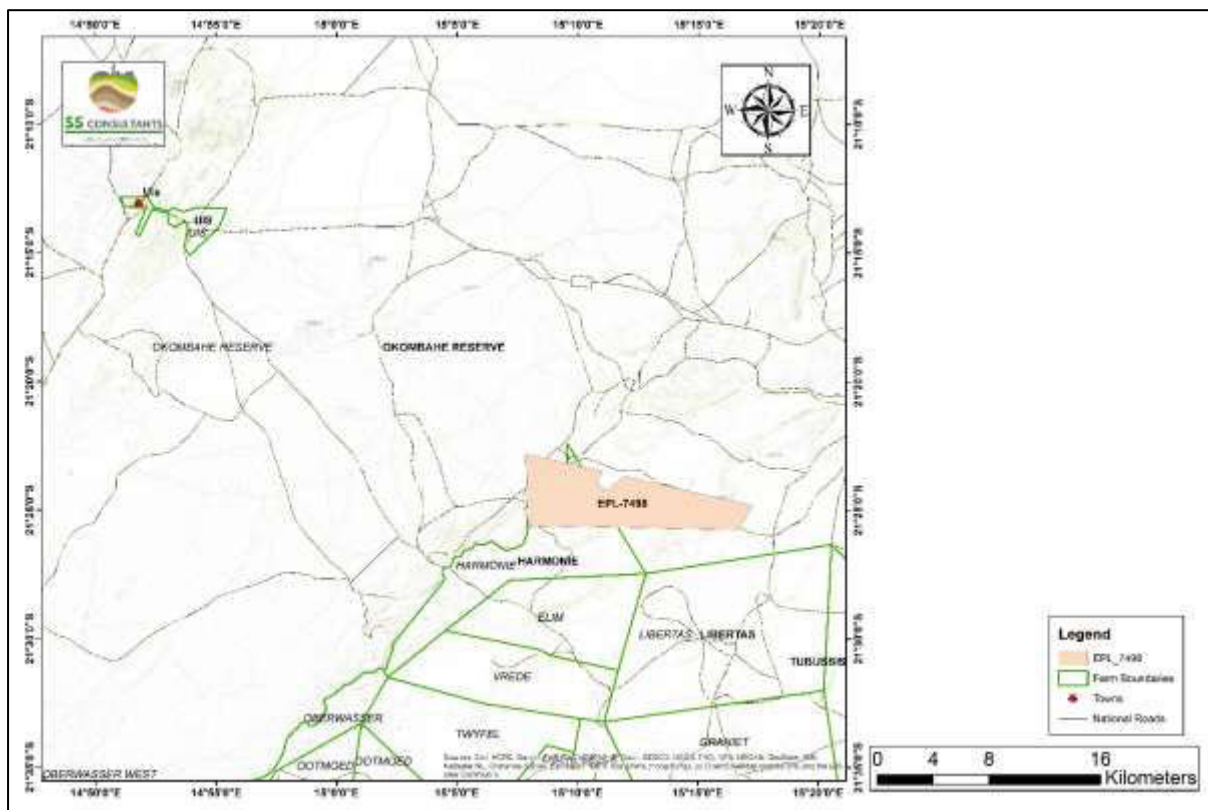


Figure 1: Locality Map for EPL 7498.

1.2. Purpose of the EMP

The primary objective of the Environmental Management plan is to outline the necessary steps for implementing the mitigation hierarchy, ensuring that all exploration activities are conducted with consideration for environmental protection and compliance with environmental regulations. As previously discussed, in accordance with regulation 8 of the Environmental Management Act (EMA) (No. 7 of 2007) and the Environmental Impact Assessment Regulations (2012), an Environmental Clearance Certificate (ECC) must be acquired before commencing exploration activities. This certificate is granted based on an approved Environmental Management Plan (EMP). Consequently, it is obligatory for a preliminary version of the Environmental Management Plan (EMP) to be included alongside the scoping Environmental Assessment (EA) process.

An 'Environmental Management Plan' is defined as "...a plan that outlines strategies for

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mitigating, controlling, and monitoring activities with potential significant effects on the environment."

Aligned with the risks and impacts identified in the Environmental Impact Assessment (EIA), the EMP establishes a link between these effects and the specific environmental management measures to be implemented on-site during project execution and over the project's lifespan. Additionally, the EMP is a legally binding document, and any individual who violates its provisions may be subject to imprisonment and/or fines.

Considering the complexities associated with assessing and identifying potential environmental risks and impacts during the EIA process, it is imperative for the proponent to adopt a dynamic EMP. This dynamic plan ensures that the implementation of mitigation measures remains adaptable to any changes that may arise and is informed by ongoing monitoring throughout the project's lifecycle.

Therefore, the objective of this document is to provide continuous guidance on executing the environmental management plan throughout all phases of the proposed project's lifespan: pre-operation (planning and design), operation, and decommissioning.

The overall objectives of the EMP:

- To stipulate measures that will reduce the adverse impacts of the proposed project on the environment.
- To ensure that regulatory authority conditions and guidelines are complied.
- To initiate actions that boost the value of environmental components where possible.
- To formulate measures that are in line with the protection of the environmental resources (biodiversity, ecosystem, natural resources and social aspects) as well intensify the value of environmental components where possible.

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- Responding to unforeseen events and providing feedback for continual improvement in environmental performance.

1.3. Environmental Assessment Practitioner (EAP)

Joyce Mwiyaambo Musweu, who is the proponent, has engaged the services of SS Consultants, an independent environmental consulting firm. Their role is to undertake the necessary Environmental Assessment (EA) and create an Environmental Management Plan (EMP) for the planned development. The EMP, along with the scoping EA report, will be submitted as supporting documentation for the application seeking an Environmental Clearance Certificate (ECC). This application will be directed to the Environmental Commissioner at the Department of Environmental Affairs (DEA), which operates under the Ministry of Environment, Forestry, and Tourism (MEFT).

The EMP report is intended to provide guidance to both Contractors and the Proponent throughout the proposed exploration activities. Its purpose is to ensure that potential environmental impacts are either minimized or completely mitigated. This approach is aimed at preventing adverse effects on the environment wherever feasible.

1.4. Legal Requirements

Section 8 (j) of the EIA Regulations has listed the requirements which must be met by the EMP for it to be considered. Henceforth, it is of importance that the EMP addresses the potential environmental impacts of the proposed activity throughout the project life cycle. In addition, the EMP must involve a system for assessment of sound monitoring and management arrangements after implementation. It is a proponent's responsibility to ensure that the proposed activity and the EIA process comply with the principles of EMA and must ensure that any contractors appointed by them also conform to such principles.

1.5. Assumptions and Limitations

This EMP has been designed with the awareness of the following assumptions and limitations:

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- This EMP has been drafted based on the scoping-level Environmental Impact Assessment (EIA) done for the proposed development of EPL 7498 inclusive of a Archaeological And Cultural 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 must be noted that the EMP is a living document and can be adjusted throughout the project development and amended if the scope of the project changes. This gives room for any change on the scope of the project; in cases of reassessing the impacts, the mitigation measures will be formulated correspondingly.

1.6. Report Structure

The EMP highlights the mitigation and management implementations that must be employed and monitored for the proposed exploration activities on EPL 7498. The EMP addresses the following phases:

- **Pre–Operational (Planning and design) phase** - Before the exploration activities commence, preliminary legislative and administrative arrangement must be carried out. This aims to prepare for the proposed exploration activities;
- **Operation phase** - the period of which exploration activities will be in operation and conducted by the proponent and/or their contractors; and
- **Decommissioning phase:** This phase is implemented when the proposed development’s lifetime ends.

2. ROLES AND RESPONSIBILITIES

It is the responsibility of the proponent to ensure that all management actions are effectively carried out and monitored through all the project’s phases. The delegated responsibility for the effective implementation of this EMP will be delegated to the following key individuals, which may be fulfilled by the same person:

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2.1. The Operating Company

The company is ultimately responsible for all stages of the project and the impacts resulting from those activities. The responsible persons will be the company's Environmental Control Officer (ECO) and Managing Director to ensure that:

- The EMP and its environmental specifications are included in contractual documents and it is required that contractors, and subcontractors, consultants etc. do meet the EMP requirements;
- The company and all its subcontractors, consultants etc. comply with all Namibian legislation and policies and any relevant International Conventions;
- Compliance with the environmental specifications are enforced on a day-to-day basis;
- Environmental audits are conducted periodically by a suitably qualified ECO to confirm that the environmental requirements are properly understood and effectively implemented;
- Sufficient budget is provided to implement those measures that have cost implications.
- The site manager must commission tree surveys well in advance of planned road construction or drill pad preparation so that the necessary site visits by forestry personnel and forestry permits are acquired; and,
- Open an effective communication between all parties concerning environmental management on the project.

2.2. Site managers

Day-to-day responsibility for environmental management will be assigned to the ECO and Manager Field Operations site manager for the duration of all operational activities to:

- Be familiar with the contents of the EMP and applicable sections of the EIA and the measures recommended therein;

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- Monitor compliance with the environmental specifications on a daily basis and enforce the environmental compliance on site by communicating the ECO's directions to all personnel involved.
- In the event of any infringements leading to environmental damage, personnel need to consult with the ECO and seek advice on any remedial measures to limit or rectify the damage;
- Maintain a record (photographic and written) of "before-and-after" conditions on site;
- Facilitate communication between all role players in the interests of effective environmental management

2.3. Proponent's Representative

If the Proponent does not personally manage all aspects throughout the above-mentioned phases referred to in this EMP, then they should assign this responsibility to a suitably qualified individual referred to in this plan as the Proponent's Representative (PR). This can be assigned to one person for all phases of exploration. On the other hand, the Proponent may decide to assign a separate PR for each component i.e. planning and design, operation, and decommissioning phase. The PR's responsibilities are included in **Table 2-1** below.

Table 2-1: Responsibilities assigned to the Proponent's Representative for planning and design, operation and decommissioning phases.

Responsibility	Project Phase
Managing the actions evolve around the implementation and monitoring of this EMP and updating and maintaining it when necessary	Throughout the lifetime of the project
Ensure environmental policies are well communicated to all personnel and that employees understand the guidelines of the EMP	Throughout the lifetime of the project
Management and monitoring of individuals and/or	Throughout the lifetime of the

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equipment on-site in terms of compliance with this EMP	project
Issuing fines for contravening EMP provisions	Throughout the lifetime of the project

2.4. Environmental Control Officer

The Proponent shall assign responsibility for overseeing the on-site implementation of the entire EMP, from the planning and design phase to the operation and decommissioning phase, to a designated person, named herein as Environmental Control Officer (ECO). Like for PR, this can be assigned to one person throughout the project lifetime or to different people for each project phase. The ECOs will have the following responsibilities:

- To Manage and facilitate the means of communication between the Proponent, PR and Interested and Affected Parties (I&APs) with regard to this EMP;
- Employing 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);
- Advising the PR on the removal of person(s) and/or equipment not complying with the provisions of this EMP;
- Making recommendations to the PR with respect to the issuing of fines for contraventions of the EMP; and
- Undertaking a review annually of the EMP and recommending additions and/or changes to this document.

2.5. Environmental Management System Framework

The proponent and its contractors will create and implement an Environmental Management System (EMS) in order to apply Environmental Management Practices. The structure for compiling a project EMS is established in this section. All environmental management paperwork will be kept in a paper and/or electronic system by the applicable exploration EMP.

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These may include, but are not limited to:

- Standard operating procedures for the implementation of the environmental action plan and management program.
- Procedures for dealing with incidents and emergencies.
- Procedures for auditing, monitoring, and reporting,
- As well as EMP compliance method statements for ad hoc actions not explicitly covered in the EMP action plans.

2.6. Register of Roles and Responsibilities

Relevant roles and duties will be identified during project planning and risk assessments. All environmental commitment duties and obligations must be documented in a register. The register must include pertinent contact information and be updated as needed.

Identify key personnel responsible for implementing and monitoring the EMP.

2.7. Stakeholder Engagement and Communication

Notification of the proposed activities were advertised in the two widely common newspaper to consult the public as presented in Appendix E, to identify and contact as many potential I&APs as possible. The description of the project was presented, and opportunity was given for the I&APs to give their comments and issues.

2.8. Communication between Parties

Emphasis will be put towards open communication between all parties, in order to reach a proactive approach towards potential environmental issues deriving from the project. This approach should guarantee that environmental impacts are anticipated and prevented/minimised. Rather than adopting a negative “policing” approach after negative impacts have already occurred. The importance of a proactive approach cannot be overemphasised, particularly in relation to preventing unnecessary tracks, and damage to vegetation (i.e. protected and endemic species) as these impacts cannot

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easily be remedied.

3. ENVIRONMENTAL SPECIFICATIONS

3.1. Compliance with the Environmental Specifications

The activities will be conducted in an environmentally and socially responsible manner. The contractor and all personnel on-site will comply with the environmental specifications contained in this section.

3.2. Training and Awareness

All site personnel and site contractors will receive the training to equip them with the necessary knowledge to comply with the environmental specifications. The MFO will ensure that an appropriate level of training is provided at all levels of site personnel.

3.3. Stakeholder Relations

All site personnel will maintain good relations with the landowners and members of the public. Any complaints received by the ECO will be addressed.

3.4. Permits

All relevant permits shall be obtained from relevant authorities. The removal or relocation of rare and endangered plants will be conserved, and should it be removed or relocated it shall be done with the required permits from the Directorate of Forestry.

3.5. Road Safety

The access roads can be dangerous at times due to dust from passing vehicles, poor camber, patches of loose sand, careless drivers and other external factors. All drivers must be aware of these hazards and take precautions to avoid them. Such precautions will include, but not be limited to:

- Complying with speed limits;
- Reducing speed considerably when visibility is poor

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- Being wary of other vehicles
- Travelling with lights on even in daylight;
- Slowing down for animals and birds on the road; and,
- Being cautious of other road users– taking into account reduced visibility due to dust.

3.6. Access Tracks

No new tracks will be made unless there are no pre-existing tracks, any new tracks or extensions should be established with the permission of the Municipality and other landowners.

The selected access and site roads will be clearly marked. A single road only will be used to and from each destination. Turning points for vehicles will also be pre-selected and marked. Care will be taken to avoid damage to plants.

Any elevated sites, or sites away from existing tracks, will be accessed on foot rather than by a vehicle.

3.7. Conservation of Biodiversity

Damage to protected species will be avoided at all costs.

3.8. Wildlife Poaching

No animal or bird is to be captured, killed or harmed in any way. Anyone caught violating this law will face suspension from the project and could be liable for prosecution. In a likewise manner, domestic livestock on farms may also not be harmed.

3.9. Health and Safety

All company personnel will receive a detailed induction upon joining the project and on a regular basis and be provided with the necessary PPE attire to prevent potential injuries and excessive inhalation of dust or harmful gases. Eating, drinking, and smoking while working with any materials that may contain radioactive or hazardous substances is forbidden. Good personal hygiene is encouraged (e.g., washing hands before eating) to

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prevent ingestion of potentially hazardous or radioactive materials. Marking disturbance areas and buffer zones to avoid unnecessary impacts. Installing sediment controls around boreholes and access roads and implementing a spill response plan and providing spill kits at all work sites

3.10. Compliance Monitoring

During exploration activities, the company ECO will conduct site compliance inspections at least once a month. After each inspection the ECO will compile an EMP compliance report for regular submission to the MFO and biannually to the MEFT or as required.

4. ENVIRONMENTAL MANAGEMENT PLAN ACTIONS

The main reason for this Environmental Management Plan (EMP) is to achieve compliance with the environmental protection and mitigation requirements of the impacts identified during the environmental assessment. This is required to avoid or minimize negative impacts and enhance positive impacts associated with the operations.

The EMP gives the commitments, which form the environmental contract between Proponent and the Government of the Republic of Namibia; represented by the Ministry of Environment, Forestry and Tourism (MEFT).

The management actions proposed to mitigate the potential impacts are detailed in the action plans below.

4.1. Key Potential environmental impacts to be managed

From the EA, the following main potential impacts per project phase has been identified and are summarised in the tables 3.2 to 3.4 as well as in the Scoping Report.

Table 4-1: Summary of key potential environmental impacts per project phase

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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.

Primarily, the EMP's management actions aims to avoid the potential impacts where possible. With the impacts that cannot be avoided, there will be measures in place to ensure the risks/impacts are minimised are carried out.

Management actions to be executed to manage the potential impacts rated in the EA for the proposed exploration development are presented in the following tables. The management actions were drawn based on the three project phases:

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

The proponent or/and the appointed personnel must evaluate these actions in detail and acknowledge their commitment to the specific management actions detailed in the table of the next subchapters.

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4.2. Phase 1: Planning and Design Management Actions

The management requirements detailed in **Table 4-2** must be executed prior to any exploration activities outset on site while necessary preliminary legislative and administrative arrangements are made in preparation for the proposed exploration activities.

Table 4-2: Planning and design management actions

Aspect	Management Requirement	Responsible PERSON/S	TARGET DATE
Labour Recruitment	<p>Provisions initiated to reduce the use of local labour should be inclusive within tenders concerning the:</p> <ul style="list-style-type: none"> • Facilitation to allow equal 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 that all labour primarily focuses on local communities and should be included within tenders concerning the exploration operations. • Specific employment procedures ensuring local businesses have 	Joyce Mwiya Musweu (the Proponent)	Ongoing



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	<p>firsthand preference during tender adjudication should be included within tenders that have to do with the exploration operations.</p> <ul style="list-style-type: none"> • Provisions promoting gender equality pertaining to recruitment should be included within tenders concerning the exploration operations. 		
<p>Occupational Health and Safety</p>	<ul style="list-style-type: none"> • Designing and submitting the Emergency Preparedness and Response Plan. • Adhere to all the Namibian Health and Safety Regulations under the Labour Act and Exploration and Mining Safety Regulations. • Facilitating training on Occupational health and Safety Training for all the employees. • There should be always a qualified first aid. • Consistent and correctly usage of all Personal Protective Equipment (PPE). 	<ul style="list-style-type: none"> • PR/ECO/Contractors 	<ul style="list-style-type: none"> • Ongoing

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<p>EMP Implementation and Monitoring</p>	<ul style="list-style-type: none"> • Ensure that the EMP to be executed during all exploration project phases. • Adhering effectively to all relevant legislation and this EMP. • Facilitating regular meetings as a reminder of all the EMP details and doing site inspections. 	<ul style="list-style-type: none"> • PR/ECO/ Contractors 	<ul style="list-style-type: none"> • Ongoing
<p>Consultation with affected communities</p>	<ul style="list-style-type: none"> • Maintaining 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. <ul style="list-style-type: none"> ○ Detailed work plan about the exploration activities. ○ Discussion of access agreements. ○ Discussion of compensation (as necessary). ○ Discussion of any other concerns or information 	<ul style="list-style-type: none"> • Joyce Mwiambango Musweu / PR/ ECO 	<ul style="list-style-type: none"> • Ongoing



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	<p>requirements that the farmers may have.</p> <ul style="list-style-type: none"> ○ Implementing the grievance mechanism with the affected communities to ensure that all the concerns and grievances related to the project are received 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. 		
<p>Archaeology</p>	<ul style="list-style-type: none"> • A qualified archaeological must be employed to conduct a detailed archaeological survey and monitoring once targets have been identified for drilling and/or other mechanically assisted exploration. Should a heritage or archaeological site be uncovered, an Archaeological Chance Finds Procedure should be applied as 	<ul style="list-style-type: none"> • Joyce Mwiyambango Musweu 	<ul style="list-style-type: none"> • During phase two and phase three

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	outlined in Appendix K of the Scoping Report.		
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4.3. Phase 2: Operational Phase Management Actions

The management actions for the operational phase during which the exploration activities will take place listed in

Table 4-3.

Table 4-3: Operation phase management actions

Environmental Feature	Potential Impact	Management Actions	Responsible Person(s)	Target Date
Waste Management	Visual impact and soil contamination	<ul style="list-style-type: none"> The exploration site must all times be kept clean. All domestic and general waste accumulated daily should be cleaned and contained appropriately. No waste may be buried or burned. Waste containers (bins) should be emptied 	<ul style="list-style-type: none"> PR/ECO/Contractors 	<ul style="list-style-type: none"> Ongoing



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		<p>regularly and removed from site to the nearest municipal waste disposal site.</p> <ul style="list-style-type: none"> • 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. • Contractors should be equipped with training on how dispose different wastes in a responsible manner and not to litter. • All the wastes must be removed from site after the completion of the project. 		
Hazardous Waste	Soil and groundwater contamination	<ul style="list-style-type: none"> • All heavy operation vehicles and equipment on site must be supplied with a drip tray to prevent hazardous spills on the ground. • All heavy operation vehicles must be 	<ul style="list-style-type: none"> • PR/ECO/Contractors 	<ul style="list-style-type: none"> • Phase two and Phase three of the project

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		<p>maintained daily to avoid oil leakages.</p> <ul style="list-style-type: none"> • Maintenance and washing of operation vehicles must happen only at a designated, demarcated workshop. 		
Groundwater	Groundwater contamination	<ul style="list-style-type: none"> • Strict usage of the toilets instead of the veld must be employed. • If grey water can be collected from ablution facilities at the contractors' camp it should be recycled and: <ul style="list-style-type: none"> ○ 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, 	<ul style="list-style-type: none"> • All the Employees and Contractors 	<ul style="list-style-type: none"> • Ongoing

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		<p>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.</p> <ul style="list-style-type: none">• 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.• Facilitation of Employees training on the groundwater impact awareness must be done.		
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		<ul style="list-style-type: none"> • 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 contamination	<ul style="list-style-type: none"> • Spill control preventative measures should be put in place to control soil contamination. • An impermeable liner should be placed on site to prevent contamination from 	<ul style="list-style-type: none"> • PR/ECO 	<ul style="list-style-type: none"> • Ongoing

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		<p>reaching to surrounding soils and groundwater systems.</p> <ul style="list-style-type: none">• Potential contaminants such as hydrocarbons and wastewater should be placed in appropriate containers on site and be disposed of in accordance with municipal wastewater discharge standards to ensure that they do not contaminate soils in the area.• Soil contamination should be monitored on site daily by PR and monthly by ECO.• PR(s) and/or CEO(s) should make sure that there is enough number of drip trays available on-site to be used in event of leakage from construction trucks or vehicles.		
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		<ul style="list-style-type: none"> 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 Biodiversity	<ul style="list-style-type: none"> Recommendations and mitigation measures as provided by the vegetation study with regards to the protection of biodiversity in the area should be applied and monitored during exploration activities. Trees with a trunk size of 150 mm and bigger should be surveyed, marked with 	<ul style="list-style-type: none"> PR/ECO/Contractors 	<ul style="list-style-type: none"> Ongoing

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		<p>paint (readily visible) and protected.</p> <ul style="list-style-type: none"> • Trees that are out of the footprint should be left to preserve biodiversity in the area. • If cleared, (provided a licence to clear is obtained) 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 environment	Noise and dust	<ul style="list-style-type: none"> • The dust generated during the exploration activities should be reduced using water. • If attainable, wastewater should be 	<ul style="list-style-type: none"> • PR/ECO/Contractors 	<ul style="list-style-type: none"> • Ongoing

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		<p>treated to an acceptable water quality level, so that it can be used for dust suppression.</p> <ul style="list-style-type: none">• 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 should wear ear plugs when		
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		<p>performing noisy tasks and should be rotated regularly to avoid exposing them to excessive noise for a long period of time in a day.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> PR/ECO/Contractors 	<ul style="list-style-type: none"> Ongoing

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		<p>wear their PPE at work, in an appropriate way.</p> <ul style="list-style-type: none"> • No alcohol consumption is allowed 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 and must be demarcated to be visible to everyone. • Public access to the exploration site should be prohibit. 		
Exploration labourers		<ul style="list-style-type: none"> • The Proponent should ensure that locals got the priority for employment of any type of a job on the project. • Portable toilets (i.e., easily 	<ul style="list-style-type: none"> • Joyce Mwiambango Musweu 	<ul style="list-style-type: none"> • Ongoing

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		<p>transportable) should be available on site.</p> <ul style="list-style-type: none"> • Separate bathrooms or toilets should be available for men and women and should clearly be labeled 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 boots, overalls, masks and all the necessary PPE for cleaning. • No workers may live on site for the whole period 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 		
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		<p>draft a Communication Plan, which should outline as a minimum the following:</p> <ul style="list-style-type: none">○ 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.○ How these stakeholders will be engaged throughout the project lifetime.○ Provision should be made for a grievance mechanism – outlining how to discover		
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		<p>and assess the issues raised and determine how to address them, inclusive of further steps of arbitration if feedback is deemed unsatisfactory.</p> <ul style="list-style-type: none"> ○ 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 contamination	<ul style="list-style-type: none"> • No wastewater / effluent should be allowed to leave the site premises 	<ul style="list-style-type: none"> • PR/ECO/Contractor 	<ul style="list-style-type: none"> • Ongoing

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		<p>without proper control in place.</p> <ul style="list-style-type: none">• The disposals should be done 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.• Groundwater impact awareness should be raised among the employees involved in this phase.		
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<p>Wildlife and Stock animals</p>	<p>Disturbance of wildlife and stock theft</p>	<ul style="list-style-type: none"> • Working hours should be committed to during the day so that the wildlife can roam freely at night. • The contractor is to compile a Non-Theft Policy to which all workers are to comply with. • All exploration workers are to cohere to the Non- Theft Policy. 	<ul style="list-style-type: none"> • Joyce Mwiambango Musweu/ PR/ECO/Contractors 	<ul style="list-style-type: none"> • Prior to the project commencement (in the employment contract). • Ongoing
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4.4. Phase 4: Rehabilitation and Decommissioning Management Actions

The table below presents the management action for decommissioning phase.

Table 4-4: Decommissioning phase management actions

Environmental Feature	Impact	Management Actions	Responsible Person/s	Target date
Employment	Loss of employment	<ul style="list-style-type: none"> The Proponent should tell the employees beforehand, of any intentions to end the project activities, and the expected date of such. The Proponent should motivate and raise awareness of the possibilities for work in other industrial sectors. Conduct a skills training programme during the operations phase to equip workers with more knowledge 	<ul style="list-style-type: none"> Joyce Mwiambango Musweu (proponent)/PR/ECO/Contractors 	<ul style="list-style-type: none"> At least 6 months before the project closure Ongoing

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		and experience.		
Rehabilitation	Groundwater contamination	<ul style="list-style-type: none"> • During the initial prospecting phase, only limited surface rock and soil sampling will take place and it is unlikely that any 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 sampling schedule must be detached. • Site should be rehabilitated as close as possible to its original condition. • Re-contour and rip the drill site before the site is finally 	<ul style="list-style-type: none"> • PR/ECO/Contractors 	<ul style="list-style-type: none"> • Throughout the entire phase 2 and Phase 3.

		<p>decommissioned.</p> <ul style="list-style-type: none">• 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 involves the procedure of repairing the environmental harm caused by exploration operations. The primary objective of rehabilitation is to return a disturbed environment to a condition similar to its state prior to exploration activities. This effort also encompasses addressing the impact on access roads, tracks created by vehicles in the vicinity, removal of vegetation, abandoned drill holes from exploration, and the restoration of regions affected by the accumulation of sampled materials and rock deposits. Through rehabilitation, a secure, steady, and environmentally benign landscape is established after prospecting, promoting interconnected, self-supporting, and beneficial possibilities, ultimately leaving behind a lasting and favorable 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. Disturbed or/and contaminated areas will be cleaned up, treated where necessary and restored to or closest to its original state.

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

The rehabilitation actions intended to be undertaken during the recommissioning of the

proposed exploration activities are described below.

Remediation of Contaminated Areas

All soil contaminated with hydrocarbons, will be identified, excavated, and disposed, adhering to the nearest town council disposal requirements at appropriate sites.

- Removed soils will be managed as determined by the nature and extent 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, handled, classified, and disposed.
- No burring and burying of waste.
- Nonhazardous substances will be disposed in the nearby landfill sites.
- It may be required to demarcate with a fence the temporary salvage yards for security reasons, particularly where these are located close to public roads.

5. CONCLUSION AND RECOMMENDATION

The Environmental Management Plan (EMP) presented in this report outlines the proactive measures that will be implemented to effectively mitigate the potential environmental impacts of the proposed exploration operations within EPL7498. The EMP details a comprehensive management strategy to address environmental concerns and ensure responsible and sustainable practices throughout the project's lifecycle.

By adhering to the Environmental Regulations of 2012 and the provisions set forth by the project proponent, the approach and methodology for the Environmental Impact Assessment (EIA) will be rigorous and thorough. The EIA will assess the potential environmental consequences of the proposed activities, taking into account factors such as air quality, water

resources, biodiversity, and cultural heritage resources.

The implementation of the EMP is essential to minimize negative effects on the environment while maximizing positive outcomes. It will focus on employing best practices, innovative technologies, and environmental safeguards to protect the natural surroundings and the well-being of local communities.

By following the EMP guidelines, the project aims to enhance the overall ecosystem services and value of the EPL7498 and its vicinity. This means conserving and protecting biodiversity, water resources, and cultural heritage, while simultaneously contributing to sustainable economic development. Therefore, this environmental Management Plan embodies the project proponent's commitment to responsible and environmentally conscious practices. Through the implementation of the EMP and the rigorous EIA process, the project aims to strike a balance between exploration and environmental conservation, ensuring a harmonious coexistence between human activities and the natural environment.

The Environmental Management Plan should be used as an on-site guiding living document during all phases of the proposed project. Additionally, auditing should take place to ensure compliance with the EMP of the proposed project. Parties responsible for implementation 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 considered as a framework for actively implementing mitigation measures and applicable legal tools to ensure both compliance and sustainability. For this reason, it is important that the proponent provide satisfactory support for human and financial resources, for the implementation of the proposed mitigations and effective environmental management during the planned exploration activities.

Given the recommendation of the EMP, SS consultants is confident that the proposed exploration activities, the proponent may be granted an Environmental Clearance Certificate.

Recommendations

For the purpose of this EMP to be fulfilled, the following implementation of monitoring measures should be put in place:

- Monitor compliance and execution of guidelines set in the EMP.
- Non-compliance shall be recorded and discussed at weekly site meetings, where timely remedial actions should be undertaken.
- In instances where dust and noise complaints are received, mitigation 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.

Provided that the recommendation given in this EMP is effectively executed, managed, and monitored, Consultants are confident that the proposed exploration activities, as described in the EA report, can be granted an Environmental Clearance Certificate. The decision must also be based on a fact that all the legal requirements pertaining to this development are complied with.

6. REFERENCES

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