

ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE PROPOSED EXPLORATION ACTIVITIES ON EPL 8799, ERONGO REGION, NAMIBIA



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Abbreviations/Acronyms

EMP	Environmental Management Plan
EPL	Exclusive Prospecting License
UTM	Universal Transverse Marcator
MEFT	Ministry of Environment, Forestry, and Tourism
MME	Ministry of Mines and Energy
mm	Milometers
°C	Degree Celsius
ECO	Environmental Control Officer
MFO	Manager Field Operations
PPE	Personal Protective Equipment’s
ENC	Environmental Coordinator
EIA	Environmental Impact Assessment
ECC	Environmental Clearance Certificate
Mm/a	Millimetre per annum
MET	Ministry of Environment and Tourism
MME	Ministry of Mines and Energy
EMP	Environmental Management Plan

1 INTRODUCTION

The Environmental Management Plan (EMP) presented in this section demonstrates how the Proponent intends to manage all the exploration activities, 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 programme, the Proponent will minimize the likely negative effects and maximize the positive effects of its operations in the Exclusive Prospecting License (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. The EMP will be internally and externally audited annually in order to ensure compliance at all times.

The Exclusive Prospecting License (EPL No. 8799) is located in the central western part of Namibia, about 44.60 km southwest of Uis settlement and approximately 68.58 km north of Henties Bay coastal town, in the Erongo Region (Figure 1). The EPL is demarcated by nine corner coordinates as illustrated in table 1 bellow.

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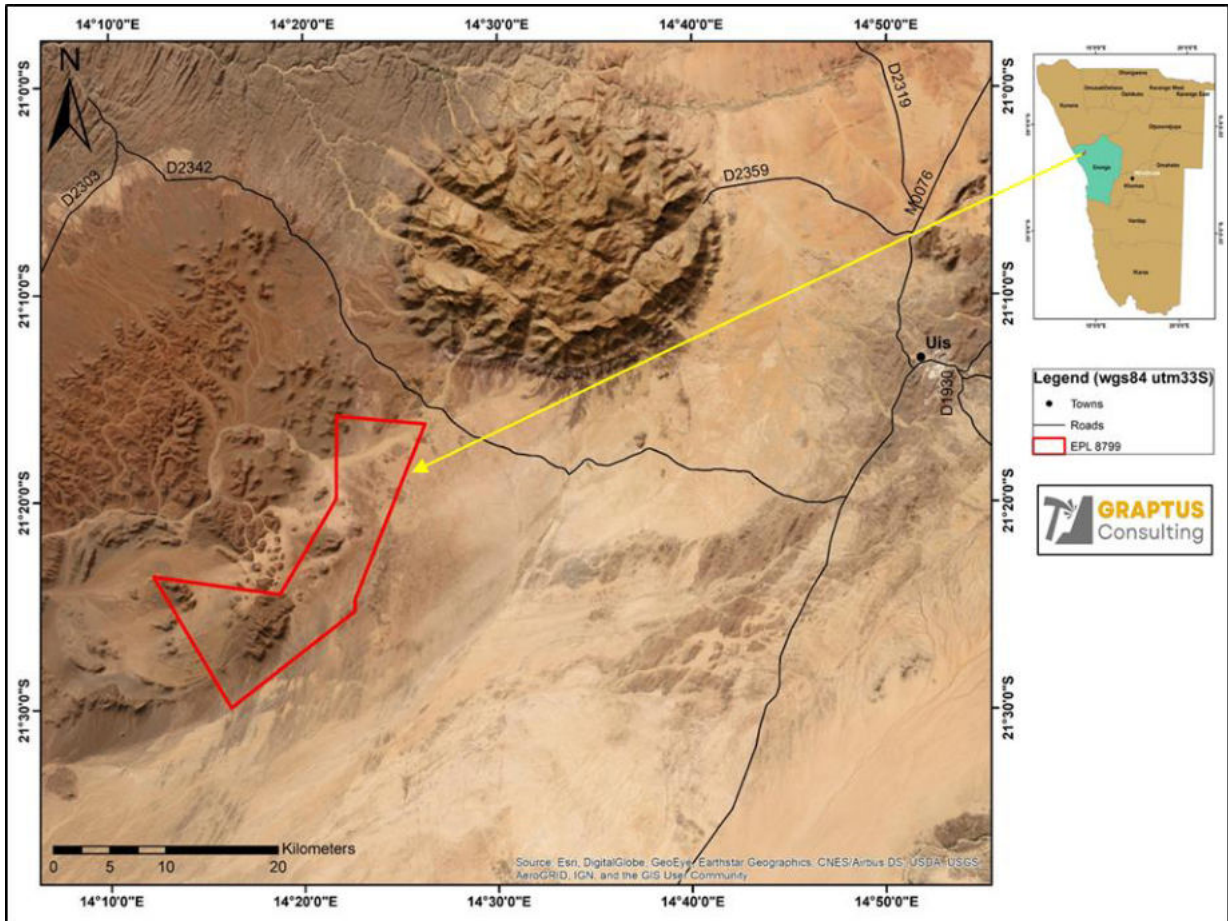


Figure 1: Locality map showing the location of EPL 8799.

Corner Point	Latitude	Longitude
1	14.269963	-21.498604
2	14.203851	-21.393047
3	14.312186	-21.407492
4	14.360798	-21.330824
5	14.361631	-21.264434
6	14.437188	-21.270823
7	14.376631	-21.411936
8	14.376353	-21.421381
9	14.269963	-21.498604

Table 1: UTM corner coordinates (Zone 33J) of EPL 8799 boundaries

1.1 Purpose of the document

This document is prepared as part of the Environmental Scoping and Impact Assessment for Proposed Exploration which was conducted in terms of the Environmental Management Act, 2007 (Act No 7 of 2007). This Environmental Management Plan is a live document that has been prepared based on the environmental effects identified in the Environmental Impact Assessment and should be read in conjunction with the Environmental Scoping and Impact Assessment Report.

The aim of this document is to provide management measures to address the environmental effects that have been identified in the Environmental Impact Assessment report and to give possible mitigation measures/recommendations to address these effects. It is essential for personnel involved to fully be aware of the possible environmental issues and the means to avoid or minimize the potential impacts of activities on site.

Furthermore, the proponent fully understands the legal and policy requirements as a holder of the EPL that Impacts identified in the EIA form the basis of a set of environmental specifications that will be implemented on-site. These environmental specifications act as an agreement between the company and the Ministry of Environment, Forestry, and Tourism (MEFT).

2 PROJECT ACTIVITIES

The projected mineral exploration activities are summarized as follows:

- i. Exploration activities include a desktop review of existing data as well as all past research. This is conducted in the general area to see if there are any prospective targets. This is done by purchasing high-resolution data from the Ministry of Mines and Energy (MME) and interpreting it as part of the first stage of exploration.
- ii. Reconnaissance assessment, which includes field-based activities such as regional mapping and sampling in order to identify and validate prospective targeted areas identified during stage 1. This step is only carried out if the step1 has identified some possible targets that need to be explored further.
- iii. Initial field-based activities such as widely distributed geological mapping, sampling, surveying, and maybe widely spaced trenching and drilling to verify the feasibility of

any identified local target based on the regional data acquired in step 2 above. The degree or depth of exploration carried out at this stage is contingent on the discovery of viable/prospective mineral resources. Alternatively, if the specified target(s) proves to be non-viable, the license is revoked.

To assess the viability of the delineated local targets, detailed local field-based operations such as localized site-specific detailed geology mapping, trenching, bulk sample, surveying, and detailed drilling are carried out. If the detailed exploration activities yield positive results, the exploration data will be compiled into a pre-feasibility report, and if the prefeasibility results are positive, a detailed feasibility study will be conducted on the identified site-specific area, which will include detailed site-specific drilling, bulk sampling, and laboratory testing/test mining.

2.1 Access and transport

The property is easily accessible via the D2342 earth graded road branching from the Uis-Henties Bay C35 gravel road (Figure 2.2). The Trans-Namib railhead connecting Omaruru-Usakos-Arandis-Swakopmund is located just about 116.35 km, southeast of EPL 8799.

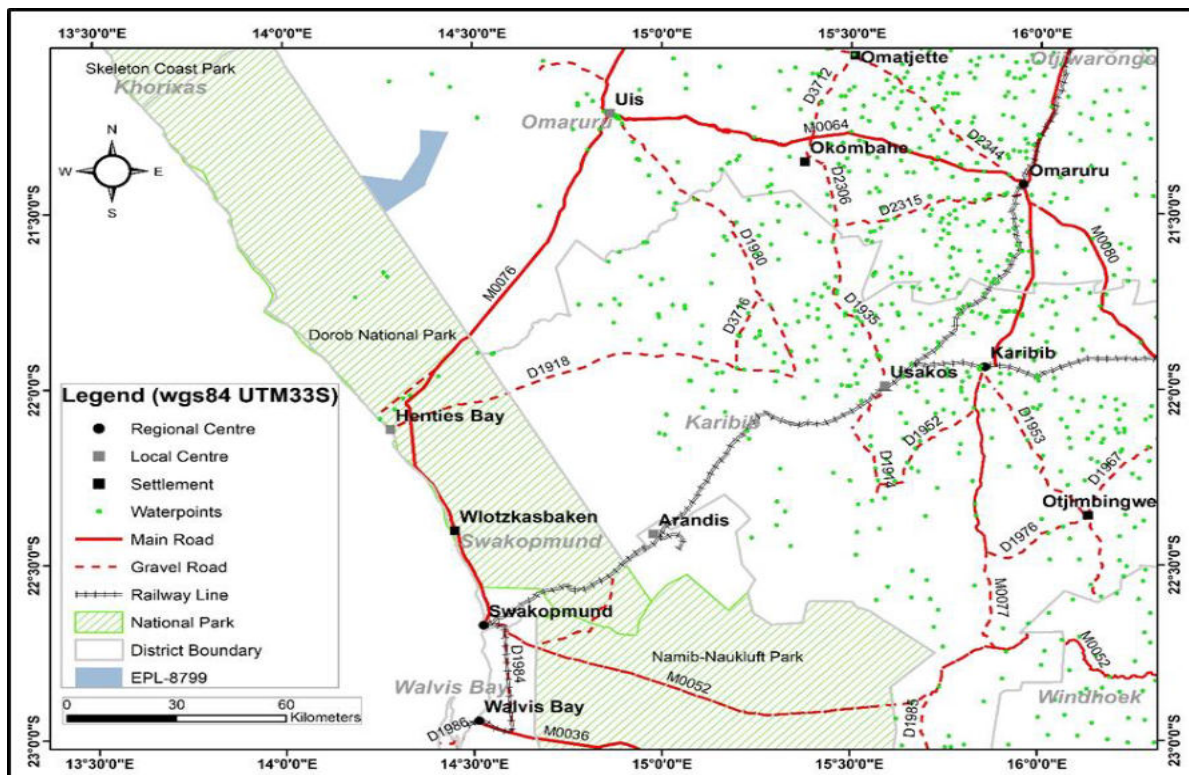


Figure 2: Locality map for EPL 8799 showing water points, roads, railway line, districts and surrounding regional centres and local centres and settlements.

2.2 Resources (water and electricity)

Exploration activities will need a limited supply of water which will be brought to the site. A diesel-powered generator will be used as needed for operating machinery.

2.3 Accommodation and supporting infrastructure

- The exploration team is envisioned to consist of three (3) skilled workers. The team will be transported daily; no camps will be set up.
- Two portable toilets will be installed onsite and regularly serviced.
- Excavator, loader, screening plant, 1x bakkie will be used for day-to-day activities.
- Waste will be collected and deposited at the Spitzkoppe/ Uis municipal dumpsite.
- Hydrocarbon tanks will be stored on-site i.e., petrol 100litres and diesel 1000Litres.
- All hydrocarbon tanks will be appropriately stored and banded to hold 110% of the capacity of the tanks and all relevant permits should be applied for by the proponent as required by the Ministry of Mines and Energy (MME).

3 SUMMARY OF THE RECEIVING ENVIRONMENT

The area falls on state land between the Okombahe reserve area and the Cape Cross farm area. It sits within the Dâures constituency formerly known as the Brandberg constituency after the tallest mountain in Namibia, the Brandberg mountain. The farmland in the area is usually used for sheep, cattle, goat, and game farming.

The area has a semi-arid climate that experiences infrequent thunderstorms between November and April. Annual rainfall figures are low between 200-250mm per annum. Vegetation is sparse, with grasses on the plains, and small woody plants favouring drainage areas. The topography is relatively flat to very gently undulating. Outside of the license to the northeast lies, the escarpment of the Brandberg Complex and the Messum Complex are exposed. Annual average temperatures are between 19-20 °C resulting in high average evaporation in range of 3200 – 3400 mm per year

4 ENVIRONMENTAL MANAGEMENT PRINCIPLES

The Proponent will ensure that all project participants adhere to the following principles:

- All employees will be obliged to undertake activities in an ecologically and socially responsible way. This applies to all consultants, workers, contractors, and subcontractors, as well as transporters, visitors, and anyone else who enters the premises.
- Safeguard the health and safety of project personnel and the public against potential impacts of the project. This includes issues of road safety, precautions against dangers on site, potential hazards; and,
- Promote good relationships with the surrounding settlements and other stakeholders.
- Wise use and conservation of environmental resources, giving due consideration to the use of resources by present and future generations;
 - Prevent or minimize environmental impacts;
 - Minimize air, water, and soil pollution; and
 - Conserve Biodiversity.

4.1 Project principles:

In order to achieve the project's goal, the following principles must be followed:

TERM	DESCRIPTION
Accountability and Commitment	The Company Senior Executives and Line managers will be held responsible and accountable for: <ul style="list-style-type: none"> a. Health and safety of site personnel while on duty, b. Environmental impacts caused by exploration activities or by personnel engaged in the daily operations of the site.

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Competence	The company will ensure a competent workforce through appropriate selection, training, and awareness of all safety, health, and environmental matters.
Risk Assessment, Prevention, and Control	Identify, assess and prioritize potential environmental risks. Prevent or minimize risks through careful planning and design, allocation of financial resources, management, and workplace procedures. Intervene promptly in the event of adverse impacts arising.
Performance and Evaluation	Set appropriate objectives and performance indicators. Comply with all laws, regulations, policies, and environmental specifications. Implement regular monitoring and reporting of compliance with these requirements.
Stakeholder Consultation	Create and maintain opportunities for constructive consultations with employees, authorities, and other interested or affected parties. Seek to achieve an open exchange of information and mutual understanding in matters of common concern.
Continual Improvement	Through continual evaluation, reports, and innovation, seek to improve performance with regard to social health and well-being as well as environmental management throughout the lifespan of the project.

Financial Provisions for retail activities	In line with the internationally recognized “polluter pays principle” the company will make the necessary financial provision for compliance with the EMP.
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4.2 Roles and responsibilities for environmental management

The environmental aspects which may be affected by the proposed project have been categorized into negative and positive impacts as an extension of the preceding sections. This section summarizes the objectives, indicators to be observed, schedules to be adhered to and roles and responsibilities of various stakeholders to the EMP.

4.2.1 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, or minimized, rather than adopting a negative “policing” approach after negative impacts have already occurred.

The importance of a proactive approach cannot be over-emphasized, particularly in relation to preventing unnecessary tracks, and damage to vegetation (i.e., protected and endemic species) as these impacts cannot easily be remedied.

4.2.2 The Exploration 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 is 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 so that the necessary site visits by forestry personnel and forestry permits are acquired; and,
- Open and effective communication is maintained between all parties concerning environmental management on the project.

4.2.3 Site Managers

Day-to-day responsibility for environmental management will be assigned to the Environmental Control Officer (ECO) and Manager Field Operations (MFO) for the duration of the project to:

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

4.2.4 Environmental Control Officer (ECO)

The proponent must appoint a suitably qualified ECO who is responsible to:

- Undertake environmental audits of overall compliance with the environmental specifications. This should be done at least bi-annually for the project area,
- Submit a site inspection report to the Managing Director and MFO;
- Advise the MFO on interpretation and implementation of the environmental specifications as required; and,
- Make recommendations for remedial action in cases of non-compliance with the environmental specifications.
- The report should be submitted to the MEFT periodically at the time interval stipulated by law.

4.2.5 Contractors

The contractors will have the responsibility to:

- Familiarize themselves with the requirements of the EMP and comply with the environmental specifications within;
- Notify the ECO through the MFO timeously in advance of any actions that might have significant negative impacts. Mitigatory measures should be discussed and implemented before negative impacts arise;
- Conduct or arrange for environmental training for employees and sub-contractors;
- Undertake rehabilitation measures where required as far as possible, rehabilitation measures should be carried out progressively and not left till the end of the project.

5 ENVIRONMENTAL SPECIFICATIONS

5.1 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.

5.2 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.

5.3 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.

5.4 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.

5.5 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;
- 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.

5.6 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 or community members.
- 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. Particular 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.

5.7 Conservation of biodiversity

- Damage to protected species will be avoided at all costs.

5.8 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.

5.9 Soil management and erosion control

- During any excavating and clearing the contractor shall take care to remove as little topsoil as possible. All soil within 100mm of the cleared surface level shall be regarded as topsoil.
- Remove and separately stockpile any subsoil material that can be used for site backfilling.
- Topsoil shall be stockpiled (and seeded) in areas within the site boundary and approved by the Project Engineer in conjunction with the Environmental Consultant, for reuse and restoration.

- Avoid handling soil when wet as this may result in the loss of soil structure and compaction. Soils should not be handled during windy conditions, which may lead to the loss of soil through wind erosion.
- Soil erosion must be prevented at all times. Where evidence of soil erosion can and/or is taking place, this should be reported by the contractor to the project engineer or environmental consultant.
- Unnecessary compaction of construction areas must be prevented, to reduce runoff velocity.
- Suitable erosion measures should be implemented in areas sensitive to erosion such as near water supply points, edges of slopes, etc. These measures could include the use of sandbags, hessian sheets, retention or replacement of vegetation.
- All the necessary precautions in terms of design and construction of earthworks, cuts, and fills must be taken.

5.10 Pollution control

- Should any incidence occur in terms of spilling, the workers shall report it immediately to the Developer and the Contractor shall be responsible for containing and cleaning up the spillage. The contractor (developer) shall ensure that correct mitigation of the pollution is undertaken.

5.10.1 Air pollution / Dust emission

- Excavations and other clearing activities should only be done during permissible weather conditions to avoid drifting of sand and dust into neighboring areas.
- Soil and sand stockpiles shall be located in sheltered areas not exposed to the wind.
- Retention of vegetation where possible will reduce dust travel.
- Exposed surfaces must be re-vegetated as soon as possible.
- The movement of vehicles and other vehicles should be strictly controlled in order to reduce the impact of increased air pollution.
- Adherence to speed limits shall be enforced.
- Sensible and responsible use of equipment which generates dust.

- It is recommended to practice dust monitoring per month in order to take note of the dust emitted at different distances and directions around the project area during operations.

5.10.2 Noise pollution

- Noise levels shall be kept within acceptable limits. All noise and sounds generated shall adhere to SABS 0103 specifications for maximum allowable noise levels for industrial areas.
- Noisy activities must be limited to between 06h00 to 18h00 to avoid disturbance of adjacent landowners and or community members.
- Noisy activities should not be allowed on weekends and public holidays unless specific arrangements have been made with the proponent and provided that neighbors have been timeously notified
- Vehicles and operating equipment must be regularly serviced.

5.11 Waste management

- The area needs to be kept clean, neat, and tidy to the satisfaction of the proponent and ECO. The proponent will provide bins at the worksites and will be responsible for the collection and containment of daily refuse and waste generated by his staff. Bins will be secured in such a way that wind cannot remove papers and plastics. Bins will also be secured against animals around the vicinity.
- No waste will be buried on site. All waste will regularly be removed to an approved waste disposal facility.

5.12 Hazardous substances

- All containers of fuel, oil, and any other hazardous substances will be kept sealed, and clearly labeled for identification.
- Tanks for fuels, oils, and any other hazardous substances need to be banded to hold 110% of the capacity of the tank to contain any possible spills.
- If any spills occur, clean-up shall occur immediately and disposed of appropriately.

5.13 Fire prevention

- Ensure an Emergency Response Plan

- No fires are to be left unattended
- Charcoal sourced from farmers should be 100% cured to avoid combustion
- The re burning of charcoal at minimal scale should be conducted during the day on less windy days with full supervision to avoid fly ashes to neighboring land.

5.14 Archaeological sites

- All archaeological remains are protected under the National Heritage Act (2004) and are not to be destroyed, disturbed, or removed. The Act also requires that any archaeological finds, be reported to the Heritage Council in Windhoek and the same applies to rock art sites.
- The ECO will be notified without delay of any archaeological finds.

5.15 Health and safety

All company personnel will receive a detailed induction upon joining the project and on a regular basis.

- **Dust:** All staff will receive dust masks and proper Personal Protective Equipment's (PPE) to prevent inhalation of potentially charcoal dust while carrying out any dust-producing activities associated with charcoal processing and packaging.
- 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 prevent ingestion of potentially hazardous or radioactive materials.
- **Bees:** Bee stings are potentially dangerous to persons who are allergic to them. Bees are attracted to water, so water / liquid should not be left standing.
- **Snakes & Scorpions:** A number of poisonous snake and scorpion species may occur in the area. Therefore, precautions are required which include: -
 - Exercising caution when picking up rocks or equipment from the ground;
 - Looking at the ground when walking; and,
 - Wearing closed shoes and not walking barefoot.

In case of emergency Aspivenin (suction syringe) is permanently available at all workstations for the first aid treatment of snake bites, scorpion stings and bee stings. Antihistamine tablets should also be available for the first aid treatment of allergic reactions to bee stings.

5.16 Work stoppage

The MFO will have the right to order work to stop in the event of environmental specification infringements that could result in damage to plants, wildlife, or personnel. Work will continue once the situation is rectified and brought to a state of compliance.

In the event of such work stoppage, the contractor will not be entitled to claim for delays or standing time.

5.17 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.

6 ENVIRONMENTAL CODE OF CONDUCT

The Code of Conduct outlined in this section of the EMP applies to, sub-contractors, visitors, permanent and temporal workers. Therefore, anybody within the boundaries of the project site must adhere to the Environmental Code of Conduct as outlined in this section of the EMP. The Environmental Coordinator (ENC) will implement on-site environmental guidelines and has the authority to issue warnings as well as discipline any person who transgresses environmental rules and procedures. Persistent transgression of environmental rules will result in a disciplinary hearing and thereafter continued noncompliance behavior will result in permanent removal from the construction sites.

6.1 Site closure and rehabilitation

Rehabilitation is the process of repairing the damage done by exploration activities. Rehabilitation plan has been developed with a main aim of returning disturbed environment close to its pre exploration state. It is also planned to cater for the access road, vehicle tracks around the site, removal, and restoration of areas covered by stockpile and rock piles. The closure vision for the proposed project is to establish a safe, stable and non-polluting post-

prospecting landscape that can facilitate integrated, self-sustaining and value generating opportunities, thereby leave a lasting positive legacy.

6.1.1 Site closure and rehabilitation activities

All waste (such as hazardous and domestic) waste will be transported offsite for disposal in licensed landfills in Spitzkoppe/Uis or surrounding towns. Disturbed or/and contaminated areas will be cleaned up, treated where necessary and restored to its pristine 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 secondary 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 at the end of the life of the proposed exploration activities are described below.

7 MITIGATION MEASURES

The purpose of the Environmental Management Plan is to provide a detailed plan to mitigate the negative and positive impacts identified in the environmental impact assessment report. Furthermore, it aims to provide actions with roles and responsibilities to implement the environmental specifications provided for to the proponent, contractors, subcontractors who will undertake exploration activities.

The following table provides a large-scale summary overview of all the major environmental management aspects. The EIA submitted with this EMP also provide mitigation measures for impacts identified therein.

**ENVIRONMENTAL MANAGEMENT PLAN FOR EXPLORATION ACTIVITIES ON EPL 8799, ERONGO REGION,
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ENVIRONMENTAL IMPACTS	PROPOSED MITIGATION MEASURES	RESPONSIBILITY	MONITORING PLAN
Air pollution	<ul style="list-style-type: none"> • Regular maintenance of vehicles and equipment's. • Brief workers and contractors. • Control speed and operation of construction vehicles. • Regular maintenance of vehicles, construction equipment's and heavy machineries. • Provide workers with dust masks. 	Personnel on duty, Foreman on duty and Environmental Officer	<ul style="list-style-type: none"> • Amount of dust produced. • Level of landscaping executed.
Noise pollution	<ul style="list-style-type: none"> • All noise should be kept within reasonable levels. • Employees and neighbors should be notified of any scheduled unusual noise. • Regular maintenance of vehicles, 	Foreman on duty, Environmental Officer, Safety Health and Environment Manager.	<ul style="list-style-type: none"> • Amount of noise produced

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	<p>equipment's and heavy machinery.</p> <ul style="list-style-type: none"> Workers should be provided with personal hearing protection if working in a noisy environment. 		
Solid waste	<ul style="list-style-type: none"> Littering should be discouraged by having strategically placed bins and refuse skips on site. Recycling plastic, paper and cans should be encouraged on site The bins should be emptied on a regular basis by the proponent or an independent contractor. The site should have containers with bulk storage facilities at convenient points to prevent littering. 	<p>Personnel on duty, Environmental Officer and Safety Health and Environment Manager</p>	<ul style="list-style-type: none"> Presence of dust bins/waste collection points.
	<ul style="list-style-type: none"> Contacto should have a sealed designated area where 	<p>Personnel on duty, Foreman on duty</p>	<ul style="list-style-type: none"> Absence of oil spills and leaks on site.

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Oil leaks and spills	<p>maintenance is carried out to prevent percolation of contaminants.</p> <ul style="list-style-type: none"> Oil products should be handled carefully on bounded surfaces; in case it leaks. Vehicles and equipment should be well maintained to prevent oil leaks. 	Environmental Officer and Safety Health and Environment Manager	
First aid	<ul style="list-style-type: none"> A well-stocked first aid kit shall be maintained by qualified personnel. 	Safety Health and Environment Manager, Safety and Health Officer.	<ul style="list-style-type: none"> Contents of the first aid kits.
Visual	<ul style="list-style-type: none"> Environmental considerations will always be adhered to before clearing roads, trenching and excavation. 	Safety Health and Environment Manager, Environmental Officer	<ul style="list-style-type: none"> Employees to be trained on how to minimize impacts that can easily be identified with the eye.
Archaeological sites	<ul style="list-style-type: none"> Buffer zones will be created around the sites. Adhere to practical guidelines provided by the responsible 	All personnel on duty, Environmental officer, Safety Health and	<ul style="list-style-type: none"> Register of all archaeological sites identified.

	<p>archaeologist to reduce archaeological impacts of quarrying activities.</p> <ul style="list-style-type: none"> • All archaeological sites to be identified and protected before development commences. 	<p>Environment Manager</p>	
<p>Occupational health and safety</p>	<ul style="list-style-type: none"> • Provide personal protective equipment's, train workers on personal safety, and how to handle equipment's and machines. • A well-stocked first aid box shall be maintained by qualified personnel. • Report any accidents/incidences and treat and compensate affected workers. • Provide sufficient and suitable sanitary conveniences which should be kept clean. 	<p>Safety and Health Officer, Safety Health and Environment Manager</p>	<ul style="list-style-type: none"> • Workers using personal protective equipment's. • Availability of a well-stocked first aid box.

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	<ul style="list-style-type: none"> • Clean sanitary facilities. 		
Fauna	<ul style="list-style-type: none"> • Some habitat areas such as the river and tunnel outcrops will be avoided wherever possible. • A fauna survey will be conducted to determine the effect of fragmented habitat to game species should the need arise. • No animals shall be killed, capture or harmed in any way. • No food stuff shall be left lying around as this will attract animals which may result in human-animal conflict. 	Personnel on duty, Environmental Officer, Safety Health and Environment Manager	<ul style="list-style-type: none"> • Regular monitoring of any unusual signs of animal habitat.
Alien invasive plants	<ul style="list-style-type: none"> • Ensure vehicles and equipment are clean of invasive plants and seeds. • Eradicating alien plants using area management plan. 	Environmental Officer, Environmental Manager	<ul style="list-style-type: none"> • Regular monitoring of any signs of alien plants.

	<ul style="list-style-type: none"> • Contain neighboring infestations and restrict movement of invasive plants from adjacent lands • Educating everyone on site on types of invasive plants. 		
<p>Loss of vegetation</p>	<ul style="list-style-type: none"> • Environmental considerations will be adhered to at all times before clearing roads, trenching and excavating. • The movement of vehicles in riverbeds, rocky outcrops and vegetation sensitive area will be avoided. 	<p>Environmental Officer, Safety Health and Environment Manager</p>	<ul style="list-style-type: none"> • Warning signs on site • Restored vegetation

8 MONITORING PLAN

The project monitoring conducted under the EMP includes:

- i. **Project readiness monitoring** - Monitoring to check progress on project readiness and close gaps through corrective actions.
- ii. **Environmental quality monitoring** - To be conducted by a competent authority or person appointed by the proponent, involving the collection and analyses of air quality, noise and water quality data at designated monitoring locations for assessing compliance with applicable environmental quality and emission standards.

- iii. **EMP compliance monitoring** - To be conducted by the Project Management Consultants to verify EMP compliance during project implementation.
- iv. **Operational monitoring** - This is required as part of the operations of the subproject and will be undertaken by the relevant government department or a nominated private sector operator.

9 RECOMMENDATIONS

Based on the results of this Environmental Impact Assessment and Environmental Management Plan (EMP) report, it's hereby recommended that the proponent be issued with an Environmental Clearance Certificate for proposed exploration on the EPL 8799.

Once a viable project has been identified (economic resources are discovered) and a separate field-based and site-specific Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) must be implemented as part of the prefeasibility and feasibility study with respect to the possible mining operations. The site-specific EIA and EMP shall cover the area identified to have potential economic minerals resources.

10 CONCLUSION

This Environmental Management Plan highlights the management measures that will be implemented to mitigate the environmental impacts of the proposed activities. The management plan detailing how the proponent intends to manage all the activities of the proposed exploration and test mining operations within EPL Area that will significantly impact on the environment has been provided in this report. The implementation of the EMP as provided in this report will minimize the negative effects and maximize the positive effects thereby enhance the overall ecosystem services / value of the EPL 8799 and surrounding areas.