ENVIRONMENTAL MANAGEMENT PLAN REPORT:

FOR THE PROPOSED MINERAL EXPLORATION OF BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERALS, AND PRECIOUS METALS ON EXCLUSIVE PROSPECTING LICENSE NO.9823

OTAVI DISTRICT, OTJOZONDJUPA REGION – NAMIBIA

ECC APPLICATION NO.: APP No. 250207005311

NOVEMBER 2025

COMPILED BY

SS CONSULTANTS

info@ssconsultants.com

COPYRIGHT NOTICE

DISCLAIMER

The author of this report has neither shares nor economic interest in EPL-9823. The report therefore is written without any conflict of interest. This is an Environmental Scoping Assessment (ESA) report, and the consultant also undertook field-based evaluation. It contains certain forward-looking statements which have been based solely on available literature as well as field data. SS Consultants will not be held responsible for any omissions and inconsistencies that may result from information that was not available at the time this document was prepared and submitted for evaluation. The authors' current expectations about future proceedings are subject to several risks and uncertainties beyond his/her control. Therefore, the author does not give assurance that such statements will prove to be accurate and future events could differ materially from those anticipated in such statements. Due care and attention have been taken in the preparation of this report. However, the information contained in this report (other than as specifically stated) has not been independently verified nor has it been audited. Accordingly, the company does not warrant or represent that the information contained in this report is accurate or complete.

AUTHORSHIP

Author	**Uaanao Katjinjaa**	**Proponent**	**Namasiku Bainga**
Qualifications and Role	– **BBA (Entrepreneurship)** – **MSc. (Integrated Environmental Management and Sustainable Development)** – **Environmental Assessment Practitioner (SS Consultant CC)**	**Application Number**	**250207005311**
Email address	**UKatjinjaa@ssconsultants.co**	**Postal Address**	**P.O. Box 2670, Katima Mulilo, Namibia**
Signature			

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1 INTRODUCTION AND PROJECT OVERVIEW

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. Therefore, this EMP is formulated as a mandatory condition of the Environmental Clearance Certificate (ECC) pursuant to Section 27 of the Environmental Management Act (No. 7 of 2007). It serves as the primary operational document for proactively identifying, assessing, and managing all environmental risks associated with mineral exploration activities on Exclusive Prospecting License (EPL) 9823. The EMP is a legally enforceable document, and any instance of non-compliance constitutes a direct breach of the ECC conditions, potentially resulting in enforcement action, suspension of activities, or revocation of the license. Furthermore, this plan is designed as a "live document" that will be periodically reviewed and updated in response to monitoring results, audit findings, and changes in the scope of exploration activities.

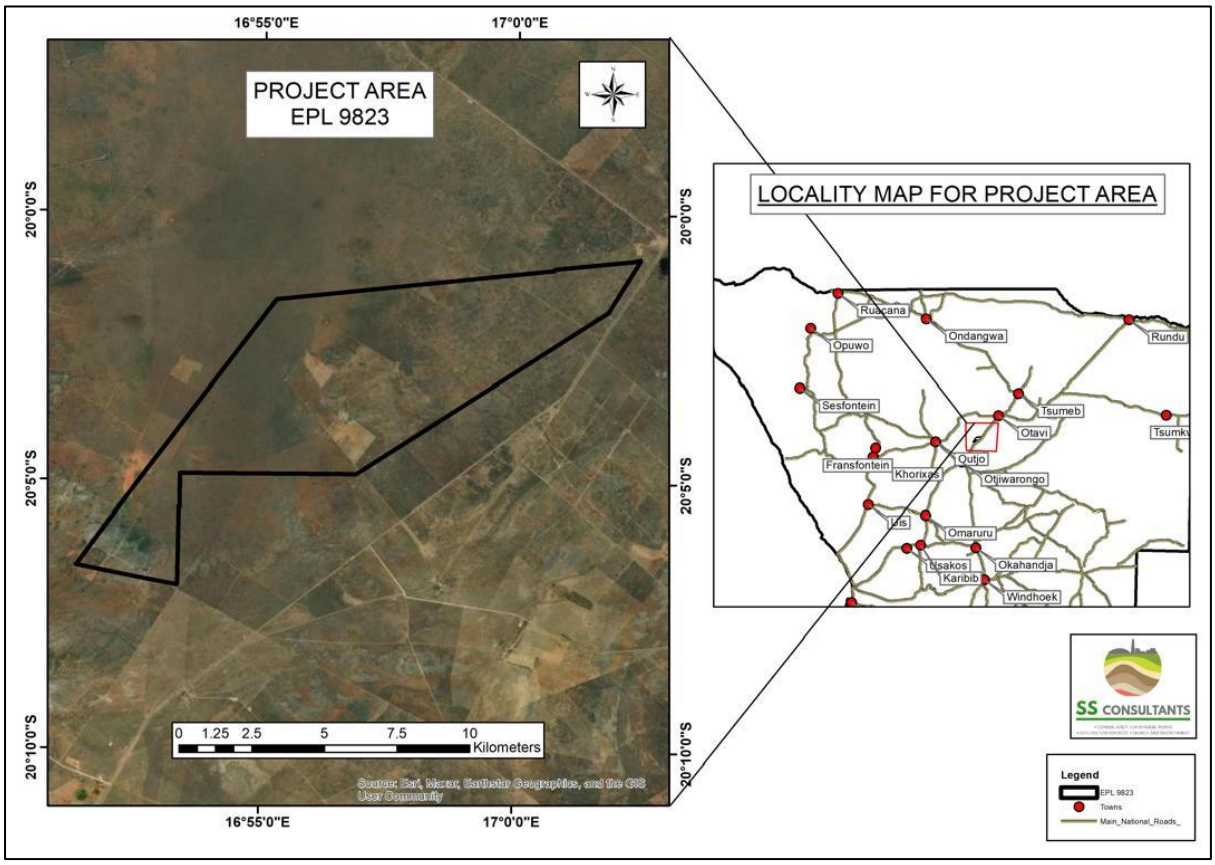

Figure 1 Project area map

2 PURPOSE OF 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 Environmental Scoping Assessment and provides operational environmental management instructions for exploration on EPL 9823. It must be read in conjunction with the ESA Report.

The EMP provides a practical, implementable framework to:

- Minimise, manage, and monitor potential environmental and socio-economic impacts associated with exploration activities;
- Ensure compliance with national legislation and best-practice environmental standards;
- Assign responsibilities for environmental management; and
- Guide the exploration team and contractors on environmentally responsible behaviour.

2.1 Operation and Maintenance

Operation and maintenance requirements include:

- Ensuring vehicles and machinery are kept in good working condition to minimise pollution and safety risks.
- Carrying out all exploration tasks (geochemical sampling, trenching, drilling, pitting, mapping, geophysics) in compliance with environmental standards.
- Maintaining drill pads, access tracks, fuel storage points, and sample storage areas to avoid contamination or degradation.

2.2 Environmental Monitoring Requirements

Environmental monitoring is required throughout the project to:

- Track compliance with the EMP;
- Observe vegetation, soil and water conditions near drill sites and trenches;
- Monitor waste management practices;
- Detect any contamination early and address it promptly;
- Ensure safe and responsible site access.

2.3 Decommissioning and Rehabilitation

Upon completing exploration activities:

- All temporary infrastructure must be removed.
- Trenches and pits must be backfilled and reshaped.
- Drill pads must be ripped and recontoured.
- Waste must be removed from site.
- A post-closure environmental inspection must be conducted.

All rehabilitation must comply with the National Policy on Prospecting and Mining, industry best practices, and MEFT requirements.

2.4 Appointed Environmental Assessment Practitioner

- In order to satisfy the requirements of the EMA and its 2012 EIA Regulations, SS Consultants has been appointed by the proponent as the Environmental Assessment Practitioner conduct the required EIA process on their (Proponent's) behalf.

3 PROJECT ACTIVITIES

The proposed exploration programme for EPL 9823 will be implemented in sequential phases, progressing from low-impact desktop studies to targeted field-based operations. Each stage is designed to refine the understanding of mineral potential within the licence area and to ensure that field activities only intensify where justified by positive results.

- Phase 1: Desktop Review and Data Interpretation

  This initial phase involves the review and interpretation of all available geological, geophysical, and geochemical data relevant to the EPL area.

  Key tasks include:

  - Reviewing existing research, historical reports, and previous exploration records;
  - Purchasing high-resolution geological and geophysical datasets from Government repositories;
  - Interpreting regional datasets to identify potential prospective zones for further assessment.

This phase is non-invasive and aims to determine whether the licence area presents viable preliminary targets for follow-up work.

- Phase 2: Reconnaissance Assessment

  If Phase 1 identifies promising targets, the exploration progresses to reconnaissance fieldwork.

  This stage involves:

  - Broad-scale field verification of interpreted targets;
  - Regional geological mapping;
  - Surface sampling (e.g., rock chip or soil sampling);
  - Ground truthing of anomalies identified during the desktop study.

The main purpose of this stage is to validate regional targets and narrow down specific areas that warrant detailed investigation.

- Phase 3: Initial Field-Based Exploration Activities

Where reconnaissance results are positive, initial field-based activities are undertaken.

This may include:

- Widely distributed geological mapping;
- Systematic surface sampling;
- Ground geophysical surveys;
- Broadly spaced trenching or shallow drilling to test subsurface continuity and geologic structures.

Activities at this phase remain exploratory and are limited to assessing the feasibility of identified targets. If results demonstrate that targets are not viable, exploration may cease and the licence may be relinquished.

- Phase 4: Detailed Localised Exploration Activities

  Should initial exploration confirm mineral potential, more focused and detailed field-based operations will be conducted.

  These may include:

  - Site-specific detailed geological mapping;
  - Trenching and bulk sampling;
  - Detailed geophysical surveys;
  - Targeted drilling programmes aimed at delineating mineralisation;
  - Laboratory testing, metallurgical analysis, and preliminary resource estimation.

Data generated from this phase is used to compile a pre-feasibility study. If pre-feasibility results are favourable, the project will proceed to a full feasibility study, which will include intensive drilling, additional bulk sampling, and test-mining where relevant.

3.1 Access and Transport

Activities include:

- Use of the B1 national road and existing farm tracks.
- Minor vegetation clearing to access sampling/trenching/drill sites (where unavoidable).

- Movement of 4x4 vehicles, light trucks, and drill rigs.

A Traffic Management Plan must be adhered to.

3.2 Resources (Water and Electricity)

- Water required for drilling will be sourced from existing boreholes upon landowner consent, or from bowsers transported from Otjiwarongo/Otavi.
- Power will be supplied via generators or vehicle systems.

3.3 Accommodation and Supporting Infrastructure

Personnel will be:

- Housed in nearby towns (Otavi or Otjiwarongo); or
- Temporarily accommodated onsite (if agreed with landowners).

Supporting infrastructure may include:

- Temporary storage containers
- Vehicle service areas
- Sample storage areas
- Temporary ablution facilities (VIP or chemical toilets)

4 ENVIRONMENTAL ASSESSMENT LEGAL REQUIREMENTS

This Environmental Management Plan (EMP) has been developed to ensure full compliance with the comprehensive legal and regulatory framework governing mineral exploration and environmental protection in Namibia. The table below outlines the key legislative and policy instruments applicable to the proposed exploration activities on EPL 9823, detailing their specific requirements and the direct implications for project implementation.

Legislation/Policy/ Guideline	**Key Provisions & Requirements**	**Specific Implications for EPL 9823**
Environmental Management Act (No. 7 of 2007) & **EIA Regulations (2012)**	• The overarching framework for environmental governance. • Mandates an EIA for listed activities (Section 27). • Requires the development of an EMP as a condition for an ECC. • Establishes principles of public participation, pollution prevention, and the precautionary approach.	• This EMP is a direct legal requirement of the ECC. • All project activities must adhere to the principles and specific measures outlined in this plan. • Non-compliance is a prosecutable offence under the Act.
Minerals (Prospecting and Mining) Act (No. 33 of 1992)	• Governs the granting and exercise of mineral rights. • Section 52 mandates a written land access agreement with the landowner before any prospecting can commence. • Provides for compensation for damages and loss of land	• The Proponent must secure and maintain valid Land Access Agreements with all relevant landowners/occupiers. • Copies of all agreements must be kept on site and made available for inspection.

	use.	
Water Resources Management Act (No. 11 of 2013)	• Provides for the protection, management, use, and development of water resources. • Prohibits the pollution of water resources (Section 68). • Requires a water abstraction license for the withdrawal of water from any source.	• A Water Abstraction Licence from the Ministry of Agriculture, Water and Land Reform (MAWLR) is required prior to any groundwater abstraction for drilling. • Strict pollution control measures (e.g., bunding, spill kits) are mandatory to prevent contamination of surface and groundwater.
Forestry Act (No. 12 of 2001)	• Protects forest resources and specific tree species. • Prohibits the cutting, disturbance, or destruction of any tree or forest product within 100 meters of a watercourse or on any ground not classified as a surveyed land parcel, except under a permit.	• A permit from the Directorate of Forestry (MEFT) is required before clearing any protected vegetation, especially near drainage lines. • A pre-clearance survey to identify protected species is mandatory.
National Heritage Act (No. 27 of 2004)	• Provides for the protection and conservation of places and objects of heritage significance. • Requires a permit for any disturbance of a heritage site. • Mandates that any chance discovery of archaeological or	• The "Chance Finds Procedure" outlined in Section 5.8 of this EMP is mandatory. • Work must cease immediately upon discovery of any potential heritage resource, and the National Heritage Council must be informed.

	palaeontological material must be reported immediately to the National Heritage Council.	
Labour Act (No. 11 of 2007) & **Health and Safety Regulations**	• Stipulates employer responsibilities for providing a safe working environment. • Requires risk assessments, safe work procedures, and the provision of Personal Protective Equipment (PPE). • Governs terms of employment and worker welfare.	• A site-specific Health and Safety Plan must be developed and implemented. • All personnel must undergo safety induction and be provided with appropriate PPE. • First aid facilities and trained personnel must be available on site at all times.
Atmospheric Pollution Prevention Ordinance (No. 11 of 1976)	• Aims to prevent air pollution and nuisances. • Provides for the control of emissions of smoke, dust, and fumes.	• Dust suppression measures (e.g., water spraying, speed limits) are legally required to minimize particulate emissions. • Machinery must be maintained to prevent excessive exhaust emissions.
Soil Conservation Act (No. 76 of 1969)	• Aims to prevent and control soil erosion. • Empowers the Minister to declare directives for soil conservation.	• Erosion control measures, such as minimizing land disturbance, contouring, and revegetation, are mandatory components of this EMP, especially given the erosive soils in the project area.

Table 1 Summary of Applicable Legislative and Policy Framework

This EMP is designed to operationalize the requirements of these instruments into clear, actionable management and mitigation measures. Compliance with this plan will therefore ensure the Proponent's adherence to the broader legal framework of Namibia.

5 SUMMARY OF THE RECEIVING ENVIRONMENT & RISK ASSESSMENT

The terrain within the EPL is characterized by undulating plains and scattered low hills, with elevations ranging from 1,320 to 1,850 meters above sea level. The region falls within a semi-arid climatic zone, receiving an average annual rainfall of approximately 682 mm, predominantly during short, intense summer thunderstorms. A critical defining characteristic of the area is its karst hydrogeology, resulting from the dissolution of underlying carbonate rocks (dolomite and limestone) of the Damara Sequence. This geological setting creates a landscape and aquifer system highly vulnerable to surface-derived contamination and susceptible to soil erosion, particularly on disturbed ground, necessitating exceptionally careful management practices.

5.1 Geology

The EPL is located within the Damara Belt's Southern Central Zone, characterized by the Pan-African Neoproterozoic orogeny. Local lithology is dominated by meta-sedimentary rocks of the Swakop Group, including schists (biotite, garnet) and significant marble bands of the Karibib Formation. The area is prospective of structurally controlled gold and other mineral deposits.

Geology supports exploration techniques such as:

- Remote sensing
- Geological mapping
- Geochemical sampling
- Geophysical surveys
- Drilling

5.2 Location and Extent

- EPL 9823 is located between Otavi and Otjiwarongo in the Otjozondjupa Region.
- Access to the licence area is via the B1 national road.
- The EPL covers an area of 7,468.7708 hectares.

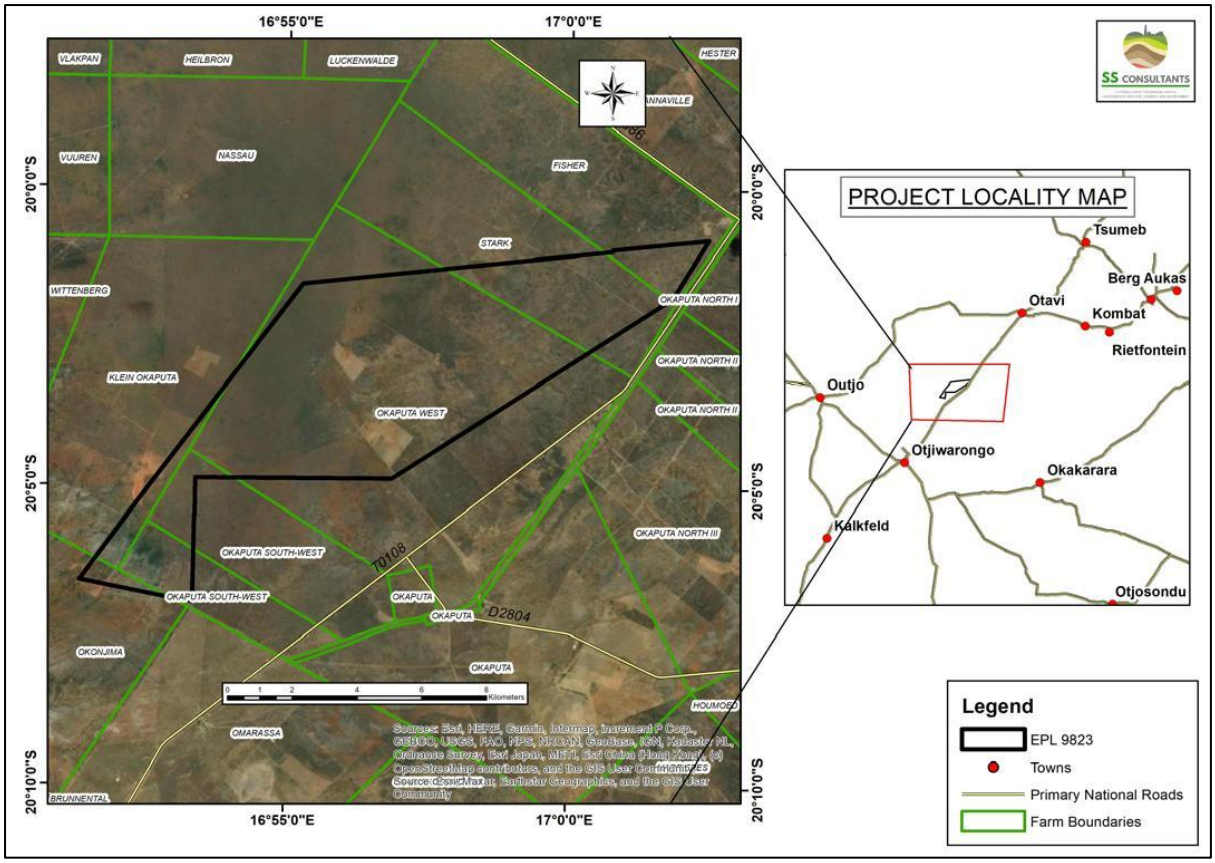

Figure 2 Locality map.

5.3 Land Use

- The EPL falls within a landscape dominated by commercial farming activities, primarily livestock production.

Figure 3: Livestock in EPL area.

- There may be interactions with farmers and landowners.

The area is well serviced by:

  - Existing water supply points
  - Power lines
  - National and district roads
  - Telecommunication infrastructure

5.4 Topography

- The topography consists of gentle undulating terrain, typical of the Otavi–Otjiwarongo area.
- The area is easily accessible with minimal need for new infrastructure developments.

5.5 Climate

- The region experiences a semi-arid climate, with:
  - Hot summers
  - Seasonal rainfall
  - Typically dry, windy periods that may increase dust dispersion

5.6 Biodiversity (Flora & Fauna)

The project area falls within a semi-arid woodland ecosystem, characterised by diverse shrubs, trees, succulents, and associated savanna fauna.

5.6.1 Flora

The area is broadly classified as a woodland, with vegetation dominated by relatively dense stands of woody shrubs and trees. According to regional descriptions (Mendelsohn et al., 2002):

- The vegetation transitions from taller woodland to shrubby forms in areas with:
  - Shallow soils
  - Steeper slopes

- Hillier or rockier terrain

- Woody vegetation commonly ranges between 1 m and 3 m in height.
- The area is dominated by thorny Acacia/Vachellia and Senegalia species, typical of the Otjozondjupa savanna.
- Thornbush thickets are prevalent on sandy and calcrete-rocky soils.
- Several species are associated with higher elevations only.

5.6.2 Key Plant Species Noted in the EPL 9823 Area

- *Aloe littoralis* (Windhoek Aloe) — protected plant, visually dominant in rocky and elevated parts of the EPL.
- Vachellia tortilis (Umbrella Thorn)
- Senegalia mellifera (Black Thorn)
- Terminalia sericea (Silver Terminalia)
- Combretum species
- Various grasses and forbs typical of semi-arid bushveld

The presence of *Aloe littoralis* indicates a rocky, well-drained habitat, consistent with much of the terrain between Otavi and Otjiwarongo.

5.6.3 Fauna

The woodlands and thornbush thickets support a diverse savanna fauna community, including:

5.6.3.1 Mammals

- Common species:
    - Springbok
    - Kudu
    - Warthog
    - Jackal

    - Small antelope species (duiker, steenbok)
- Smaller mammals:
    - Rodents
    - Bats
    - Mongooses

5.6.3.2 Birdlife

The mixture of trees, shrubs and open woodland supports:

- Raptors (eagles, kestrels, hawks)
- Ground-dwelling birds (francolins, guineafowl)
- General savanna species (hornbills, weavers, starlings)

5.6.3.3 Reptiles

- Lizards
- Geckos
- Snakes typical of semi-arid savannas

Reptile presence may be higher around rocky outcrops and aloe clusters, which offer shade and moisture pockets.

5.6.4 Ecological Sensitivities

- **Protected species present:** including *Aloe littoralis*.
- **Thornbush thickets** provide habitat for birds and small mammals.
- **Rocky slopes and shallow soils** support unique, slow-growing flora.
- Disturbance to vegetation must be minimised, especially in areas with **succulents and protected trees**

Figure 4 Vegetation

5.7 Mitigation Measures for Flora & Fauna

Environmental Aspect	Potential Impact	Mitigation Measures	Responsible Party
Disturbance to Protected Plants (e.g., Aloe littoralis)	Damage, removal, or destruction of protected aloe species and other sensitive flora	- Identify and mark protected plants before work begins. - Establish **10–20 m no-go buffer** around *Aloe littoralis* and other protected species. - Avoid clearing on rocky outcrops where aloes are concentrated. - If removal is unavoidable, obtain a permit from Forestry (MAWLR) **before** any disturbance. - Train workers to recognise protected species.	ECO / Site Manager / Contractor
Vegetation Clearing	Loss of woodland,	- Limit clearing to the minimal	Contractor /

(General)	shrubs, and thornbush thickets	footprint required for access and drilling. - Use **existing tracks** rather than creating new ones. - Clearly demarcate work areas. - Avoid clearing in sensitive zones (steep slopes, rocky areas, shallow soils).	Proponent
Habitat Loss & Fragmentation	Disruption of habitats used by mammals, birds, reptiles	- Plan access routes to avoid dense thickets and drainage lines. - Conduct work in phases to minimise large disturbances. - Implement progressive rehabilitation after completing work in each area. - Maintain natural vegetation buffers around active exploration areas.	ECO / Site Manager
Soil Disturbance (Affects Flora Regeneration & Fauna Habitat)	Reduced vegetation recovery; soil erosion; disturbance to burrowing animals	- Strip and stockpile topsoil separately for reuse. - Avoid working during/after heavy rains. - Backfill pits, trenches, and drill sumps immediately after use. - Stabilise loose soils using vegetation or brush packs.	Contractor
Wildlife Disturbance	Stress, displacement, or	- Restrict operations to daylight hours (07h00–	All Staff / ECO

	injury to fauna	18h00). - Prohibit chasing, feeding, or handling wildlife. - Minimise noise by maintaining equipment. - Establish a wildlife sighting and incident reporting system. - Maintain safe driving speeds (<40 km/h on farms).	
Poaching & Illegal Plant Harvesting	Loss of wildlife and protected flora	- Enforce a **zero-tolerance poaching policy**. - Prohibit removal of plant material (aloe leaves, firewood, seeds). - Site access must be controlled and monitored. - Report any suspected poaching to MET/MEFT.	Proponent / Contractor
Fire Risk (Affects Both Fauna & Flora)	Bushfires leading to loss of vegetation, aloe stands, and wildlife	- No open fires allowed.- Equip all vehicles with fire extinguishers.- Maintain cleared firebreaks around drill sites.- Avoid work on extreme fire-danger days.- Train staff in fire response.	Site Manager / Contractor
Pollution (Hydrocarbons, Waste)	Soil/water contamination affecting plant roots & wildlife	- Bund all fuel storage (110% capacity). - Use drip trays for machinery. - Remove all waste to licensed sites.	Contractor / Proponent

		- Clean up spills immediately using spill kits. - No waste burial or burning.	
Disturbance to Avifauna (Birdlife)	Disruption of nesting or roosting areas	- Avoid clearing trees during bird breeding season **(if applicable to species present)**. - Mark tall structures if left overnight to prevent bird collision. - Maintain woodland buffers near nesting trees.	ECO / Contractors
Reptile & Small Mammal Mortality	Injury or death from pits, trenches or vehicle movement	- Cover or fence open trenches overnight. - Inspect pits daily for trapped animals. - Provide escape ramps in deeper excavations. - Limit vehicle movement to designated tracks.	Contractor / Site Supervisor
Post-Exploration Vegetation Recovery	Poor regrowth on disturbed areas	- Re-spread topsoil after backfilling. - Encourage natural revegetation using brush-packing. - Avoid smoothing natural rocky surfaces where aloes grow. - Monitor regrowth for at least one rainy season.	ECO / Proponent

Table 2 Mitigation Measures for Flora & Fauna

5.8 Socio-Economic Environment

- Communities in Otavi and Otjiwarongo stand to benefit from:
    - Temporary jobs
    - Skills transfer
    - Local procurement
- The workforce will be sourced from nearby towns.

6 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.

7 MANAGEMENT OF KEY POTENTIAL ENVIRONMENTAL IMPACTS

7.1 Roles and Responsibilities for Environmental Management

The environmental aspects associated with the exploration programme on EPL 9823 may result in both positive and negative impacts. This section outlines the roles, responsibilities, communication structures, and implementation requirements necessary to ensure effective environmental management throughout the project lifecycle. It also sets out the objectives, indicators, and responsibilities of all stakeholders involved in implementing the EMP.

7.1.1 Communication Between Parties

Open and transparent communication between all project stakeholders is essential for proactive environmental management. This approach ensures that potential negative impacts are **anticipated, avoided, or minimized** rather than addressed only after the damage has occurred.

Particular emphasis must be placed on preventing unnecessary off-track driving and avoiding damage to vegetation especially **protected, rare, or slow-growing species** such as *Aloe littoralis*. These impacts are often difficult or impossible to rehabilitate, making proactive management critical.

The communication system must include:

- Clear reporting lines
- Regular updates between the ECO, Site Manager, contractors, and the Proponent
- Early notification of activities that may pose risks
- Immediate reporting of incidents or non-compliance

7.1.1.1 Stakeholder Engagement

Effective stakeholder engagement is a critical component of responsible mineral exploration and is essential to ensuring transparency, building trust, and preventing conflict during project implementation. The Proponent, together with the Environmental Control Officer (ECO) and the Manager of Field Operations (MFO), shall ensure that all Interested and

Affected Parties (I&APs) are informed of the project activities and that meaningful opportunities for engagement are provided throughout the exploration lifecycle.

Stakeholder engagement activities for EPL **9823** will include, but are not limited to, the following:

a) Notification of Project Activities

- Public notices shall be placed in **local newspapers**, in accordance with the Environmental Management Act (EMA) and its Regulations.
- **Site notices** will be prominently displayed at strategic locations within and around the EPL to inform local communities, landowners, and passers-by of the intention to undertake prospecting and exploration activities.
- All notices will clearly state the project description, proponent details, contact information, and the period within which stakeholders may submit comments.

b) Engagement with Landowners and Local Communities

- The Proponent shall maintain open communication with landowners and community members throughout all phases of exploration.
- Prior to the commencement of fieldwork, landowners shall be consulted to ensure access arrangements, safety considerations, and expectations are clearly understood.
- Any concerns raised by landowners or local communities will be recorded by the ECO and addressed promptly.

c) Management of Stakeholder Queries and Complaints

- A stakeholder register will be maintained, listing all individuals or groups who express interest in the project.
- A **Grievance and Feedback Mechanism** will be implemented to allow I&APs to raise issues or lodge complaints.
- The ECO will ensure that all complaints are investigated, addressed, and documented, with response actions communicated back to the affected stakeholder.

d) Ongoing Communication During Exploration

- Updates on exploration progress, access routes, and any activity that may affect communities or landowners will be shared proactively.
- Where significant changes to exploration activities are planned, the Proponent shall notify relevant stakeholders beforehand.
- The ECO will ensure that all engagement activities are documented, forming part of the project's compliance reporting.

e) Integration of Stakeholder Input

- Stakeholder comments and recommendations will be considered in decision-making where feasible and appropriate.
- Issues raised during engagement processes shall be incorporated into mitigation measures, access arrangements, and operational planning.

7.1.2 The Exploration Operating Company (Proponent)

The Proponent, through its Managing Director and Environmental Control Officer (ECO), is ultimately responsible for ensuring that all exploration activities comply with the EMP and relevant legislation. Responsibilities include:

- Ensuring the EMP and its environmental specifications are built into all contractual documents.
- Ensuring all contractors, subcontractors, and consultants comply with the EMP and relevant Namibian legislation and international standards where applicable.
- Enforcing compliance with the environmental specifications on a day-to-day basis.
- Appointing a suitably qualified ECO to conduct environmental monitoring and periodic audits.
- Ensuring adequate budget is allocated for environmental management measures.
- Commissioning tree/vegetation surveys where needed (e.g., before new access tracks or clearances).
- Ensuring forestry permits are applied for and obtained when protected species may be affected.

- Maintaining open and effective communication regarding environmental matters with all project parties.

7.1.3 Site Managers

Day-to-day environmental responsibility will be assigned to the Site Manager and Manager: Field Operations (MFO), supported by the ECO. Their responsibilities include:

- Familiarity with the EMP and relevant sections of the ESA/EIA.
- Implementing and enforcing environmental specifications at the workface.
- Monitoring daily compliance and communicating the ECO's directions to staff and contractors.
- Consulting with the ECO in cases where environmental damage has occurred or may occur and implementing necessary remedial measures.
- Keeping photographic and written records of "before-and-after" site conditions.
- Facilitating communication between workers, contractors, and the ECO to ensure effective environmental management.

7.1.4 Environmental Control Officer (ECO)

The Proponent must appoint a competent ECO to oversee environmental management. The ECO will:

- Conduct environmental audits and site inspections at least **bi-annually** or as required by MEFT.
- Compile environmental inspection reports for submission to the Managing Director and MFO.
- Advise the MFO on interpreting and implementing environmental requirements.
- Recommend corrective actions in cases of non-compliance.
- Submit required reports to MEFT at intervals stipulated by law or ECC conditions.
- Maintain an incident register documenting environmental events, corrective actions, and follow-up measures.

7.1.5 Contractors

All contractors operating on EPL 9823 must comply with this EMP. Their responsibilities include:

- Ensuring all staff understand and follow the EMP and environmental specifications.
- Notifying the Site Manager and ECO well in advance of any activity that may cause significant negative impacts so that mitigation measures can be agreed upon and implemented beforehand.
- Providing environmental induction and training to their employees and subcontractors.
- Ensuring appropriate waste management, pollution control, and safe operational practices.
- Undertaking rehabilitation measures progressively, rather than leaving all rehabilitation to the end of the project.
- Cooperating fully with the ECO during audits, inspections, and corrective action processes.

8 ENVIRONMENTAL MANAGEMENT PROCEDURES

This section provides the specific, actionable procedures that must be followed.

8.1 Pre-Operational Planning and Land Access

- **Land Access Agreements:** No vehicle or personnel shall enter any privately owned land within the EPL without a signed Land Access Agreement as per Section 52 of the Minerals Act.
- **No-Go Zones:** Prior to mobilisation, the MFO and ECO shall identify and clearly demarcate environmentally sensitive "No-Go Zones," including drainage lines, dense vegetation, and areas near homesteads.
- **Stakeholder Notification:** A schedule of planned activities must be shared with relevant landowners and the Local Authority at least 14 days in advance.

8.2 Access, Track Management and Erosion Control

- **Use of Existing Tracks:** Vehicle movement must be restricted to existing farm and access tracks. Off-road driving is strictly prohibited.
- **New Track Establishment:** If absolutely necessary, requires prior written approval from the landowner and the ECO. New tracks must follow natural contours, avoid drainage lines, and be rehabilitated immediately after use.
- **Erosion Control:** At all sites where vegetation is cleared, immediate erosion control measures must be implemented, such as brush packing or sediment fences.

8.3 Biodiversity and Flora Conservation

- **Minimised Clearance:** Vegetation clearance must be limited to the absolute minimum necessary for safety and operational efficiency.
- **Protected Species:** A pre-clearance survey must be conducted to identify any plant species protected under the Forestry Act. A permit from the Directorate of Forestry is required before any protected species can be disturbed.

- **Topsoil Management:** In areas of ground disturbance, the top 150-200mm of topsoil must be carefully stripped, stockpiled separately, and protected for use in rehabilitation.

8.4 Waste Management

- **The Principle:** "Take it in, take it out" shall apply to all non-organic waste.
- **Waste Segregation:** Clearly labelled, sealed bins for general waste, recyclables, and hazardous waste must be provided at all work sites.
- **Hazardous Waste:** All used oils, filters, and chemical containers must be stored in a dedicated, bunded area and removed by a licensed waste carrier. Records of waste disposal receipts must be maintained.

8.5 Pollution Prevention and Hazardous Substances Management

- **Fuel and Oil Storage:** All hydrocarbons must be stored in dedicated, labelled containers placed within an impermeable bund with a volume of 110% of the largest container.
- **Maintenance and Refuelling:** All vehicle and equipment maintenance and refuelling must occur over drip trays in a designated, bunded area, at least 50m from any drainage line.
- **Spill Response Plan:** A Spill Response Kit must be present on all service vehicles. All personnel must be trained in immediate spill containment and reporting procedures. Any spill exceeding 25 litres must be reported to the MFO, ECO, and MAWLR within 24 hours.

8.6 Water Resource Protection

- **Water Abstraction:** The abstraction of groundwater for drilling or other purposes is strictly prohibited without a valid Water Abstraction Permit from MAWLR.
- **Source Water:** Water for drilling and dust suppression should be sourced via bulk water suppliers from outside the project area.
- **Drillhole Decommissioning:** Upon completion, each drillhole must be properly decommissioned to prevent it from becoming a conduit for contamination in the

karst environment. This involves geophysical logging, placement of bentonite plugs, and backfilling with cement/bentonite grout. A detailed Drillhole Decommissioning Record for each hole must be submitted to the ECO and MEFT.

8.7 Air Quality, Dust and Noise Management

- **Dust Suppression:** On unsealed access tracks and work areas, dust must be suppressed by applying water at a frequency sufficient to prevent visible dust plumes. Speed limits on site tracks shall be set at 30 km/h.
- **Noise:** Noisy activities shall be restricted to weekdays between 07h00 and 18h00. All machinery must be equipped with standard mufflers.

8.8 Heritage and Archaeological Resources Protection

8.8.1 Impact Assessment of Archaeological and Heritage Resources

The EPL 9823 project area is situated within a landscape of inferred archaeological sensitivity. Although no heritage resources were formally recorded during the desktop assessment, the geological setting and known regional heritage patterns indicate a high likelihood that undiscovered archaeological sites, artefacts, or subsurface features—such as stone tools, pottery fragments, historical remains, or unmarked graves—may occur.

Exploration activities, particularly drilling, trenching, excavation, and movement of heavy vehicles, may inadvertently disturb or destroy such resources. The pre-mitigation impact significance is therefore assessed as **Medium**, due to the irreversible nature of potential damage. When mitigation measures are fully implemented, the impact significance is reduced to **Low**.

8.8.2 Mitigation Measures and Recommendations

To safeguard archaeological and heritage resources, the following measures shall apply:

- A qualified archaeologist must be appointed to conduct a **detailed archaeological survey** prior to drilling or any mechanically assisted exploration where ground disturbance is expected.

- All exploration activities must **stop immediately** if any archaeological remain, artefact, or suspected grave is uncovered.
- The project shall adopt and implement the **Archaeological Chance Finds Procedure** included in **Appendix K** of this EMP.
- **Chance Finds Procedure:** The following procedure is mandatory:
    - **STOP** all work immediately.
    - **SECURE** the area.
    - **INFORM** the MFO and ECO immediately.
    - The ECO will **NOTIFY** the National Heritage Council of Namibia (NHC) without delay.
    - Work may only resume upon written authorisation from the NHC.

The National Heritage Council of Namibia (NHC) must be notified immediately for guidance on assessment, recovery, packaging, and removal where required. Work may only resume after formal written approval is granted by the NHC.

8.8.2.1 Archaeological and Heritage Resources – Impact, Mitigation, Responsibility, Monitoring

Potential Impact	Mitigation Measures	Responsibility	Monitoring Indicators
Disturbance or destruction of archaeological sites, artefacts, or unmarked graves during exploration activities (Medium → Low significance with mitigation)	-Appoint a qualified archaeologist to conduct a detailed survey before drilling or ground-disturbing activities. - Implement and enforce the Chance Finds Procedure	Environmental Officer (ECO); Manager Field Operations (MFO); All Personnel; Appointed Archaeologist	- Archaeological survey report completed. - Evidence of worker awareness and training. - Register of chance finds maintained. - NHC

	(Appendix K). - Stop work immediately if any heritage resource is discovered. - Secure the site and notify the ECO and MFO. - ECO to notify the National Heritage Council (NHC) for guidance. - Resume work only upon written approval from the NHC.		communication records. - No unauthorised disturbance of heritage materia

Table 3 Archaeological & Heritage Resources Mitigation

9 ENVIRONMENTAL MANAGEMENT PRINCIPLES

The Proponent commits to ensuring that all project participants uphold the following principles:

a) Ecological and Social Responsibility

All employees, including consultants, workers, contractors, subcontractors, transporters, visitors, and others entering the premises, are obligated to conduct activities in an ecologically and socially responsible manner.

b) Health and Safety

Safeguarding the health and safety of project personnel and the public is paramount. This includes addressing road safety, on-site dangers, and potential hazards associated with the project.

c) Community Relations

Foster positive relationships with surrounding settlements, farm owners and stakeholders, emphasizing open communication and collaboration.

d) Wise Use and Conservation of Environmental Resources

Ensure the wise use and conservation of environmental resources, with consideration for both present and future generations. Prevent or minimize environmental impacts associated with project activities. Take measures to minimize air, water, and soil pollution resulting from project operations. Actively contribute to the conservation of biodiversity in the project area.

These principles underscore the Proponent's commitment to responsible and sustainable practices, promoting not only the success of the project but also the well-being of the environment, communities, and future generations.

10 ENVIRONMENTAL SPECIFICATIONS

These are detailed and specific requirements, standards, and guidelines that are set to govern and ensure the environmental performance of exploration. These specifications are designed to minimize or mitigate any potential negative impacts on the environment resulting from the activities associated with the exploration. These specifications cover a range of aspects and practices to promote responsible and sustainable environmental management. The environmental specifications are:

10.1 Compliance with Environmental Specifications

- Conducting activities in an environmentally and socially responsible manner.
- Strict adherence to environmental specifications by the contractor and on-site personnel.

10.2 Training and Awareness

- Provision of training for all site personnel and contractors to ensure compliance with environmental specifications.
- Oversight by the Manager Field Operations (MFO) to guarantee appropriate training levels at all personnel tiers.

10.3 Stakeholder Relations

- Maintenance of positive relations with landowners and the public by all site personnel.
- Addressing and resolving any complaints received by the Environmental Control Officer (ECO).

10.4 Permits

- Obtaining all necessary permits from relevant authorities.
- Conservation and relocation of rare and endangered plants require permits from the Directorate of Forestry.

10.5 Road Safety

- Implementation of precautions for safe access road usage, considering visibility, animal presence, and road conditions.
- Adherence to speed limits, cautious driving, and strict control of vehicle movements.

10.6 Access Tracks

- No new tracks unless essential, with approval from the Municipality and landowners.
- Clear marking of selected access and site roads, avoiding damage to plants.
- Foot access to elevated or trackless sites where possible.

10.7 Conservation of Biodiversity

- Strict avoidance of damage to protected species.

10.8 Wildlife Poaching

- Prohibition of capturing, killing, or harming animals or birds.
- Strict consequences for violations, including potential suspension from the project and prosecution.

10.9 Soil Management and Erosion Control

- Careful excavation to minimize topsoil removal.
- Separation and stockpiling of subsoil for backfilling.
- Prevention of soil erosion with suitable measures in sensitive areas.

10.10 Pollution Control

- Immediate reporting and containment of spills by workers.
- Mitigation of pollution incidents by the contractor.

10.11 Air Pollution/Dust Emission

- Timely activities during permissible weather conditions.
- Sheltered location for soil and sand stockpiles.

- Vegetation retention to reduce dust, re-vegetation of exposed surfaces, and controlled vehicle movement.
- Adherence to speed limits and dust monitoring practices.

10.12 Noise Pollution

- Keeping noise levels within acceptable limits, following appropriate noise mitigation specifications.
- Limiting noisy activities to specific times and avoiding weekends and public holidays.

10.13 Waste Management

- Maintaining cleanliness with provided bins and responsible waste disposal.
- No on-site burial of waste; removal to approved facilities.

10.14 Hazardous Substances

- Proper labelling and sealing of containers holding hazardous substances.
- Bunding of tanks to contain spills, immediate clean-up, and disposal of spills.

10.15 Fire Prevention

- Emergency Response Plan establishment.
- Controlled burning of charcoal with precautions and supervision.

10.16 Archaeological Sites

- Protection of archaeological remains, reporting of any finds to the Heritage Council.

10.17 Health and Safety

- Detailed induction for all personnel, including measures for dust, bees, snakes, and scorpions.
- Emphasis on good personal hygiene, including handwashing before eating.
- Provision of personal protective equipment and first aid supplies.

10.18 Dust Management

Staff provided with dust masks and proper Personal Protective Equipment (PPE) during charcoal processing to prevent inhalation.

10.19 Ingestion Prevention

Prohibition of eating, drinking, or smoking while working with potentially hazardous materials to avoid ingestion

10.20 Emergency Measures

Availability of Aspivenin (suction syringe) at all workstations for first aid in case of snake bites, scorpion stings, or bee stings.

10.21 Work Stoppage

- Authority of the MFO to halt work in case of environmental specification infringements.
- No entitlement to claims for delays during work stoppages.

10.22 Compliance Monitoring

- Monthly site compliance inspections by the company ECO.
- Compilation of EMP compliance reports submitted regularly to the MFO and biannually to the MEFT.

11 DECOMMISSIONING, REHABILITATION AND CLOSURE PLAN

Rehabilitation is a progressive process conducted concurrently with operations.

- **Progressive Rehabilitation:** As each exploration target is completed, rehabilitation must commence within one month.
- **Site-Specific Methods:**
    - **Trenches and Pits:** Backfill with original material, compact, and cover with stockpiled topsoil.
    - **Drill Pads:** Remove all equipment, rip compacted surfaces, and re-spread topsoil.
    - **Access Tracks:** Ripper lines to break up compaction and re-contour to blend with natural topography.
- **Closure Criteria:** The site will be considered successfully rehabilitated when all infrastructure is removed, the landform is stable, natural revegetation is established, and the landowner provides written sign-off

12 ENVIRONMENTAL IMPACTS, AND MITIGATION MEASURES

This section forms the core of the Environmental Management Plan (EMP), providing a systematic and detailed analysis of the potential environmental and socio-economic consequences of the proposed exploration activities on EPL 9823. It moves from identification to prescription, ensuring every foreseeable impact is matched with a concrete, actionable control measure.

12.1 Key Components:

1. **Impact Identification:** The section catalogues both positive and negative impacts across all project phases (pre-operational, operational, decommissioning). Positive impacts include temporary job creation, local skills development, and economic injection. Negative impacts are categorized by environmental theme, such as impacts on biodiversity, soil and water, waste generation, air quality (dust), noise, heritage resources, and community health and safety.
2. **Risk-Based Assessment:** Impacts are not merely listed; they are evaluated. The section employs a risk assessment methodology (or references its findings from the Scoping Report) that considers the *probability, extent, duration, and intensity* of each impact. This allows for the prioritization of management efforts on those impacts deemed most significant (e.g., groundwater contamination in the karst environment, improper drillhole closure).
3. **Structured Mitigation Hierarchy:** For every identified negative impact, the section prescribes a clear hierarchy of controls:
    - **Avoidance:** Where possible, changing plans to avoid the impact altogether (e.g., defining "No-Go Zones" for sensitive habitats).
    - **Minimization:** Implementing measures to reduce the impact's severity (e.g., using water for dust suppression, restricting work hours to limit noise).
    - **Rehabilitation:** Repairing damage during and after operations (e.g., progressive backfilling of trenches, re-spreading topsoil).
    - **Offset/Compensation:** As a last resort, where residual impacts are unavoidable.

4. **Actionable Management Measures:** The mitigation is presented not as vague advice but **as specific procedures and standards**. Examples include:
    - The requirement for a 110% bund volume for fuel storage.
    - The step-by-step Chance Finds Procedure for heritage resources.
    - The technical specification for drillhole decommissioning (bentonite plugs, grouting).
    - Speed limits (30 km/h) for vehicles on site tracks.
5. **Integration with Operational Control:** The mitigation measures are directly linked to the roles and responsibilities defined earlier in the EMP. They specify *who* must implement the measure (e.g., the MFO, the drilling contractor) and *how* it will be monitored and enforced.

Environmental Impact	Proposed Mitigation Measures	Responsibility	Monitoring Indicators
Air Pollution / Dust Generation	• Conduct regular maintenance of vehicles and heavy equipment.• Brief workers and contractors on dust control requirements.• Enforce speed limits and controlled vehicle movement.• Undertake grading/landscaping only when necessary.• Provide dust masks/PPE to all workers.• Limit clearing during windy periods.	Personnel on Duty; Foreman; Environmental Officer (EO)	• Visible dust during operations.• Compliance with speed limits.• Condition of access roads and cleared areas.
Noise Pollution	• Keep noise within acceptable levels.• Notify employees and neighbours of planned noisy activities.• Conduct regular maintenance of noisy machinery and vehicles.• Provide workers	Foreman; EO; Safety, Health & Environment (SHE) Manager	• Noise level measurements.• Noise complaints logged.• Maintenance records.

	with hearing protection where necessary.• Restrict noisy work to 06h00–18h00.		
Solid Waste Generation	• Provide clearly labelled refuse bins and skips at strategic points.• Encourage recycling of plastic, cans, and paper.• Empty bins regularly and dispose at approved facilities.• Maintain bulk storage waste points to prevent littering.• Prohibit burying or burning of waste onsite.	Personnel on Duty; EO; SHE Manager	• Condition and availability of waste bins.• Records of waste removal.• Site cleanliness.
Oil Leaks and Hydrocarbon Spills	• Conduct vehicle maintenance in a designated, sealed, and bunded area.• Handle and store oils on impervious, bunded surfaces.• Keep spill kits onsite and train workers in their use.• Maintain equipment to prevent leaks.• Clean spills immediately and dispose of contaminated materials properly.	Personnel on Duty; Foreman; EO; SHE Manager	• Absence or presence of oil spills.• Spill incident register.• Condition of bunded areas.
First Aid & Medical Emergencies	-Maintain a well-stocked first aid kit at all times. - Train personnel in first aid and emergency response. - Display emergency contact information onsite.	SHE Manager; Safety & Health Officer	- Contents of first aid kits. - Incident and treatment records.
Visual / Aesthetic	- Apply environmental considerations before clearing,	SHE Manager; EO	- Visual inspection reports.

Impact	trenching, or excavating. - Limit disturbance to designated work areas only. - Rehabilitate disturbed areas progressively.		- Evidence of minimal disturbance. - Rehabilitated areas.
Archaeology & Cultural Heritage	- Establish buffer zones around known heritage sites. - Follow guidance from a qualified archaeologist when operating in sensitive areas. - Identify and protect all archaeological sites before work begins. - Keep an archaeologist on standby during high-risk phases. - Report chance finds immediately to EO and NHC; do not disturb materials.	All Personnel; EO; SHE Manager	- Heritage register updated. - Chance finds log maintained. - Buffer zones clearly demarcated.
Occupational Health & Safety	- Provide PPE and train workers in its correct use. - Maintain clean and adequate sanitary facilities. - Keep first aid kits stocked and accessible. - Investigate and record all incidents and near-misses. - Conduct regular toolbox talks and inductions.	Safety & Health Officer; SHE Manager	- PPE usage on-site. - First aid kit availability. - Records of incidents and inductions.
Fauna Disturbance	- Avoid sensitive habitats such as riverbeds, rocky outcrops, and caves.	Personnel on Duty; EO; SHE Manager	- Observation of animal movement. - Wildlife incidents

	- Conduct fauna surveys if necessary. - Prohibit harming or capturing animals. - Prevent improper disposal of food waste to avoid attracting wildlife. - Educate workers on human–wildlife conflict prevention.		recorded. - Cleanliness of work areas.
Alien Invasive Plant Spread	- Ensure vehicles and equipment arrive clean and free of seeds. - Implement an alien vegetation management plan. - Remove and control invasive species early. - Train workers to recognise invasive plants.	EO; Environmental Manager	- Regular inspections for invasive species. - Records of removals or treatment.
Loss of Vegetation	- Follow environmental guidelines before clearing. Prevent vehicle movement in sensitive areas (riverbeds, rocky outcrops). - Restrict vehicle access to authorised routes. - Rehabilitate cleared areas with native vegetation.	EO; SHE Manager	- Warning signage in place. - Restoration of disturbed areas. - Compliance with approved access routes.

Figure 5 Environmental Impacts, and Mitigation Measures, Responsibilities, and Monitoring Indicators

13 MONITORING PLAN

13.1 Project Readiness Monitoring

- Verify permits
- Conduct environmental induction
- Confirm access agreements

13.2 Environmental Quality Monitoring

- Soil and vegetation condition
- Waste disposal records
- Water usage

13.3 EMP Compliance Monitoring

- ECO reports
- Incident logs
- Internal audits

13.4 Operational Monitoring

- Drill site inspections
- Hydrocarbon storage checks
- Rehabilitation status tracking

13.5 INCIDENT REPORTING AND NON-COMPLIANCE PROTOCOL

- **Incident Reporting:** Any environmental incident must be reported to the MFO and ECO within 24 hours. A formal Incident Report must be compiled.
- **Non-Compliance:** The ECO is empowered to issue a formal "Notice of Non-Compliance" for any breach. Repeated or serious non-compliance will result in a "Stop Work Order".

14 ENVIRONMENTAL CODE OF CONDUCT

This Environmental Code of Conduct applies to **all personnel** involved in the exploration operations on EPL 9823, including the Proponent, contractors, subcontractors, temporary and permanent workers, and visitors. Adherence to this Code is mandatory for any individual entering or working within the project boundary.

The Environmental Control Officer (ECO) is responsible for monitoring compliance with all environmental requirements outlined in this EMP. The ECO has the authority to issue warnings, recommend corrective actions, and report non-compliance to site management. Repeated or serious violations may lead to disciplinary action, including removal from the exploration site. This Code of Conduct ensures that all project participants contribute to responsible, safe, and environmentally sustainable operations throughout the project lifecycle.

14.1 Site Closure and Rehabilitation

Rehabilitation is a critical step to restore the environment affected by exploration activities. The objective is to return disturbed areas as close as possible to their pre-exploration condition and ensure that the post-closure landscape is safe, stable, and non-polluting.

Rehabilitation efforts will focus on:

- Drill pads
- Trenches and pits
- Access tracks
- Temporary work areas
- Areas used for storage, sampling, and equipment placement

The closure vision is to achieve a self-sustaining, environmentally stable landscape that does not pose risks to people, livestock, wildlife, or downstream users.

14.1.1 Site Closure and Rehabilitation Activities

The following activities will form part of the rehabilitation and closure process:

- Removal of all temporary structures, including site camps and storage facilities.

- Removal of all equipment, drilling gear, and associated materials from the site.
- Dismantling and removal of temporary infrastructure such as fuel storage tanks, solar units, and generators.
- Backfilling of all trenches, pits, and drill sumps using appropriate material.
- Rehabilitation of access tracks (where new tracks were created) in consultation with landowners.
- Avoidance of damage to existing secondary roads and strict use of designated tracks.
- Redistribution of recovered topsoil and subsoil to restore natural soil profiles.
- Cleaning, treatment, and restoration of disturbed or contaminated areas.
- Full removal of domestic and hazardous waste to licensed facilities in Otavi, Otjiwarongo, or other approved disposal sites.

15 RECOMMENDATIONS

Based on the comprehensive findings and detailed management framework established within this Environmental Management Plan (EMP), the following formal recommendations are made to ensure the responsible execution of the proposed exploration activities:

1. **Issuance of Environmental Clearance Certificate:** It is recommended that the Environmental Commissioner grant an Environmental Clearance Certificate (ECC) to the Proponent for the proposed exploration activities on EPL 9823, contingent upon the full and binding implementation of all conditions and mitigation measures stipulated within this EMP.
2. **Pre-Operational Compliance Verification:** Prior to the commencement of any ground-disturbing activities, the Proponent must provide evidence to the Ministry of Environment, Forestry and Tourism (MEFT) of the following:
    - Signed Land Access Agreements with all relevant landowners/occupiers, as per the Minerals Act.
    - Appointment of a suitably qualified and MEFT-approved Environmental Control Officer (ECO).
    - Submission of contractor environmental management protocols and proof of staff induction.
    - Acquisition of all other necessary subsidiary permits (e.g., from Forestry, Water Affairs).
3. **Implementation of Progressive Monitoring and Auditing:** The Proponent must adhere to the stringent monitoring and auditing schedule outlined in this EMP. The timely submission of the ECO's bi-annual audit reports and annual performance reports to MEFT is mandatory for demonstrating ongoing compliance and for informing any necessary adaptive management of the plan.
4. **Commitment to Adaptive Management:** This EMP must be treated as a living document. The Proponent is required to formally review and, if necessary, revise the plan in response to monitoring findings, audit outcomes, changes in exploration

methodology, or the discovery of unforeseen environmental sensitivities. Any significant amendments must be submitted to MEFT for approval.

5. **Stakeholder Engagement Continuity:** The Proponent should maintain open, proactive communication channels with registered Interested and Affected Parties (I&APs), local authorities, and landowners throughout the exploration phase, providing updates on activities and environmental performance.

6. **Condition for Future Development:** Should exploration activities progress beyond the scope defined in this EMP and identify economically viable mineral resources, it is a mandatory condition that a separate, comprehensive Environmental and Social Impact Assessment (ESIA) be conducted for any proposed advanced exploration, test-mining, or mining operations. This subsequent assessment will be scoped specifically to the project's new footprint and potential impacts, requiring a new application for environmental authorization.

16 CONCLUSION

This Environmental Management Plan (EMP) provides a rigorous, practical, and legally defensible framework designed to govern the environmental and social aspects of mineral exploration on EPL 9823. It translates the principles of Namibia's environmental legislation into explicit, actionable procedures for on-the-ground management.

The plan demonstrates a clear pathway for the Proponent to fulfill their commitment to regulatory compliance, responsible environmental stewardship, and proactive stakeholder engagement. By establishing defined roles, systematic monitoring protocols, and detailed mitigation measures—particularly for the sensitive karst environment and biodiverse woodlands of the Otavi District—the EMP ensures that exploration is conducted with minimal footprint and maximum accountability.

Effective implementation of this EMP will facilitate the following outcomes:

- **Minimization and Control of Negative Impacts:** Through preventative design, continuous monitoring, and immediate corrective actions, potential impacts on soil, water, air, biodiversity, and heritage resources will be reduced to acceptable levels.
- **Enhancement of Positive Socio-Economic Benefits:** By prioritizing local employment, skills transfer, and fair engagement with landowners, the project can contribute positively to the local economy while fostering social license to operate.
- **Protection of Ecosystem Function and Land Use Compatibility:** The phased and low-impact approach, coupled with strict controls and progressive rehabilitation, ensures that exploration activities coexist with existing farming and ecological land uses without causing long-term degradation.
- **Strengthened Governance and Transparency:** The mandated audit and reporting regime provides a transparent mechanism for regulator and stakeholder oversight, building trust and ensuring ongoing compliance.

In conclusion, this EMP represents a comprehensive blueprint for **sustainable exploration**. If implemented diligently and enforced consistently, it will ensure that the search for mineral resources on EPL 9823 is conducted in a manner that safeguards environmental integrity, respects social values, and aligns with Namibia's long-term sustainable development goals.

The plan thereby provides a sufficient basis for managing the identified risks, supporting the recommendation for the approval of the proposed activities.

17 REFERENCES

Bittner Water Consult CC, 2004. Demarcation of Water Basins on National Level, s.l.: s.n.

Enviro Dynamics Namibia, 2014. Environmental Assessment for the Exploration of Base Metals on Exclusive Prospecting Licenses 5606, 4934, 5712 & 5713), Kavango East Region, Namibia, Windhoek: Enviro Dynamics Namibia.

Geological Survey of Namibia. 2012. Strategic Environmental Assessment of the Central Namib Uranium Rush.

Goldline Global Consulting (Pty) Ltd, 2009. Namibia Mineral Mining Plants and Product (Pty) Ltd: Simplon Limestone Project, s.l.: s.n.

(I. Gonzalez-Alvarez , M.A. Goncalves , E.J.M. Carranza 2020). Whereas Roger Marjoribanks (2010),. Introduction to the Special Issue Challenges for mineral exploration in the 21st century: Targeting mineral deposits under cover Ore Geology Reviews

Volume 126, November 2020, 103785

Kinahan, J. 2021. Archaeological desk assessment of EPL 7547, Erongo Region, Namibia.

Mendelsohn, J., Jarvis, A., Roberts, C. & Robertson, T., 2002. Atlas of Namibia, Cape Town: David Phillips Publishers.

Miller, R. McG. 1983a. The Pan-African Damara Orogen of South West Africa/Namibia, 431-515. In: Miller, R. McG. (Ed.), Evolution of the Damara Orogen of South West Africa/Namibia. Spec. Publ. geol. Soc. S. Afr., 11, 515pp

Mining Minnesota, 2014. Exploration drilling best management practices, Duluth: Mining Minnesota.

Ministry of Agriculture, Water and Forestry, 2011. Groundwater in Namibia and Explanation to the Hydrogeological Map, s.l.: s.n.

Ministry of Lands and Resettlement, 2011. Karas Integrated Regional Land Use Plan, s.l.: s.n.

Ministry of Mines and Energy (2010). Strategic Environmental Assessment for the central Namib Uranium Rush. Ministry of Mines and Energy, Windhoek, Republic of Namibia.

OMAVI Geotechnical & Environmental Services, 2021. Detailed Environmental Assessment (EA) Report for the Proposed Exploration and Mining of Dimension Stone on Mining Claims 71609 – 71617 in the Erongo Region (An Amendment to the Scoping Report), Windhoek: Unpublished.

Roger Marjoribanks (2010),. Geological Methods in Mineral Exploration and Mining., Second Edition

Nambinga and Mubita, 2021, The Impact of Mining Sector to the Namibia economy "Assessing socio-economic and environmental effects", National Planning Commission

Namibia Statistics Agency, 2023. Namibia National Census Data. [Online] Available at: https://nsa.org.na/

Northspan Explorations Ltd, 2019. Reverse Circulation Drilling. [Online] Available at: northspan.ca/drilling-services/reverse-circulation-drilling

NSW Mining, 2013. Exploration Methods Explained: Fact Sheet, Castle Hill: Anchor Resources.

Shuuya, S. P, 2018. Hagenhof EPL 6226: Geological Quarterly Report for the period of 1 July 2018 to 30 September 2018, Windhoek: Unpublished.

The Mineral Resources of Namibia (Yellow file). 1993. Geological Survey of Namibia (GSN).

Walser.G. (2000). Economic impact of world mining. World Bank Group Mining Department, Washington, D.C., United States of America.