

ENVIRONMENTAL MANAGEMENT PLAN REPORT FOR THE EXPLORATION OF BASE AND RARE METALS, DIMENSION STONE, INDUSTRIAL MINERALS, AND PRECIOUS METALS ON EPL NO. 8816, LOCATED IN OTJIKONDO VILLAGE WITHIN THE KAMANJAB CONSTITUENCY, IN THE KUNENE REGION– NAMIBIA

COMPILED BY



SS CONSULTANTS

 info@ssconsultants.com

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

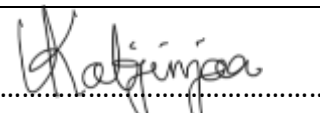
COPYRIGHT NOTICE

The copy rights to this report are held by the proponent, the holder of the Exclusive Prospecting License 8816. Compilation of the report was done by SS Consultants CC, which established in 2016, in line with the Namibia's Companies Act, 2004 (Act No.28 of 2004), with a company registration number SS/2016/13499.

DISCLAIMER

The author of this report has neither shares nor economic interest in EPL 8228. The report therefore is written without any conflict of interest. It contains certain forward-looking statements which have been based solely on available literature as well as field data collections. 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, author does not 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. The scientific information contained in this document was compiled by SS Consultants Environmental Specialist.

COMPILED BY:

Author:	Uaanao Katjinjaa
Qualifications and Role	Bachelor of Business Administration- Entrepreneurship and Enterprise Development), MSc. Integrated Environmental Management and Sustainable Development) Environmental Assessment Practitioner SS Consultant CC
Email address:	ukatjinjaa@ ssconsultants.co
Signature:	

Proponent:

Mr. Seblon Kambwale Hangula

P. O. Box 1836, Wanahenda,

Windhoek, Namibia

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

TABLE OF CONTENTS

LIST OF FIGURES II

LIST OF TABLES II

1. OVERVIEW 1

1.1. PROJECT BACKGROUND 1

1.2. PURPOSE OF THE EMP 3

1.3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)..... 3

1.4. LEGAL REQUIREMENTS..... 3

1.5. ASSUMPTIONS AND LIMITATIONS 4

2. ROLES AND RESPONSIBILITIES 4

2.1. EMPLOYERS’ REPRESENTATIVE (ER) 5

2.2. ENVIRONMENTAL CONTROL OFFICER (ECO) 6

2.3. CONTRACTORS 8

3. ENVIRONMENTAL MANAGEMENT PLAN ACTIONS 9

3.1. KEY POTENTIAL ENVIRONMENTAL IMPACTS TO BE MANAGED 9

3.2. PHASE 1: PLANNING AND DESIGN MANAGEMENT ACTIONS 10

3.3. PHASE 2: OPERATIONAL PHASE MANAGEMENT ACTIONS 14

3.4. REHABILITATION AND DECOMMISSIONING MANAGEMENT ACTIONS 26

4. SITE CLOSURE AND REHABILITATION 28

4.1. SITE CLOSURE AND REHABILITATION ACTIVITIES 28

5. RECOMMENDATIONS FOR MONITORING 29



ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

6. CONCLUSION.....29

7. REFERENCES.....31

LIST OF FIGURES

Figure 1-1: Locality Map for EPL 8816.2

LIST OF TABLES

Table 1-1: Environmental objectives and targets.1

Table 3-1: Summary of key potential environmental impacts per project phase9

Table 3-2: Planning and design management actions. 11

Table 3-3: Operation phase management actions. 15

Table 3-4: Decommissioning phase management actions. 26



ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

1. OVERVIEW

1.1. Project Background

The Ministry of Mines and Energy (MME) has granted the proponent an Exclusive Prospecting License (EPL) with the primary purpose of exploring base and rare metals, dimension stone, industrial minerals and precious metals group of mineral commodities. To proceed with the exploration activities, the proponent is required to obtain an Environmental Clearance Certificate (ECC) as mandated by the Environmental Management Act.

The extent of these impacts will inform the development of an effective Environmental Management Plan (EMP) that will facilitate the management of these impacts by implementing appropriate mitigation measures. The EMP outlines the proponent's approach to managing the exploration, potential mining, and processing operations within the EPL area, with a focus on minimizing negative effects and maximizing positive ones on the receiving environment.

The proponent's exploration focus includes base and rare metals, dimension stone, industrial minerals, and precious metals. EPL 8816 is located about 71 kilometers northwest of Outjo town and approximately 3 kilometers southwest of Otjikondo Village within the Kamanjab constituency in the Kunene Region. Encompassing a total area of around 19,730.343 hectares, this private land can be reached via the D2666 gravel road, a branch of the main Kamanjab - Outjo C40 tarred road. The locality of the EPL is shown in Figure 1-1.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

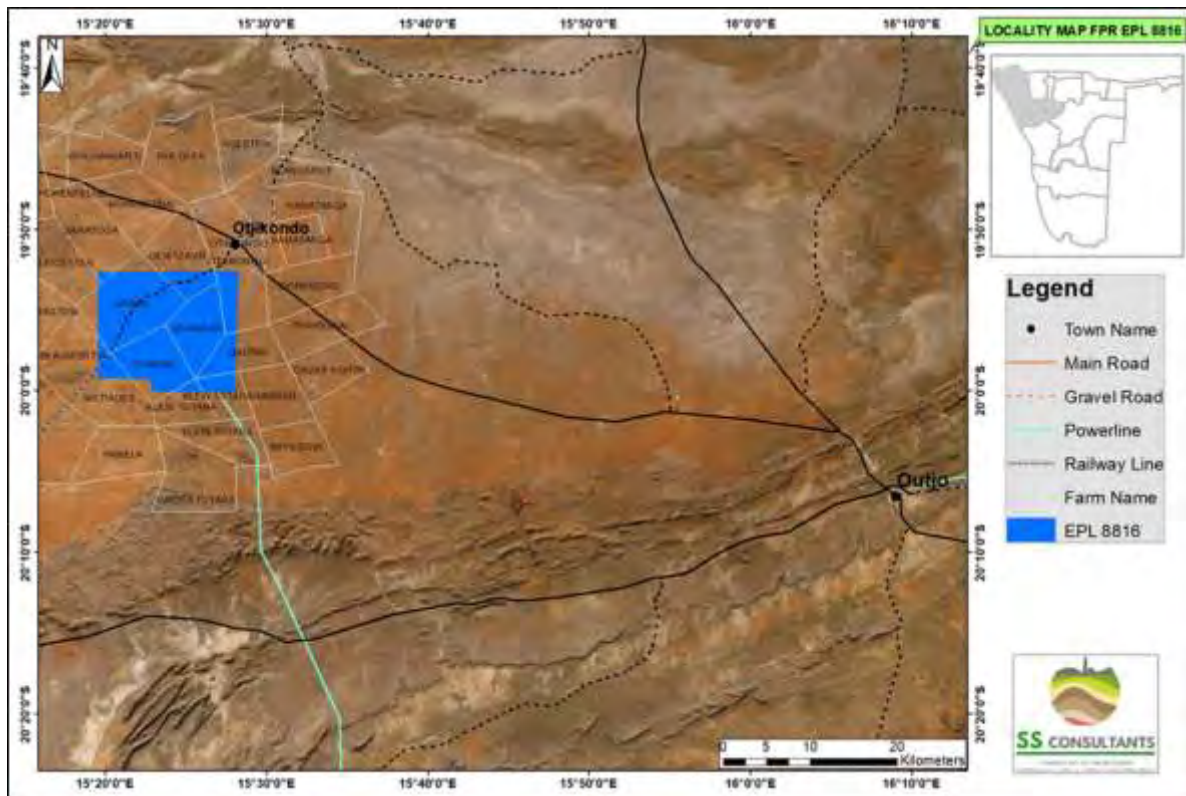


Figure 1-1: Locality Map for EPL 8816.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

1.2. Purpose of the EMP

The Environmental Management Plan (EMP) serves as a comprehensive tool outlining specific actions necessary to implement mitigation measures for a proposed project. The main aim of this EMP is to ensure that the project complies with the goals of the Namibian Environmental Management Act (EMA, No. 7 of 2007); and, more specifically, to provide a framework for implementing the management actions as described in the EMP for the operational and maintenance phases of the project. There are some environmental impacts that cannot be avoided, these environmental impacts require mitigation, and in order to mitigate against these impacts an EMP is required. The EMP aims to ensure best practices are implemented and environmental degradation is avoided through appropriate environmental protection, adherence to legal requirements and maintaining good community relationships. Continuous management of the EMP should be maintained throughout the project's life to ensure effective responsiveness to any changes and positive monitoring results throughout the project's lifecycle.

The overall objectives of the EMP are as follows:

- Implement measures to avoid and minimize adverse impacts of the proposed project.
- Ensure compliance with regulatory authority stipulations and guidelines.
- Enhance the value of environmental components where feasible.
- Protect environmental resources such as biodiversity, ecosystems, natural resources, and social aspects.
- Respond to unforeseen events and provide feedback for continual improvement in environmental performance.

The Environmental objectives and targets for this project are summarized on the following table.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

Table 1-1: Environmental objectives and targets.

Objectives	Targets (these need to be measured)		Management programs (How will targets be achieved)
	Indicator	Target	
To ensure that pollution prevention and environmental impact reduction procedures and equipment are in place and effective.	<ul style="list-style-type: none"> o Introduction of temporary controls following an incident o Spills in work area 	No spills in work area	<ul style="list-style-type: none"> o Identification of Hazards and Risk o Hazard Analysis Control of Hazardous Materials o Incident Management
To ensure that work is performed in accordance with this environmental management plan	<ul style="list-style-type: none"> o Close out of actions from o Incident o Investigations, o Inspections, o Observations 	100% within agreed timeframes	<ul style="list-style-type: none"> o Roles and Responsibilities o Audit and Inspections

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

Potential environmental risks/ impacts are identified, and provisions are made for their prevention and management.	Environmental Risk Register has been approved by site Management.	Environmental Risk Register prepared for each operational site.	<ul style="list-style-type: none"> ○ Environmental Aspects Register ○ Strategic Risk Management
To ensure that site personnel are aware of and able to achieve their environmental targets through appropriate training and awareness programs.	<p>Inductions and training completed</p> <p>Environmental awareness topics delivered to personnel</p>	Fully trained personnel	<ul style="list-style-type: none"> ○ New Employee Induction ○ Assessment of Training Requirements ○ Toolbox Talks
To maintain and improve this EMP and procedures to meet, and demonstrate that, the environmental objectives of the Project are met.	<p>Inspections and audits</p> <p>Actual Vs Scheduled</p>	>90%	<ul style="list-style-type: none"> ○ Compliance Inspection and management Review ○ Regional Management Review

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

1.3. Environmental Assessment Practitioner (EAP)

SS Consultants, an independent environmental consultant, was tasked by the proponent to conduct the required Environmental Assessment (EA) and prepare an Environmental Management Plan (EMP) for the proposed development. According to the Environmental Act of 2007, the EMP must be submitted to the Environmental Commissioner at the Department of Environmental Affairs (DEA) of the Ministry of Environment, Forestry, and Tourism (MEFT), along with the scoping EA report, as a supporting document to apply for an Environmental Clearance Certificate (ECC).

The EMP will serve as guidance for both Contractors and the Proponent during the proposed exploration operations, ensuring that environmental impacts are minimized or avoided wherever possible. Additionally, the EMP will be used in the process of reviewing the EIA scoping report for decision-making purposes.

1.4. Legal Requirements

In order to be considered, the EMP must meet the requirements specified in Section 8 (j) of the EIA Regulations. The review of the legal framework serves to inform the Proponent, affected and interested communities, as well as the decision-makers at the Ministry of Environment, Forestry, and Tourism: Department of Environmental Affairs (MEFT: DEAF) about the expectations and necessary elements of the EMP. The EMP not only adheres to the Environmental Management Act but also incorporates other relevant regulations, such as the Minerals (Prospecting and Mining) Act No. 33 of 1992 (Minerals Act), which pertains to exploration activities. This Act governs the exploration, prospecting, mining, disposal, and control of minerals in Namibia and addresses related matters.

The proponent bears the responsibility of ensuring that both the proposed activity and the EIA process comply with the principles of the Environmental Management Action Plan (EMAP). Moreover, they must ensure that any contractors appointed by them also adhere to the relevant Acts and regulations.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

1.5. Assumptions and Limitations

This EMP has been formulated while considering the following assumptions and constraints:

- The EMP is based on the scoping-level Environmental Impact Assessment (EIA) conducted for the proposed exploration on EPL 8816.
- The mitigation measures outlined in this EMP are directly related to the risks and impacts identified in the scoping report. These risks and impacts were determined based on the provided project description and site investigation.
- It is essential to understand that the EMP is not a fixed document and can be modified as the project progresses or if there are changes to the project's scope. Any alterations to the project's scope will necessitate a reassessment of the impacts, and appropriate mitigation measures will be formulated accordingly.

2. ROLES AND RESPONSIBILITIES

The successful implementation and monitoring of the mitigation measures are crucial to fulfilling all the commitments outlined in the EMP concerning the avoidance and reduction of identified impacts. The EMP and its monitoring program are ongoing processes, commencing from the project's design phase and continuing throughout development, operation, and, if applicable, decommissioning. Given this, it is of utmost importance that the proponent bears the entire responsibility for ensuring the efficient implementation of the EMP, as required, and ensuring robust monitoring practices are in place. The key individuals responsible for the effective implementation of the EMP may be assigned to the same person to streamline the process.:

- Employers Representative
- Environmental Control Officer
- Contractors.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

2.1. Employers' Representative (ER)

The Proponent has identified a suitably qualified individual to assign the role of project manager for all phases of exploration i.e. planning and design, operation, and decommissioning phase.

The developer appoints the ER to manage all contracts for work/services that are outsourced during the construction phase. Any competent employee or third-party organization which possesses the appropriate experience may fill this position. Any official communication regarding work agreements is delivered through this person/organization. The ER shall assist the Environmental Control Officer (ECO) where necessary and will have the following responsibilities regarding the implementation of this EMP:

The following are the responsibilities for the ER:

- Act as the on-site project manager and implementing agent.
- Ensuring that the contractor has obtained the necessary legal authorizations and permits,
- Assisting the contractor in finding environmentally responsible solutions to problems with input from the ECO where appropriate,
- Warning and ordering the removal of individuals and/or equipment not complying with the EMP,
- Providing input into the ECO's ongoing internal review of the EMP. This review report should be submitted on a monthly basis to the developer
- Appoint the Environmental Control Officer (ECO);
- Make sure that the Employer's tasks and responsibilities are properly implemented and are in compliance with the relevant legislation and the EMP for the project.
- Ensure that all the necessary environmental authorizations and permits have been obtained before any project's work related to such permits.
- Assist the Contractor in finding environmentally responsible solutions to challenges that

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

may arise (in cases where serious threats occur, or high impacts to or on the environment caused by the project, the workers may stop work.)

- The Employer must be informed of the reasons for the stoppage as soon as possible.
- The Project manager has the authority to issue fines for transgressions of basic conduct rules and/or contravention of the EMP;
- Should the Contractor or his/her employees fail to show appropriate consideration for the environmental aspect related to the EMP, the Project manager can have person (s) and/or equipment removed from the site or work suspended until the matter is resolved.
- Report to the Employer on the implementation of this EMP on site (with input from the ECO and/or independent environmental auditor);
- Maintain open and direct communication between the Employer, ECO, Contractor and I&As with regards to environmental matters, and;
- Attend regular site meetings and inspections.

2.2. Environmental Control Officer (ECO)

To effectively manage the implementation of the EMP, the proponent must designate a responsible person, referred to as the Environmental Control Officer (ECO), to oversee and monitor the on-site implementation of the EMP. This responsibility encompasses all phases, starting from planning and design through to operation and decommissioning. The proponent or the Project manager (PM) may opt to assign this role to a single individual for all phases or appoint separate ECOs for each phase to supervise the implementation of the EMP. The ECOs will have the following responsibilities:

The ECO's duties include the following:

- Assisting the ER in ensuring that the necessary legal authorizations have been obtained;
- Maintaining open and direct lines of communication between the ER, Developer,

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

Contractor, and Interested and Affected Parties (I&APs) with regard to this EMP and matters incidental thereto;

- Monthly site inspection of all construction areas with regard to compliance with this EMP;
- Monitor and verify adherence to the EMP (audit the implementation of the EMP) and verify that environmental impacts are kept to a minimum;
- Taking appropriate action if the specifications for the EMP are not adhered to;
- Assisting the contractor in finding environmentally responsible solutions to problems;
- Training of all construction personnel with regard to the construction and operation mitigation measures of this EMP and continually promoting awareness of these;
- Ensure that all contractors shall provide adequate environmental awareness training for senior site personnel by the ECO and that all construction workers and newcomers receive an induction presentation on the importance and implications of this EMP. The presentation shall be conducted, as far as is possible, in the employees' language of choice;
- Monthly inspection to verify if new personnel have received appropriate environmental, health and safety training and training for those who have not;
- Advising on the removal of person(s) and/or equipment not complying with the specifications of the EMP in consultation with the ER;
- Recommending the issuing of fines for transgressions of site rules and penalties for contraventions of the EMP; and
- Undertaking a monthly-month review of the EMP and recommending additions and/or changes to the document.
- Overseeing the implementation of the EMP: Ensuring that all measures and actions outlined in the EMP are carried out as planned and within the specified timeframes.
- Conducting regular inspections: Performing on-site inspections to monitor compliance with the EMP's requirements and identifying any potential environmental issues or deviations.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

2.3. Contractors

The contractor is responsible for the implementation, onsite monitoring, and evaluation of the EMP. The contractor must keep records of all environmental training sessions, including names, dates and the information presented for inspection and reporting by the ER and ECO at all times. The responsibilities of the contractor include:

- **Implementation of Mitigation Measures:** The contractors are responsible for effectively implementing the mitigation measures outlined in the Environmental Management Plan (EMP) to minimize environmental impacts.
- **Monitoring and Reporting:** The contractors will participate in monitoring activities as required and report any environmental incidents or non-compliance promptly to the relevant authorities and project management.
- **Training and Awareness:** The contractors will ensure that their staff are trained and aware of the environmental requirements and responsibilities relevant to their roles.
- **Waste Management:** The contractors will ensure the proper handling, disposal, and recycling of construction waste and hazardous materials will be carried out in line with approved procedures and regulations.
- **Biodiversity Conservation:** The contractors will take measures to protect local biodiversity and habitats, especially in ecologically sensitive areas.
- **Water and Air Quality:** The contractors and subcontractors will implement practices to protect water bodies and air quality, including proper management of storm water and dust control measures.
- **Cultural Heritage:** The contractors will take precautions to avoid disturbance to cultural heritage sites or artifacts and report any findings as required.
- **Community Engagement:** The contractors will engage with local communities, listen to their concerns, and address them appropriately during project activities.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

- Emergency Response: The contractors will always be prepared to respond to environmental emergencies and cooperate with the project team in the event of incidents.
- Environmental Performance Improvement: Continuously seek ways to improve environmental performance throughout the project's lifecycle.

3. ENVIRONMENTAL MANAGEMENT PLAN ACTIONS

The Environmental Management Plan (EMP) outlined in this Report is a dynamic document developed based on the findings of the scoping report. It is subject to continuous updates throughout the implementation of the proposed project. The EMP incorporates relevant Namibian environmental regulations, policies, as well as other local and international best practices concerning exploration projects. To address potential impacts, the EMP includes detailed action plans outlining management measures aimed at mitigating adverse effects. These measures are designed to ensure environmental compliance and sustainability during the project's execution.

3.1. Key Potential environmental impacts to be managed

From the EIA, potential impacts per project phase have been identified and are summarised in the tables under subchapters 3.1, 3.2 to 3.4 as well as in the Scoping Report.

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

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

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

Management actions need to be employed to manage the potential impacts. The potential impacts rated in the EA and carried out for the proposed exploration development are presented in the following tables. The management actions are formulated as follows:

- Planning and design (pre-exploration) (**The management** requirements detailed in Error! Not a valid bookmark self-reference. must be executed before any exploration activities commence on site. Also, necessary preliminary legislative and administrative arrangements must be set up in preparation for the proposed exploration activities.).
- Operation and maintenance phase management actions (during exploration activities) **The Operational** Phase Section relates to the management and mitigation measures required to ensure that the continuation of the project and the maintenance of the infrastructure is operated in a manner that demonstrates responsible, precautionary environmental management. The EMP will address specific areas of concern in terms of the long-term environmental management of the affected environment.

The management actions for the operational phase during which the exploration activities are listed in Error! Not a valid bookmark self-reference..

-).
- Decommissioning (**The table** below presents the management action for the decommissioning phase.)

The delegated personnel will assess the mitigation measures in detail and align their commitment to the specific management actions detailed in the table of the next subchapters.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

3.2. Phase 1: Planning and Design Management Actions

The management requirements detailed in Error! Not a valid bookmark self-reference. must be executed before any exploration activities commence on site. Also, necessary preliminary legislative and administrative arrangements must be set up in preparation for the proposed exploration activities.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

Table 3-2: Planning and design management actions.

Aspect	Management Requirement	TARGET DATE
Labor Recruitment	<p>Provisions mapped out to reduce the use of local labour should be inclusive within tenders concerning the:</p> <ul style="list-style-type: none"> • Facilitation to allow equal treatment, non-discrimination, and equal opportunity of workers, and to establish, maintain, and improve the worker-management relationship, and promote compliance with national employment and labour laws. • Provision stating that all unskilled and skilled labour primarily considered people from local communities and should be included within tenders concerning the exploration operations. • Specific employment procedures ensuring local firms enjoy preference during tender adjudication should be included within tenders that have to do with the exploration operations. • Provisions promoting gender equality pertaining to recruitment should be included 	Ongoing

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

	within tenders concerning the exploration operations.	
Occupational Health and Safety	<ul style="list-style-type: none"> • Development and submitting of the Emergency Preparedness and Response Plan. • Commit to all the Namibian Health and Safety Regulations under the Labour Act and Exploration and Mining Safety Regulations. • Training on Occupational health and Safety Training for all the employees. • There should be always a qualified first aid. • Active and correctly usage of all Personal Protective Equipment (PPE). 	<ul style="list-style-type: none"> • Ongoing
EMP Implementation and Monitoring	<ul style="list-style-type: none"> • Ensure that the EMP is executed during all exploration project phases. • Adhering effectively to all relevant legislation and this EMP. • Providing regular meetings as a reminder of all the EMP details and doing site inspections. 	<ul style="list-style-type: none"> • Ongoing
Consultation with affected communities	<ul style="list-style-type: none"> • Conduct ongoing informed consultation and participation with the affected communities (community, local and traditional authorities) prior to any exploration activities commencement and throughout the activities to provide them with the following information. 	<ul style="list-style-type: none"> • Ongoing



ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

	<ul style="list-style-type: none">○ Detailed work plan with regards to the exploration activities.○ Discussion of access agreements.○ Discussion of compensation (as necessary).○ Any other concerns or information requirements that the farmers may have.○ Implementing the grievance mechanism with the affected communities to ensure that all the concerns and grievances related to the project are received, noted, and resolved.○ Resolve the affected communities' issues and concern promptly and transparently and in a culturally fitting way.○ An allegiance by the exploration company for the rehabilitation of the site when exploration activities are decommissioned.	
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

3.3. Phase 2: Operational Phase Management Actions

The Operational Phase Section relates to the management and mitigation measures required to ensure that the continuation of the project and the maintenance of the infrastructure is operated in a manner that demonstrates responsible, precautionary environmental management. The EMP will address specific areas of concern in terms of the long-term environmental management of the affected environment.

The management actions for the operational phase during which the exploration activities are listed in Error! Not a valid bookmark self-reference..

Table 3-3: Operation phase management actions.

Environmental Features	Potential Impact	Management Actions	Target Date
Waste Management	Visual impact and soil contamination	<ul style="list-style-type: none"> • The exploration site should always be kept tidy. • The exploration activities should strictly happen within the project footprint. • All domestic and general waste accumulated daily should be cleaned and contained daily. • No waste may be buried or burned. • Waste containers (bins) should be emptied regularly and removed from site to the nearest municipal waste disposal site. • All recyclable waste needs to be taken to the nearest recycling depot. • Several, separate waste containers (bins) for hazardous and domestic / general waste must be provided on site. • Employees should be sensitised to dispose of waste in a 	<ul style="list-style-type: none"> • Ongoing

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

		<p>responsible manner and not to litter.</p> <ul style="list-style-type: none"> • All the wastes must be removed from site after the completion of the project. 	
Hazardous Waste	Soil and groundwater contamination	<ul style="list-style-type: none"> • All heavy operation vehicles and equipment on site must be supplied with a drip tray to prevent spill-outs • All heavy operation vehicles should be maintained regularly to avoid oil leakages. • Maintenance and washing of operation vehicles must happen only at a designated workshop. 	<ul style="list-style-type: none"> • Phase two and Phase three of the project
Groundwater	Groundwater contamination	<ul style="list-style-type: none"> • The usage of the toilets instead of the veld must be strictly adhered to. • If grey water can be collected from ablution facilities at the contractors' camp it should be recycled and: <ul style="list-style-type: none"> ○ Used for dust suppression; ○ Used to water vegetable gardens or to support a small nursery in local communities (as and when agreed 	<ul style="list-style-type: none"> • Ongoing



		<p>upon by such communities); and/or</p> <ul style="list-style-type: none"> ○ Used to clean equipment. ● All run off materials such as hydrocarbons, wastewater and other potential contaminants should be contained on site appropriately and disposed of in accordance with municipal wastewater discharge standards, so that they do not reach to ground or surface water systems. ● Wastewater (excluding sewage) should be drained into lined / impermeable catch pits, big enough for daily / weekly usage without overflowing. Water from these catch pits should be removed from site to the nearest wastewater treatment facility by an approved wastewater removal company. ● Employees must properly be trained on the groundwater impact awareness., ● There must be an established and maintained emergency preparedness and response system that facilitates space 	
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--



ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

		<p>for responding to any accidental and emergency situations to prevent and mitigate any harm to people and the environment. This can account for major / minor spills and firefighting at the exploration site during exploration activities (with consideration of air, groundwater, soil and surface water).</p>	
Soil	Soil contamination	<ul style="list-style-type: none"> • Spill control preventative measures should be put in place to control soil contamination. • An impermeable liner should be placed on site to prevent contamination from reaching to surrounding soils and groundwater systems. • Potential contaminants such as hydrocarbons and wastewater should be placed in appropriate containers on site and be disposed of in accordance to municipal wastewater discharge standards to ensure that they do not contaminate soils in the area. • Soil contamination should be monitored on site daily by PR 	<ul style="list-style-type: none"> • Ongoing



		<p>and monthly by ECO.</p> <ul style="list-style-type: none"> • ECO(s) should ensure that enough number of drip trays are available on-site and that these are utilised in the event of leakage from construction trucks or vehicles. • Contaminated soils onsite that may have resulted from leakage/spillage from construction vehicles or equipment should be removed to a depth dependent on the size of the spill and disposed at a designated landfill. The removed soil must be replaced with clean soil. 	
Biodiversity	Loss of Biodiversity	<ul style="list-style-type: none"> • Recommendations and mitigation measures as provided by the vegetation study with regards to the protection of biodiversity in the area should be adhered to and monitored during exploration activities. • Trees with a trunk size of 150 mm and bigger should be surveyed, marked with paint (readily visible) and protected. • Trees that are not within the footprint should be left to 	<ul style="list-style-type: none"> • Ongoing

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

		<p>preserve biodiversity in the area.</p> <ul style="list-style-type: none"> • If cleared, the numbers of protected, endemic and near endemic species removed should be documented. • Trees and plants protected under the Forest Act No 12 of 2001 must not be removed without a valid permit from the local Department of Forestry. 	
Terrestrial environment	Noise and dust	<ul style="list-style-type: none"> • The dust generated during the exploration activities should be reduced by means of water spray. • If attainable, wastewater should be treated to an acceptable water quality level, so that it can be used for dust suppression. • Noise levels during exploration activities should be kept within the allowable standards for urban areas. • Noise levels should adhere to the SANS restrictions on noise. • The working hours should be restricted to daytime due to the use of heavy equipment, power tools and the 	<ul style="list-style-type: none"> • Ongoing



ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

		<p>movement of heavy vehicles.</p> <ul style="list-style-type: none"> • Noisy equipment should be off when not used to avoid noise pollution on site and its surroundings. • Workers should wear ear plugs when performing noisy tasks and should be rotated regularly to avoid exposing them to excessive noise for a long period of time in a day. • Workers should be equipped with personal protective equipment (PPE) such as earplugs to reduce noise exposure. • Workers should ensure that they always wear the PPE on work sites. 	
Health and Safety	Health and safety impacts	<ul style="list-style-type: none"> • The contractor(s) should ensure that all personnel are equipped with personal protective equipment (PPE), such as coveralls, gloves, safety boots, safety glasses and hard hats always. • Workers should ensure that they always wear their PPE at 	<ul style="list-style-type: none"> • Ongoing

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

		<p>work, in an appropriate way.</p> <ul style="list-style-type: none"> • Alcohol should be prohibited during working hours. • No workers should be allowed on site if under the influence of drugs and alcohol. • An appropriate location should be indicated on the site for the parking of operation vehicles and must be demarcated to be visible to everyone. • Public access to the exploration site should be prohibited. 	
<p>Exploration labourers</p>		<ul style="list-style-type: none"> • The Proponent should ensure that locals got the priority for employment of any type of a job. • Portable toilets (i.e., easily transportable) should be available on site. • Separate bathrooms or toilets should be available for men and women and should clearly be indicated as such. • Sewage waste needs to be removed on a regular basis to the nearest approved sewage disposal site. • Workers responsible for cleaning the toilets should be provided with latex gloves, rubber boots, overalls, masks 	<ul style="list-style-type: none"> • Ongoing

		<p>and all the necessary PPE for cleaning.</p> <ul style="list-style-type: none"> • No workers may reside on-site for the entire duration of the exploration period. Only a security guard will be allowed to sleep on-site (if there will be any). • The proponent or contractor should draft a Communication Plan, which should outline as a minimum the following: <ul style="list-style-type: none"> ○ How stakeholders, who require ongoing communication for the duration of the exploration period, will be identified and recorded and who will manage and update these records. ○ How these stakeholders will be engaged throughout the project lifetime. ○ Provision should be made for a grievance mechanism – outlining how to discover and assess the issues raised and determine how to address them, inclusive of further steps of 	
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

		<p>arbitration if feedback is deemed unsatisfactory.</p> <ul style="list-style-type: none"> ○ There should be continuous engagement with the stakeholders and affected communities and farmowners to ensure they are aware of the relevant communication channels and that they are part of the project decision making where needed. 	
Water	Groundwater contamination	<ul style="list-style-type: none"> ● No wastewater / effluent should be allowed to leave the site premises without proper control. ● The disposals should be done in accordance with municipal wastewater discharge standards. ● Daily maintenance of exploration equipment and vehicles should be done to detect early spills or leakages. ● An emergency responsive plan should be available for major / minor spills at the exploration site during operation (with consideration of air, groundwater, soil and surface water) to prepare the workers on how to respond to any emergency. 	<ul style="list-style-type: none"> ● Ongoing

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

		<ul style="list-style-type: none"> • Groundwater impact awareness should be raised among the employees involved in this phase. 	
Wildlife and Stock animals	Disturbance of wildlife and stock theft	<ul style="list-style-type: none"> • Working hours should be committed to during the day so that the wildlife can roam freely at night. • The contractor is to compile a Non-Theft Policy to which all workers are to comply with. • All exploration workers are to cohere to the Non- Theft Policy. 	<ul style="list-style-type: none"> • Prior to the project commencement (in the employment contract). • Ongoing



3.4. Rehabilitation and Decommissioning Management Actions

The table below presents the management action for the decommissioning phase.

Table 3-4: Decommissioning phase management actions.

Environmental Feature	Impact	Management Actions	Target date
Employment	Loss of employment	<ul style="list-style-type: none"> • The Proponent should tell the employees well in advance, of any intentions to cease the exploration activities, and the expected date of such. • The Proponent should encourage and raise awareness of the possibilities for work in other industrial sectors. • Conduct a skills training program during the operations phase. 	<ul style="list-style-type: none"> • At least 6 months before the project closure • Ongoing
Rehabilitation	Groundwater contamination	<ul style="list-style-type: none"> • During the initial prospecting phase, only limited surface rock and soil sampling will take place and it is unlikely that any damage be left by this activity. • All waste, inoperative samples, and any other remains from the site must be removed. • All sample bags, plastic waste, survey pegs, materials used for sump creation etc. from site at completion of sampling schedule must be 	<ul style="list-style-type: none"> • Throughout the entire phase 2 and Phase 3.

		<p>detached.</p> <ul style="list-style-type: none">• Site should be returned to as close as possible to its original condition.• Re-contour and rip the drill site before the site is finally decommissioned.• Fill holes, rip up, rake track, and spread stockpiled topsoil back over the entire new tracks made, to allow re-vegetation.• Make sure that the ECO did a site inspection prior to and after rehabilitation to check rehabilitation efforts of each drill site.	
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

4. SITE CLOSURE AND REHABILITATION

Rehabilitation is the process of returning the land in a given area that has been disturbed by construction and earthworks to some degree of its former state, or an otherwise determined state. Many projects, if not all, will result in the land becoming degraded to some extent. However, with proper rehabilitation most impacts associated with the reservoir construction project, could be mitigated and restored to an acceptable level. The rehabilitation plan should address various aspects, such as the access road, vehicle tracks, vegetation removal, abandoned exploration drill holes, and the restoration of areas covered by sampling stockpile and rock piles.

4.1. Site closure and rehabilitation activities

Poorly rehabilitated construction areas provide a difficult legacy issue for governments, communities, and companies, and ultimately tarnish the reputation of operators as a whole. Objectives of proper site closure and rehabilitation include the following:

- Reduction or elimination of the need for a long-term management program to control and minimize the long-term environmental impacts;
- Clean-up, treatment or restoration of contaminated areas (e.g. soils contaminated by oil or fuel spills, concrete spills, etc.).
- Excavation of contaminated material and disposal thereof in an acceptable manner.

Rehabilitation measures to implement:

- A site inspection will be held quarterly by the scheme supervisor after every maintenance work during operation of the scheme. Rehabilitation will be done to the satisfaction of the MEFT.
- Frequent inspections of the scheme and effective follow-up procedures, to prevent minor defects from becoming major repair jobs.
- Make sure all soil polluted during maintenance work is properly stored in drums and removed to an appropriate waste dump.

ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 8816

- Make sure all windblown litter is removed once maintenance has seized.
- Make sure that all potential hazards (i.e. the sewerage pit) are properly closed and left in a safe and neat position.

Rehabilitation will be completed when the above have been achieved.

5. RECOMMENDATIONS FOR MONITORING

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

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

6. CONCLUSION

According to the recommendations outlined in the Environmental Management Plan (EMP), SS Consultants express confidence that, as detailed in the scoping report, the proposed exploration activities have the potential to receive an Environmental Clearance Certificate. However, this is contingent on strict adherence to the EMP and compliance with all relevant legal requirements for development. The EMP should function as an active and dynamic guiding document on-site throughout all project phases, with regular audits to verify its effective implementation. Those accountable for any breaches of the EMP should be held responsible for any necessary rehabilitation efforts.

In summary, the anticipated environmental impacts of the proposed project are anticipated to be of low likelihood, limited in scope, with minor and temporary effects on the receiving environment, including physical, biological, socioeconomic elements, and ecosystem functions. This report establishes a framework for integrating mitigation strategies and applicable legal measures to ensure both environmental compliance and preservation of the ecosystem. To guarantee the successful execution of the proposed mitigations and effective environmental management during exploration activities, the project proponent must allocate adequate human and financial resources.

7. REFERENCES

- 'ACACIA', 2002. Atlas of Namibia Project. Directorate of Environmental Affairs, Ministry of Environment and Tourism.
- Ashmole, I., & Motloutung, M. (2008). Mineral: the latest trends in exploration and production technology. In *Proceedings of the International Conference on Surface Mining* (Vol. 5, No. 8). Craven, D., & Craven, P. (2000). The Flora of the Brandberg, National Herbarium of Namibia, National Botanical Research Institute.
- Schneider, G. & Seeger, K., 1992. Copper. In: s.l.:The Mineral Resources of Namibia, pp. 2.3, 1-172.