ENVIRONMENTAL SCOPING ASSESSMENT (ESA) FOR THE EXPLORATION OF INDUSTRIAL MINERALS, DIMENSION STONE, PRECIOUS METALS, BASE AND RARE METALS MINERAL GROUPS ON EPL NO.7470, LOCATED IN UIS DISTRICT, ERONGO REGION – NAMIBIA

COMPILED BY



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TABLE OF CONTENTS

LIST	OF	FIGURESII	
LIST	OF	TABLES II	
1.	ov	ERVIEW1	
1.	1.	Project Background	1
1.	.2.	PURPOSE OF THE EMP	2
1.	.3.	ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)	4
1.	4.	LEGAL REQUIREMENTS	4
1.	5.	Assumptions and Limitations	5
2.	ROI	ES AND RESPONSIBILITIES5	
2.	1.	PROPONENT'S REPRESENTATIVE	6
2.	2.	Environmental Control Officer	7
2.	3.	CONTRACTORS AND SUBCONTRACTORS	8
3.	EN۱	/IRONMENTAL MANAGEMENT PLAN ACTIONS9	
3.	1.	Key Potential environmental impacts to be managed	9
3.	2.	PHASE 1: PLANNING AND DESIGN MANAGEMENT ACTIONS	.11
3.	3.	PHASE 2: OPERATIONAL PHASE MANAGEMENT ACTIONS	.16
3.	COI	NCLUSION	
3.	.4.	RECOMMENDATIONS FOR MONITORING	.37
4.	REF	ERENCES	
		i Pag	ge



LIST OF FIGURES

Figure 1: Locality Map for EPL 7470. Error! Bookmark not defined.

LIST OF TABLES

Table 3-1:	Summary of key potential environmental impacts per project phase	9
Table 3-2:	Planning and design management actions	11
Table 3-3:	Operation phase management actions	16
Table 3-4:	Decommissioning phase management actions	32



1. OVERVIEW

1.1. Project Background

The Ministry of Mines and Energy (MME) has granted the EPL 7470 to the proponent to undertake mineral exploration activities for the mineral groups of industrials minerals, dimension stone, precious metals, base, and rare metals mineral. As per the Environmental Management Act, the proponent needs an Environmental Clearance Certificate (ECC) to be able to conduct the exploration. According to the Minerals (Prospecting and Mining) Act No. 33 of1992 (Minerals Act), Section 67(1)(a) denounce that an EPL is for the purpose of conducting of mineral resource exploration. The mineral groups consist of various elements that fall under each group, and it has been listed in the Minerals Act Schedule 1.

The Environmental Management Act (EMA) (2007) and its 2012 Environmental Impact Assessment (EIA) Regulations, requires that the proponent conducts an EIA for the project to identify and evaluate all the possible impacts it may have on the environment. The severity of the impacts helps in drafting effective Environmental Management Plan (EMP) that would help to manage the impacts by implementing the identified mitigation measures. If the EIA and EMP are not done, then this implies that the proponent cannot be awarded the Environmental Clearance Certificated required to undertake the listed activity, in this case the exploration activities.

EPL 7470 is situated about 15 km south of Uis town, Daures Constituency, Erongo Region. The EPL covers a total area of approximately 19036.7487 hectares of state land and can be accessed via C35 road from Uis, which passes through on the EPL on north-western side or via the D1930 road that passes through the EPL on its eastern side. The locality of the EPL is depicted **Error! Reference source not found.**.





Figure 1-1: Locality Map for EPL 7470.

1.2. Purpose of the EMP

The Environmental Management plan (EMP) is a guidance tool that provides a detailed plan of actions needed in the implementation of the mitigation measures invented for proposed project. EMP is a legally binding document and a person who breaches the provisions of this EMP may face imprisonment and/or a fine. The document aims to minimize and maximize the identified negative and positive impacts respectively. It also provides the management actions with roles and responsibilities for the successful implementation of the environmental management strategies by the proponent (Miss Frieda Namutenya Nambahu). It is mandatory that a draft of the Environmental Management Plan (EMP) is included as part of the scoping Environmental Assessment (EA) process. In short, a 'management plan' is defined as:



"...a plan that describes how activities that may have significant environments effects on the environment are to be mitigated, controlled and monitored."

The risks and impacts identified in the EIA are relate to the needed environmental management plan on the ground. Continuous EMP management should be adopted throughout the project's life to ensure that the implementation of the mitigations that are responsive to any change that may occur is effective and that the result of monitoring is positive throughout the project's life cycle.

The overall objectives of the EMP:

- To implement measures that will help avoid and/or minimise the adverse impacts of the proposed project.
- To ensure that regulatory authority stipulations and guidelines are adhered to.
- To develop measures that boost the value of environmental components where possible.
- To establish actions that protect environmental resources (biodiversity, ecosystem, natural resources, and social aspects).
- Responding to unpredicted events and providing feedback for continual improvement in environmental performance.

The following phases are addressed in this EMP:

- Phase 1: Initial Desktop study and prospecting activities Before the exploration activities start, preliminary legislative and administrative arrangements must be carried out. This is done to prepare for the proposed exploration activities.
- **Operation** the period during which the exploration activities will be operational.
- Decommissioning This phase is implemented when the proposed development's lifetime ends.



1.3. Environmental Assessment Practitioner (EAP)

SS Consultants is an independent environmental consultant, and it was appointed by the proponent (Miss Frieda Namutenya Nambahu) to undertake the required Environmental Assessment (EA) and an EMP for the proposed development. Following the Environmental Act of 2007, it is a requirement that the EMP is submitted to the Environmental Commissioner at the Department of Environmental Affairs (DEA) of the Ministry of Environment, Forestry and Tourism (MEFT), together with the scoping EA report as supporting document to the application for an Environmental Clearance Certificate (ECC). The EMP will also be used by Contractors as well as the Proponent to direct them during the proposed exploration operations to ensure that impacts on the environment are avoided where possible or limited altogether? as well as in the process of EIA scoping report review for decision making.

1.4. Legal Requirements

For the EMP to be considered, it must meet the requirements of Section 8 (j) of the EIA Regulations. The review of the legal framework aims to inform the Proponent, affected, and interested communities, and the decision makers at the MEFT: DEAF about the requirements and expectations sought out from the EMP. The EMP does not only adhere to the Environmental Management Act, but also accommodates other regulations that speak to the project activities like the Minerals (Prospecting and Mining) Act No. 33 of 1992 (Minerals Act) with regards to the exploration activities. This Act caters for the reconnaissance, prospecting, and mining for, and disposal of, and the exercise of control over, minerals in Namibia; and provides for matters incidental thereto.

The EMP must also address all the identified potential environmental impacts of the proposed activities throughout the project life cycle. On the same level, the EMP must include a system for assessment of the effective monitoring and management arrangements after implementation. It is the responsibility of the proponent to make sure that the proposed activity as well as the EIA process comply with the principles of Environmental Management



Action Plan (EMAP) and must ensure that any contractors appointed by them also conform to the Acts and regulations.

1.5. Assumptions and Limitations

This EMP has been developed with the acknowledgement of the following assumptions and limitations:

- This EMP has been developed based on the scoping-level of Environmental Impact Assessment (EIA) conducted for the proposed exploration on EPL 7470 inclusive of an Archaeological and Cultural Heritage Impact Assessment Report.
- The mitigation measures recommended in this EMP document are based on the risks/impacts in the scoping report which were identified based on the provided project description and site investigation. It is important to note that the EMP is not a explicitly document and can be amended throughout project development and if the scope of the project changes. This means that for any change in the scope of the project, the impacts will be reassessed, and the mitigation measures will be formulated correspondingly.

2. ROLES AND RESPONSIBILITIES

Mitigations implementation and monitoring are critical in ensuring the fulfilment of all the commitments made in the EMP regarding the avoidance and minimising of the identified impacts. The EMP and its monitoring programme is a continuous process that starts right at project's design, and continues through to development, operation, and decommissioning (if considered). It hence essential that the proponent carries the entire responsibility to ensure that the EMP is sufficiently implemented, as deem necessary, and make sure that sound monitoring is done. The delegated responsibility for the effective implementation of this EMP will rest on the following key individuals which may be fulfilled by the same person:

• Proponent's Representative

- Environmental Control Officer
- Contractors and Subcontractors.

2.1. Proponent's Representative

The Proponent can choose to manage all aspects of the planning and design, operation and decommissioning activities throughout the above-mentioned phases referred to in this EMP or choose to assign the responsibility to a suitably qualified individual referred to in this plan as the Proponent's Representative (PR). The Proponent may decide to assign the role of a PR to one person for all phases of exploration, or separate PR for each component i.e. planning and design, operation, and decommissioning phase.

The following are the responsibilities for the PR:

- Act as the on-site project manager and implementing agent.
- Appoint the Environmental Control Officer (ECO);
- Ensure 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 prior to any project's work that is related to such permits.
- Assist the Contractor in finding environmentally responsible solutions to challenges that 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 PR 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 PR 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 lines of communication between the Employer, ECO, Contractor and I&Aps with regards to environmental matters, and;
- Attend regular site meetings and inspections.

2.2. Environmental Control Officer

As part of the EMP implementation management, the proponent is required to assign responsibility for managing the on-site implementation of the EMP, from the planning and design phase to the operation and decommissioning phase, to a designated person, named herein as Environmental Control Officer (ECO). The Proponent or the PR may choose to assign this role to one person for all phases or assign separate individual ECOs to oversee the implementation of the EMP during each phase. The ECOs will have the following responsibilities:

- Manage the EMP and facilitate communication between the Proponent, PR and Interested and Affected Parties (I&APs) regarding this EMP.
- Implementation of site inspections (recommended minimum frequency is monthly during exploration and bi-annually during decommissioning) of all areas with respect to the implementation of this EMP (monitor and audit the implementation of the EMP);
- Biannual reporting to MEFT
- Making suggestions to the PR with respect to the issuing of fines for contraventions of the EMP; and
- Conducting the internal auditing of the EMP and recommending additions and/or changes to this document.
- Assist the PR in ensuring that all the necessary environmental authorizations and permits have been obtained.



- Assist the PR and Contractors in finding environmentally responsible solutions to challenges that may arise;
- Conduct environmental monitoring as per EMP requirements;
- Monitor the Contractor's environmental awareness training for all new personnel coming onto site;
- Keep records of all activities related to environmental control and monitoring;
- Attend regular site meetings.

2.3. Contractors and Subcontractors

The responsibilities of the Contractors and Subcontractors include:

- Comply with the relevant legislation and the EMP for the proposed exploration project;
- Prepare and submit to the proponent the following Management Plans:
 - ✓ Environmental Awareness Training and Inductions;
 - ✓ Emergency Preparedness and Response;
 - ✓ Waste Management;
 - ✓ Health and Safety, and;
 - ✓ Electric and Magnetic Fields (EMF) Safety.
- Ensure effective environmental awareness training for senior site personnel;
- Environmental awareness induction must be given to all site personnel prior to work commencement;
- Keep record of all the environmental awareness training and induction presentations, and;
- Attend regular site meetings and environmental inspections;



3. ENVIRONMENTAL MANAGEMENT PLAN ACTIONS

The Environmental Management Plan, described in this Report, is established from the findings of the scoping report. The EMP must be continuously updated during the implementation of the proposed project, and must incorporate the Namibian Environmental regulations and policies, and other local and international environmental best practices in exploration projects. The management measures proposed to mitigate the potential impacts are detailed in the action plans below.

3.1. Key Potential environmental impacts to be managed

From the EA, potential impacts per project phase have been identified and are summarised in the tables under subchapters 3.1, 3.2 to 3.5 as well as in the Scoping Report.

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

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

Management actions must be implemented 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 were formulated based on the three project phases:



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

The proponent or the delegated personnel should evaluate these measures in detail and concede their commitment to the specific management actions detailed in the table of the next subchapters.



3.2. Phase 1: Planning and Design Management Actions

The management requirements detailed in **Table 3-2** must be implemented prior to any exploration activities commencement on site. Also, necessary preliminary legislative and administrative arrangements must be set up in preparation for the proposed exploration activities.

Table 3-2: Planning and design management actions

Aspect	Management Requirement	Responsible PERSON/S	TARGET DATE
Labour	Provisions mapped out to minimise the use of local labour should be	Miss Frieda Namutenya	Ongoing
Recruitment	inclusive within tenders concerning the:	Nambahu (the Proponent)	
	 Facilitation to aid the equitable 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 labour is derived 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 within tenders concerning the exploration operations. 		
Occupational Health and Safety	 Preparation and submitting of the Emergency Preparedness and Response Plan. Comply to all the Namibian Health and Safety Regulations under the Labour Act and Exploration and Mining Safety Regulations. Employees must be trained on Occupational health and Safety Training. There should be always a qualified first aid. Ensure that the Personal Protective Equipment (PPE) are actively and effectively used. 	• PR/ECO/Contractors	• Ongoing

EMP Implementation and Monitoring	 Ensure that all the details related to the EMP are executed during all exploration project phases. Adhering effectively to all relevant legislation and this EMP. Conducting regular meetings as a reminder of all the EMP details and doing site inspections. 	• PR/ECO/ Contractors	• Ongoing
Consultation with affected communities	 There should be an 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. Detailed work plan with regards to the exploration activities. Discussion of access agreements. Discussion of compensation (as necessary). 	 Miss Frieda Namutenya Nambahu/ PR/ ECO 	• Ongoing

	 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. 		
Archaeology	 An archaeological expert must be appointed to conduct a detailed archaeological survey and monitoring once targets have been identified for drilling and/or other mechanically assisted exploration. 	 Miss Frieda Namutenya Nambahu 	 During phase two and

Once the exact locations of the exploration sites are determined,	phase
and should a heritage or archaeological site be uncovered, an	three
Archaeological Chance Finds Procedure should be applied as	
outlined in Appendix K of the Scoping Report.	

3.3. Phase 2: Operational Phase Management Actions

The management actions for the operational phase during which the exploration activities are listed in

Table 3-3.

Table 3-3:Operation phase management actions

Environmental	Potential	Management Actions	Responsible Person(s)	Target Date
Feature	Impact			
Waste	Visual impact	• The exploration site and its	PR/ECO/Contractors	Ongoing
Management	and soil	surrounding should always be kept		
	contamination	tidy.		
		• 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 responsible	
		manner and not to litter.	
		All the wastes must be removed	
		from site after the completion of	
		the project.	
Hazardous	Soil and	All heavy operation vehicles and PR/ECO/Contractors	• Phase two and
Waste	groundwater	equipment on site must be supplied	Phase three of
	contamination	with a drip tray.	the project
		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.
Groundwater	Groundwater contamination	 The use 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: Used for dust suppression; Used to water vegetable gardens or to support a small nursery in local communities (as and when agreed upon by such communities); and/or Used to clean equipment.

All run off materials such as	
hydrocarbons 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 be equipped
• Employees must be equipped
with an appropriate groundwater
impact awareness training.,
There must be an established and
maintained emergency
preparedness and response
system that facilitates space for
responding to any accidental and
emergency situations to prevent
and mitigate any harm to people
and the environment. This can
account for major / minor spills
and firefighting at the exploration
site during exploration activities
(with consideration of air,
groundwater, soil and surface
water).

Soil	Soil	Spill control preventative PR/ECO	Ongoing
	contamination	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 and	

	monthly by ECO.	
•	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	•	Recommendations and	PR/ECO/Contractors	Ongoing
	Biodiversity			mitigation hierarchy 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.		
			•	The Proponent should only, when		
				necessary, remove trees within		
				the actual footprint of the specific		
				exploration activities with		
				permission if required. Trees that		
				are not within the footprint		
				should be left to preserve		

		biodiversity in the area.		
		• 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	Noise and	• The dust generated during the	PR/ECO/Contractors	Ongoing
environment	dust	exploration activities should be		
		reduced by means of water spray.		
		• If feasible, 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 movement of heavy
vehicles.
Noisy equipment should be off
when not used to avoid noise
pollution on site and its
surroundings.
Workers performing noisy tasks
should wear ear plugs 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	•	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 work, in an appropriate way.	PR/ECO/Contractors	Ongoing

	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.
	Public access to the exploration
	site should be prohibit.
Exploration	The Proponent should ensure Miss Frieda Ongoing
labourers	that locals got the priority for Namutenya
	employment of any unskilled Nambahu
	labour.
	 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 boats,
	overalls, masks and all the
	necessary PPE for cleaning.
	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:	
• 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.	
\circ 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 arbitration if	
	feedback is deemed	
	unsatisfactory.	
0	There should be	
	continues	
	engagement with the	
	stakeholders and	
	affected communities	
	to ensure they are	
	aware of the relevant	
	communication	
	channels and that	
	they are part of the	
	project decision	
	making where	

		needed.		
Water	Groundwater	• No wastewater / effluent should	PR/ECO/Contractor	Ongoing
	contamination	be allowed to leave the site		
		premises without proper control.		
		 These should be disposed in 		
		accordance with municipal		
		wastewater discharge standards.		
		• Daily maintenance of exploration		
		equipment and vehicles should be		
		done to detect early spills or		
		leakages.		
		 An emergency responsive plan 		
		should be available for major /		
		minor spills at the exploration site		
		during operation (with		
		consideration of air, groundwater,		
		soil and surface water) to prepare		
		the workers on how to respond to		
		any emergency.		

		Groundwater impact awareness			
		should be raised among the			
		employees involved in this phase.			
Wildlife and	Disturbance of	Working hours should be Miss Frieda	٠	Prior	to the
Stock animals	wildlife and	restricted to during the day so that Namutenya		project	
	stock theft	the wildlife can roam freely at Nambahu/		comme	ncement
		night. PR/ECO/Contractors		(in	the
		• The contractor is to compile a		employ	ment
		Non-Theft Policy to which all		contrac	t).
		workers are to comply with.	٠	Ongoin	3
		 All exploration workers are to 			
		cohere to the Non- Theft Policy.			

Phase 4: Rehabilitation and Decommissioning Management Actions

The table below presents the management action for decommissioning phase.

 Table 3-4:
 Decommissioning phase management actions

Environmental	Impact	Management Actions	Responsible Person/s	Target date	
Feature					
Employment	Loss of	The Proponent should inform	Miss Frieda Namutenya	• At least 6	
	employment	the employees well in advance	, Nambahu	months before	
		of any intentions to end the	e (proponent)/PR/ECO/Con	the project	
		exploration activities, and the	tractors	closure	
		expected date of such.		Ongoing	
		• The Proponent should motivate			
		and raise awareness of the			
		possibilities for work in other			
		industrial sectors.			
		• Implement a skills training	5		
		programme during the			
		operations phase.			
Rehabilitation	Groundwater	• During the initial prospecting	PR/ECO/Contractors	Throughout	
	contamination	phase, only limited surface rock		the entire	
		and soil sampling will take place	2	phase 2 and	
		and it is unlikely that any	,	Phase 3.	
		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 compliant	
completion of sampling	
schedule must be detached.	
Site should be retroverted 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	

ale

site inspection prior to and after	
rehabilitation to check	
rehabilitation efforts of each	
drill site.	



Site closure and rehabilitation

Rehabilitation is an action for recovering damage done by exploration activities. The core reason for rehabilitation is to revive a damaged/ disturbed environment close to its pre-exploration state. It is also planned to accommodate the access road, vehicle tracks around the site, vegetation removal, abandoned exploration drill holes, and restoration of areas covered by sampling stockpile and rock piles. The disturbed areas will be covered by the collected topsoil and spread evenly. Also, where possible, all the removed native plant species in disturbed areas will be replanted. The closure vision for the proposed project is to establish a safe, stable, and non-polluting post- prospecting landscape that can facilitate integrated, self-sustaining and value generating opportunities, thereby leaving a lasting positive legacy.

Site closure and rehabilitation activities

All waste (such as hazardous and domestic) will be transported offsite for disposal in licensed landfills in Uis or other surrounding towns like Hentisbay or Omaruru. Damaged or/and contaminated areas will be cleaned up, treated where necessary and recovered to its pristine state.

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

The rehabilitation actions deliberated to be employed during the recommissioning of the

proposed exploration activities are described below.

Remediation of Contaminated Areas

All soil contaminated with hydrocarbons will be removed, excavated, and disposed in accordance with nearest town council disposal requirements at appropriate sites.

- ✓ Removed soils will be managed as determined by the nature and degree of the contamination.
- ✓ All equipment in which chemicals have been stored or transported will be cleaned and disposed of in a suitable disposal facility.

Waste Management

Waste management activities will include:

- ✓ Hazardous waste will be managed, properly handled, classified and disposed.
- ✓ No burring and burying of waste.
- ✓ Nonhazardous substances will be disposed in the nearby landfill sites.
- ✓ If required, temporary salvage yards will be fenced for security reasons, particularly where these are located close to public roads.

3. CONCLUSION

Based on the recommendation given in this EMP, SS Consultants is confident that the proposed exploration activities, as described in the EA report be granted an Environmental Clearance Certificate, if adhere to EMP. The project should be monitored and all the legal requirements pertaining to this development must be complied with.

The Environmental Management Plan should be used as an on-site and on-going guiding document during all phases of the proposed project, and auditing should take place in order to ensure effective implementation of the EMP. Parties responsible for transgression of the EMP should be held responsible for any rehabilitation that may need to be undertaken. Overall, the severity of potential environmental impacts of the proposed project activities on the receiving environment (physical, biological, socioeconomic environments and ecosystem

functions) will have low probability of occurrence, localized extent, and low magnitude and temporally duration. This report should be viewed as a framework for merging mitigation measures and applicable legal tools to ensure both compliance and protection of the environment and its ecosystem. It is therefore important that the proponent provide sufficient support for human and financial resources, for the execution of the proposed mitigations and effective environmental management during the planned exploration activities.

Based on the recommendation given in this EMP, SS consultants is confident that the proposed exploration activities, as described in **Chapter 2** of the scoping report may be granted an Environmental Clearance Certificate, provided that the EMP is implemented and that all the legal requirements pertaining to this development are complied with.

3.4. Recommendations for Monitoring

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

- Monitoring of the implimentation 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.

4. **REFERENCES**

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