

**ENVIRONMENTAL MANAGEMENT PLAN REPORT FOR:**


**THE PROPOSED INDUSTRIAL AND NUCLEAR FUEL MINERAL  
EXPLORATION ON EPL NO.7469**

**UIS, ERONGO REGION – NAMIBIA**

COMPILED BY




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## ENVIRONMENTAL MANAGEMENT PLAN REPORT EPL 7469

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## 1. OVERVIEW

### 1.1. Project Background

The proponent was issued with a notice to grant EPL 7469 by the Ministry of Mines and Energy, with the aim of undertaking mineral exploration activities for the mineral groups of industrial minerals and nuclear fuel minerals. However, the granting of the EPL is subjected to the proponent being awarded an Environmental Clearance Certificate (ECC). According to the Minerals (Prospecting and Mining) Act No. 33 of 1992 (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.

It should be noted that the proponent need to do an EIA and EMP for impacts identification and mitigation is because all proposed works are among listed activities that may not be undertaken without an Environmental Clearance Certificate (ECC) under the Environmental Management Act (EMA) (2007) and its 2012 Environmental Impact Assessment (EIA) Regulations.

The EPL is located in the North western part of Namibia, about 20 km Northwest of Uis settlement, in the Daures District of Erongo Region, and covers 8387.8111 hectares of land. The locality of the EPL is depicted in the map Figure 1.

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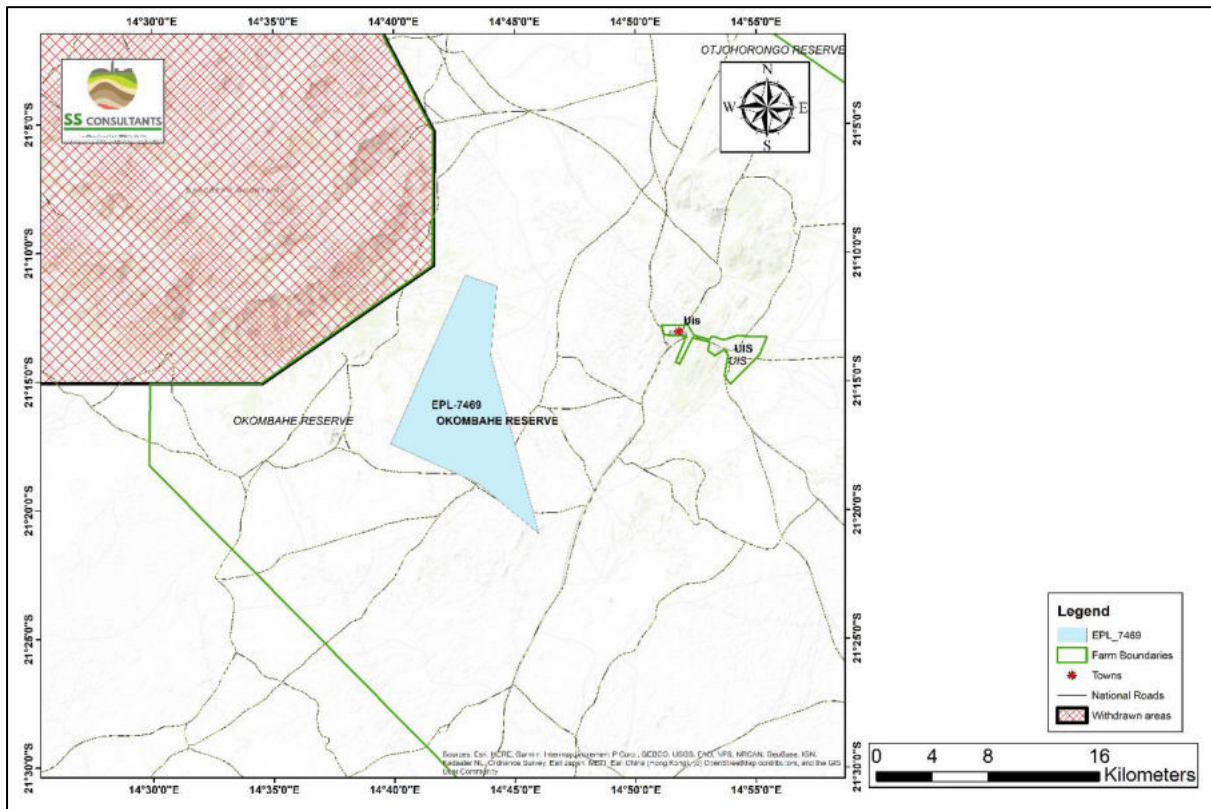


Figure 1: Locality Map for EPL 7469.

## 1.2. Purpose of the EMP

The Environmental Management plan is a tool used to guide the implementation of the proposed project in this case to conduct exploration of industrial and nuclear fuel minerals. This will be based on the mitigation hierarchy put into place to avoid/ minimize the impacts the project has on the environment. As mentioned in the previous sub-section, prior to commencement of the exploration activities, an Environmental Clearance Certificate (ECC) is required based on an approved Environmental Management Plan (EMP). This is based on regulation 8 of the Environmental Management Act's (EMA) (7 of 2007) and the Environmental Impact Assessment Regulations (2012). It is mandatory that a draft of the Environmental Management Plan (EMP) is included as part of the scoping Environmental Assessment (EA) process. An 'Environmental Management Plan' is defined as:

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

Based on the risks and impacts identified in the EIA, the EMP connects together these impacts and the needed environmental management on the ground during project implementation and operation. In addition, EMP is a legally binding document and a person who contravenes the provisions of this EMP may face imprisonment and/or a fine. Given the complexity in identifying the risks and impacts the project may cause to the environment during the EIA process, it is required that the proponent adopts a practical of continues EMP management, in which the implementation of the mitigations is responsive to any change that may occur and the result of monitoring throughout the project’s life cycle.

The focal point of the EMP document is therefore to give continues guidance on the environmental management throughout the life- span of the proposed project, pre-operation (planning and design), operation and decommissioning.

The overall objectives of the EMP:

- To licentiate measures that will mitigate the adverse impacts of the proposed project
- To Ensure that regulatory authority stipulations and guidelines are complied
- To develop measures to boost the value of environmental components where possible.
- To formulate measures to protect environmental resources (biodiversity, ecosystem, natural resources and social aspects) as well enhance the value of environmental components where possible.
- Responding to unforeseen events and providing feedback for continual improvement in environmental performance.

The EMP report addressed the following phases:

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- **Planning and design (Pre-operation)** – Before the exploration activities commence, preliminary legislative and administrative arrangement have to be carried out. This is done with the reason of preparing for the proposed exploration activities.
- **Operation** - the period during which the exploration activities will be operational.
- **Decommissioning** – This phase comes to effect when the proposed development's lifetime ends.

### 1.3. Environmental Assessment Practitioner (EAP)

The proponent has appointed SS Consultants as an independent environmental consultant to conduct the required Environmental Assessment (EA) and an EMP for the proposed development. The EMP will be submitted together with the scoping EA report as supporting documents to the application for an Environmental Clearance Certificate (ECC) to the Environmental Commissioner at the Department of Environmental Affairs (DEA) of the Ministry of Environment, Forestry and Tourism (MEFT). This EMP report will come into handy for the Contractors, as well as the Proponent in directing them during the proposed exploration operations. In ensuring that impacts on the environment shall be avoided where possible or limited altogether.

### 1.4. Legal Requirements

In order for the EMP to be considered, it must meet the requirements of Section 8 (j) of the EIA Regulations. The EMP must address the potential environmental impacts of the proposed activity on the environment throughout the project life cycle. In addition, the EMP has to include a system for assessment of the effective monitoring and management arrangements after implementation. It is a proponent's responsibility to ensure that the proposed activity as well as the EIA process comply with the principles of EMA and must ensure that any contractors appointed by them also conform to such principles.

### 1.5. Assumptions and Limitations



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

- This EMP has been drafted based on the scoping-level Environmental Impact Assessment (EIA) conducted for the proposed development of EPL 7469 inclusive of a Archaeological And Cultural Impact Assessment Report.
- The mitigation measures recommended in this EMP document are based on the risks/impacts in the scoping report which were identified based on the provided project description and site investigation. It is important to note that the EMP is adjustable throughout the project development, and can be amended 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.

### 1.6. Report Structure

The EMP points out the mitigation and management executions that must be implemented and monitored for the proposed exploration activities on EPL 7469. The EMP addresses the following phases:

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

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### 2. ROLES AND RESPONSIBILITIES

Throughout the project's design, development, operation, and decommissioning (if considered), it is entirely the proponent's responsibility to ensure that the EMP is effectively implemented at any time, as they deem necessary, and that the mitigations are monitored. 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

#### 2.1. Proponent's Representative

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

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

Responsibility	Project Phase
Managing the implementation and monitoring of this EMP and updating and maintaining it when necessary	Throughout the lifetime of the project
Ensure environmental policies are communicated to all personnel and that employees understand the	Throughout the lifetime of the project

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guidelines of the EMP	
Management and monitoring of individuals and/or equipment on-site in terms of compliance with this EMP	Throughout the lifetime of the project
Issuing fines for contravening EMP provisions	Throughout the lifetime of the project

### 2.2. Environmental Control Officer

The Proponent shall assign responsibility for overseeing the on-site implementation of the entire EMP, from the planning and design phase to the operation and decommissioning phase, to a designated person, named herein as Environmental Control Officer (ECO). The Proponent may choose to assign this role to one person for both phases, or they may assign separate individual ECOs to oversee the implementation of the EMP during each phase. The ECOs will have the following responsibilities:

- Management and facilitation of communication between the Proponent, PR and Interested and Affected Parties (I&APs) with regard to this EMP;
- Employing site inspections (recommended minimum frequency is monthly during exploration and bi-annually during decommissioning) of all areas with respect to the implementation of this EMP (monitor and audit the implementation of the EMP);
- Advising the PR on the removal of person(s) and/or equipment not complying with the provisions of this EMP;
- Making recommendations to the PR with respect to the issuing of fines for contraventions of the EMP; and
- Undertaking a review annually of the EMP and recommending additions and/or changes to this document.

### 3. ENVIRONMENTAL MANAGEMENT PLAN ACTIONS

The main reason for this Environmental Management Plan (EMP) is to deliver the

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recommendations from the Scoping Report in the form of Environmental Specifications that can be practically implemented and enforced on site so that there is avoidance or as minimal damage to the environment as possible. These actions are required to avoid or minimize negative impacts and enhance positive impacts associated with the operations.

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

The management 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, the following main potential impacts per project phase has been identified and are summarised in the tables under subchapters 3.1, 3.2 to 3.5 as well as in the Scoping Report.

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

	<b>Project Phase</b>	<b>Potential impacts identified in the EA</b>
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.

The primary aim of the management actions of the EMP is to avoid the potential impacts

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where possible. Where impacts cannot be avoided, measures are put into place to ensure the risks/impacts are minimised.

Management actions have to be employed to manage the potential impacts rated in the EA 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 assess these actions in detail and acknowledge their commitment to the specific management actions detailed in the table of the next subchapters.

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### Phase 1: Planning and Design Management Actions

The management requirements detailed in **Table 3-2** need to be carried out before any exploration activities commence on site while necessary preliminary legislative and administrative arrangements are made in preparation for the proposed exploration activities.

Table 3-2: Planning and design management actions

Aspect	Management Requirement
Labour Recruitment	<p>Provisions designed to reduce the use of local labour should be inclusive within tenders concerning the:</p> <ul style="list-style-type: none"><li>• Provision stating that all unskilled labour sourced from local communities should be included within tenders concerning the exploration operations.</li><li>• Specific recruitment procedures ensuring local firms enjoy preference during tender adjudication should be included within tenders that have to do with the exploration operations.</li><li>• Provisions promoting gender equality pertaining to recruitment should be included within tenders concerning the exploration operations.</li></ul>

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Aspect	Management Requirement
Biodiversity	<ul style="list-style-type: none"> <li>• There should be a study done on the vegetation within those areas that will be affected by exploration activities and related infrastructure.</li> <li>• All trees (a “tree” is defined here as an indigenous woody perennial plant with a trunk diameter <math>\geq 150</math> mm) that occur within the development site should be surveyed and not removed from site.</li> <li>• Should there be a need to remove some of the trees that have not been registered and surveyed, the Proponent should apply for the licence to remove these trees from the local Forestry department (Ministry of Environment, Forestry and Tourism).</li> <li>• Large indigenous trees and protected tree species within to be kept the site should be surveyed and marked with red paint.</li> </ul>
EMP Implementation	<ul style="list-style-type: none"> <li>• The proponent should appoint a Proponent’s Representative (PR) that will act as their on-site implementing agent. This person should be responsible to ensure that the Proponent’s responsibilities are executed and comply to relevant legislation and this EMP.</li> </ul>

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Aspect	Management Requirement
<p>Consultation with affected farmers</p>	<ul style="list-style-type: none"> <li>• Consultation meetings should be held with the affected community prior to any exploration activities commencing on site in order to provide them with the following information                             <ul style="list-style-type: none"> <li>○ Detailed work plan with regards to the exploration activities.</li> <li>○ Discussion of access agreements.</li> <li>○ Discussion of compensation (as necessary).</li> <li>○ Any other concerns or information requirements that the farmers may have.</li> </ul> </li> </ul>
<p>Agreements with community affected by the activity</p>	<ul style="list-style-type: none"> <li>• Access agreements need to be made with the affected parties (community, local and traditional authorities) that most likely to be affected by the exploration activities in the area.</li> <li>• The agreement should include but is not limited to:                             <ul style="list-style-type: none"> <li>○ Compensation agreements (if necessary).</li> <li>○ Agreed upon operating hours.</li> <li>○ A commitment by the exploration company for the rehabilitation of the site when exploration activities are decommissioned.</li> <li>○ Agreed upon access to the site.</li> <li>○ Commitment to the adherence and implementation of the EMP.</li> <li>○ The Scoping Report and EMP for reference.</li> </ul> </li> </ul>



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Aspect	Management Requirement
Archaeology	<ul style="list-style-type: none"><li>• An archaeological expert must be appointed to undertake a detailed archaeological survey once targets have been identified for drilling and/or other mechanically-assisted exploration</li><li>• Once the exact locations of the exploration sites are determined, and should a heritage or archaeological site be uncovered, an Archaeological Chance Finds Procedure should be applied as outlined in Appendix K of the Scoping Report.</li></ul>

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### Phase 2: Operational Phase Management Actions

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

**Table 3-3.**

Table 3-3: Operation phase management actions

Environmental Feature	Impact	Management Actions
EMP training	Lack of EMP awareness and the implications thereof	<ul style="list-style-type: none"><li>• Employees appointed for exploration work must ensure that all personnel are aware of necessary health, safety and environmental considerations applicable to their respective work.</li></ul>
Monitoring	EMP non-compliance	<ul style="list-style-type: none"><li>• The ECO or the Proponent/Proponents Representative should monitor the implementation of this EMP.</li><li>• The Proponents Representative should inspect the site throughout the exploration at least on a monthly basis.</li></ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• Bi-annual audits should be conducted of site activities by an external ECO.</li> </ul>
Waste Management	Visual impact and soil contamination	<ul style="list-style-type: none"> <li>• The exploration site should always be kept clean.</li> <li>• All domestic and general waste accumulated daily should be cleaned and contained daily.</li> <li>• No waste may be buried or burned.</li> <li>• Waste containers (bins) should be emptied regularly and removed from site to the nearest municipal waste disposal site.</li> <li>• All recyclable waste needs to be taken to the nearest recycling depot.</li> <li>• A sufficient number of separate waste containers (bins) for hazardous and domestic / general waste must be provided on site.</li> <li>• Exploration workers should be sensitised to dispose of waste in a responsible manner and not to litter.</li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• All the wastes must be removed from site after the completion of the project.</li> </ul>
Hazardous Waste	Soil and groundwater contamination	<ul style="list-style-type: none"> <li>• All heavy operation vehicles and equipment on site should be provided with a drip tray.</li> <li>• All heavy operation vehicles should be maintained regularly to prevent oil leakages.</li> <li>• Maintenance and washing of operation vehicles should take place only at a designated workshop area.</li> </ul>
Wastewater	Groundwater contamination	<ul style="list-style-type: none"> <li>• Use of the toilets instead of the veld must be strictly adhered to.</li> <li>• If grey water can be collected from ablution facilities at the contractors' camp it should be recycled and:               <ul style="list-style-type: none"> <li>○ Used for dust suppression;</li> <li>○ Used to water vegetable gardens or to support a small nursery in local communities (as and when agreed upon by such communities); and/or</li> </ul> </li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>○ Used to clean equipment.</li> <li>● All run off materials such as hydrocarbons, wastewater and other potential contaminants should be contained on site and disposed of in accordance with municipal wastewater discharge standards, so that they do not reach to ground or surface water systems.</li> <li>● 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.</li> <li>● Groundwater impact awareness training should be provided to the employees involved in this project phase.</li> <li>● An emergency plan should be available for major / minor spills and firefighting at the exploration site during exploration activities (with consideration of air, groundwater, soil and surface water).</li> </ul>

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Environmental Feature	Impact	Management Actions
Soil	Soil contamination	<ul style="list-style-type: none"> <li>• Spill control preventative measures should be put in place to control soil contamination.</li> <li>• An impermeable liner should be laid down on the site area in order to prevent contaminants from reaching to surrounding soils and groundwater systems.</li> <li>• Potential contaminants such as hydrocarbons and wastewater should be contained on site and disposed of in accordance to municipal wastewater discharge standards to ensure that they do not contaminate soils in the area.</li> <li>• Soil contamination should be monitored on site daily by PR and monthly by ECO.</li> <li>• 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.</li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>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 replaced with clean soil. The contaminated soil should be removed and disposed at a designated landfill site suitable to receive contaminated soil.</li> </ul>
Biodiversity	Loss of Biodiversity	<ul style="list-style-type: none"> <li>Recommendations and mitigation hierarchy as provided by the vegetation study with regards to the protection of biodiversity in the area should be adhered to during exploration activities.</li> <li>Trees with a trunk size of 150 mm and bigger should be surveyed, marked with paint (readily visible) and protected.</li> <li>The Proponent should only, when necessary, remove trees within the actual footprint of the specific exploration activities. Trees that are not within the footprint should be left to preserve biodiversity in the area.</li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• If cleared, the numbers of protected, endemic and near endemic species removed should be documented.</li> <li>• Trees and plants protected under the Forest Act No 12 of 2001 are not to be removed without a valid permit from the local Department of Forestry.</li> </ul>
Dust and noise	Nuisance impacts	<ul style="list-style-type: none"> <li>• The contractor(s) should suppress dust associated with exploration activities by using a reasonable amount of water.</li> <li>• If feasible, wastewater should be treated to an acceptable water quality level, so that it can be used for exploration purposes (dust suppression).</li> <li>• Noise levels during exploration activities should be kept within the allowable standards for urban areas.</li> <li>• Noise levels should adhere to the SANS restrictions on noise.</li> </ul>



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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• The working hours should be restricted to between 08h00 and 17h00 due to the use of heavy equipment, power tools and the movement of heavy vehicles.</li> <li>• Noisy equipment should be switched off when not in use (when not needed) to avoid noise pollution on site and its surroundings.</li> <li>• Workers performing noisy tasks should be rotated regularly (work on shifts) to avoid exposing them to excessive noise for a long period of time in a day.</li> <li>• Workers should be equipped with personal protective equipment (PPE) such as earplugs to reduce noise exposure.</li> <li>• Workers should ensure that they wear the PPE at all times on work sites.</li> </ul>
Health and Safety	Health and safety impacts	<ul style="list-style-type: none"> <li>• The contractor(s) should ensure that all personnel are provided with personal protective equipment (PPE), such as coveralls, gloves, safety boots, safety glasses and hard hats at all times.</li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• Workers should ensure that they wear the PPE at all times on work sites.</li> <li>• Alcohol should be prohibited during working hours.</li> <li>• No workers should be allowed on site if under the influence of alcohol.</li> <li>• An appropriate location should be indicated on the site for the parking of operation vehicles.</li> <li>• Public access to the exploration site should be prohibit.</li> </ul>
Exploration labourers		<ul style="list-style-type: none"> <li>• The Proponent should ensure that locals from the surrounding areas are employed for any unskilled labour.</li> <li>• Exploration labourers should not be recruited on-site.</li> <li>• Portable toilets (i.e. easily transportable) should be available on site.</li> <li>• Separate ablutions should be available for men and women and should clearly be indicated as such.</li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• Sewage waste needs to be removed on a regular basis to the nearest approved sewage disposal site.</li> <li>• Workers responsible for cleaning the toilets should be provided with latex gloves, rubber boots, overalls and masks.</li> <li>• 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).</li> <li>• The Proponent or contractor should draft a Communication Plan, which should outline as a minimum the following:               <ul style="list-style-type: none"> <li>• 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.</li> <li>• How these stakeholders will be consulted on an ongoing basis.</li> </ul> </li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• Provision should be made for a grievance mechanism – outlining how concerns will be lodged/recorded and how feedback will be delivered, inclusive of further steps of arbitration in the event that feedback is deemed unsatisfactory.</li> <li>• There should be continues engagement with the stakeholders and affected community to ensure they are aware of the relevant communication channels.</li> </ul>
Water	Groundwater contamination	<ul style="list-style-type: none"> <li>• No wastewater / effluent should be allowed to leave the site premises without proper control.</li> <li>• These should be disposed of in accordance with municipal wastewater discharge standards.</li> <li>• Regular maintenance and monitoring of exploration equipment and vehicles should be done to detect early spills or leakages.</li> </ul>

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Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• An emergency responsive plan should be available for major / minor spills at the exploration site during operation activities (with consideration of air, groundwater, soil and surface water) to prepare the workers on how to respond in cases of emergencies.</li> <li>• Groundwater impact awareness training should be provided to the employees involved in this phase.</li> </ul>
Wildlife and Stock animals	Disturbance of wildlife and stock theft	<ul style="list-style-type: none"> <li>• Working hours should be limited to during the day, thus enabling the wildlife to roam freely at night.</li> <li>• The contractor is to compile a Non-Theft Policy to which all workers are to comply with.</li> <li>• All exploration workers are to adhere to the Non- Theft Policy.</li> </ul>

**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 Feature	Impact	Management Actions
Employment	Loss of employment	<ul style="list-style-type: none"> <li>• The Proponent should inform the employees, of its intentions to cease the exploration activities, and the expected date of such well in advance.</li> <li>• The Proponent should raise awareness of the possibilities for work in other industrial sectors.</li> </ul>
Rehabilitation	Groundwater contamination	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Remove all waste, defunct samples, and any other remains from the site.</li> </ul>

Environmental Feature	Impact	Management Actions
		<ul style="list-style-type: none"> <li>• Remove all sample bags, plastic waste, survey pegs, materials used for sump creation etc. from site at completion of sampling schedule.</li> <li>• Site should be rehabilitated to as close as possible to its original condition.</li> <li>• Re-contour and rip the drill site before the site is finally decommissioned.</li> <li>• Fill holes, rip up, rake track, and spread stockpiled topsoil back over the entire new tracks made, to allow re-vegetation.</li> <li>• Make sure that the ECO has a site inspection prior to and after rehabilitation to check rehabilitation efforts of each drill site.</li> </ul>

## **Site closure and rehabilitation**

Rehabilitation is the process of mending the damage done by exploration activities. The main aim for rehabilitation is to resuscitate/recover a damaged/ disturbed environment close to its pre exploration state. It is also planned to cater for 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 closure vision for the proposed project is to establish a safe, stable and non-polluting post- prospecting landscape that can facilitate integrated, self-sustaining and value generating opportunities, thereby leave a lasting positive legacy.

### **Site closure and rehabilitation activities**

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

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

The rehabilitation actions intended to be undertaken during the recommissioning of the proposed exploration activities are described below.

### **Remediation of Contaminated Areas**



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

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

### **Waste Management**

Waste management activities will include:

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

### **3. CONCLUSION**

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

The Environmental Management Plan should be used as an on-site guiding document during all phases of the proposed project, and auditing should take place in order to ensure compliance with the EMP of the proposed project. 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 integrating mitigation

measures and applicable legal tools to ensure both compliance and sustainability. It is therefore vital that the proponent provide adequate support for human and financial resources, for the implementation 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, if the EMP is implemented and that all the legal requirements pertaining to this development are to be complied.

### **Recommendations for Monitoring**

In order to minimize or avoid the aforementioned environmental impacts, the following implementation of monitoring measures should be put in place:

- Monitor whether provisions in EMP are being 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, abatement 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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