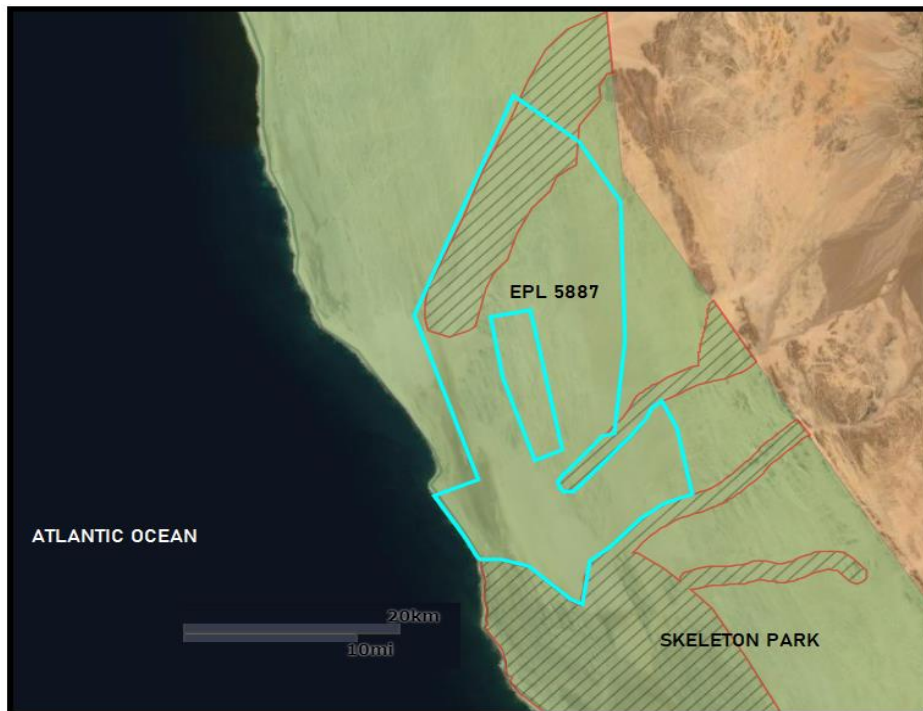


# Namibia Minerals and Investment Holdings (Pty) Ltd - EPL 5887

Environmental Management Plan  
(EMP) Report for the Proposed Minerals  
Exploration Activities in the Exclusive  
Prospecting License (EPL) No.  
5887, Epupa / Opuwo Districts Kunene  
Region



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March 2021

CENTRE for GEOSCIENCE REASERCH



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## **1. THE EMP**

### **1.1 Summary of the EMP Objectives**

The Environmental Management Plan (EMP) provides a detailed plan of action required in the implementation of the mitigation measures for minimising and maximising the identified negative and positive impacts respectively. The EMP gives commitments including financial and human resources provisions for effective management of the likely environmental liabilities during and after the exploration. Regular assessments and evaluation of the environmental liabilities during the exploration will need to be undertaken and will ensure adequate provision of the necessary resources towards good environmental management at various stages of the project development.

## **2 Specific Mitigation Measures**

Based on the findings of the Scoping work, the following specific mitigations have been provided for the proposed exploration programme activities:

- (i) Mitigation measures to prevent habitat destruction (Table 1.1);
- (ii) Mitigation measures to prevent faunal destruction (Table 1.2);
- (iii) Mitigation measures for ground components including geology, water and construction materials (Table 1.3);
- (iv) Mitigation measures related to prospecting in the National Park (Table 1.4).

Table 1.0: Mitigation measures to prevent habitat destruction.

<b>Description</b>	Habitat destruction will vary depending on the scale/intensity of the exploration activities and inevitable infrastructure.
<b>Extent</b>	Localised total destruction of the habitat will be associated with the extensive drilling and trenching and infrastructure (campsite, access etc.) with a local impact also expected to occur within the specific areas that will be targeted for exploration (where potential mineral resources will be discovered). This however, would be a relatively small area with localised implications.
<b>Duration</b>	The duration of the impact is expected to be permanent in the actual exploration area. This however, would be a relatively small area with localised implications. Rehabilitation of the actual drilled and trenched sites, associated infrastructure and access routes, etc. would however reverse the likely negative impact to low.
<b>Intensity</b>	The actual exploration activities sites would be permanently altered. This however, would be a relatively small area with localised implications. The adjacent sites associated with the exploration activities and necessary infrastructure would be affected moderately. This however, would be a relatively small area with localised implications. Areas not directly affected by the exploration activities and associated infrastructure although within the immediate area would be affected minimally. This would include dust, noise and other associated disturbances in the area.
<b>Mitigation</b>	<ol style="list-style-type: none"> <li>1. Limit the operation to a specific site and avoid other rocky outcrops in the area. This would sacrifice the actual area for other adjacent rocky areas and thus minimise the effect on flora associated with these areas.</li> <li>2. Avoid placing dumping sites, overburden/storage sites and associated infrastructure in sensitive areas – e.g. in/close to drainage lines, other rocky outcrops in the area, etc. This would minimise the negative effect on the local environment especially unique features serving as habitat to various species.</li> <li>3. Avoid placing campsites and access routes (roads and tracks) through sensitive areas – e.g. over rocky outcrops/ridges and along drainage lines. This would minimise the effect on localised potentially sensitive habitats in the area.</li> <li>4. Avoid driving randomly through the area (i.e. “track discipline”), but rather stick to permanently placed roads/tracks. This would minimise the effect on localised potentially sensitive habitats in the area.</li> <li>5. Remove unique species and any other local features deemed sensitive and relocate to a less sensitive/disturbed site if possible.</li> <li>6. Rehabilitation of the disturbed areas – i.e. actual exploration activities and associated areas, but also the prospecting “scars” and associated tracks. Such rehabilitation would not only confirm the company’s environmental integrity, but also show true local commitment to the environment protection in line with the company’s environmental policy.</li> </ol>
<b>Frequency of occurrence</b>	This would depend on the future prospecting and/or extension to the proposed exploration, activities.
<b>Probability</b>	Definite (100%) negative impact on habitat is expected in the actual exploration activities area. This however, would be much localised and cover only a small area – i.e. immediate exploration activities and associated developments. Highly Probable (75%) negative impact on habitat is expected in the adjacent developed areas. Probable (50%) negative impact on habitat is expected in the infrastructure (roads/tracks) to and around the exploration areas. Precautionary principle (e.g. avoid unique habitat features) would decrease the significance of these potential impacts.
<b>Significance</b>	Before mitigation: <b>Medium</b> and After mitigation: <b>Medium to Low</b>
<b>Status of the impact</b>	Negative and localised unique habitats (e.g. rocky outcrops and ridges, etc.) and associated flora would bear the brunt of this proposed development.
<b>Degree of confidence in</b>	The above mentioned predictions made and would suggest that the mitigation measures be implemented to minimise potentially negative aspects regarding the local fauna in the area.

Table 1.2: Mitigation measures to prevent faunal destruction.

<b>Description</b>	Faunal destruction will vary depending on the scale/intensity of the exploration activities as well as the inevitable infrastructure.
<b>Extent</b>	Localised total destruction of the habitat and thus consequently fauna associated directly with the rocky outcrop with a local impact also expected to occur within the specific areas that will be targeted for exploration (where potential mineral resources will be discovered). This however, would be a relatively small area with localised implications.
<b>Duration</b>	The duration of the impact is expected to be permanent in the actual exploration area and in particular where extensive drilling and trenching is going to take place. This however, would be a relatively small area with localised implications. Rehabilitation of the actual site, associated infrastructure and access routes, etc. would however reverse this impact to low.
<b>Intensity</b>	The actual field-based exploration sites would be permanently altered. This however, would be a relatively small area with localised implications. Areas not directly affected by the exploration activities and associated infrastructure although within the immediate area would be affected minimally. This would include dust, noise and other associated disturbances in the area.
<b>Mitigation</b>	<ol style="list-style-type: none"> <li>1. Limit the operation to a specific site and avoid other rocky outcrops in the area. This would sacrifice the actual area for other adjacent rocky areas and thus minimise the effect on fauna associated with these areas.</li> <li>2. Avoid placing dumping sites, overburden/storage sites and associated infrastructure in sensitive areas – e.g. in/close to drainage lines, other rocky outcrops in the area, etc. This would minimise the negative effect on the local environment especially unique features serving as habitat to various species.</li> <li>3. Avoid placing campsite and access routes (roads and tracks) through sensitive areas – e.g. over rocky outcrops/ridges and along drainage lines. This would minimise the effect on localised potentially sensitive habitats in the area.</li> <li>4. Avoid driving randomly through the area (i.e. “track discipline”), but rather stick to permanently placed roads/tracks. This would minimise the effect on localised potentially sensitive habitats in the area.</li> <li>5. Avoid driving at night through the area as this would further endanger nocturnal species.</li> <li>6. Stick to speed limits of maximum 30 km/h as this would result in fewer faunal road mortalities. Speed humps could also be used to ensure the speed limit.</li> <li>7. Remove (e.g. capture) unique fauna and sensitive fauna before commencing with the site clearing for exploration and other development activities and relocate to a less sensitive/disturbed site if possible.</li> <li>8. Prevent and discourage the setting of snares (poaching), illegal collecting of veld foods (e.g. mushrooms, etc.), Killing of perceived dangerous species (e.g. snakes, scorpions, etc.) and collecting of wood as this would diminish and negatively affect the local fauna.</li> <li>9. Prevent and discourage fires by workers as this could easily cause runaway veld fires affecting the local fauna, but also causing problems (e.g. loss of grazing and domestic stock mortalities, etc.) for the neighbouring farmers.</li> <li>10. Avoid creating an informal settlement / camp within the EPL area, but rather bus workers in from an established settlement. This would lessen the effect on the local environment and associated fauna.</li> <li>11. Rehabilitation of the disturbed areas including all the prospecting “scars” and associated tracks. Such rehabilitation would show true local commitment to its environment policy.</li> </ol>
<b>Frequency of occurrence</b>	This would depend on the future prospecting and/or extension to the proposed exploration activities.
<b>Probability</b>	Highly Probable (75%) negative impact on fauna is expected in the adjacent developed areas (e.g. overburden site, roads, etc.). Probable (50%) negative impact on fauna is expected in the infrastructure (roads/tracks) to and around the general EPL area. Precautionary principle (e.g. avoid unique habitat features as well as adhering to the proposed mitigating measures would minimise this) would decrease the significance of these potential impacts.
<b>Significance</b>	Before mitigation: <b>High</b> and After mitigation: <b>Medium to Low</b>
<b>Status of the impact</b>	Negative and localised unique habitats (e.g. rocky outcrops and ridges, etc.) with associated fauna would bear the brunt of this proposed development.
<b>Degree of confidence</b>	The above mentioned predictions made and would suggest that the mitigation measures be implemented to minimise potentially negative aspects regarding the local fauna in the area.

Table 1.3: Mitigation measures ground components including geology, water and construction materials.

<b>Description</b>	The influences and impacts of the proposed project activities on the ground components including geology, water and construction materials.
<b>Extent</b>	The extent of the likely negative impacts as a result of the proposed project activities on the ground components will be localised and in particular will affect the immediate ground components within the specific areas that will be targeted for exploration (where potential mineral resources will be discovered). This however, would be a relatively small area with localised implications.
<b>Duration</b>	The duration of the likely impacts will be permanent and beyond the duration of the proposed project.
<b>Intensity</b>	The level of impacts is likely to be high to moderate within the immediate environment and low in the surrounding areas.
<b>Mitigation</b>	<ol style="list-style-type: none"> <li>1. Limit the operation to a specific site and avoid other rocky outcrops in the area. This would sacrifice the actual area for other adjacent rocky areas and thus minimise the effect on fauna associated with these areas.</li> <li>2. Avoid placing dumping sites, overburden/storage sites and associated infrastructure in sensitive areas – e.g. in/close to drainage lines, other rocky outcrops in the area, etc. This would minimise the negative effect on the local environment.</li> <li>3. Avoid placing campsite and access routes (roads and tracks) through sensitive areas – e.g. over rocky outcrops/ridges and along drainage lines.</li> <li>4. Avoid driving randomly through the area (i.e. “track discipline”), but rather stick to permanently placed roads/tracks.</li> <li>5. All solid and liquid wastes generated because of the proposed project activities shall be reduced, reused, or recycled to the maximum extent practicable. Burial of waste on anywhere is not allowed and all waste must be disposed on approved waste disposal site to be developed as part of the mine plan;</li> <li>6. No littering in the site area including access roads must be always clean;</li> <li>7. Powder boxes, oil cans, and all other forms of litter must be removed;</li> <li>8. Trash may not be burned or buried, except at approved sites under controlled conditions in accordance with the regulations;</li> <li>9. Disposal of wastewater into any public stream including is prohibited;</li> <li>10. All appropriate permits must be obtained before the implementation of the proposed exploration activities.</li> <li>11. Rehabilitation of the disturbed areas including all the prospecting “scars” and associated tracks. Such rehabilitation would show true local commitment to its environment policy.</li> </ol>
<b>Frequency of occurrence</b>	This would depend on the future prospecting and/or extension to the proposed exploration activities.
<b>Probability</b>	(0.5) Likely occur during the proposed prospecting and/or extension to the proposed exploration activities.
<b>Significance</b>	Before for the negative impacts mitigation: <b>High to Medium</b> and after mitigation <b>Medium to Low</b>
<b>Status of the impact</b>	Negative
<b>Legal requirement</b>	Minerals Act, Water Act Resources Management Act, 2004, Environmental Management Act 2007 and all related Energy,
<b>Degree of confidence in</b>	The geological and geotechnical specialist who undertook the study and contribution to the above assessment is sure of the recommendations with a confidence level of 80%.

Table 1.4: Mitigation measures related to prospecting in the National Park.

Type of Activities	Mitigation Measures in Line with the Park Regulations
Applicable to all the Proposed Exploration Activities that may be Undertaken within the Park	(i) Prospecting and mining for strategic minerals only, will be permitted in the park, and then only in areas where they will not unduly undermine conservation priorities (i.e. nowhere in the intertidal zone, not within 5 km's of lichen fields, Damara tern nesting sites or seal colonies, not in or within 5 km's public recreation and tourism (i.e. not within 5 km's of any lodge or public campsite);
	(i) All prospecting and mining will be preceded by an EIA and EMP, in accordance with Namibia's Environmental Management Act of 2007, and the relevant mining legislation;
	(i) All prospecting and mining related disturbed sites must be rehabilitated after closure or abandonment, in accordance with the Environmental Management Act of 2007.

### 3 General Mitigation Measures

#### 3.1 Environmental Awareness Guidance

The following is the summary of the general environmental awareness guidance that must be implemented throughout the lifecycle of the proposed exploration:

- (i) The Environmental Rules apply to EVERYBODY. This includes all permanent, contract, or temporary workers as well as any other person who visits the exploration area in the field. Any person who visits the site will be required to adhere to the company Environmental Code of Conduct;
- (ii) The Site Manager will issue warnings and will discipline ANY PERSON who breaks anyone of the Environmental Rules and Procedures. Repeated and continued breaking of the Rules and Procedures will result in a disciplinary hearing and which may result in that person being asked to leave the site permanently;
- (iii) The ENVIRONMENT means the whole surroundings around us. The environment is made-up of the soil, water, air, plants and animals; and those characteristics of the soil, water, air, plant and animal life that influence human health and wellbeing;
- (iv) If any member of the WORK FORCE does not understand, or does not know how to keep any of Environmental Rule or Procedure, that PERSON must seek advice from the ENVIRONMENTAL CONTROL OFFICER (ECO), SITE MANAGER or CONTRACTOR. The PERSON that does not understand must keep asking until she/he is able to keep to the all the Environmental Rules and Procedures.



## 3.2 Natural Environmental Management Guidance

- (i) Never feed, tease or play with, hunt, kill, destroy or set devices to trap any wild animal (including birds, reptiles and mammals), livestock or pets. Do not bring any wild animal or pet to the mine site;
- (ii) Do not pick any plant or take any animal out of the exploration area EVER, its national park. You will be prosecuted and asked to leave the project area;
- (iii) Never leave rubbish and food scraps or bones where it will attract animals, birds or insects. Rubbish must be thrown into the correct rubbish bins or bags provided;
- (iv) Protect the surface material by not driving over it unnecessarily;
- (v) Do not drive over, build upon, or camp on any sensitive habitats for plants and animals;
- (vi) Do not destroy bird nest, dens, burrow pits, termite hills etc or any other natural objects in the area.

## 3.3 Vehicle Use and Access Guidance

- (i) Never drive any vehicle without a valid licence for that particular vehicle and do not drive any vehicle that appears not to be road-worthy;
- (ii) Never drive any vehicle when under the influence of alcohol or drugs;
- (iii) DO NOT enter the park or make any new roads without permission. Stay within demarcated areas;
- (iv) Avoid U-Turns and large turning circles. 3-point turns are encouraged. Do not ever drive on rocky slopes, ephemeral river channels or vegetated dune areas;
- (v) Stay on the road, do not make a second set of tracks and do not cut corners;
- (vi) DO NOT SPEED - keep to less than 60 km per hour on the tracks and site roads;
- (vii) No off-road driving is allowed;
- (viii) Vehicles may only drive on demarcated roads;
- (ix) Adhere to speed limits and drive with headlights switched on along any gravel road.

## 3.4 Control of Dust Guidance

- (i) Do not make new roads unless instructed to do so by your Contractor or the Environmental Control Officer / Site Manager;
- (ii) Do not disturb the surface of the natural landscape.



## 3.5 Health and Safety Guidance

- (i) Drink lots of water every day, but only from the fresh water supplies;
- (ii) Take the necessary precautions to avoid contracting the HIV/AIDS virus, and adhere to COVID-19 social distancing and wear masks at all time. It should be compulsory that all workers sanitise their hands when reporting for work and leaving. Location of hand sanitisation stations must be clearly marked;
- (iii) Only enter or exit the mine at the demarcated gates / or road;
- (iv) Always keep the access area as you found them;
- (v) Any damage to any existing infrastructure in the area must be reported to the Environmental Control Officer / Project Manager who will then inform the authority of any damage with all the repairs done to the satisfaction of the owner or Environmental Control Officer;
- (vi) Never enter any area that is out of bounds, or demarcated as dangerous or wander off without informing or permission of team leader;
- (vii) Report to your Contractor or the Site Manager if you see a stranger or unauthorised person in the exploration area;
- (viii) Do not remove any vehicle, machinery, equipment or any other object from the exploration site without permission of your Contractor or the Site Manager;
- (ix) Wear protective clothing and equipment required and according to instructions from your Contractor or the Site Manager;
- (x) Never enter or work in the exploration area when under the influence of alcohol or drugs.

## 3.6 Preventing Pollution and Dangerous Working Conditions Guidance

- (i) Never throw / dump any hazardous substance such as fuel, oil, solvents, etc. onto the ground;
- (ii) Never allow any hazardous substance to soak into the soil;
- (iii) Immediately tell your Contractor or Environmental Control Officer / Site Manager when you spill, or notice any hazardous substance being spilled anywhere in the exploration area;
- (iv) Report to your Contractor or Environmental Control Officer / Site Manager when you notice any container, which may hold a hazardous substance, overflow, leak or
- (v) Immediately report to your Contractor or Environmental Control Officer / Site Manager when you notice overflowing problems or unhygienic conditions at the ablution facilities;
- (vi) Vehicles, equipment and machinery, containers and other surfaces shall be washed at areas designated by the Contractor or Environmental Control Officer/ Site Manager;

- (vii) If you are not sure how to transport, use, store or dispose any hazardous substance  
- ASK your Contractor or Environmental Control Officer / Site Manager for advice.

### **3.7 Saving Water Guidance**

- (i) Always use as little water as possible. Reduce, reuse and re-cycle water where possible;
- (ii) Report any dripping or leaking taps and pipes to your Contractor or Environmental Control Officer or Site Manager;
- (iii) Never leave taps running. Close taps after you have finished using them.

### **3.8 Disposal of Waste Guidance**

- (i) Learn to know the difference between the two main types of waste, namely:
  - ✓ General Waste; and
  - ✓ Hazardous Waste.
- (ii) Learn how to identify the containers, bins, drums or bags for the different types of wastes. Never dispose of hazardous waste in the bins or skips intended for general waste or construction rubble;
- (iii) Never burn or bury any waste within exploration area;
- (iv) Never overfill any waste container, drum, bin or bag. Inform your Contractor or the Environmental Control Officer / Site Manager if the containers, drums, bins or skips are nearly full;
- (v) Never litter or throwaway any waste on the site, in the field or along any road. No illegal dumping;
- (vi) Littering is prohibited.

### **3.9 Archaeological Objects Guidance**

- (i) If you find any suspected religious, cultural, historical or archeologically object or site around the exploration area, you must immediately notify your Environmental Control Officer / Site Manager;
- (ii) Never remove, destroy, interfere with or disturb any religious, cultural, historical or archaeological object or site around the exploration area.



## 4.0 Roles and Responsibilities

### 4.1 Overview

Management of the environmental elements that may be affected by the different activities of the proposed exploration is an important element of the proposed exploration activities. The EMP also identifies the activity groups / environmental elements, the aspects / targets, the indicators, the schedule for implementation and who should be responsible for the management to prevent major impacts that the different exploration activities may have on the environment (Table 1.1 - 1.4).

### 4.2 Employer's Representative (ER)

The proponent is to appoint an **Employer's Representative (ER)** with the following responsibilities with respect to the EMP (Table 1.1 – 1.4) implementation:

- ✓ Act as the site project manager and implementing agent;
- ✓ Ensure that the proponent's responsibilities are executed in compliance with the relevant legislation;
- ✓ Ensure that all the necessary environmental authorizations and permits have been obtained;
- ✓ Assist the exploration contractor/s in finding environmentally responsible solutions to challenges that may arise;
- ✓ Should the ER be of the opinion that a serious threat to, or impact on the environment may be caused by the exploration activities, he/she may stop work; the proponent must be informed of the reasons for the stoppage as soon as possible;
- ✓ The ER 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 adequate consideration for the environmental aspects related to the EMP, the ER can have person(s) and/or equipment removed from the site or work suspended until the matter is remedied;
- ✓ Maintain open and direct lines of communication between the landowners and proponent, as well as any other identified Interested and Affected Parties (I&APs) with regards to environmental matters; and
- ✓ Attend regular site meetings and inspections as may be required for the proposed exploration programme.

### 4.3 Environmental Control Officer (ECO)

The proponent is to appoint an **Environmental Control Officer (ECO)** with the following responsibilities with respect to the EMP (Table 1.1 – 1.4) implementation:

- ✓ Assist the ER in ensuring that the necessary environmental authorizations and permits have been obtained;
- ✓ Assist the ER and Contractor in finding environmentally responsible solutions to challenges that may arise;
- ✓ Conduct environmental monitoring as per EMP requirements;
- ✓ Carry out regular site inspections (on average once per week) of all construction areas with regards to compliance with the EMP; report any non-compliance(s) to the ER as soon as possible;
- ✓ Organize for an independent internal audit on the implementation of and compliance to the EMP to be carried out half way through each field-based exploration activity; audit reports to be submitted to the ER;
- ✓ Continuously review the EMP and recommend additions and/or changes to the EMP document;
- ✓ 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; the latter to include a photographic records of the exploration activities, rehabilitation process, and a register of all major incidents; and
- ✓ Attend regular site meetings.

## 4.4 Contractors and Subcontractors

The responsibilities of the **Contractors and Subcontractors** that may be appointed by the proponent to undertake certain field-based activities of the proposed exploration programme include:

- ✓ Comply with the relevant legislation and the EMP provision;
- ✓ Preparation and submission to the proponent/ ER of the following Management Plans:
  - Environmental Awareness Training and Inductions;
  - Emergency Preparedness and Response
  - Waste Management; and;
  - Health and Safety.
- ✓ Ensure adequate environmental awareness training for senior site personnel;
- ✓ Environmental awareness presentations (inductions) to be given to all site personnel prior to work commencement; the ECO is to provide the course content and the following topics, at least but not limited to, should be covered:
  - The importance of complying with the EMP provisions;

- Roles and Responsibilities, including emergency preparedness;
  - Basic Rules of Conduct (Do's and Don'ts);
  - EMP: aspects, impacts and mitigation;
  - Fines for Failure to Adhere to the EMP;
  - Health and Safety Requirements.
- ✓ Record keeping of all environmental awareness training and induction presentations; and
  - ✓ Attend regular site meetings and environmental inspections.

## 4.6 Monitoring of the Environmental Performance

### 4.6.1 Overview

The monitoring process of the EMP performances for the proposed exploration project is divided into two parts and these are:

- (i) Monitoring activities and effects to be undertaken by the Environmental Control Officer (ECO);
- (ii) Preparation of an Environmental Monitoring Report covering all activities related to the Environmental Management Plan during and at closure of the proposed exploration to be undertaken by the Environmental Control Officer (ECO).

Namibia Minerals and Investment Holdings (Pty) Ltd will be required to report regularly (twice in a year) to the Ministry of Environment and Tourism, the environmental performances as part of the ongoing environmental monitoring programme. Environmental monitoring programme is part of the EMP performances assessments and will need to be compiled and submitted as determined by the regulators. The process of undertaking appropriate monitoring as per specific topic (such as fauna and flora) and tracking performances against the objectives and documenting all environmental activities is part of internal and external auditing to be coordinated by the Environmental Control Officer/ Consultant / Suitable qualified in-house resource person.

The second part of the monitoring of the EMP performance will require a report outlining all the activities related to effectiveness of the EMP at the end of the planned mineral exploration to be undertaken by the Environmental Control Officer (ECO). The objective will be to ensure that corrective actions are reviewed and steps are taken to ensure compliance for future EIA and EMP implementation. The report shall outline the status of the environment and any likely environmental liability after completion of the proposed project. The report shall be submitted to the Ministry of Environment and Tourism and will represent the final closure and fulfilment of the Environmental Contract conditions as provided for the Environmental Clearance Certificate to be issued.

## 5. CONCLUSION AND RECOMMENDATION

### 5.1 Conclusions

The proposed project activities will have low and localised impacts on the local environment. The following is the summary of the overall likely negative impact assessment of the proposed exploration activities on the receiving environments:

- (i) General survey of the EPL area: **Assessment** - *Very low and localised as most of the activities will not involve and destructive and extensive field-based activities;*
- (ii) Geological mapping: **Assessment** - *Very low and localised as most of the activities will be limited to field –based observation similar to any other person working around the EPL area;*
- (i) Geochemical sampling (regional and local sampling programmes): **Assessment** - *Very low and localised as most of the activities will be limited to field –based observation similar to any other person working around the EPL area);*
- (ii) Aerial and ground geophysical surveys (Existing Government data sets): **Assessment** – *Negligible as no field-based activities will be undertaken;*
- (iii) Aerial Hyperspectral survey (Subject to the positive outcomes of i- iv above): **Assessment** – *Very low and localised as most of the activities to be undertaken will be aerial-based linked to existing airstrip in the area for logistics;*
- (iv) Possible Trenching (Subject to the outcomes of i - v above): **Assessment** - *Very low and localised to a specific area that may be excavated;*
- (v) Drilling (Subject to the outcomes of i -vi above): **Assessment** – *Low to High and localised to a specific area and the extent of the impact will depend on the number and spacing of the boreholes to be drilled;*
- (vi) Bulk Sampling (Subject to the outcomes of i -vi above): **Assessment** - *Very low and localised to a specific area that may be sampled;*
- (vii) Campsite, access and related logistics to support activities vi – viii: **Assessment** - *Very low and localised to a specific area that will be used for campsite and new access;*
- (viii) Laboratory analysis's of collected samples: **Assessment** – *Negligible as no field based activities will be undertaken.*

### 5.2 Recommendations

The proposed mineral exploration activities will have low and localised impacts on the local environment. Based on the findings of this Environmental Assessment Study (Scoping and EMP) it's hereby recommended that the proposed exploration activities be issued a renewal of the Environmental Clearance Certificate with key conditions of adhering to all Skeleton Coast



National Park (SCNP) regulations. The proponent (Namibia Minerals and Investment Holdings (Pty) Ltd) must take all the necessary steps to implement all the recommendations of the EMP for the successful implementation and completion of the proposed exploration programme covering the EPL 5887. Recommended actions to be implemented by Namibia Minerals and Investment Holdings (Pty) Ltd as part of the management of the likely impacts through implementations of the EMP are:

- (i) The proponent must obtain entry permit to the Skeleton Coast National Park (SCNP) and adhere to all the park regulations;
- (i) The proponent must implement precautionary measures by developing and implementing radiation management measures for the proposed detailed field-based exploration activities such as the drilling operations. Once a viable and potentially economic project has been identified, the proponent must develop and implement a Radiation Management Plan (RMP) as part of the EIA and EMP that will be undertaken for the feasibility stage;
- (ii) Before detailed site-specific exploration activities such as extensive drilling operations and access routes are selected, the project environmental officer should consider the archaeological sensitivity of the area and commission a field survey in advance of any site development;
- (iii) Contract an Environmental Control Officer/ Consultant / suitable in-house resources person to lead and further develop, implement and promote environmental culture through awareness raising of the workforce, contractors and sub-contractors in the field during the whole duration of the proposed exploration period;
- (iv) Provide with other support, human and financial resources, for the implementation of the proposed mitigations and effective environmental management during the planned exploration activities for the EPL 5887;
- (v) Develop a simplified environmental induction and awareness programme for all the workforce, contractors and sub-contractors;
- (vi) Where contracted service providers are likely to cause environmental impacts, these will need to be identified and contract agreements need to be developed with costing provisions for environmental liabilities;
- (vii) Implement internal and external monitoring of the actions and management strategies developed during the mineral exploration process are on going. Hence Environmental Monitoring report has been prepared by the Environmental Consultant;
- (viii) Develop and implement a monitoring programme that will fit into the overall company's Environmental Management Systems (EMS) as well as for any future EIA for possible mining projects.

Once a viable project has been identified, a separate field-based and site-specific Environmental Impact Assessment (EIA) and the development of an Environmental Management Plan (EMP) MUST be implemented as part of the feasibility study stage. The aims and objectives of the Environmental Assessment (EA) covering Environmental Impact

Assessment (EIA) and Environmental Management Plan (EMP) to be implemented as part of the feasibility study if a variable resources are discovered are:

- ✓ To assess all the likely positive and negative short- and long-term environmental (which includes socioeconomic) impacts on the local (EPL Area), regional (Erongo Region), national (Namibia) and Global levels using appropriate assessment guidelines, methods and techniques covering the complete project cycle. The EIA and EMP shall be performed with reasonable skill, care and diligence in accordance with professional standards and practices existing at the date of performance of the assessment and that the guidelines, methods and techniques shall conform to the national regulatory requirements, process and specifications in Namibia and in particular as required by the Ministry of Environment and Tourism and the Ministry of Mines and Energy;
- ✓ The development of appropriate mitigation measures that will enhance the positive impacts and reduce the likely negative influences of the negative impacts identified or anticipated.

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