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ECC-121-372-REP-06-D

ENVIRONMENTAL MANAGEMENT PLAN

**FOR THE PROPOSED CONSTRUCTION COMPLETION AND OPERATION OF A
TOURISM AND HUNTING LODGE ON FARM WALDBURG NO.82, KHOMAS REGION,
NAMIBIA.**

PREPARED FOR



FEBRUARY 2022

TITLE AND APPROVAL PAGE

Project Name:	For the proposed construction completion and operation of a tourism and hunting lodge on farm Waldburg No. 82, Khomas Region, Namibia.
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DEFINITIONS AND ABBREVIATIONS

dB	Decibel
ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
EMA	Environmental Management Act, 2007
EMP	Environmental Management Plan
IFC	International Finance Corporation
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment Forestry and Tourism
MME	Ministry of Mines and Energy
MSDS	Material Safety Data Sheet
OSH	Occupational Safety and Health
Pb	Lead
PPE	Personal Protective Equipment
SANS	South African National Standards
SHE	Safety Health Environmental
SNR	Single Number Rating

1 INTRODUCTION

1.1 BACKGROUND TO THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent Gmundner Hotels (Pty) Ltd to undertake an environmental assessment process and develop a scoping report and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, No. of 7 of 2007 and its regulations. An environmental clearance application will be submitted to the relevant competent authority: The Ministry of Environment, Forestry, and Tourism (MEFT).

The proponent proposes the construction, completion, and operation of a tourism and hunting lodge approximately 30 km from Dordabis on Farm Waldburg No. 82 in the Khomas Region, Namibia. Hunting on the farm will be strictly conducted by the owner and appointed professional hunter/farm manager as a source of meat for the lodge.

The project consists of 12 accommodation units with a core or common area, a staff village, stables, airfield, solar plant, activities area, greenhouses, renovations to the current hunter's house and the construction of a new game fence around the farm. All work will fall within the boundaries of farm Waldburg No. 82. Most of the construction and renovations of the lodge have already been completed or almost completed at Site A, which is the site where the lodge is situated and Site B where the old hunters' house is situated.

The project site is located to the Southeast of Windhoek next to the C23 road. It can be accessed from Windhoek by driving along the B6 road (en route to the Hosea Kutako International Airport) and turning onto the C23 road, the farm is situated to the east of the road approximately 30 km before Dordabis (Figure 1). The entrance gate is also currently under construction.

1.2 ENVIRONMENTAL REGULATORY REQUIREMENTS

This EMP has been developed by following the requirements of the Environmental Management Act, No. 7 of 2007 and its regulations.

Legislation that should be adhered to include the following mentioned in Table 1.

Table 1: Applicable laws, regulations and best practice methods

NATIONAL REGULATORY REGIME	RELEVANCE TO THE PROJECT
Constitution of the Republic of Namibia of 1990	Social protection
Atmospheric Pollution Prevention Ordinance 11 of 1976	Social and Biophysical landscape protection
Environmental Management Act, No. 7 of 2007 and its regulations, including the Environmental Impact Assessment	Environmental Management

NATIONAL REGULATORY REGIME	RELEVANCE TO THE PROJECT
Regulations, No. 30 of 2012	
Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971	Biophysical protection
Water Act, No. 54 of 1956	Water source protection
The Forestry Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005	Vegetation protection
Animal Health Regulations: Animal Health Act, 2011 Under Section 32 Of The Animal Health Act, 2011 (Act No. 1 Of 2011)	Animal welfare
Animals Protection Act 71 of 1962 Controlled Wildlife Products and Trade Act 9 of 2008	Ethical treatment of animals
Arms and Ammunition Act No. 7 of 1996.	Firearms and weapon handling/possession
Nature Conservation Ordinance Act No. 4 of 1975 and its regulations.	Biodiversity protection
Labour Act, No. 11 of 2007 and regulations relating to the Health and Safety of Employees at Work (No. 156 of 1997)	Social protection
National Heritage Act, No. 27 of 2004.	Heritage protection
Namibia Tourism Board Act (No. 21 of 2000) and Regulations relating to Levy Payable by Accommodation Establishments Government Notice 137 of 2004	Regulatory board
Draft Pollution Control; and Waste Management Bill (1999)	Biophysical landscape protection
Hazardous Substances Ordinance Ordinance No. 14 of 1974	Biophysical landscape protection
IFC STANDARDS	POSSIBLE RELEVANCE
Performance Standard 1	Assessment and Management of Environmental and Social Risks and Impacts
Performance Standard 4	Community Health, Safety, and Security

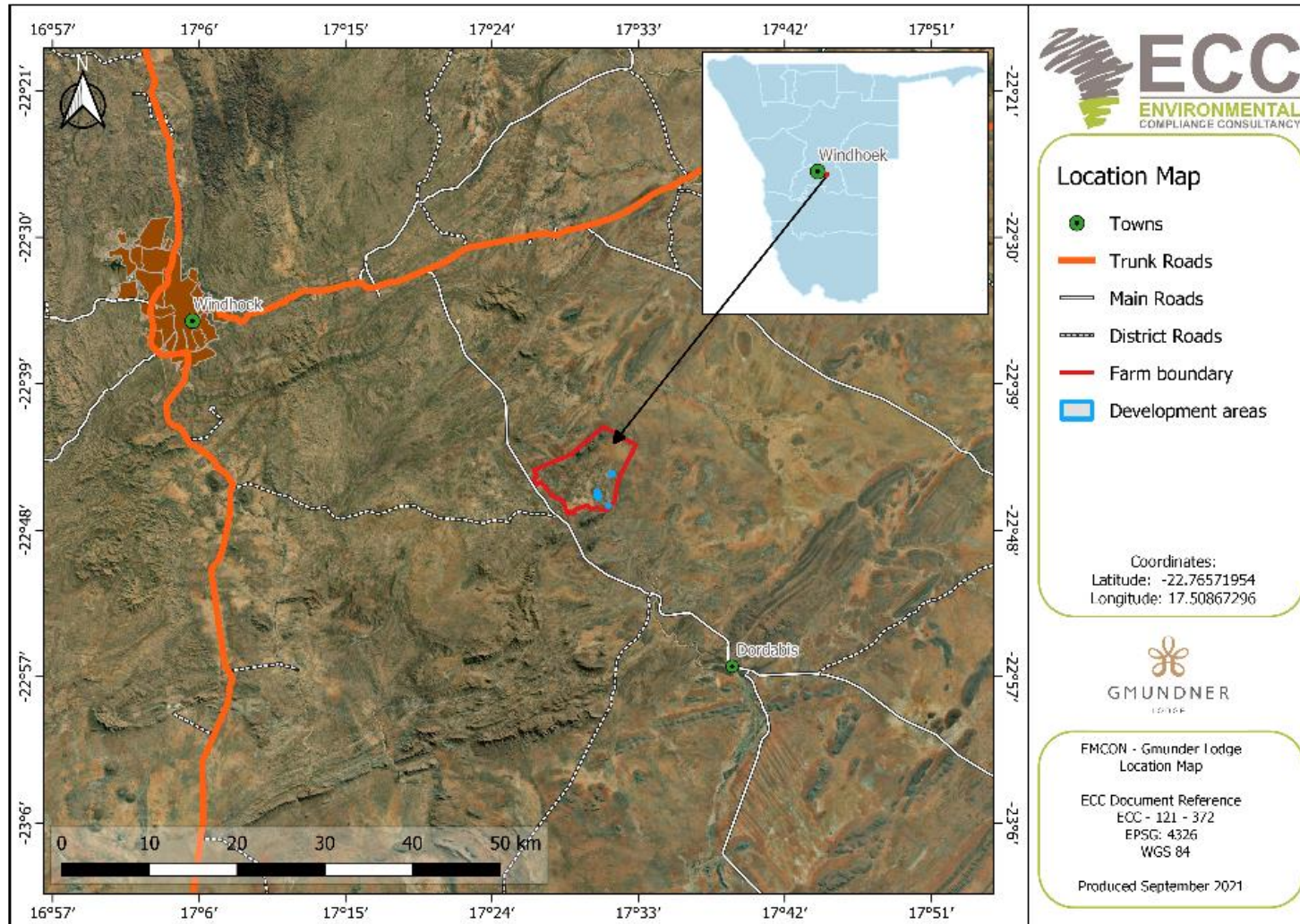


Figure 1: Location of farm Waldburg No. 82

1.3 PURPOSE AND SCOPE OF THIS REPORT

This EMP provides a logical framework, proposed mitigation measures and management strategies for the activities associated with the proposed project. They are provided to ensure that potential environmental and social impacts are mitigated and minimised as far as practically possible and that statutory and other legal obligations are adhered to and fulfilled. Outlined in the EMP are the protocols and procedures, and the roles and responsibilities to ensure that management arrangements are effectively and appropriately implemented.

This EMP forms an appendix to the environmental scoping report and impact assessment and has been based on the findings of the assessment; therefore, the environmental scoping report should be referred to for further information on the proposed project, assessment methodology, applicable legislation, and assessment findings.

This EMP is a live document and shall be reviewed at predetermined intervals, or updated when the scope of work alters, or when further data or information can be added. All personnel working on the project will be legally required to comply with the standards set out in this EMP.

The scope of this EMP includes all activities carried out during the construction and operational stages of the project.

1.4 MANAGEMENT OF THIS EMP

The proponent will hold the environmental clearance certificate for the proposed project and shall be responsible for the implementation and management of this EMP. Before the commencement of the project, this EMP shall be reviewed, amended as required and approved for implementation. The implementation and management of this EMP and thus the monitoring of compliance shall be undertaken through daily duties and activities as well as monthly inspections.

This EMP shall be circulated to all contractors and made available on ECC's website.

1.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. These will be provided in the safety management plan to be developed by the proponent independently.

Where there is any conflict between the provisions of this EMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines and relevant laws), the statutory requirements are to take precedence, and contracts are to be amended.

The information contained in this EMP has been based on the project description as provided in the environmental scoping report. Where the project methods alter, this EMP may require updating and potential further assessment undertaken.

1.6 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy (ECC), a Namibian consultancy with registration number CC/2013/11401, has prepared this document on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa in the public and private sector. ECC is independent of the proponent and has no vested or financial interest in the proposed project except for fair remuneration of professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or post to the following address:

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2 PROJECT MANAGEMENT PERSONNEL

The proponent shall provide a project team to oversee the completion of current construction and proposed operational activities, which shall be composed of the proponent's personnel and contractors. A nominated role shall be identified to ensure the management and implementation of this EMP throughout the project is carried out, which shall be supported by the proponent.

2.1 ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES

The proponent shall be responsible for:

- Ensuring all members of the project team, including contractors, comply with the procedures set out in this EMP;
- Ensuring that all personnel are provided with sufficient training, supervision, and instruction to fulfil this requirement; and
- Ensuring that any persons allocated specific environmental responsibilities are notified of their appointment and confirm, in writing, that their responsibilities are clearly understood.

Contractors shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed below. The key personnel and environmental responsibilities of each role throughout the project life are presented in Table 2.

Table 2: Roles and responsibilities

ROLE	RESPONSIBILITIES & DUTIES
<p>General Manager (Proponent)</p>	<ul style="list-style-type: none"> - Responsible for ensuring compliance with this EMP; - Ensuring employees understand and comply with the requirements of this EMP; - Ensuring that all personnel are provided with enough training, supervision and instruction to fulfil this requirement; - Ensuring compliance with this EMP including overseeing the day-to-day activities during operations, and routine and non-routine maintenance works during operations; - Ensure the environmental policy is communicated to all personnel; - Responsible for providing the required resources (including financial and technical) to complete any required tasks; - Responsible for the management, maintenance and revisions of this EMP; - Maintain community issues and concerns register and keep records of complaints and responses provided; - Maintain an up-to-date register(s) of employees who have completed the site induction; - Ensuring that best environmental practice is undertaken throughout

ROLE	RESPONSIBILITIES & DUTIES
	<p>the operations of the facility;</p> <ul style="list-style-type: none"> - Notifying relevant regulatory authorities if serious environmental incidents occur as soon as possible. - Being responsible for all management plans and environmental monitoring; and - Receiving and responding to environment-related complaints received from the public or other stakeholders.
<p>Foreman (Appointed HSE responsible person}</p>	<p>The farm/lodge foreman will be responsible for the implementation of the EMP for the lodge. The foreman will be available, as required, throughout the operation of the lodge and is/are responsible for the following roles:</p> <ul style="list-style-type: none"> - Bearing authority and independence to demand reasonable steps as required to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant construction activities be ceased immediately should an adverse impact on the environment be likely to occur; - Weekly checklists must be completed by the foreman and findings submitted to the general manager; - Monthly EMP checklists must be completed by the foreman. Findings are to be submitted to the general manager; - Provisioning of environmental awareness/management training and inductions; - Ensuring that best environmental practice is undertaken throughout the operations of the lodge; - Timely distribution of any relevant environmental documentation, including revisions to this EMP to all staff; - Responsible for compliance with and adhering to this EMP at all times; - Ensuring they have undertaken a site induction and are conversant with the requirements of this EMP; and - Reporting of any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the proponent.
<p>Employees / Contractors as well as visitors where applicable</p>	<p>Any contractors hired for operation or maintenance activities at the lodge shall be compliant with this EMP, and shall be responsible for the following:</p> <ul style="list-style-type: none"> - Undertaking activities by following this EMP as well as relevant policies, procedures, management plans, statutory requirements, and contract requirements; - Implementing appropriate environmental management measures; - Reporting environmental issues, including actual or potential environmental incidents and hazards, to the proponent, and; - Ensuring appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported by employees and subcontractors.

2.2 EMPLOYMENT

The proponent and all contractors shall comply with the requirements of the regulations for Labour, Health and Safety and any amendments to these regulations. The following shall be complied with:

- In liaison with local government, the community, stakeholders and relevant authorities the proponent shall ensure that local people have access to information about job opportunities and are considered first for construction/maintenance contract employment positions;
- The number of job opportunities shall be made known together with the associated skills and qualifications;
- The maximum length of time the job is likely to last for shall be indicated;
- Foreign workers with no proof of permanent legal residence shall not be hired;
- Every effort shall be made to recruit from the pool of unemployed workers living in the local area; and
- Every employee hired must be provided with a valid employment contract stating the position hired for, the hourly remuneration offered.

3 COMMUNICATION AND TRAINING

It is important that regular communication is maintained with all the stakeholders and that stakeholders are made aware of potential impacts and how to minimise or avoid them. This section sets out the framework for communication and training concerning the EMP.

3.1 COMMUNICATIONS

The foreman shall communicate any environmental issues to the project team through the following means (as and when required):

- Site induction;
- Internal and external audits and site inspections;
- Toolbox talks, including instruction on incident response procedures; and
- Briefings on key project-specific environmental issues.

This EMP shall be distributed to the project team including any contractors and personnel working on the site to ensure that the environmental requirements are adequately communicated. Key activities and environmentally sensitive operations shall be briefed to workers and contractors.

During the construction and operational activities, communication amongst the management team shall include discussing any complaints received and actions to resolve them, any inspections, audits or non-conformance with this EMP, and any objectives or target achievements.

3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

The general manager and the foreman are the primary contact persons in the event of an environmental emergency. The general manager has the authority and independence to request reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse environmental impact be anticipated.

In the event of an incident that requires emergency services, the following services should be contacted.

Table 3: Emergency contact details

TOWN	AMBULANCE	POLICE	FIRE BRIGADE
Windhoek	+264 (61) 21-1111	+264 (61) 1-0111	+264 (61) 21-1111
Dordabis	-	+264 (62) 573 514	-

For large-scale spills (greater than 200 litres) and other significant environmental incidents, the fire services should be contacted as required and the MEFT office informed of the incident (telephone +264 61 284 2111) as well as the MME by completing form PP/11. All correspondence with MEFT/MME should be undertaken by the general manager as guided by the foreman.

3.3 COMPLAINTS HANDLING AND RECORDING

The proponent shall maintain a complaint's register that will detail the name and contact details of the complainant, the date and time of the complaint, the nature of the complaint, the appropriate action is taken to resolve issues, and the date of complaint handover. The proponent shall be responsible for nominating the correct personnel to coordinate and resolve the issue.

Any complaints received verbally shall be recorded as per above and the information shall be given to the proponent who is responsible for the management of complaints and will provide a written response to the complainant.

The workforce shall be informed about the complaints register, its location and the person responsible, to refer residents or the general public who wish to lodge a complaint. The complainant shall be informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons why are to be recorded in the register.

The complaints register shall be kept for the facility and will be available for government or public review upon request.

3.4 TRAINING AND AWARENESS

All personnel working on the project shall be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training, and experience.

3.4.1 SITE INDUCTION

All personnel involved in the project shall be inducted to the site with a specific environment and social awareness training component. The environment and social awareness training shall ensure that personnel are familiar with the principles of this EMP, the environment and social aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures. The proponent shall ensure a register of completed training is maintained.

The site induction should include, but not be limited to the following:

- A general site-specific induction that outlines:
 - o What is meant by "environment" and "social";
 - o What are the environmental risks and impacts of the lodge;
 - o What can be done to mitigate against such impacts; and
 - o Why the environment needs to be protected and conserved.
- The inductee's role and responsibilities concerning implementing the EMP;
- The site's environmental rules;
- Details of how to deal with, and who to contact if environmental problems do occur;
- Basic vegetation clearing principles and species ID sheets;

- Focal themes such as compliance, reporting of accidents and incidents, good housekeeping and standard procedures for waste management;
- The potential consequences of non-compliance with this EMP and relevant statutory requirements; and
- The roles of responsible people for the project.

4 REPORTING, COMPLIANCE AND ENFORCEMENT

4.1 ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING

4.1.1 DAILY COMPLIANCE MONITORING

A copy of this EMP shall be on-site throughout the project and shall be available upon request. It is the responsibility of the foreman to enforce the provisions of this EMP and ensure this EMP is complied with by all personnel daily throughout the facility. Daily, weekly and monthly inspections will be undertaken. Any environmental problems or risks identified shall be notified to the foreman and actioned as soon as is reasonably practicable.

4.1.2 MONTHLY COMPLIANCE MONITORING

Monthly inspections shall be undertaken by the general manager to check that the standards and procedures set out in this EMP are being complied with and pollution control measures are in place and working correctly. Any non-conformance shall be recorded, including the following details: a brief description of non-conformance, the reason for the non-conformance, the responsible party, the result (consequence), the corrective action taken and any necessary follow up measures required.

4.1.3 REPORTING

There shall be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or accident, is reported to the general manager.

4.2 RELEVANT PERMITS

Although the Water Resources Management Act, No. 11 of 2013 is not enforced, it is best practice to adhere to its stipulations while ensuring compliance with the Water Act, No. 54 of 1956, which is maintained still. Since water is sourced from existing boreholes, a licence to abstract water for commercial use is required in terms of the Water Act, No. 54 of 1956 and shall operate by following any conditions of the licence.

Table 4: Project-related permit/registration requirements

PERMIT, LICENCES OR REGISTRATION	RELEVANT AUTHORITY	PROJECT BEARING
WATER ABSTRACTION PERMITS	Ministry of Agriculture, Water and Land Reform	An abstraction permit is required for the abstraction of water from a borehole for commercial purposes.
EFFLUENT DISCHARGE PERMIT	Ministry of Agriculture, Water and Land Reform	An effluent discharge permit is required if the proponent plans to discharge any effluent waste.
PERMITS FOR THE REMOVAL OF VEGETATION	Ministry of Environment, Forestry and Tourism	Permits will need to be obtained in the event where protected tree species need to be removed or large tracts of land above 15 ha need to be cleared.
HUNTING PERMITS	Ministry of Environment, Forestry and Tourism	Hunting permits will be needed for the hunting of protected game and for huntable game (i.e, if planned to hunt more animals than allocated under the yearly hunting regulations).
REGISTRATION OF GAME FENCE	Ministry of Environment, Forestry and Tourism	The game fence that is currently under construction around the farm will need to be registered.
APPLICATION TO UTILIZE GAME (WILD ANIMALS)	Ministry of Environment, Forestry and Tourism	A permit needs to be applied for any of the following reasons: Shoot and sell, Shoot for own use, Keep and sell, Transport, Night Culling, Trophy Meat, Catch, keep and sell and Trophy hunting.
RELEVANT PERMITS AND REGISTRATION WITH REGARDS TO AIRFIELDS AND HANGARS	Namibian Civil Aviation Authority	An airfield and helicopter hanger are currently being constructed.

4.3 NON-COMPLIANCE

Where it has been identified that works are not compliant with this EMP, the proponent shall employ corrective actions so that the works return to being compliant as soon as possible. In instances where the requirements of the EMP are not upheld, a non-conformance and corrective action notice shall be produced. The notice shall be generated during the inspections and the general manager shall be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

A non-compliance event or situation, for example, is considered if:

- There is evidence of a contravention of this EMP and associated indicators or objectives;
- The foreman or the contractor has failed to comply with corrective or other instructions issued by the manager or qualified authority; or
- The foreman or contractor fails to respond to complaints from the public.

Activities shall be stopped in the event of a non-compliant event identified until corrective action(s) has been completed.

4.4 INCIDENT REPORTING

The general manager must ensure that an accident and incident (including minor or near-miss) reporting system is maintained by the foreman so that all applicable statutory requirements are covered. For any serious incident involving a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the police. This requirement does not preclude immediate first aid being administered and the location being made safe.

The foreman must investigate the cause of all work accidents and significant incidents and must provide the results of the investigation and recommendations on how to prevent a recurrence of such incidents. A formal root-cause investigation process should be followed.

4.4.1 DISCIPLINARY ACTION

This EMP is a legally binding document and non-compliance with it shall result in disciplinary action being taken against the perpetrator(s). Such action may take the form of (but is not limited to):

- Fines/penalties;
- Legal action;
- Monetary penalties imposed by the proponent on the contractor;
- Withdrawal of licence(s); and
- Suspension of work.

The disciplinary action shall be determined according to the nature and extent of the transgression / non-compliance, and penalties are to be weighed against the severity of the incident.

5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

5.1 ENVIRONMENTAL PERFORMANCE MEASUREMENT

This chapter provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as roles responsible. This register will be subject to regular review by the manager and updated when necessary.

The proponent will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

5.2 OBJECTIVES AND TARGETS

Environmental protection is the responsibility of management and if management is environmentally aware, it motivates all employees and their associated business partners, customers and suppliers to think and act in a more environmentally responsible manner. Environmental objectives and targets have been developed so that activities on the proposed site can minimise potential impacts on the environment, as far as reasonably practicable.

Environmental objectives for the project are as follows:

- Zero pollution incidents;
- Sustainable resource use (water and energy);
- Application of the waste management hierarchy;
- A safe working environment for employees; and
- Use natural resources effectively and efficiently.

5.3 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES

An environmental review of the proposed project has been completed to identify all the commitments and agreements made within the environmental scoping report. From this, a schedule of environmental commitments and risks has been produced (Table 5), which details deliverables including measures identified for the prevention of pollution or damage to the environment during the project's lifetime.

Table 5 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible person. This register will be subject to regular review by the manager and updated when necessary. The general manager will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

Table 5: Environmental risks and issues, and mitigation and monitoring measures

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
Job creation, skills development and business opportunities	Beneficial socio-economic impacts on a local and regional scale	<ul style="list-style-type: none"> – Maximise local employment and local business opportunities; – Enhance the use of local labour and local skills as far as reasonably possible; and – Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible. 	Monthly	Farm manager/Proponent
General construction completion and operational activities	Dust generation during the construction completion, future maintenance/construction and operational activities.	<p>To minimise the potential for dust generation the following management measures should be implemented, as required:</p> <ul style="list-style-type: none"> – Vehicles must adhere to speed limits to avoid producing excessive dust; – Vehicles and machinery should be maintained to limit exhaust fume emissions; – Use surfaces that minimise dust accumulation and facilitate effective cleaning; – Where an effect is profound, ensure dust suppression measures are in place; and – Employees to use and wear the appropriate PPE. 	Daily	Foreman
	Noise generation	The Labour Act, No. 11 of 2007 and Regulations relating to the Health and Safety of Employees at Work (GN 156/1997) should	Daily	Farm manager/ Foreman/

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>be closely followed for occupational noise exposure, specifically focusing on chapter 6. Section 197 ((1) Subject to subregulations (2) and (3), no employer shall require or permit an employee to work in an environment in which he or she is exposed to an equivalent noise level equal to or exceeding 85 dB(A)) and Schedule 3(2) Noise Regulations (regulation 197).</p> <p>The SANS standard for environmental daytime noise, which is 45 dBA (outdoors) and 35 dBA (indoors) in a rural district. The EMP should be closely followed to ensure that noise generated stays below these limits, as far as reasonably practicable.</p> <p>Impulse noise is measured and monitored differently to continuous noise exposure at a lower dB and should thus also be covered in the health and safety management plan to be developed by the proponent.</p> <ul style="list-style-type: none"> – Avoid noise-generating activities that could impact other users of the area by ensuring noisy activities occur indoors; avoid hammering on metal that generates intermittent noise especially at night, and ensure appropriate measures are put in place to rectify noise complaints should they occur; – The proponent should develop a health and safety management plan that takes into account noise generation; – Appropriate PPE should be worn during hunting and recreational shooting activities (i.e, ear protection, a Single Number Rating (SNR) of 30 or more should be used for > 		Employees

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>100dB);</p> <ul style="list-style-type: none"> – Silencers could be used on hunting rifles to reduce impulse noise dB level; – People not shooting should stand further away from the noise source; – Sensitive environmental areas (i.e, vultures breeding area) should be identified and less or no noise generated near these areas; – Neighbours should be consulted with regards to the proposed airfield and flying activities; – Employees and tourists should be made aware of the possible health effects of being exposed to impulse noise; and – Ensure that procedures for receiving complaints from nearby land users or residents are in place and responded to timeously. 		
	Employee, community and tourism health and safety.	<ul style="list-style-type: none"> – Health and Safety management plan should be developed and implemented on-site by the proponent; – The Labour Act, No. 11 of 2007 and Regulations relating to the Health and Safety of Employees at Work (GN 156/1997) should be adhered to; – Appropriate PPE should be used for relevant tasks on-site (i.e., ear protection, safety boots, overalls, butchery apron and gloves etc.); – Training on weapon handling and safety should be provided 	Daily	Foreman

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>to employees, hunters and visitors;</p> <ul style="list-style-type: none"> – Safety induction training sessions should be given to all technicians and field staff before commencement of their shifts; – Risk identification and suitable prevention measures should be employed within the facility area to eliminate potential impacts; – Routine medical checks to be conducted on personnel to ascertain fitness for work levels; – Frequent maintenance of all equipment and daily inspections done; – Occupational Incidents and accidents on-site should be reported to the division: Occupational Safety & Health (OSH) at the Ministry of Labour, Industrial Relation and Employment Creation, by using form F.5; – Emergency contact details should be readily accessible to contact relevant services during an emergency; – No unauthorized use of equipment should be allowed; – In the unlikely event of a death occurring within farm boundaries from occupational negligence or otherwise from a "freak accident event", the area should be secured and all personnel removed from the scene; – A root cause analysis into the event should be undertaken as soon as practicably possible; – Counselling should be provided to the witnesses and other 		

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>personnel members who may have been impacted by the event;</p> <ul style="list-style-type: none"> – Appropriate safety signs should be added near dangerous areas or equipment; and – Employees should be made aware of all possible health and safety risks. 		
	Fire management	<ul style="list-style-type: none"> – Development of a fire management system through the process of risk identification and assessment; – Identify and signpost dedicated assembly points at the lodge area and old hunters house area; – Developing site-specific work procedures as part of the fire management system; – Induction on fire prevention and toolbox talks; – Control and reduce the potential risk of fire by segregating and safe storage of flammable materials; – Avoid potential sources of ignition for example, by prohibiting smoking in and around areas where chemicals/fuel is stored; – Ensure suitable fire-extinguishing equipment is accessed immediately and conveniently whenever necessary. This can include pails of water, buckets of sand, or portable extinguishers; – For veld fires, appropriate fire fighting equipment should be available on-site; – Emergency contact details should be readily available on-site; 	Weekly, Monthly, Annually	All Staff

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> – Fires made for a “braai”/BBQ within farm boundaries should be monitored and put out to prevent the risks of causing a veld fire; and – Ensure key personnel are trained to manage an emergency fire situation. 		
Biodiversity	<p>Potential habitat fragmentation and habitat loss, due to the game fence currently under construction.</p> <p>Electrocution risk from the proposed electrified fences.</p>	<ul style="list-style-type: none"> – Swing gates could be added to ensure that burrowing animals can get through; – Droppers (wood/steel/plastic pipe) should be added at regular intervals to ensure that the fence will be visible to wildlife; – Fences should be monitored and checked regularly for wildlife that might be stuck/entangled; – Fences should be checked for snares and removed immediately; and – Poaching incidents should be reported to MEFT/police. – Height of the live tripwire (or lowest wire) could be moved highest possible position, preferably to a height of at least 25 cm above ground level; – Tripwire could be set up about 40 to 50 cm away from the main fence (this will only effectively work if combined with mitigation in the bullet point above); – A rocky barricade (larger rocks) could be added at the bottom of the fence, which will need to be high enough to ensure animals like tortoises and pangolins are diverted; 	Daily, Monthly, annually	Foreman/Farm Manager

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> - Remove or do not add bottom live trip wires to the fence (optimal mitigation); - Wait for the “Ground-Breaking Pangolin-Friendly Fencing Project” product/concept to become freely available (currently in development) and use as an alternative once available; - Switch off the live wire during the day (Jackals and some predators are nocturnal where tortoises are diurnal); and - Ensure that the diamond mesh at the bottom is well maintained. 		
	<p>Potential overhunting of animals with a good genetic make-up and wildlife mismanagement within farm boundaries.</p>	<p>The Nature Conservation Ordinance Act No. 4 of 1975 and its regulations, Controlled Wildlife Products and Trade Act 9 of 2008 and the Animals Protection Act 71 of 1962 should be closely followed with regards to any hunting activities within farm boundaries.</p> <ul style="list-style-type: none"> - Produce an effective management plan; - Create awareness on biodiversity, conservation and ecosystems to employees and tourists; - Prevent only targeting larger-bodied game or game with the largest horns.; - No wildlife should be hunted without the relevant permits in place; 	<p>Daily, monthly, annually</p>	<p>Foreman/Farm Manager</p>

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> - The number of huntable game species that may be hunted as well as regulations are indicated in the yearly hunting season announcement from MEFT; - Farm owners should apply for the relevant hunting permits; - Keep a record of hunts and game numbers; - Game could be added to the farm (New genetics) to prevent inbreeding of fenced off populations; and - Sustainable game farm management and ethical practices should be promoted and incorporated. 		
	<p>Potential Lead poisoning (i.e. scavengers/predators could be impacted by lead used in ammunition).</p>	<ul style="list-style-type: none"> - Eliminate the use of lead ammunition within farm boundaries; - Create awareness on conservation of endangered raptors and vultures; - Substitute lead-based ammunition for alternatives (i.e., copper or copper alloys); - Ensure that parts of animals (where the bullet made an impact and fragmented) hunted with lead-based ammunition are not disposed of in a manner that vultures will be able to feed on it, after a hunt and slaughter; and - Game that dies in the field after being wounded by lead-based ammunition (i.e., if meat is not usable) should be disposed of to ensure that vultures/scavengers do not feed on contaminated parts of the animal. 	<p>Daily, Monthly, yearly</p>	<p>Foreman/Farm Manager</p>

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
	<p>Impacts to biodiversity with regards to aircraft landing and vehicles driving in the field.</p> <p>Tourism and hunting activities may have impacts on birds during breeding/nesting periods.</p>	<ul style="list-style-type: none"> - Employees could ensure that the area on or surrounding the airfield is clear of animals before an aircraft lands or takes off; - Off-road driving (where there is no road) should be avoided as far as possible; - Vehicles should drive slower within farm boundaries to prevent running over slow-moving animals; and - Sensitive habitats or areas (i.e., where birds are breeding or where a protected plant species is found etc) could be identified and driving off-road in these areas should be avoided. 	Daily, Monthly, yearly	All staff
Biodiversity encounters	The possible encountering of biodiversity on-site	<p>The Nature Conservation Ordinance Act No. 4 of 1975 and its regulations, Controlled Wildlife Products and Trade Act 9 of 2008 and the Animals Protection Act 71 of 1962 should be closely followed with regards to any encounters with wildlife with farm boundaries.</p> <ul style="list-style-type: none"> - No living organism should be removed from farm boundaries by anyone other than by a professional/registered animal handler, pest control company, MEFT/MAWLR or relevant rehabilitation or wildlife organisations; 	Daily, weekly	All staff

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> – No living organism shall be poached/consumed/harmed or killed for illegal purposes (i.e., illicit trade of pangolins for scales); – Police and MEFT should be notified of any poaching incident involving sensitive or protected species or if such an animal is found on someone within or surrounding farm boundary; – If snares or poaching equipment is found in the field, it should be removed and destroyed; – Fences and the farm should be monitored for potential snares and traps; – All staff should be informed in writing about the consequences with regards to rules that are broken (i.e., possession of a firearm, poaching, stock theft removal of protected species etc.) – Wildlife encountered on farm should be ethically treated; – Nests discovered on infrastructure within farm boundaries should not be removed or destroyed if it is not clear that there are no eggs or chicks in the nests; – Nests/eggs/birds should be identified by a professional and action could be taken depending on advice or instruction given by the professional; – Pesticides and herbicides should not be used as far as reasonably possible; – If there is no other possibility the relevant 		

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>pesticides/herbicides/chemicals should be used by a professional/registered pest control company and the MSDS of the substance used should be closely followed;</p> <ul style="list-style-type: none"> - Invasive plant species should be removed, and their spread should be prevented; and - Waste on-site should be well managed and removed from the site to prevent animals (i.e., rodents, snakes, scorpions etc) from breeding/living on-site. 		
Vegetation	<p>Potential removal of protected plant species</p> <p>The potential introduction of alien vegetation</p>	<ul style="list-style-type: none"> - Use existing roads for access to avoid new tracks; - Minimise clearance areas through proper planning of the construction/operational activities; - Protected plant species should not be removed, without the relevant permission or permits. - The field team should not drive in the veld or create new tracks, without evaluating the plant species within that area; - Route new tracks around established and protected trees, and clumps of vegetation; - Large trees or shrubs should not be removed (could be essential for breeding birds); - Identify rare, endangered, threatened and protected species; - During toolbox talks and induction sessions, highlight to workers that the removal of significant plants should be avoided; - Where possible rescue and relocate plants of significance; - Promote revegetation of cleared areas upon completion of construction activities; 	Daily, Monthly	Farm manager

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> - All project equipment arriving on-site from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed inspection completed prior to such equipment being used; - Ensure contractors receive induction on preventing the spread of alien weed; - Ensure the potential introduction and spread of alien plants is prevented; - Ensure the correct removal of alien invasive vegetation and prevent the establishment and spread of alien invasive plants; - Eradicate weeds and alien species as soon as they appear; and - Make workers aware of alien species and weeds. 		
Heritage	Potential heritage discovery	<p>In case of discovering or unearthing heritage sites, the following measures (chance-find procedure) shall be applied:</p> <ul style="list-style-type: none"> - Works to cease and the area to be demarcated with appropriate tape by staff, and the farm manager to be informed; and - The farm manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and mark the area with GPS. 	Daily	All staff/Farm manager

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
Emergency Incidents	Soil and water contamination due to inadequate control or accidental release of hazardous substances on site	<p>Since there is the potential to store approximately 8000 litres of diesel on-site, the following should be taken into consideration.</p> <p>Storage</p> <ul style="list-style-type: none"> – Separate hazardous and non-hazardous chemicals from each other; – Label chemicals appropriately; – Chemicals with different hazard symbols should not be stored together - clear guidance on the compatibility of different chemicals can be obtained from the Materials Safety Data Sheets (MSDS) which should be readily available; – Store chemicals in a dedicated, enclosed, and secure facility with a roof and a paved/concrete floor; – Diesel tanks should be completely contained within secondary containment such as bunding; – Consider the feasibility of substituting hazardous chemicals with less hazardous alternatives; and – Fuels, lubricants, and chemicals are to be stored within appropriately sized, impermeable bunds or trays with a capacity not less than 110% of the total volume of products stored. 	Daily, monthly, annually	All staff members

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>Spills</p> <p>The spill kits with the following items as a minimum should be made available on site:</p> <ul style="list-style-type: none"> – Absorbent materials; – Shovels; – Heavy-duty plastic bags; – Protective clothing (e.g., gloves and overalls); – Major servicing of equipment shall be undertaken offsite or within appropriately equipped workshops; – For small repairs and required maintenance activities all reasonable precautions to avoid oil and fuel spills must be taken (e.g., spill trays, impervious sheets); – Provision of adequate and frequent training on spill management, spill response and refuelling must be provided to all onsite staff; – No refuelling is to take place within 50 meters of groundwater boreholes, surface water bodies or streams; – Vehicles and machinery are to be regularly serviced to minimise oil and fuel leaks; and – All major petroleum product spills (spill of more than 200 litres per spill) should be reported to the Ministry of Mines and Energy (MME) on Form PP/11 titled “Reporting of major petroleum product spill”. 		

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>The following points, therefore, apply to all areas on the site:</p> <ul style="list-style-type: none"> – Assess the situation for potential hazards; – Do not come into contact with the spilt substance until it has been characterised and necessary personal protective equipment (PPE) is provided; and – Isolate the area as required. <p>The following measures are to be implemented in response to a spill:</p> <ul style="list-style-type: none"> – Spills are to be stopped at the source as soon as possible (e.g., close valve or upright drum); – Spilt material is to be contained to the smallest area possible using a combination of absorbent material, earthen bunds or other containment methods; – Spilt material is to be recovered as soon as possible using appropriate equipment. In most cases, it will be necessary to excavate the underlying soils until clean soils are encountered; – All contaminated materials recovered after a spill, including soils, absorbent pads and sawdust, are to be disposed of at an appropriately licenced facility; and – A written incident report must be submitted to the general 		

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		manager.		
Groundwater and surface water pollution	Possible nutrient enrichment of groundwater due to leakage of sewage into the groundwater	<ul style="list-style-type: none"> – The Bubbler greywater system needs to be well maintained at all times; – Need to carefully investigate the sewage system regularly to look for leakages; – Effluent water should be tested yearly or as required, to ensure that it complies with relevant legislation and standards; – Should ensure that the effluent is safe for discharge; – Effluent discharge permits should be in place for any effluent that is planned to be discharged; – Conditions of the effluent discharge permit should be adhered to; – Effluent should not be discharged into a sensitive habitat/ area (i.e., dam, river or stream); – Groundwater needs to be monitored and tested to ensure that there is no contamination; – The fat trap should be well maintained and cleaned monthly or more regularly if required; – Abstraction permits should be in place and abstraction monitored; – A water-wise mindset should be adopted on-site; – Water leakages or pipe bursts should be fixed as soon as 	Daily/weekly	General manager/ Foreman/ Employees

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<p>possible;</p> <ul style="list-style-type: none"> – Eco-friendly and low water use equipment should be used; – Showerheads and taps should also preferably be eco-friendly; and – Activities that require a lot of water (filling the swimming pool, butchery etc.) should be monitored to ensure that water is not wasted. 		
Soil Erosion	Potential soil erosion during heavy precipitation or strong winds within farm boundaries at cleared areas.	<ul style="list-style-type: none"> – Indigenous vegetation could be planted to prevent erosion; – Rock beds could also be used to prevent erosion on the gentle slopes around the buildings; and – An erosion control plan should be developed and implemented on-site due to the relief of site A and the vegetation that has been cleared. 	Monthly	Farm manager (Proponent)
Waste management	Possible sewage discharge runs the risk of pathogen /diseases transmissions and odours.	<ul style="list-style-type: none"> – Ensure toilets are always clean and dry; – Provide adequate sanitary facilities, including clean water, soap, disposable paper towels; – Ensure suitable personal protective equipment that may include waterproof/abrasion-resistant gloves, footwear, eye, and respiratory protection; – Face visors are particularly effective against splashes when working with sewage; – Recycle wastewater, where possible; 	Daily	All staff

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> – Install an impermeable hardstand in areas of high-risk contamination to prevent ground infiltration by pollutants; – Segregation of wastewater (domestic and industrial effluent); and – The monitoring of wastewater discharges should be conducted regularly. 		
	Environmental pollution (littering and poor storage of solid waste)	<p>Waste management should follow the International Finance Corporation (IFC) standards as follows:</p> <ul style="list-style-type: none"> – Implement a waste management plan (from “cradle to grave” methodology) covering all aspects of waste generated on-site; – Training and toolbox talk about the importance of waste management; – Ensure a high standard of housekeeping across/within farm boundaries; – Solid waste shall be stored in an appointed area in covered, tip-proof metal drums/skips for collection and disposal to an approved waste management site; – The waste storage areas shall always be kept clean and tidy; – Storage of domestic waste on site may result in the attraction of unwanted scavengers and should be removed as soon as it is feasible; – Implement the waste management hierarchy across the site: Avoid, reuse, recycle, then the disposal; 	Daily/Weekly	All staff members

TASK ACTIVITY/ EQUIPMENT	IMPACT IDENTIFIED	MITIGATION CONTROL MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		<ul style="list-style-type: none"> – Return packaging of hazardous and non-hazardous materials (wherever possible), such as empty bags for reuse; – Solid wastes should be deposited/emptied regularly. – See the material safety data sheets available from suppliers for disposal of contaminated products and empty containers; – Liaise with the governing body (municipality/council) regarding the waste and handling of hazardous waste; – Hydrocarbon and chemical contaminated solids have the potential to cause contamination to the soil, ground and or surface water, thus correct storage and disposal methods are required. 		

6 DECOMMISSIONING

If the lodge is closed (and if ownership is transferred), the proponent and the new owner should mutually agree on the way ahead for the farm and associated infrastructure. If the new owner has no use or plan for the site or buildings on-site the proponent will be responsible to remove all equipment, machinery, products, chemicals, fuel or any other materials from the farm. If infrastructure is removed during decommissioning it is recommended that the proponent implement a rehabilitation plan for the sites, to ensure that the site is safe and that no further degradation to the site can occur.

7 IMPLEMENTATION OF THE EMP

The proposed tourism and hunting lodge construction completion and operation work will be carried out in compliance with the relevant regulations. Minor to moderately significant impacts are anticipated and management and mitigation measures are in place to eliminate or reduce the severity of potential impacts.

This EMP:

- A. Has been prepared according to a contract with the proponent;
- B. Has been prepared based on information provided to ECC up to November 2021;
- C. Is for the sole use of the proponent, for the sole purpose of an EMP;
- D. Must not be used (1) by any person other than the proponent or (2) for a purpose other than an EMP; and
- E. Must not be copied without the prior written permission of ECC.

ECC has prepared the EMP based on information provided by the proponent, and the environmental scoping report conducted for Gmundner Hotels and the proposed tourism and hunting lodge on farm Waldburg No. 82.