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REPORT:

EMP FOR THE PROPOSED CONSTRUCTION AND DEVELOPMENT OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO.28, KHOMAS REGION, NAMIBIA

PROJECT NUMBER: ECC-121-455-REP-07-A

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ABBREVIATIONS

Abbreviation	Description
<	Less than
dB	decibels
ECC	Environmental Compliance Consultancy (Pty) Ltd
EIA	environmental impact assessment
EMP	environmental management plan
GPS	Global Positioning System
IFC	International Finance Corporation
Km/h	kilometre per hour
m	metre
MAWLR	Ministry of Agriculture, Water and Land Reform
MSDS	material safety data sheet
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
Ltd.	Limited
PPE	personnel protective equipment
Pty	proprietary
PV	photovoltaic
OSH	occupational safety health
SHE	safety health and environment
SNR	Signal Noise Ratio

1 INTRODUCTION

1.1 PROJECT BACKGROUND

Environmental Compliance Consultancy (ECC) has been contracted by Waldeck (Pty) Ltd (herein referred to as 'the Proponent') to conduct an environmental impact assessment (EIA) for the proposed construction and development of a hunting lodge and associated infrastructure on Waldeck Farm No.28, Khomas Region, Namibia.

Waldeck (Pty) Ltd propose to upgrade Farm Waldeck No.28 by developing a tourism and hunting lodge. The envisioned works include construction of 6 accommodation units (2 double units and 4 single units), a main common core area, two PV solar plants with a battery room, an activities area, staff village, demolition of the current dilapidated farmhouse and construction of a new 4-bedroom farmhouse and construction of a cold storage room, a butchery and a grey water treatment plant. The Proponent purchased a portion of Farm Iturea (a portion southeast of Farm Waldeck No.28), hence the boundary fence that is currently dividing the two farms will be removed. The entire farm boundary fence will also be renovated to a height of approximately 2.5 meters. Hunting particularly for trophy will be supervised strictly by registered Professional Hunters. All work will fall within the boundaries of Farm Waldeck No.28.

In addition to Farm Iturea, the Proponent signed a contractual purchase agreement with landowners of Farm Dornbaum No.74 and Bethlehem No.27/Rem 3. These portions are south and southeast of Farm Waldeck No.28. Once the portions have been procured, fully acquisitioned and transferred, an amendment to the environmental clearance certificate will be launched with the competent authority (Ministry of Environment, Forestry and Tourism). The EMP will be updated to address any impacts that may be associated with the land development works in these portions.

Farm Waldeck No. 28 is located approximately 36km south of Windhoek in the Windhoek Rural Constituency, Khomas Region, Namibia. The Project site can be accessed by driving south of Windhoek along the B1 road, turning and driving onto the D1463 district road for approximately 9 km. The location of Farm Waldeck No.28 and the purchased portion of Farm Iturea is shown in Figure 1.

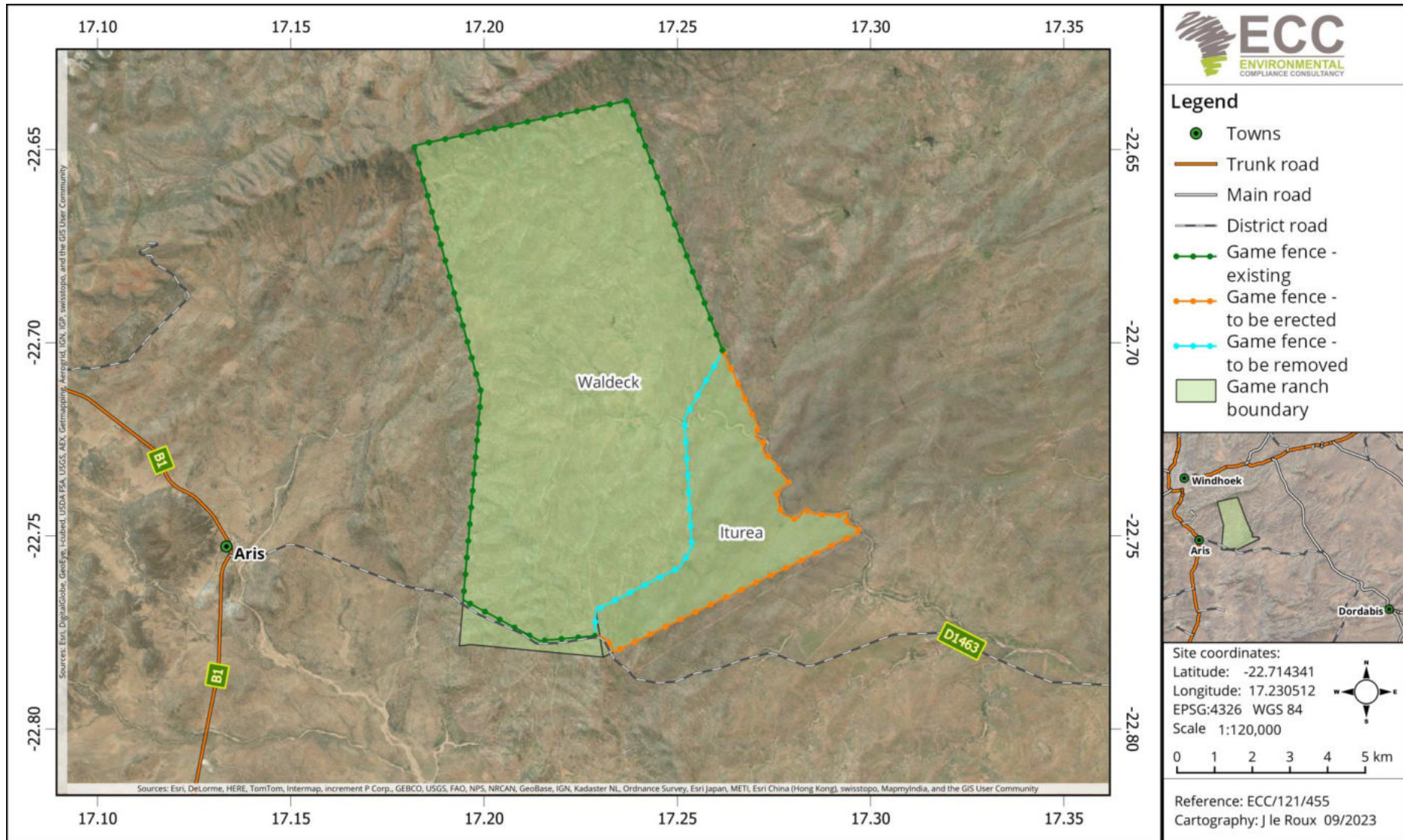


Figure 1: Location of Farm Waldeck No. 28 and Farm Iturea

1.2 ENVIRONMENTAL REGULATORY REQUIREMENTS

The proposed project triggers listed activities as stipulated in the Environmental Management Act, No. 7 of 2007 and its Regulations, promulgated in 2012. An environmental scoping report, environmental impact assessment (EIA) and environmental management plan (EMP) are required to be submitted as part of the application to support the decision-making process for issuing an environmental clearance certificate.

This report presents the EMP and has been undertaken in terms of the requirements of the Environmental Management Act, 2007 and its Regulations.

1.3 PURPOSE AND SCOPE OF THIS REPORT

The environmental management plan (EMP) provides a logical framework, mitigation measures and management strategies for the activities associated with the proposed project. In this way ensuring that the potential environmental impacts are curbed 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, procedures and roles and responsibilities to ensure the management arrangements are effectively and appropriately implemented.

The EMP is submitted as an appendix to the environmental scoping and impact assessment report which has been prepared for this Project. The environmental scoping report should be referred to for project specifications, assessment methodology, applicable legislations and assessment findings.

This EMP is a live document and shall be reviewed at predetermined intervals, and or updated during the EIA process when or if the scope of work alters, or when further data or information is added. All personnel working on the project will be legally required to comply with the requirements set out in the final EMP that is approved by the competent authorities i.e., Ministry of Environment, Forestry and Tourism (MEFT).

1.4 MANAGEMENT OF THIS EMP

The Proponent, will hold the environmental clearance certificate for the proposed project and will be responsible for the implementation and management of this EMP. The implementation and management of this EMP, and thus the monitoring of compliance, will be undertaken through daily duties and activities, as well as monthly inspections.

1.5 LIMITATIONS, UNCERTAINTIES, AND ASSUMPTIONS RELATED TO THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. This will be provided in the safety management plan to be developed by the Proponent. Additionally, mitigation measures associated with impacts on additional portions that are not procured and fully transferred to the Proponent are not included in this report. Mitigation management measures regarding the import of game are also not included in this report as the full

extent of the impacts will be scoped in an environmental clearance application amendment application which will be launched with the competent authority (MEFT) once the land portions have been transferred.

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 contract should be amended, and statutory requirements are to take precedence.

The information contained in this EMP is based on the project description as provided in the environmental scoping report. When the design or operation method changes, this EMP may require updating and potential further assessment may be undertaken.

1.6 ENVIRONMENTAL ASSESSMENT PRACTITIONER

The report has been prepared by Environmental Compliance Consultancy (Pty) Ltd (ECC) (Reg. No. 2022/0593) on behalf of the Proponent. Authored by ECC employees with no material interest in the report's outcome, ECC maintains independence from the Proponent and has no financial interest in the project apart from fair remuneration for professional fees. Payment of fees is not contingent on the report's results or any government decision. ECC members or employees are not, and do not intend to be, employed by the Proponent, nor do they hold any shareholding in the project. Personal views expressed by the writer may not reflect ECC or its client's views. The environmental report's information is based on the best available data and professional judgment at the time of writing. However, please note that environmental conditions can change rapidly, and the accuracy, completeness, or currency of the information cannot be guaranteed.

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2 ENVIRONMENTAL MANAGEMENT FRAMEWORK

2.1 OBJECTIVES AND TARGETS

Environmental objectives and targets have been developed so that trophy hunting activities and lodge operations can minimise potential impacts on the environment, as far as reasonably practicable.

Environmental objectives for the project are as follows:

- Zero pollution incidents;
- Minimal vegetation clearing;
- Minimal impact on regional groundwater users;
- Protect local flora and fauna, and
- Use natural resources effectively and efficiently.

2.2 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 persons are provided with sufficient training, supervision, and instruction to fulfil this requirement;
- Ensuring that any persons allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood; and
- Contractors shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed above.

Table 1 lists the roles and responsibilities allocated to different personnel throughout the project's lifecycle.

Table 1 – Roles and responsibilities

ROLE	RESPONSIBILITIES AND 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 supervision and instructions to fulfil duties in line with the EMP; - Ensuring compliance with this EMP including overseeing the day-to-day activities during operations, and routine and non-routine maintenance works during operations; - 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; - Ensuring that best environmental practices are undertaken throughout the operations of the facility; - Notifying the relevant authorities on serious environmental incidents promptly; and - Being responsible for all management plans and environmental monitoring.
<p>Foreman (Appointed HSE responsible person)</p>	<p>The farm or 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 tasked with 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; - Complete monthly EMP checklists and submit findings to the farm manager; - Provisioning of environmental awareness/management training, capacity building and inductions; - Ensuring that best environmental practices are undertaken throughout the operations of the lodge; - Timely distribution of any relevant environmental documentation, including revisions to this EMP to all staff; - Ensuring site inductions are conducted throughout the different phases of the Project;

ROLE	RESPONSIBILITIES AND DUTIES
	<ul style="list-style-type: none"> - Reporting of any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the Proponent; and - Responsible for compliance with conditions as set out in this EMP.
Employees, contractors and visitors	<p>Contractors hired for operations or maintenance activities at the lodge should comply with this EMP and shall be responsible for the following:</p> <ul style="list-style-type: none"> - Undertaking activities in accordance with 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 or foreman; and - Ensuring appropriate corrective or remedial actions are taken to address all environmental hazards and incidents.

2.3 EMPLOYMENT

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

- In liaison with local government and community 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 required 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 group of unemployed workers living in the surrounding area; and
- Every employee hired must be provided with a valid employment contract stating the position hired and hourly remuneration offered.

3 COMMUNICATION AND TRAINING

To ensure potential risks and impacts are minimised, it is vital that personnel are appropriately informed on how to properly implement the EMP. It is also important that regular communications are maintained with directly affected parties and are informed of potential environmental or socioeconomic impacts and how to minimise them. This section sets out the framework for communication and training in relation to the EMP.

3.1 COMMUNICATIONS

During construction, the project manager and site manager shall communicate site-wide environmental issues to the project team through the following means (as and when required):

- Site inspection and audits;
- Site induction, including instruction on incident response procedure, and
- Briefings on key project-specific environmental issues, like feedback on complaints.

This EMP shall be distributed to the construction team including any contractors to ensure that the environmental requirements are adequately communicated. Key activities and environmentally sensitive operations should be highlighted to workers and contractors.

During the construction phase, communications between 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

An emergency is any abnormal event, which demands immediate attention. It is any unplanned event, which results in the temporary loss of management control at site, but where functional resources can manage the response. An emergency response plan document will be put in place that manages the response in relation to emergencies including environmental emergencies. Table 2 contains a list of emergency contact numbers.

Table 2 - Emergency contact details

TOWN	AMBULANCE	POLICE	FIRE BRIGADE
Windhoek	+264 (61) 21-1111	+264 (61) 1-0111	+264 (61) 21-1111
Dordabis	+264 (61) 302 931	+264 (62) 573 514	-
Rehoboth	+264 (62) 52-3811	+264 (62) 1-0111	+264 (62) 52-2091

For large-scale spills (i.e., greater than 200 litres) and other significant environmental incidents, the fire service should be notified as required and MEFT office should be informed of the incidents (telephone +264 61 284 2111) as well as the Ministry of Mines and Energy (MME) by completing form PP/11 (telephone: +264 61 284 8111). All correspondence with MME/MEFT should be undertaken by the farm manager as guided by the foreman.

3.3 COMPLAINTS HANDLING AND RECORDING

Any complaints received through various means of communication by contracted employees or directly affected IAPs should be documented by the receiver. The following aspects should be noted in the complaint register:

- The name of the complainant
- The contact details of the complainant
- Date and time of the complaint
- The nature of the complaint

The information shall be given to the Proponent who is responsible for the management of complaints. The project manager shall do the following:

- Acknowledge the complaint as received;
- Maintain a complaint document register file;
- Provide a written response to the complainant 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 workforce shall be informed about the complaints register. The complaints register shall be kept for the duration of the Project 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. The Proponent should ensure that employees assigned with specific duties possess the necessary skill sets to complete such duties.

3.5 SITE INDUCTION

All personnel involved in the project shall be inducted to the site with specific environmental and social awareness training, and health and safety issues. The environmental and social awareness training shall ensure that personnel are familiar with the principles of this EMP, and the environmental impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

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

A general site-specific induction that outlines:

- What is meant by “environment” and “social”;
- What are the environmental risks and impacts associated with lodge construction and operations;
- How can construction activities impact the environment; and
- What can be done to mitigate against impacts.
-

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 should any environmental problems occur;
- The potential consequences of non-compliance with this EMP and relevant statutory requirements, and
- The role of responsible people working on the project.

4 REPORTING, COMPLIANCE AND ENFORCEMENT

4.1 ENVIRONMENTAL PERFORMANCE MANAGEMENT

The current summary of a register of environmental risks and issues identifies mitigation and monitoring measures, as well as the roles responsible for execution. The Project Manager and Foreman will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

4.2 CONSTRUCTION: ENVIRONMENTAL INSPECTION & COMPLIANCE MONITORING

4.2.1 MONTHLY COMPLIANCE MONITORING

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

4.3 OPERATIONS: ENVIRONMENTAL INSPECTIONS & COMPLIANCE MONITORING

Annual inspections of the different lodge operational areas will be undertaken by the Proponent to determine any non-conformances. Any non-conformance will be recorded, including the following details: a brief description of non-conformance; the reason for the non-conformance; the responsible party; the result (consequence); and the corrective action taken and any necessary follow up measures required.

4.4 REPORTING

There will be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or accident, is promptly reported to the Farm Manager.

4.5 NON-COMPLIANCE

Where it has been identified that works are not compliant with this EMP, the Farm Manager will implement corrective actions to the extent 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 will be produced. The notice will be generated during the inspections and the project manager will be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

Activities shall be stopped in the event of non-compliant event identified until corrective actions have been completed.

4.6 INCIDENT REPORTING

The Site 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.

4.6.1 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):

- Fine/penalties;
- Legal action;
- Monetary penalties imposed by the Proponent on the contractor;
- Withdrawal of licence; 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 summary register of environmental risks and issues which identifies mitigation and mitigation measures as well as responsible party(ies). This chapter is subject to regular review by the Proponent and will be updated as necessary.

The Proponent will use this register to undertake monthly and annual inspections to ensure the Project is compliant with the EMP.

5.2 OBJECTIVES AND TARGETS

Environmental protection is the responsibility of management and if management incorporate environmental disciplines in their day-to day activities, employees, contractors and customers would act and align their operations towards such standards.

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.

The Project aims to achieve the following environmental objectives:

- 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 efficiently and effectively.

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 and impact assessment report. From this, a schedule of environmental commitments and risks has been produced which details deliverables including measures identified for the prevention of pollution or damage to the environment during the project's lifetime (Table 3).

Table 3 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible persons.

Table 3 - Environmental risks and issues, mitigations and monitoring measures

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
Air quality	Possible dust emissions from construction vehicles and equipment. Dust generation during construction /future maintenance activities.	To minimise the potential for dust generation, the following management measures should be implemented, as required: <ul style="list-style-type: none"> - Restrict speed of vehicles (<40 km/h); - Vehicles and machinery should be maintained to limit exhaust fume emissions; - Dust generating activities should be avoided during strong wind events; - Where an effect is profound, ensure dust suppression measures are in place; and - Employees should use and wear appropriate PPE (e.g. dust masks). 	Daily	Farm Manager Site Supervisor Foreman Employees
Visual	Visual disturbances	- Engage with the surrounding neighbours about the construction activities; and -Practise Good housekeeping on site.	Monthly Daily	Farm Manager Foreman Employees
Noise	Gunshot noise and construction noise leading to noise nuisance and potential hearing loss towards site-based employees.	The Labour Act No.11 of 2007 and Regulations relating to the Health and Safety of Employees at Work (GN 156/177) should be followed for occupational noise exposure (Chapter 6, section 197, sub-section 1-3). This section states that no employee shall work in an environment where noise levels equal or exceed 85 dB.	Daily	Farm Manager Foreman Employees

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<p>The following mitigation measures should be implemented, as required:</p> <ul style="list-style-type: none"> -The Proponent should develop a healthy and safety management plan that takes into account noise generation; -Restrict noise generating activities to day- time operations; -Conduct safety inductions before hunting expeditions; -Appropriate PPE should be worn during hunting activities (i.e. earplugs, earmuffs, ear protective equipment with >30 SNR). -Ensure that hunting ammunitions are equipped with silencers; -People not shooting should stand further away from the noise source; - Vehicles on site should be maintained regularly to exhaust noise levels; and -Ensure noise complaints are recorded and responded to timeously. 		

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
<p>Occupational health and safety</p>	<p>Occupational health and safety concerns during the construction phase of the project.</p>	<p>To promote a safe and conducive working environment, the following mitigation measures should be considered:</p> <ul style="list-style-type: none"> -A 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 occupational health and safety should be adhered to; -Appropriate PPE should be worn by employees (e.g. safety boots, overalls, butchery apron and gloves). -Conduct safety induction to employees and employees should be trained on weapon handling; -Appropriate safety/warning signs should be erected at areas considered to cause certain degree of harm; -Risk assessment in the workplace must be done to identify facility areas that could cause some degree of impacts, suitable prevention measures should be identified; -Frequent maintenance of all equipment and machineries is advised; -Occupational incidents and accidents incurred on-site should be reported to the authorities (i.e. 	<p>Daily</p>	<p>Foreman</p>

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<p>Occupational Safety & Health (OSH) at the Ministry of Labour, Industrial Relation and Employment Creation, by using form F.5 (Ministry of Labour, Industrial Relations and Employment Creation);</p> <ul style="list-style-type: none"> -Emergency contact details should be displayed to contact relevant services in emergency situations; - 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; and -Counselling should be provided to the witnesses and other personnel member who may have been impacted by the event. 		
Fire risks management	Potential risk of fire occurrences and veld fire leading to ecosystems breakdown.	<ul style="list-style-type: none"> - Develop a fire management system through risk identification and assessment; - Identify and signpost dedicated assembly points at the lodge area; - Develop site-specific work procedures as part of the fire management system; - Control and reduce the potential risk of fire by segregating and safe storage of flammable materials; 	Weekly, monthly and annually	All staff

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> - Avoid potential sources of ignition for example, by prohibiting smoking in and around areas where chemicals/fuel is stored; - Ensure suitable fire-extinguishing equipment are easily accessible whenever necessary (this can include pails of water, buckets of sand, or portable extinguishers); - For veld fires, appropriate firefighting equipment should be available on-site; -Design and re-define the fire breaks within the farm on an annual basis following the rain season; - Emergency contact details should be readily available on-site; - Fires made for “braai”/BBQ within farm boundaries should be monitored and extinguished to prevent the risks of causing a veld fire; and 		
Wildlife mismanagement	Potential overhunting of game with good genetic make-up and wildlife mismanagement within the farm boundaries. Potential risk of inbreeding	<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 followed closely with regards to any hunting activities within farm boundaries.</p> <p>The following measures will guide the sustainable hunting of game:</p>	Daily, monthly and yearly.	Farm Manager Foreman

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> - Develop an effective wildlife management plan; -Create awareness on biodiversity, conservation and ecosystem to staff members and hunters; -Hunting should be conducted under the supervision of registered professional hunters; - Game hunting permits should be applied for; - Conduct annual game counts and keep a record of hunted and game populations; - Introduce new game to the farm from elsewhere (new genetics) to prevent inbreeding of fenced off populations; and - Sustainable game farm management and ethical practices should be promoted and incorporated. 		
Avifauna management	Potential lead exposure and poisoning from lead in hunting ammunitions (i.e raptors and vulnerable scavenger birds)	<p>Management/control measures include the following:</p> <ul style="list-style-type: none"> - Lead ammunitions should not be used during hunting expeditions; and - Ensure that carcasses (where the bullet made an impact and fragmented) hunted with lead-based ammunitions are disposed- off properly. 	Daily, monthly and yearly.	Farm Manager and Foreman
Wildlife management	The possible of encountering and interacting with biodiversity on-site.	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.	Daily, monthly and yearly.	Farm Manager Foreman

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> - Wildlife encountered on farm have the right of way; - Restrict speed of vehicles (<40 km/h); - No living organism should be removed from farm boundaries by anyone other than a professional/registered animal handler, pest control company, MEFT/MAWLR or relevant rehabilitation or wildlife organisations; - Prohibit illegal hunting, consumption and possession of game and game products (i.e., illicit trade of pangolins for scales); - Police and MEFT should be notified of any illegal hunting incident involving sensitive or protected species or if such an animal is found on someone within or surrounding farm boundary; -Snares found on the farm should be removed and destroyed; - An anti-poaching unit should be recruited to conduct regular patrols within the farm; -Installation of closed-circuit cameras would aid to monitor the project area on a 24-hour basis; - Nests discovered on infrastructure within farm boundaries should not be removed or destroyed; - Pesticides and herbicides should not be used as far as reasonably possible; 		

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> -If there is no other possibility, the relevant pesticides/herbicides/chemicals should be used by a professional/registered pest control company and the MSDS of the substance used should be followed closely; - Invasive plant species should be removed, and their spread should be monitored closely; and - Waste on-site should be well managed and removed from the site to less attract rodents, snakes and scorpions. 		
	<p>Potential removal of protected plant species land clearing activities.</p>	<p>To counteract the potential risk of removing certain protected plant species, the following control management measures should be implemented:</p> <ul style="list-style-type: none"> -Prior to any land clearing event, site inspection should be conducted to determine the presence of any unique plant species; - Protected plant species should not be removed, without the relevant permission or permits; - Large trees or shrubs should not be removed (could be essential for breeding birds); -Where possible, rescue and relocate plants of significance; - Promote revegetation of cleared areas upon completion of construction activities; and 	<p>Daily, monthly</p>	<p>Farm Manager Foreman</p>

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		- All project equipment arriving on-site from elsewhere should have an internal weed and seed inspection completed prior to such equipment being used, this will prevent encroachment of invasive species.		
	Potential habitat destruction and disturbances of ecosystem functioning due to land clearing activities for the PV solar plants.	- Use existing roads to avoid new tracks and potentially destroying habitats or burrowing species; - Prior to land clearing, site inspections should be conducted to determine the presence of any unique nesting/ breeding site within the proposed project site; and - Minimise clearing areas through proper planning of construction and operational activities; and	Daily, monthly	Farm Manager Foreman
Heritage	Potential heritage discovery	In case of discovering or unearthing heritage sites, the following measures (chance-find procedure) shall be applied: - Works to cease and the area to be demarcated with appropriate tape by staff, and the Farm Manager to be informed; and - Archaeological/heritage artefacts/graves are to remain un-disturbed, until an investigation is conducted.	Daily	All staff members
Soil Pollution control	Emergency incidents/accidental release of	Since generators will be used during the construction phase, the following measures should be taken into	Daily, monthly and yearly	All staff members

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
	hazardous substances leading to soil contamination.	<p>consideration regarding storage, handling and spill management.</p> <p>Storage</p> <ul style="list-style-type: none"> -Hazardous chemicals should be stored separate from non-hazardous chemicals; -Chemical containers should be labelled correctly-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 bundings; 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. <p>Spills</p> <p>Spill kits with the following items as a minimum should be made available on site:</p>		

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<p>Safety measures</p> <ul style="list-style-type: none"> - Protective clothing should always be worn (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); - No refuelling is to take place within 50 m (meters) of groundwater boreholes, surface water bodies or streams; - Vehicles and machinery are to be regularly serviced to minimise oil and fuel leaks; and <p>Spill management procedures</p> <ul style="list-style-type: none"> - Do not come into contact with the spilt substance until it has been characterised and necessary personal protective equipment (PPE) is provided - Assess the situation for potential hazards; - Isolate the area as required. - Spills are to be stopped at the source as soon as possible (e.g., close valve or upright drum); 		

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> - 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 off at an appropriately licenced facility; and -A written incident report must be submitted to the farm manager. - Should there be major petroleum product spills on site, (spill of more than 200 litres per spill) such incidences should be reported to the Ministry of Mines and Energy (MME) on Form PP/11 titled "Reporting of major petroleum product spill". 		
Groundwater pollution control	Possible nutrient enrichment of groundwater due to leakage of sewage into the groundwater. Potential risk associated with the discharge	<ul style="list-style-type: none"> - Ensure compliance to section 68, 70 and 72 of the Water Resources Management Act No.11 of 2013. - Effluent waste discharge permits are in place and permit conditions should be adhered to; 	Daily and weekly	Farm Manager Foreman Employees

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
	of wastewater into watercourses.	<ul style="list-style-type: none"> -The Bubbler greywater treatment system needs to be well inspected for leakages at all times; -Effluent water should be tested yearly or as required, to ensure that it complies with relevant legislation and standards; - 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; and - The kitchen fat trap should be well maintained and cleaned monthly or more regularly. 		
Groundwater management	Potential lowering of groundwater due to water abstractions during lodge construction and operation.	<ul style="list-style-type: none"> - Abstraction permits should be in place; - Groundwater levels should be monitored regularly to understand the performance of the aquifers against lodge abstractions; -Turn off pumps when abstraction is not required; -Adopt a water wise mindset on site; - Water leakages or pipe burst should be reported and fixed as soon as possible; -Should there be a desire to plant ornamental plant on site, drought resistant species should be considered; - Eco-friendly and low water use equipment should be used i.e. eco-freindly showerheads and taps; and 	Daily and weekly	Farm Manager Foreman Employees

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		- Activities that require a lot of water should be monitored to ensure water is used efficiently.		
Waste management	Possible sewage discharge runs the risk of pathogen /diseases transmissions and odours.	-Ensure toilets are always clean and dry; - Provide adequate sanitary facilities, including clean water, soap, disposable paper towels; - Provide suitable personal protective equipment that may include waterproof/abrasion-resistant gloves, footwear, eye, and respiratory protection; - The monitoring of wastewater discharges should be conducted regularly.	Daily	All staff members
	Environmental pollution (littering and poor storage of solid waste)	Waste management should follow the International Finance Corporation (IFC) standards as follows: - Implement a waste management plan (from “cradle to grave” methodology) covering all aspects of waste generated on-site; - 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; -The proposed compost site should always be inspected regularly;	Daily and weekly	All staff member

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> - Ensure solid wastes on site are removed timeously to ward off unwanted scavengers; and - Implement the waste management hierarchy across the site: Avoid, reuse, recycle, then the disposal. 		

6 DECOMMISSIONING PHASE

In the event that the Farm Manager plan to cease with lodge operation (and/or 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 intent not to use the infrastructure, the Proponent will be responsible to remove all equipment, machinery, chemicals, fuel and any other element from the farm. If infrastructure is removed at decommissioning stage, it is recommended that the Proponent implement a rehabilitation plan for the site to ensure that the site is returned to its natural state as feasibly possible and that no further degradation to the site is foreseen.

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, hence management and mitigation measures are in place to eliminate or reduce the severity of potential impacts

This environmental management plan:

- A. Has been prepared according to a contract with the Proponent;
- B. Has been prepared based on information provided to ECC up to September 2023;
- 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 any purpose other than an EMP;
- E. Must not be copied without the prior written permission of ECC.