

ANDERSSONS AT ONGAVA

ENVIRONMENTAL MANAGEMENT PLAN

2025



Prepared for the renewal of Environmental Clearance by Ongava Game Reserve (Pty) Ltd

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Application APP-4729

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Abbreviations

Anderssons	Anderssons lodge on Ongava Game Reserve	
ECC	Environmental Clearance Certificate	
EMP	Environmental Management Plan	
Etosha	Etosha National Park	
MEFT	Ministry of Environment, Forestry and Tourism	
Ongava	Ongava Game Reserve	

1 INTRODUCTION

Ongave Game Reserve (Pty) Ltd wishes to renew the Environmental Clearance Certificate (ECC) for the lodge Anderssons at Ongava. The current ECC is attached in APPENDIX I.

Ongava Game Reserve (Pty) Ltd owns the land, movable and immovable assets, tourism operations and infrastructure of three lodges on the private reserve: Ongava Lodge & Little Ongava, Ongava Tented Camp and Anderssons at Ongava.

The reserve is dedicated to conservation, and tourism is the only commercial activity on the property.

1.1 This document

This document contains a description of the infrastructure and activities offered by the lodge, followed by tables with management actions. The tables list factors that could potentially have a negative impact on the environment, as well as management actions that aim to prevent or mitigate each potential impact.

Management measures are given for the operational phase and although no construction is currently planned, this Environmental Management Plan (EMP) provides a table with construction phase management measures that must be implemented during upgrade or maintenance events. Decommissioning has not been addressed in detail, but the risks and management actions would be similar to those of the construction phase.

1.2 Methodology

Data collected during a 3-day site visit, combined with information provided by the General Manager Operations, Mr Stuart Crawford, were used to update the EMP.

1.3 Infrastructure update

There has been one significant change in the past three years, namely a new staff house was built within the footprint of the existing staff village. It comprises 80 m² and was constructed using prefabricated panels.

1.4 Objectives of the EMP

The management actions given in Section 4 aim to minimise negative impacts and enhance positive impacts that may result from the Project. The EMP is a living document that is updated as new information, policies, authority guidelines and technologies are developed and become available.

This EMP has three main objectives:

- identify possible impacts associated with the project
- propose measures to prevent or mitigate negative impacts, and enhance positive impacts
- detail the actions required to carry out the proposed mitigation measures

The EMP demonstrates the commitment of Ongava Game Reserve (Pty) Ltd to follow current best practices for sustainable tourism, and it forms an environmental contract between the proponent and the Government of the Republic of Namibia (MEFT) in its capacity as guardian of the country's natural resources.

1.5 Permits and licences

The proponent is responsible for obtaining and updating all permits, licences and registrations that are required for the project. Table 1 lists some of the applicable permits.

Table 1. Permits required for the project

Permit/Licence	Authority	Relevance	
Licence to abstract and	MAWLR	Except for personal, domestic use, all abstraction	
use water, Form WA03-		and use of water requires a permit. Section 44-45	
GW		of the Water Resources Management Act (2013)	
		and Sections 44-45 of the Water Resources	
		Management Regulations (2023).	
Effluent discharge,	MAWLR	Sewerage systems and effluent discharge are	
Form WA07		regulated by a permit in accordance with Sections	
		66-68 of the Water Resources Management	
		Regulations (2023).	
Clearing of land	MEFT	The Forest Act 12 of 2001 stipulates a permit for	
		the removal of any protected plant species.	
Consumer Installation	MME	The storage of more than 600 litres of fuel in a	
Certificate, Form PP/5		rural area, for personal use only. The Petroleum	
		Products Regulations (2000).	
Permission for shifts	Ministry of Labour,	The Labour Act 11 of 2007 limits shift length and	
and leave schedules	Industrial Relations	number of consecutive workdays.	
	and Employment	E.g. 12-hour shifts and leave schedules of 3 weeks	
	Creation	on, 1 week off require written permission.	

2 PROJECT OVERVIEW

2.1 Location

Ongava Game Reserve comprises 30,000 hectares and is located 90 km north of Outjo on the C38, with the Etosha National Park its northern boundary and its main entrance 50 m from the Anderson Gate.

2.2 Tourist activities

Game drives on the reserve and into Etosha are conducted in open game viewing vehicles, driven by qualified guides. Guided walks are led by qualified, firearm-proficient guides.

A visitors' centre with permanent natural history exhibitions integrates research, conservation and tourism, providing an educational activity for the guests staying in all the lodges on the reserve.

2.3 Infrastructure

The fenced footprint of Anderssons and the Research Centre comprises 7.7 Ha.

2.3.1 Main area

The main area consists of various open air and covered bar, dining and lounge areas, and a reception/office building. There is a sunken viewing terrace overlooking a waterhole, an open-air fire boma and a swimming pool. A pathway leads from the lounge to a covered underground hide from where wildlife may be viewed while drinking at a waterhole. Paved walkways connect the main area with the guest rooms, visitor's centre and research centre.

The kitchen is attached to the main area and consists of a walk-in fridge/freezer, 2 two storerooms, 2 staff bathrooms and an outdoor dining area for staff. A separate building in the back-of-house area houses 5 storerooms and a laundry.

2.3.2 Ongava Research Centre

The Ongava Research Centre has been providing scientific data and research to Namibia and the management of Ongava for the past 20 years. Articles, historic items and records of research done at Ongava are on permanent display in the visitors' centre.

The research centre contains 2 laboratories, 4 houses for permanent scientists, 6 double rooms for visiting students, a director's house, staff canteen and kitchen.

2.3.3 Guest rooms

A total of 18 guests can be housed in nine rooms. All the rooms are freestanding, en suite with indoor and outdoor showers, a sitting area and shaded verandah.

The guest units are freestanding buildings, connected to the main area by a raised red brick walkway. They are built from bricks and mortar and are clad on the outside with rocks collected from the road construction areas of the reserve, so that the natural landscape is not denuded.

Visiting pilots/guides are accommodated in en suite tents.

2.3.4 Staff accommodation

There are 4 management units, varying in size from 40 to 100 m² and consisting of a bedroom, bathroom, lounge and covered veranda. Guides and chefs have 11 units of 40 m² each, all units with a bedroom/sitting/kitchenette area, bathroom and covered verandah.

The lodge manager lives in a freestanding house with two en suite bedrooms and sitting room.

The junior staff are accommodated in 3 brick and mortar blocks, each with 12 en suite single rooms, and one old staff block with 12 bedrooms sharing two ablution facilities. This block will be converted to en suite single rooms within the next 18 months.

2.3.5 Support infrastructure

There is no workshop or maintenance facility at Anderssons and all maintenance is done at the Reserve Headquarters. Lodge vehicles refuel at Anderssons from diesel tanks mounted on a bunded cement floor.

2.4 Services

Water and electricity services are located underneath the pathways between buildings, making optimum use of linear developments.

2.4.1 Water supply and reticulation

Water supply is from two boreholes, 16 m and 17 m deep. The main borehole is situated in camp next to reception and the back-up borehole is 150 m east of the lodge. The boreholes are fitted with submersible low-volume pumps to ensure a stable water level, and pumping is alternated between the two.

The water table in the region is very shallow (6 - 30 m) and the reserve's source water forms part of the Ombika aquifer, thus groundwater is a highly sensitive resource that has to be strictly monitored for contamination and over abstraction as described in Section 5.1.

2.4.2 Wastewater and sewage

There are two Claris sewerage systems at Anderssons. Sewerage system is a 150 ltr basin system with a screen and lifter pump. Each guest unit has its own system, pumping to a collective single chamber screened septic tank. From here the sewage is pumped to the Claris fusion three-chambered bio-treatment plants. Recycled grey water is discharged into 35,000 ltr holding tank and then used on the roads for dust suppression.

There is a fat trap system at the kitchen area for grey water from the main lodge and laundry. This unit has a volume of approximately 3,500 ltr and it discharges grey water into a single septic tank from where it is pumped to the main Claris fusion plant.

2.4.3 Solid waste

Rubbish bins are provided at point of source. The bins have lids and are animal-proof. From the lodge, waste is taken weekly to a central waste storage compound that services the four lodges on Ongava Reserve. Recyclable waste is separated on site and the remaining solid waste is collected weekly in an 8-ton truck and taken to the official landfill in Outjo. Recycled waste including plastic, glass and tin is sent to Windhoek and Otjiwarongo for processing.

2.4.4 Energy

Electricity supply is main grid with a back-up generator, used only in case of grid outage. The generator is a six-cylinder engine in a self-contained metal unit, mounted on a cement floor. Geysers are a solar hybrid system, with a PV unit at each guest room and a unit at the main lodge area.

2.4.5 Roads and tracks

Ongava Reserve has a well-established road network, consisting of constructed gravel roads with camber and drainage ditches. The roads are graded by the Reserve maintenance team and they also repair and maintain speed bumps and culverts.

2.5 Design and landscaping

The architecture of Anderssons was designed to be an extension of the landscape itself, rather than an imposition on it. A sense of place is maintained by curving lines, muted natural colours, and the use of natural materials such as wood, sand, thatch and locally sourced rocks.

No trees were removed or damaged during construction and staff are trained to actively preserve naturally occurring vegetation. Paved walkways ensure that guests and staff walk in designated areas only, and the walkways are raised for better drainage.

The gardens have over 100 indigenous species of plants. Ongava Game Reserve is engaged with the Namibian Botantical Research Institute as a relocation centre for illegally obtained/transported plants that were confiscated.

3 IMPLEMENTATION

Anderssons and the Ongava Reserve staff are responsible for the day-to-day implementation of this EMP. All contractors, subcontractors, visitors and staff must be made aware of the contents of the EMP and their roles in achieving its objectives.

3.1 Training

Appropriate training, education and experience for the tasks that are expected of employees will result in competence of the workforce. All contractors, subcontractors, their staff, and lodge employees will receive induction training upon arrival on site, and the lodge manager will keep a register of completed training.

A site induction should contain at least the following components:

- Definitions of "environment", "social", "impact", etc. in language that is understandable by the trainees
- The risks and potential impacts associated with the project
- How can risks and impacts be minimised
- Environmental rules of the project
- The roles and responsibilities of the trainee in relation to the environment and this EMP
- Procedures to follow in the event of an environmental issue
- The consequences of non-compliance, including the possibility that the ECC may be withdrawn, and the project forced to close.

3.2 Compliance

- Anderssons will avoid or minimise potential impacts on the by complying with the guidelines in this EMP.
- Immediate action will be taken if EMP measures are not followed.
- All required environmental authorisations, permits and licences have been obtained; their stipulations are implemented; and renewal will be done before expiry.
- Contractors and new employees will be informed of the high value placed on the environment and will be aware of the measures in the EMP and their responsibility in carrying out those measures.

3.3 Consequences of non-compliance

This EMP is a legally binding document. The consequences of non-compliance will be stipulated in every employment contract as well as in contracts with contractors and subcontractors and will include but are not limited to:

- Fines and penalties to the individual
- Termination of employment (staff)
- Penalties to the contractor
- Legal action
- Withdrawal of licence
- Suspension of work

4 MANAGEMENT ACTIONS

Management measures to mitigate each potential negative impact are given in tables in this section. The headings of the tables (Table 3, Table 4 and Table 5) are discussed here.

Nature of impact

Possible impacts on a feature or function of the environment are identified. Description of potential risk sources (impacting activities) and the mechanisms through which an impact may occur are described.

Mitigation

Mitigation measures are proposed for each identified impact. These measures consist of specific management actions that need to be carried out in order to avoid, minimise or remedy negative impacts, together with adjustments to respond to unforeseen impacts.

Responsible person

Successful implementation of an EMP relies on defined roles and responsibilities. Ongava has allocated duties to individuals and teams, and they are responsible for carrying out the required management actions. Table 2 lists the responsible persons and a summary of their responsibilities.

Person/Team	Responsibilities
General Manager	Overall responsibility for implementation of EMP.
Operations (GMO)	Support to the construction team and Ongava staff for
	implementation of environmental management measures.
Maintenance & Asset	Day to day supervision of other role players.
Manager (MM)	Maintenance of buildings, vehicles, machinery, sewage and waste
	systems at Anderssons.
Lodge Management	Overall management of Anderssons.
(LM)	
Human Resource	Employment of staff
Manager (HR)	
Farm Manager (FM)	Maintenance of reserve infrastructure and living assets
Guides	Transport of guests.
	Ensuring appropriate human-wildlife interactions.
Contractor	Construction

Table 2. Individuals and teams in charge of carrying out the management actions

Tools

This column refers to actions, equipment, protocols and guidelines that enable the application of the management actions. Ongava has the following guidelines and procedures that govern the implementation of management actions:

- Guiding Protocol
- Ongava Management Plan
- HR guidelines
- Standard Operating Procedures (SOP)
- Health & Safety annual audit

4.1 Construction phase

No major construction is planned in the foreseeable future, but Table 3 makes provision for maintenance contractors furing the operational phase, as well as potential future upgrades and additions.

Table 3. Management actions: construction phase

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
1. Soil resources and land capa	bility		
Erosion, compaction of and damage to soils. Off-road driving damages the structure of the soil surface and causes	Motorised access will be limited to existing tracks and defined development areas. As far as possible, no new roads or tracks should be developed within the lodge or staff village areas.	GMO. Contractor	Ongava Mgt Plan. Visual inspections
soil compaction, which results in less water infiltration and availability, limited root penetration and less	No construction or activities within areas containing highly erodible, dispersed, fine-particle, sodic soils	GMO. Contractor	Identify highly erodible soils and areas before construction starts. Avoid these areas.
vegetation cover. Damaged soil crust makes the fine underlayer of soil	Prevent water runoff from concentrating unnaturally in any one area.	Contractor	Road building and maintenance plan
vulnerable to wind erosion, the resulting dust settles on plants, interferes with photosynthesis, and causes a decline in habitat quality.	No off-road driving should be allowed. Where it is unavoidable, the resulting tracks must be obliterated by sweeping them. Regular road maintenance, erosion control and good drainage will prevent the need for off-road driving.	GMO. Contractor	Ongava Mgt Plan. Visual inspections
	Water pipes shall be installed and trenches dug in such a way as to minimise the chance of erosion.	Contractor	Site inspections
	The boundaries of construction sites that extend beyond already impacted areas must be clearly demarcated. Where construction will take place within or close to sensitive features, these should be demarcated.	GMO. Contractor	Demarcation of construction areas. Demarcation of sites of particular sensitivity with "Do not Disturb" signs.
	No construction activities may take place outside the defined infrastructure footprint areas.	Contractor	Site plans to clearly define construction areas.
	Quarries/borrow pits may not be dug without formal permission.	GMO. Contractor	Approval. Demarcate permitted area.
	The movement of construction crew must be within the demarcated site boundaries at all times.	GMO. Contractor	Site boundary demarcation.

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
	An area for mixing and stockpiling construction material must	GMO.	Selection of laydown area. Demarcate
	be demarcated. It must be located in an area that is already	Contractor	area.
	disturbed, or where development will take place.		
	Access routes between the stockpiling areas and the building	GMO.	Clearly demarcated routes.
	sites should be demarcated and their use enforced. Existing	Contractor	
	roads must be used.		
	Sand and rocks utilised for construction must be from defined	GMO.	Approval. Demarcate sources.
	and already impacted areas. These sites must be identified and approved by the GMO.	Contractor	
	Once construction work is completed, all building material and	Contractor	Ongava Mgt Plan. SOP. Visual
	rubbish must be removed from the farm and the construction		inspections
	sites must be rehabilitated to a state as close as possible to its		
	pre-construction condition.		
	The use of graders should be avoided because they gouge roads		Visual inspections
	below the level of the surrounding surface.	Contractor	
Soil is contaminated by cement, paint,	The mixing and use of concrete and cement must takes placed	Contractor	Designated mixing areas.
thinners, hydrocarbons and other	in defined, designated areas only.		
chemicals used in the construction	All hydrocarbons and chemicals must be stored, handled and	Contractor	Lined and bunded storage areas.
process	dispensed on and over an impermeable surface.	Contractor	
	Any spillage must be contained and cleaned up with 24hrs of	Contractor	Spill kits. Drums with sealable lids.
	occurrence. The resulting waste must be sealed in an appropriate container and taken off site for disposal.		
2. Topography	appropriate container and taken on site for disposal.		
Significant alterations to the shape of	Site levelling and landscaping only where required by the	GMO	Approval from GMO
the landscape	designs.	Contractor	
	Construction site office and facilities to be dismantled and	Contractor	Site inspection
	removed once construction is completed		
3. Biodiversity			in the second
Mortality of amphibians, reptiles, birds,	Avoid any nests, burrows, dens and roosting sites.	GMO.	Identify sites with nests, burrows,
mammals. Snakes are particularly		Contractor	dens. Demarcation of sensitive sites.
vulnerable because they are usually	Educate contractor and staff to avoid sensitive sites.	1	Induction
killed on sight	Venomous snakes should be removed by a specialist, and other snakes should be avoided.	1	Induction

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
	Educate staff in the ecological value of snakes and how to avoid them.		Induction
Poaching of wildlife. Tortoises and small mammals are particularly vulnerable.	The greater area around building sites should be searched for snares during the construction phase and after construction is complete.	GMO. Contractor	Site inspections
	Restriction of contractor staff movement	Contractor	Site inspections
	Inspection of contractor staff housing to check for animal parts and/or products	Contractor	Site inspections
Damage to or removal of protected species of fauna and flora	Identify and demarcate sensitive sites. Declare them no-go zones.	GMO. Contractor	Identify and demarcate
	Education of contractor and staff.		Environmental management contract. Induction
	Continuous monitoring to ensure that no protected species are affected.		Site inspections
Damage to vegetation, leading to a loss of habitat integrity and disruption of ecosystem functions	Motorised access should be limited to existing tracks and defined development areas. Road construction takes place within a corridor of less than 16 metres wide. No off-road driving is allowed under any circumstances. Ensure that only permitted access roads and paths are used by construction workers and vehicles at all times. No firewood may be collected. Remove and relocate protected species with a good relocation/survival potential – e.g., <i>Aloe</i> spp., <i>Adenium boehmianum</i> , etc. – and include as part of the indigenous landscaping Avoid damage to and destruction of mature, protected trees Prevent damage to hills, ridges and rocky outcrops Prevent damage to ephemeral pan habitats Prevent poaching of sensitive flora Carry out regular inspections of the staff village and staff transport, looking for poached plants, animals or animal parts.	GMO Contractor	Ongava Mgt Plan. SOP. Site inspections
	Rehabilitate laydown areas, temporary construction facilities and construction tracks	-	

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
	Use only indigenous flora species for landscaping		
	Areas dominated by Dichrostachys cinerea (sicklebush) should		
	not be disturbed mechanically to avoid the area becoming even		
	more dense		
	Do not use chemicals to clear fence lines and airstrip area of		
	vegetation as these could affect adjacent areas		
Invasive vegetation causes a decline in	Construction materials must be free from seedlings and seeds	Contractor	Site inspections
habitat quality	of alien and invasive vegetation.		
Landscape disturbance from	Upon closure of construction, site must be rehabilitated using	Contractor	Inspection and sign-off by GMO
construction activities	only indigenous vegetation.		
4. Hydrology			
Erosion of river banks, washes and	Rivers to be entered and exited using only existing approaches	All	Mark entry and exit points.
drainages	and entrance/exit points.		
Surface and groundwater	The mixing and use of concrete and cement must be only take	Contractor	Identify and prepare mixing sites.
contamination	place in designated areas so as not to contaminate the sites in		
	any way.		
	No construction activities may take place within 1:100 year	All	Site inspections.
	floodline of any watercourse or within 50m of a spring.		
	Hydrocarbons and chemicals must be stored, handled and	Contractor	Designated bunded area. Use of drip
	dispensed in a manner that prevents spillage and		trays.
	contamination.		
5. Negative visual impact			
Vehicle tracks	No new roads or tracks will be developed. No off-road driving	All	Visual inspections
	or driving alongside tracks is allowed.		
Construction structures and facilities	All structures including offices, ablution, accommodation, lay-	GMO	Site inspection after completion of
	down areas, parking sites, etc. are dismantled and removed	Contractor	construction
	from the reserve after this phase.		
6. Solid waste, sewage and was	ste water discharge		
Large volumes of waste are generated,	Littering is not permitted and all waste must be placed in	All	Site inspections
causing ecological damage including	appropriate receptacles.		
visual pollution, contamination of soil	The contractor will provide animal proof receptacles to contain	Contractor	Animal-proof containers and cage.
and groundwater, decline in health of	daily refuse.		

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
wildlife, mortality of animals that ingest waste, habitat deterioration, etc.	A waste holding cage that is bird and animal proof will be used to store the solid waste before it is transported to a municipal waste facility.		
	Building rubble is consolidated in one, suitable location, removed from the area, and disposed of at an official waste facility.	Contractor	Mgr to identify suitable manner.
	Used oils and other workshop waste must be stored in airtight containers, sealed, and dispatched to an appropriate waste facility.	Contractor	Mgr to identify suitable facility.
	Fat/grease traps will be installed at kitchen and all cooking outlets.	Contractor	Site inspections
	Hygienic temporary ablutions of sufficient quantity will be provided for workers.	Contractor	Site inspections
	Ablutions are regularly serviced and the sewage disposed of at a designated location and in an environmentally appropriate manner.	Contractor	Mgr to identify suitable manner.
Unpleasant odours	Continuous monitoring and maintenance of sewerage system. Should unpleasant odours be identified, the source of the odours must be identified and remedied within 48 hours.	Contractor Contractor	Site inspections
7. Machinery & vehicles			
Noise pollution	Efficient, modern, silenced generator will be used. Power tools and motorised equipment will be used during daylight hours only.	Contractor	Site inspections
Contamination of soil and water by hydrocarbons	The contractor will ensure that all equipment is in good working order and will not contaminate soil or water resources with diesel, petrol, oil or any other foreign substances.	Contractor	Site inspections
	Drip trays to be place under any leak.	Contractor	Drip trays
	Vehicles and machinery with fuel, oil or hydraulic fluid leaks must be removed from service for repair.	Contractor	Site inspections
	No servicing or major repair of vehicles or machinery may take place on-site.	Contractor	

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
Damage to roads and tracks	The contractor shall ensure that all vehicles remain on designated roads at all times. No off road driving under any circumstances.	All	All contractors are made aware of this requirement.
	All vehicles used in the area must be operated with low tyre- pressure to minimise negative impacts on tracks and roads.	All	
8. Construction staff damage loc			
Disruption of ecological processes through physical acts and/or pollution of the local habitat.	The contractor and his employees shall adhere to all regulations prescribed by the relevant authority at all times, as well as to the management measures given in this EMP.	Contractor	Site inspections
	The contractor will ensure the proper supervision of employees at all times and their compliance with rules and regulations.	Contractor	Site inspections
	All employees will be educated as to the need to refrain from the destruction of plants and animals, as well as from indiscriminate defecation, waste disposal and pollution of soil and water resources.	Contractor	Induction
	Access to the site is restricted to the contractor's employees only.	Contractor	Site inspections
9. Bush fires			
Bush fires destroy habitats and animals, and present a risk to life and health of	Take precautions to prevent the outbreak and spreading of fires and ensure all employees are aware of the precautions.	Contractor	Induction. Site inspections.
humans.	Adequate firebreaks must be made around all infrastructure	GMO, Contractor	Grader
	Gas canisters to be housed in Bureau of Standards approved structures.	Contractor	Gas enclosures
	Fire extinguishers and other firefighting equipment are strategically located throughout construction area. Staff are trained in their usage.	Contractor	Firefighting equipment
10. Social protection			
Construction workers on site visit local shops, leading to a potential increase in sex work, domestic violence, general violence, alcohol abuse.	Awareness campaign in the community to make them aware of the dangers.	GMO, social workers, community leaders	

NATURE OF IMPACT	MANAGEMENT	RESPONSI- BILITY	TOOLS/MONITORING
	Construction staff village is fenced and staff are confined there when not being transported or working on the building site. Workers are not allowed to leave the site after dark. No vehicles are available to construction staff after dark.		
11. Health and Safety of staff			
Injury to persons	Health and Safety aspects are not addressed in this EMP because they are regulated by another ministry. It is assumed that all contractors, their employees and other persons on the construction site will adhere to the relevant regulations.	Contractor	Protective clothing as prescribed by construction regulations and best practice.
	Equipment and tools handled only by persons qualified in their use.	Contractor	Specialised training.
	First aid kit is readily available on site and staff are trained the usage. Enough people on site are trained in medical protocols to deal with an emergency.	Contractor	First aid kit. Emergency and med-evac protocol. First aid certificates.
12. Heritage			
Construction activities damage and/or destroy sites of cultural significance.	Report any find that may be of cultural or archaeological value to the National Heritage Council.	GMO, Contractor	Chance find procedure

4.2 Operational phase

Table 4. Management actions: operational phase

NATURE OF IMPACT	MANAGEMENT		TOOLS/MONITO RING
1. Biodiversity			
Game drives and operational vehicles	Guests and employees are made aware that they are in a sensitive	GMO. Guides.	Guiding Protocol, SOP
disturb animals in their daily movements,	environment, and are shown the appropriate way to interact with		
hunting and/or foraging, potentially	wildlife.		
leading to stress and mortality. Damage to	Trained guides escort guests at all times, no self-drive or walking	Guides	
and destruction of vegetation and animal	other than in designated areas.		
habitats, leading to a loss of habitat	No plants or animals may be disturbed, violated, destroyed or	All	
integrity and disruption of ecosystem	removed.		

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
functions. Decline in habitat quality,	Employees are educated to refrain from the destruction of plants	GMO	
leading to mortality and a decline in local	and animals, indiscriminate defecation, waste disposal and		
animal population integrity.	pollution of soil and water.		
	Avoid areas containing nests, burrows, dens or roosting sites.	GMO. Guides.	
	No protected, rare or endangered plants may be disturbed,	GMO. Guides.	
	damaged or removed.		
	Only permitted access roads and paths are used by employees,	All	
	guest and vehicles at all times.		
	No off-road driving is allowed.	All	
Mortality of amphibians, reptiles, birds,	Venomous snakes should be removed by a specialist, and other	LM. Guides.	Training.
mammals. Snakes are particularly	snakes should be avoided.		Guiding protocol
vulnerable because they are killed on	Educate staff in the ecological value of snakes and how to avoid	LM	Training
sight.	them rather than kill them.		
Poaching of wildlife. Tortoises and small	The lodge, back of house and surrounding areas should be	All	Visual inspections
mammals are particularly vulnerable.	searched regularly for snares.		
	Inspection of staff housing to check for plants, animals or animal	LM	Visual inspections
	parts		
Birds collide with glass windows and PV	Use as little glass as possible. Tilt glass to reflect the ground and	LM	Records of bird injury and
panels, causing mortality.	not the air. Install bird-friendly glass. Apply visual bird deterrents		mortality
	to glass.		
Damage to/removal of protected species	Identify protected species and demarcate sensitive sites.	LM. Guides.	Guiding Protocol. SOP.
of fauna and flora	Educate staff to avoid sensitive sites.	LM	Ongava Mgt Plan.
	Continuous monitoring to ensure that no protected species are	GMO. LM	
	impacted by the lodge activities.		
Damage to vegetation, leading to a loss of	Motorised access should be limited to existing tracks and defined	All	Guiding Protocol. SOP.
habitat integrity and disruption of	development areas. Road construction takes place within a		Ongava Mgt Plan.
ecosystem functions	corridor of less than 16 metres wide.		
	No off-road driving is allowed under any circumstances.	All	
	Ensure that only permitted access roads and paths are used by	All	
	construction workers and vehicles at all times.		
	Avoid damage to and destruction of mature, protected trees e.g.	All	
	Colophospermum mopane and Combretum imberbe		
	Prevent destruction of karst hills/ridges/outcrops	Guides	

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
	Prevent destruction of ephemeral pan habitats	Guides	
	Carry out regular inspections of the staff village and staff transport,	LM	
	looking for poached plants or animal parts.		
	Use only indigenous flora species as part of the landscaping at the various development sites	GMO. LM	
	Areas dominated by <i>Dichrostachys cinerea</i> (sicklebush) should not be disturbed mechanically to avoid the area becoming even more dense	GMO	
	If chemicals are used to clear fence lines and airstrip or to control invasives, care should be taken not to affect adjacent areas by, inter alia, spraying on wind-still days and directing the spray to target species.	GMO	
Dead trees and plant material play an ecological role and their removal causes a decline in habitat quality	Firewood for ambience and braai evenings is collected by reserve staff under direction of the GMO, and no harvesting of plants or collection of firewood by individuals for any other purpose is permitted.	All	SOP. Visual inspections
Invasive vegetation causes a decline in habitat quality	Regular monitoring and removal of invasive plants.	LM	SOP. Visual inspections
2. Solid waste		·	
Large volumes of waste are generated, causing ecological damage including visual	Minimise waste by buying supplies in bulk and using re-usable packaging and transport options.	LM	SOP
pollution, contamination of soil and groundwater, decline in health of wildlife,	Minimise plastic bottle waste by promoting local tap water and providing re-usable water bottles to guests.	LM. Guides.	
animals ingest waste causing mortality,	All solid waste is either recycled or appropriately disposed.	LM. MM.	
habitat deterioration, etc.	Appropriate waste bins are provided at the point of source. All waste bins are covered and secured to be animal proof.	LM. MM.	
	A bird, animal and wind proof waste holding cage is used to store solid waste until it is transported to a municipal dump site. This area is secured and has a concrete floor for maintenance and to prevent ground seepage.	ММ	
	Recyclable waste (glass, cans, plastics, paper) is stored on site until there is sufficient volume to be transported for recycling.	ММ	

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
	All waste that cannot be recycled, re-used or donated is stored on site in suitable containers, then disposed of at a registered waste facility.	MM	
Hydrocarbons contaminate the soil and groundwater, leading to deterioration of	Used hydrocarbons are collected at point of use and stored in airtight, sealed containers.	MM	SOP. Containers
ecosystem processes and a decline in habitat quality.	Used hydrocarbons are despatched to an appropriate waste facility.	GMO	SOP. Visual inspections
3. Energy			
Excessive use of fossil fuels. Carbon emissions.	Energy use (diesel, petrol, paraffin, gas) is metered and monitored. Readings are compared with target usage to ensure optimum efficiency.	LM. MM.	SOP. Logbooks, usage records, monthly reports.
	Generator is used as back-up only.	LM	SOP
	Geysers are solar powered.	GMO	
	All cooking for the lodge operation is done with gas. The staff village is provided with electric stoves.	GMO. LM	
	All electrical appliances are energy-efficient models. Fridge and freezer doors seal tightly and are kept closed.	GMO. LM	
Generator noise disrupts the sense of place and causes noise pollution.	Generator is housed in noise-limiting container; use generator only during daylight or for limited hours.	LM. MM.	SOP
4. Water reticulation and consump	tion		
Loss of water through leaks in reticulation system	Maintenance programme for pipes and tanks is in place. Leaks and faults are repaired immediately upon detection.	MM	Maintenance schedule
Overuse of groundwater	Water conservation is actively promoted among guests and staff. Guests are informed of water scarcity and encouraged to participate in water conservation.	LM	SOP. Water saving devices and measures are communicated to staff and guests
	Water usage is measured and recorded, then compared with targets to ensure optimum efficiency.	LM. MM.	Usage data, monthly reports
5. Sewage and wastewater			
Contamination of soil, as well as surface	Continuous monitoring and maintenance of the sewerage systems.	MM	Visual inspections
and groundwater, due to sewage and waste water discharge	Bio-degradable toilet cleaners are used to preserve bacteria in the septic system	LM	Bio-degradable cleaning materials
Ecological impacts	Fat/grease traps are installed at kitchen outlets and maintained.	LM. MM	Maintenance schedule

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
	Septic tanks and soak-aways are maintained.	MM	
Unpleasant odours	Qualitative monitoring of odours.	LM. MM	Inspections
	The source of unpleasant odours are identified and remedied	MM	Repairs are carried out
	within 48 hours of identification.		
6. Vehicle use			
Erosion of roads and tracks	Regular maintenance of roads and tracks.	MM	Maintenance schedule
	Implement measures to disperse concentrated water flow and	MM	Ongava Mgt Plan
	repair erosion at such locations.		
Damage to roads and tracks	Low tyre pressure on all operational vehicles.	LM. Guides.	SOP. Guiding Protocol
	Operational vehicles are 4-wheel drive and of standard width.	GMO	SOP
Off-road driving damages the structure of	No off-road driving is allowed, except in specific circumstances	All	SOP. Guiding Protocol
the soil surface and causes soil	according to the Guiding Protocol. Only permitted access roads		
compaction, which results in less water	and paths are used by employees, guests and vehicles at all times.		
infiltration and availability, limited root	Avoid sensitive soils and areas where water collects.		
penetration and less vegetation cover.	Making tracks next to a road is not allowed. Taking shortcuts is not	All	
Damaged soil crust makes the fine	allowed.		
underlayer of soil vulnerable to wind	New roads and tracks have to be authorised by the GMO and	GMO	
erosion, the resulting dust settles on	developed according to the road plan.		
plants, interferes with photosynthesis, and	Vehicles are parked only in designated parking areas.	All	
causes a decline in habitat quality.			
Exhaust emissions cause air pollution	Vehicles are serviced regularly and monitored for excessive	MM	SOP. Guiding Protocol
	exhaust emissions.		
Driving in rivers disrupts surface water	Rivers are entered and exited only at existing and designated	Guides	SOP. Guiding Protocol
hydrology	points. No off-road driving is permitted once a river is exited.		
Driving over flooded or moist areas	No driving in seasonally inundated areas when flooded or moist.	Guides	SOP. Guiding Protocol
disrupts surface water hydrology			
7. Operational activities		_	
Toiletries and cleaning chemicals cause	Every reasonable attempt is made to use only biodegradable	GMO. LM	SOP. Bio-degradable cleaning
contamination of the soil, as well as	soaps, detergents and other cleaning chemicals.		materials
surface and ground water.			
Chemicals disrupts the optimal functioning	Biodegradable and eco-friendly guest amenities are provided.	GMO. LM	SOP. Bio-degradable cleaning
of the septic system.			materials

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
Vehicle parking, servicing and other workshop activities cause soil and groundwater contamination	Vehicle servicing is done on impervious, bunded surface or over oil pans.	MM	SOP. Bunded surface, oil pans
Fuel storage and refuelling procedures cause soil and groundwater contamination	Fuel is stored in appropriate receptacles and kept on an impermeable, bunded surface.	MM	Bunded surface
	Fuel is dispensed over impervious, bunded surface or drip trays.	MM	Bunded surface, drip trays
Machinery use disturbs the natural quiet	Graders, tractors and power tools are used during daylight hours only.	GMO. MM.	Visual inspections
Contamination of soil by paint, thinners, varnish, turpentine, detergents, etc.	These substances are stored in sealed, clearly marked containers and only in designated store rooms. Care is taken to avoid spills and unnecessary contact with soil, water, vegetation and animals. Decanting is done over a drip tray to prevent spillage and further than 40 m of any natural water source.	MM	Drums with lids. Drip trays.
8. Light at night			
Upward directed lights disturb the sense of place and has significant impacts on animals.	Outdoor lights are directed to shine down.	GMO. LM	Outdoor lights
Invertebrates that are attracted to the light provide an unnatural food source for taxa such as bats and geckos. These insectivores are attracted to the food and then face conditions where they are more likely to die from causes such as collisions and predation.	No spotlights or upward facing lights are used.	GMO. LM	SOP
Nightly invertebrate fatalities may result from exhaustion or predation, potentially disrupting their population numbers and causing disturbances in ecological processes.	Amber or yellow lightbulbs with the lowest possible brightness are used.	GMO. LM	SOP. Amber or yellow lightbulbs
Night-flying birds may be disoriented by	All lights are turned off after guests have gone to their rooms.	LM	SOP
lights, increasing the risk of predation and mortality. Adult bird mortality leads to mortality of dependent chicks.	Low intensity, downward facing pathway lights that contribute to health and safety may be kept on at night.		Pathway lights

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
9. Socio-economic impacts			
A cycle of dependence and debt: Lodge staff spend their salary at bars, become dependent on alcohol and other substances, go into debt to fund their addiction, lose their jobs, and finally descend into criminality, causing more poverty. This cycle may become a long- term, intergenerational problem that the elders in the community have to deal with.	Awareness campaign in the community to make everybody aware of the dangers so that impacts can be addressed by the entire community. Awareness of domestic violence and how to handle it. Help for women and children vulnerable to domestic violence. Educate employees in basic financial management. Regular financial advice to staff. Employment contracts have a clause for random alcohol and drug testing at any time while on duty and when on the premises.	GMO, social workers, community leaders	
10. Health and safety			
Labour policies Staff and guest health and safety	 The company is in compliance with all national legislation and regulations governing workplace equity and diversity. The company is in compliance with all national legislation and regulations governing health and safety. Protective clothing, as appropriate to operations, is provided to employees. Adequate first aid kits are available and regularly maintained. A suitable number of employees is trained in first aid. On-site staff housing is secure, clean, and provided with sufficient running water, sanitation and energy for the number of personnel accommodated. Staff housing is maintained. Employees and guests are made aware of procedures to follow in the event of an emergency, e.g. whom to contact, how to contact him/her during the night; evacuation routes. Employees responsible for guest transport have valid licences and public driving permits. 	GMO. HR. LM	HR guidelines. Health & Safety annual audits. Labour matters, health and safety are not addressed in this EMP because they are regulated by other ministries and specific legislation. It is assumed that the proponent adheres to those.
Fires destroy animals and habitats, and pose a risk to life and health of humans.	All precautions are taken to prevent the outbreak and spread of fires. Employees are trained in the necessary precautions and firefighting procedures. Firefighting equipment is available, regularly maintained, and employees are trained in fire safety.	GMO. HR. LM	Fire fighting equipment. Gas storage facilities.

NATURE OF IMPACT	MANAGEMENT	RESPONSI BILITY	TOOLS/MONITO RING
	Gas canisters are stored in Bureau of Standards approved		
	structures.		
	Fire extinguishers are strategically located throughout the		
	developed area.		
11. Monitoring compliance with this EMP			
Eco Awards Namibia is an internationally	Keep certification up to date according to the programme	GMO. LM	Assessments every 3 years
recognised certification programme with	regulations.		
independent, objective assessors who			
evaluate sustainability practices.			

4.3 Closure & decommissioning phase

There is no intention to cease operations or decommission Anderssons in the foreseeable future. Since tourism has an indefinite projected lifespan, and since the land, immovable assets and business are privately owned and the owners have a vested interest in the success of the operation, there is currently no decommissioning plan except at concept level (Table 5).

Should closure and decommissioning of any of the Ongava assets be required, an extensive decommissioning plan will be drawn up and meticulously followed according to the highest standards of environmental management best practices. The priority for closure will be to return the land as closely as possible to the pre-construction condition. Measures will be taken to prevent soil erosion and provide protection so that plants can re-colonise. A site assessment will be carried out after closure to ensure that no structures remain and that site rehabilitation has been fully achieved.

Rehabilitation and Closure Objectives

There are three primary closure objectives.

- 1. Protect public health and safety, as well as health and safety of fauna and flora.
- 2. Alleviate or eliminate environmental damage.
- 3. Return the site to its original, pre-development condition.

Table 5. Decommissioning outline.

NATURE OF IMPACT	MITIGATION
Infrastructure	
Buildings and support infrastructure	All structures will be completely removed
Roads and tracks	Roads and tracks will be rehabilitated to a state as close as possible to the original condition of the area.
Pathways	All pathways will be rehabilitated to a state as close as possible to the pre-construction condition.
Destruction of & damage to plants; of	listurbance of soil
Soil erosion	The site will be re-vegetated. If this is not appropriate or possible, then it will be covered with scrub to prevent soil erosion and to provide protection for colonising vegetation.
Alien plant invasion	Follow-ups will be done to ensure that alien or invasive plants and weeds have not flourished.
Damage to vegetation	Construction guidelines will apply to ensure limited impact.
Soil	
Compaction of and damage to soils, contamination	Construction guidelines will apply to ensure limited impact.
Hydrology	
Contamination of ground and surface water, erosion of river banks	Construction guidelines will apply to ensure limited impact.
Animals: habitat disturbance; death	of animals
Death of animals, poaching, habitat or behaviour disturbance	Construction guidelines will apply to ensure limited impact.
Negative visual impact	

NATURE OF IMPACT	MITIGATION
Sewerage system	Septic tanks will be drained and removed. The area (including soak-away) will be filled with rubble or with fill from an environmentally acceptable source.
Water pipes	All pipes will be removed and trenches will be filled in.
Electricity lines	All electrical infrastructure will be removed from the property.
Foundations, concrete slabs, holes in ground	All structures in or on the ground will be removed. All holes, pits and depressions will be filled.
Ground surface retains signs of development	Ground surface will be raked, swept and levelled as appropriate. Rocks, stones and vegetable matter will be scattered as appropriate to return the ground to a state as close as possible to its original condition.
Temporary structures and facilities	Contractor site office, facilities and structures to be dismantled and removed once decommissioning is completed.
Solid waste, sewage and waste wate	er discharge
Large volumes of rubble, materials and equipment cause ecological damage	Construction guidelines will apply to ensure limited impact.
Machinery & vehicles: noise, contam	nination of soil and water by liquids, erosion of roads
Noise, contamination of soil and water, erosion	Construction guidelines will apply to ensure limited impact.
Construction staff damage local env	ironment
Disruption of ecological processes through physical acts and/or pollution	Construction guidelines will apply to ensure limited impact.
Bush fires: destruction of habitat and	d death of animals
Outbreak of fire	Construction guidelines will apply to ensure limited impact.
Health and Safety of staff	
Injury to persons	Construction guidelines will apply to ensure limited impact.

4.4 Heritage chance find procedure

When a heritage site or item of cultural significance is discovered during any phase of the development, it has to be reported to the National Heritage Council to ensure compliance with the National Heritage Act (27 of 2004), section 55: "a person who discovers any archaeological object must as soon as practicable report the discovery to the Council".

The procedure to follow when a potential heritage item is discovered by chance, whether by a contractor, guest or staff member, is given in

Table 6.

Table 6. Heritage chance find procedure

1. Responsibilit	ies			
Finder	The person who discovers archaeological or heritage items			
Supervisor	Secure site and advise management			
Senior manager	Report finding to NHC. Determine safe working boundaries			
Archaeologist	Inspect, identify, advise management, and recover the items			
2. Actions				
Person	Actions			
Finder	If operating machinery or equipment, stop work			
	Demarcate the site			
	Take GPS coordinates if possible			
	Report findings to supervisor			
Supervisor	Report findings, site location and actions taken to superintendent.			
	Cease any works in immediate vicinity			
Senior manager	Visit site and determine whether work can proceed without damage to findings			
	Determine and mark exclusion boundary			
	Site location and details to be added to Archaeological Heritage Geographical Information System (GIS) for field confirmation by archaeologist			
Archaeologist	Inspect site and confirm addition to GIS			
	Advise NHC and request written permission to remove findings from work area			
	Recovery, packaging, and labelling of findings for transfer to National Museum			
3. Discovery of	human remains			
	Actions as above			
	Advise and liaise with NHC and Police			
	Recovery of remains and removal to National Museum or National Forensic Laboratory, as directed by the police and NHC			

5 MONITORING

This EMP can only provide value in preventing and managing potential impacts if the proponent implements it. Compliance with the EMP must be monitored regularly, and adaptive management applied based on the results of monitoring.

Compliance with the management measures (Section 4, Table 3 and Table 4) is monitored regularly. Key aspects to monitor are given in Table 7 but the general manager and lodge manager may add to these and may delegate specific tasks as required by the lodge operations.

Component	Measurable	Frequency	Person
Water consumption	Usage in litres per total bednight *	Monthly	LM
Groundwater quality	Fitness for human consumption	Annually	MM
Groundwater availability	Levels and pumping volumes at all production boreholes	Annually	MM
Sewerage system	Septic tanks Monthly		MM
Sewerage pipes	Leaks	Monthly	MM
Grey water pipes	Leaks	Monthly	MM
Fat traps	Functioning equipment, clean filter	Weekly	LM, MM
Water installations	Functioning of purification equipment	Weekly	LM, MM
Trickle filter plant	Functioning equipment	Weekly	LM, MM
Solid waste	Secure storage of solid waste	Daily	LM
Solid waste	Removal of waste from site and secure storage of waste	Daily, weekly	LM, MM
Soak-aways	Drainage	Weekly	MM
Tracks & roads	Erosion	Weekly	FM
Wildlife	Record species of special interest	On-going	LM, guides
Bird mortality/injury	Collision impact of birds with glass and PV panels	Weekly & as it occurs	LM
Grid electricity	Nampower records: usage per total bednight *	Monthly	LM
Diesel	Records at source tanks and generator	Daily. Monthly summary	LM
Gas	Usage	Monthly	LM
Vehicles	Oil leaks, emissions, tyres	Daily	Guides, MM

Table 7.	Mitigation	components to	be	monitored
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* Total bednights include every person using lodge resources: guests, staff, managers, scientists, contractors

5.1 Water monitoring

The aim of the water monitoring programme is to assess the consumption and impact of water use on groundwater quality and availability. The Maintenance and Asset Manager carries out the monitoring programme.

- 1. Visual inspection of borrow pits for any waste or groundwater seepage and immediate removal of contaminants.
- 2. Inspection of wastewater treatment facility, sampling and analysis of effluent.
- 3. Ensure minimal leakage from evaporation ponds.
- 4. Ensuring landscape irrigation is not carried out in areas of human activity.
- 5. Monitor abstraction rates and groundwater level at all production boreholes.
- 6. Assessment of abstraction rate yearly and adjustment as required for sustainable utilisation.
- 7. Rainfall monitoring (daily)
- 8. Considering the shallow water table, it is essential to prevent groundwater contamination by ensuring that septic tanks are sealed and all pipes leak-free.
- 9. Groundwater samples are taken from production boreholes to monitor contamination from all lodge discharges, both point source and non-point source. The guidelines for effluent monitoring in the Effluent Discharge permit must be followed.
- 10. Groundwater quality is tested for mineral and bacterial content to ensure that it is fit for human consumption. Samples must be taken from a point of use (e.g. a tap in the kitchen) and from production boreholes.

5.2 Energy monitoring

Electricity: grid source is monitored monthly

PV energy is used for hot water in a geyser hybrid system

Gas: monitored monthly

Diesel: recorded daily and monthly summaries are made

Firewood: only dead wood is collected and sourced from de-bushing operations. Fires are used only for ambience in the evenings and no cooking or heating is done with fire, either in the lodge or in the staff village.

5.3 Environmental Performance Assessment

Environmental auditing is aimed at ensuring continual improvement in environmental performance. The lodge keeps records of environmental monitoring data, which is included in an annual report to the Board of Ongava. The annual report contains details of all changes and new projects. Monthly summaries of data are used to assess the level of compliance with environmental legislative requirements and the commitments made in the EMP.

6 EMERGENCY PROCEDURES

The project may cause impacts of low to medium-high significance, but they can all be mitigated to very low significance. Sources of risk include sewage and chemical spills.

6.1 Sewage or waste water spills

Should leaks in the sewerage or waste water system be detected, the following actions will be taken:

- The spillage will be contained and the source turned off if possible. Depending on the amount of spillage, it will be remediated in situ or in the case of a large spillage that is contained, it will be removed.
- The reason for the spillage will be rectified.

6.2 Hydrocarbon or chemical spills

The objective is to contain and remediate spillages of hydrocarbons (petrol, diesel, oil, lubricants) or chemicals (pool cleaners, housekeeping chemicals).

- Contact management in the event of a spill.
- The spillage is contained and the source turned off if possible.
- Management organises a team to assist with cleaning.
- Demarcate the spilled area where practicable.
- Move the spill kits to the area.
- Scoop up the spilled substance along with contaminated soil or any absorbent material using the spill kit shovel. Place the scooped up substance into plastic bags.
- The waste bags must be marked as hazardous waste and disposed of as hazardous waste.
- The leakage must be stopped and reason for spill must be rectified.
- Diesel tanks are mounted on bunded concrete floors to contain spills.

7 CONCLUSION

This Environmental Management Plan describes the management measures that are implemented with the aim of preventing or mitigating negative environmental impacts and enhancing positive impacts that the lodge activities may have. It is a legal document that commits Ongava Game Reserve (Pty) Ltd to comply with all the management measures, monitoring programmes and other plans as presented in this document.

A high level of compliance with the measures in the EMP was observed during the site visit and it is recommended that the ECC for Anderssons at Ongava be renewed for a further 3 years.

APPENDIX I. ECC 2021

