

# ENVIRONMENTAL MANAGEMENT PLAN

## HOBATERE LODGE



Prepared for Journeys Namibia Management Group (Pty) Ltd in support of application for renewal of Environmental Clearance

**September 2024**

**ECC APPLICATION # 240516003683**

PROJECT	<b>Renewal of Environmental Clearance: Hobatere Lodge</b>
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## **1 INTRODUCTION**

The proponent, Journeys Namibia Management Group (Pty) Ltd, is the managing operator of the Hobatere North Concession and contracted Henriette Potgieter to apply for renewal of the Environmental Clearance Certificate that expired on 30 October 2018.

No construction has taken place since 2018, and the physical footprint of the project remains unchanged. This document presents a new, updated Environmental Management Plan (EMP). It includes current procedures and technology used by the lodge that were either unavailable or not applicable in 2017 when the current EMP was written.

### **1.1 This document**

The lodge was visited for two days, 29 April to 1 May 2024. The general manager of the lodge acted as guide during a thorough inspection of the site and provided information freely. Data collected during the site visit and information from the Head Office of Journeys Namibia were used to draw up this document.

An environmental audit was conducted during the site visit, assessing compliance with the current EMP by reviewing the implementation and efficacy of mitigation measures. The results of the audit are presented in Section 3.

### **1.2 Eco Awards Namibia**

The Eco Awards Namibia certification programme is recognised by international tourism certification schemes and most importantly, the Ministry of Environment, Forestry and Tourism (MEFT) is an active member of the Eco Awards alliance.

Independent assessors go to a lodge for two days where they evaluate the sustainability and environmental sensitivity of the operation against an extensive set of criteria based on international best practice. The independence and status of the programme result in audits that provide reliable information on the sustainability practices of a lodge.

Hobatere Lodge scored 87% in a re-assessment conducted in July 2024.

## **2 PROJECT DESCRIPTION**

### **2.1 Location**

Hobatere lies in the #Khoadi-//Hôas Conservancy area, 60 km from Kamanjab with access from the C35 road.

### **2.2 Guest facilities**

#### **2.2.1 Main area**

The main lodge has a restaurant, bar, dining area, curio shop, reception and kitchen with associated storage and service areas.

Guest parking is provided for 10 vehicles on a compacted dirt surface in front of reception.

### **2.2.2 Guest units**

6 en suite guest rooms, 6 en suite bungalows and 2 en suite guide rooms.  
Total of 30 beds.

### **2.3 Staff accommodation**

Staff village is fenced and consists of 6 freestanding units, each with 1 single and 2 double bedrooms, a bathroom with shower, basin and toilet, and a living area with gas stove. Senior staff are housed in 4 single rooms, all en suite.

The manager's house is located outside the staff village and has 1 bathroom, 2 bedrooms and a living area. There is also a director's house with 1 bathroom, 1 bedroom and a living area.

### **2.4 Airstrip**

Located 2 km from the lodge at Lat 19.332500 Long 14.370000.  
There are two 2 public toilets and 5 storage units at the airstrip.

### **2.5 Support infrastructure**

Three storerooms: maintenance, staff rations and housekeeping.  
Workshop.

### **2.6 Electricity**

Electricity for all operations is provided by 60 x 420W Canadian Solar Modules with 30 x BYD 5 kWh Lithium Batteries and 3 x SMA Sunny Island 8.0H-13 battery inverters. A back-up generator is used to boost supply on overcast and peak occupancy days. The generator and battery bank are mounted on a cement floor in a brick room with corrugated iron roof.

Hot water is supplied by solar geysers in the following locations:

Guest rooms: 4

Main area: 2

Staff accommodation: 6

Manager's house: 1

House near workshop: 1

Laundry: 2

A Honda 4.2 kVA generator is used to pump water for wild animal waterholes.

### **2.7 Water**

Source: 3 boreholes, one of which is brackish.

The game viewing hide has a borehole with a solar pump that pumps to two 10 000 litre tanks.

The lodge is supplied by a borehole with an electrical pump. Water goes from the borehole to a dam near the workshop, and from there to holding tanks and the reticulation system.

### **2.8 Sewerage and wastewater**

Four septic waste systems:

- Main area and 9 guest rooms

- Three separate guest rooms
- Staff village
- Laundry and director's house

The overflow goes into a holding tank which is emptied as needed by a contractor and the effluent is removed from the concession by the contractor. The septic tanks are treated with chemicals every time they are emptied.

## **2.9 Solid waste**

Solid waste is separated at source. Food waste is given to the neighbouring community for livestock feed and cardboard boxes are burnt on site. Recyclable waste is bagged and held on the back of a truck. Once a week a contractor from the local community collects the waste from Hobatere, then Hoada Campsite and Grootberg lodge, and then delivers it to the Palmwag junction where the food supply truck for these lodges, now empty, takes it to Windhoek.

## **2.10 Access**

Regular road maintenance is carried out and erosion is prevented by putting gravel in areas where the soil is likely to be washed away.



### 3 AUDIT REPORT

During the site visit the general manager and maintenance manager provided a guided tour and information for an environmental audit conducted by the Practitioner. The audit assessed compliance with the current EMP (drawn up in 2016) by reviewing the implementation and efficacy of mitigation measures.

Adherence to the provisions of the current EMP was audited by the Practitioner and the results are given in Table 1.

Table 1. Audit of compliance with current EMP

MANAGEMENT MEASURES	AUDIT 2024
<b>Erosion and damage to roads and tracks.</b>	
Motorised access must be limited to existing roads. No new roads or tracks should be developed.	Comply
No off road driving under any circumstances.	Signs of off-road driving were observed.
Areas with sensitive, compactable soils should be avoided (vehicles compact the soil, preventing water and root penetration and tracks remain visible for years).	All the game drive routes could not be inspected, but MEFT officials from Galton Gate regularly patrol the game drive routes and are in a good position to monitor compliance.
All vehicle parking to take place in designated parking areas	Comply
Implement measures to disperse concentrated water flow and repair any erosion that has resulted.	Comply
<b>Contamination of soil</b>	
Oil pans to be used in vehicle parking areas (under vehicles that leak).	No bunded areas or drip trays. Signs of oil spillage on the ground at the workshop.
Vehicle servicing to take place on impervious, bunded surfaces or over oil pans	Cement floor, but no bunding or other methods of containment of hydrocarbon spills.
Used oil to be stored in appropriate receptacle and despatched to appropriate waste facility.	Stored in a sealed drum.
Fuel storage in appropriate receptacle and in bunded areas.	Fuel is stored in 200 litre drums on a cement floor, but the floor is not bunded and signs of spillage were present.
Fuel dispensing to take place over bunded areas.	No bunded areas or containment measures are in place.
<b>Fauna</b>	
Guests and employees should still be sensitised to the need to be aware of wildlife and of the appropriate way to interact with wildlife	Comply
Trained guides to escort guests at all times, no self-drive or walking other than in accepted designated areas	Comply

MANAGEMENT MEASURES	AUDIT 2024
Large animal viewing must be conducted according to recognised or approved conservation protocols	
No game or other natural resource and/or occurrences may be disturbed, violated, mutilated, destroyed, killed or removed.	Comply
Avoid any sites with nests, burrows, dens etc. of protected species.	Comply
No game or other natural resource and/or occurrences may be disturbed, violated, mutilated, destroyed, killed or removed.	Comply
The greater area around the site should be regularly searched for snares.	Comply
<b>Flora</b>	
No protected plants may be disturbed by the operational activities or be damaged or removed.	Comply
Ensure that only permitted access roads and paths are used by employees, guest and vehicles at all times.	Comply
The Concessionaire shall preserve the Concession Area and its game and botanical species and ensure that all its guests, visitors and employees who enter the Concession Area shall do likewise.	Comply
No plant life or other natural resource and/or occurrences may be disturbed, violated, mutilated, destroyed, killed or removed.	Comply
Firewood collection may only take place in areas approved by the Conservancy Warden.	No firewood is collected on the concession. Firewood is bought from communities and used for ambience only.
The area will be kept free of any alien vegetation that has or may inadvertently be introduced.	A small grass lawn is present.
<b>Disruptions to surface water</b>	
Rivers are to be entered and exited only at existing points. No off-road driving is permitted once the river is exited and, no driving in any seasonally inundated areas when flooded or moist.	Comply
<b>Contamination and depletion of groundwater resources</b>	
Water conservation must be actively promoted. Guests to be informed of water scarcity and encouraged to participate in water conservation.	Comply

<b>MANAGEMENT MEASURES</b>	<b>AUDIT 2024</b>
Measure and record water use (compare with targets for water use).	No water meter
Repair any leak in the water reticulation system within 24hrs of detection	Comply
The use of biodegradable and eco-friendly soaps and detergents should be encouraged.	Comply
The diesel storage tank volumes will be carefully monitored in order to ensure no leakage.	Comply
<b>Burning of waste and cooking fires cause air pollution</b>	
Burning is allowed for limited amounts of cardboard packaging, and only if the material is not suitable for recycling.	Comply
<b>Noise</b>	
Natural quiet should be achieved wherever possible (especially away from main routes), thus avoiding use of generators at lodges	Comply
<b>Visual environment</b>	
Motorised accessibility should be limited to existing roads and tracks.	Comply theoretically, but in practice there are secondary tracks and signs of off-road driving.
Only subdued or directional lighting may be used.	Comply
<b>Large volumes of waste are generated</b>	
All physical waste should be managed and either recycled or appropriately disposed.	Comply
No waste of any sort is to be buried in riverbeds.	Comply
Appropriate waste bins must be provided at the point of source. All waste bins will be covered and secured to be animal proof.	Comply
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 dump site. This area should be fenced and secured and it should have a concrete floor to ensure that it can be suitably maintained and no ground seepage will occur.	No compliance. Green plastic bags with waste are kept on the bed of a lorry. It is high enough to prevent hyaena and jackal access, but birds, baboons and cats can easily reach the waste. The bags are closed and wind-blown detritus is unlikely but possible.
If possible and appropriate, glass will be stored on site in suitable containers until there is sufficient to be transported for recycling.	Comply
If possible and appropriate, tins, cans and foil will be stored on site in suitable containers until there is sufficient to be transported for recycling.	Comply

<b>MANAGEMENT MEASURES</b>	<b>AUDIT 2024</b>
If possible and appropriate, plastics will be stored on site in suitable containers until there is sufficient to be transported for recycling.	Comply
If possible and appropriate, paper and cardboard will be stored on site in suitable containers until there is sufficient to be transported for recycling.	Cardboard boxes are burnt on site.
All waste that cannot be recycled or sold will be stored on site in suitable containers. This must be disposed of at a permitted waste site.	Comply
Limited amounts of packaging may be burned in a designated pit.	Comply
Organic waste may be buried in suitably designed "animal –proof" deep pits.	Comply. No burying of waste takes place. Organic waste is taken to a neighbouring farm where it is fed to livestock.
Used oil to be dispatched to an appropriate waste facility.	Comply
<b>Sewage and waste water management</b>	
Fat/grease traps at kitchen outlets to be maintained.	No fat traps
Septic tanks and soak-aways to be maintained.	Comply
Qualitative monitoring of odours will take place.	Comply
Should unpleasant odours be identified, the source of the odours must be identified and the remedied within 1 week of identification.	Comply
<b>Energy</b>	
Energy use to be monitored and measured in order to ensure that efficiency is striven for.	Comply
Energy saving measures to be continually implemented (lights, use of hybrid solar and diesel generator etc.)	Comply
Diesel generator to only be used as a backup.	Comply
<b>Exhaust emissions cause air pollution, and oil leaks contaminate the soil</b>	
Ensure that all equipment is in good working order and does not contaminate soil or water resources with diesel, petrol, oil or any other foreign substances.	There is some contamination from fuel dispensing area and the workshop, but that is not due to faulty equipment, rather to no suitable area being provided.
All vehicles used must be operated with low tyre-pressure to minimise negative impacts on tracks and roads.	Comply
To limit track damage all vehicles used will be four-wheel-drive and will be of standard width.	Comply
<b>Employees and guests on site</b>	
The staff and guests shall adhere to any rules and regulations that the MEFT may prescribe at	Comply

<b>MANAGEMENT MEASURES</b>	<b>AUDIT 2024</b>
all times as well as the management measures included in this document.	
The site management must ensure the proper supervision of employees and guests at all times and their abidance to any rules and regulations.	Comply
Access to the site must be restricted to employees and guests only.	Comply
All employees must be educated to the need to refrain from the destruction of plants and animals, as well as from indiscriminate defecation, waste disposal and or pollution of soil and water resources.	
The likelihood of rising river water levels is high during the rainy season. Storms in upper catchment areas may not be observed from the mid-lower reaches of rivers, so activities adjacent to rivers should be avoided during rainy periods.	Comply
<b>Fire</b>	
The proponent must take all precautions to prevent the outbreak and spreading of fires and is to ensure all employees are aware of the necessary precautions.	Comply
Gas canisters to be housed in Bureau of Standards approved structures.	No
Fire extinguishers to be strategically located throughout developed area.	Comply
<b>EMP implementation</b>	
Bi-annual internal audits of EMP compliance	No
Independent expert to conduct annual compliance audit.	Yes
Submission of external annual report to environmental authorities	No

## **4 ENVIRONMENTAL MANAGEMENT**

### **4.1 Environmental aspects associated with this project:**

- Soil
- Fauna
- Flora
- Surface water resources
- Groundwater resources
- Visual environment

- Sewage and wastewater management
- Energy efficiency
- General environmental issues

#### 4.2 Aim of this EMP

The aim of this EMP is to identify potential negative impacts and to suggest management actions that can prevent or mitigate each identified negative impact. Avoidance of damage to the natural environment should be strived for above all.

Protocols and procedures that ensure the effective implementation of management actions are given, as well as the persons or teams responsible. All staff members of the lodge are required to have a working knowledge of the management actions and of their own roles in fulfilling them. Contractors are also obliged to be informed of the EMP and to follow its provisions.

This EMP is a live document and will be updated as new information, data, policies, authority guidelines and technologies develop.

#### 4.3 Responsibility

The proponent is ultimately responsible for the implementation of this EMP.

The teams and/or persons who are expected to implement the EMP in situ, and their roles and responsibilities as defined by Journeys Namibia are listed in Table 2.

Table 2. Persons and teams responsible for implementation.

Person/Team	Responsibilities
<b>OPS:</b> Operations Manager/Director	Overall responsibility for implementation of EMP. Support to the construction and other contractors. Support and direction to the lodge staff for implementation of the EMP.
<b>Maint:</b> Maintenance team	Maintenance and cleaning of buildings, vehicles, machinery, sewerage and waste systems at Game Lodge.
<b>Mgt:</b> Management team at the lodge	Overall management of the lodge. Supervision of all staff, including maintenance team and guides.
<b>Guides:</b> Employed by the lodge	Transport of guests. Ensuring appropriate human-wildlife interactions.
<b>Contractor:</b> Construction, vehicle and other maintenance	Ensuring their staff and sub-contractors are informed of the measures in the EMP. Ensuring that their staff and sub-contractors adhere to all the EMP measures.

## 5 MANAGEMENT MEASURES

### 5.1 Construction phase

This section aims to inform possible future construction seeing as none is planned for the foreseeable future.

Table 3. Prevention and management measures during construction

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
<b>Soil</b>		
Compaction of and damage to soils	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 camp area.	Ops & Contractor
Soil erosion	No construction or activities within areas containing highly erodible dispersed, fine-particle, sodic etc. soils	Ops & Contractor
	Prevent water runoff from concentrating unnaturally in any one area.	Contractor
	Any water pipes shall be installed in such a way as to minimise the chance of erosion.	Contractor
Soil contamination	The mixing and use of concrete and cement must takes placed in designated areas so as not to contaminate the sites in any way.	Contractor
	All hydrocarbons and chemicals must be stored, handled and dispensed so as not to contaminate sites in any way.	Contractor
	Any spillage must be contained and cleaned up with 24hrs of occurrence. The resulting waste must be properly disposed of.	Contractor
Soil resources and land capability	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.	Ops & Contractor
	No construction activities are to take place outside the defined infrastructure footprint areas.	Contractor
	Quarries/borrow pits may not be dug without formal registration/permission.	Ops & Contractor
	The movement of construction crew must be within the demarcated site boundaries at all times.	Contractor
	A suitably positioned construction material stockpiling and mixing area must be chosen and demarcated. This must be located in an area that is already transformed or disturbed.	Ops & Contractor
	Access routes from the stockpiling areas to the building sites should be demarcated and use enforced. Existing roads should be used for these purposes.	Ops & Contractor
	Sand and rocks utilised for construction must be from defined and already impacted areas. These sites must be identified and approved by the Director of Operations.	Contractor
	Once construction work is completed, all excess material must be removed and the site suitably rehabilitated.	Contractor
	The use of graders should be avoided because they gouge roads below the level of the surrounding surface.	Contractor

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
<b>Topography</b>		
Significant alterations to the shape of the landscape	Site levelling and landscaping only where required by the designs. No earthmoving equipment may be used without the express permission of MEFT.	Ops & Contractor
	Construction site office and facilities to be dismantled and removed once construction is completed	Ops & Contractor
<b>Biodiversity</b>		
Death of amphibians, reptiles, birds	Avoid any sites with nests, burrows, dens etc. of protected species.	Ops & Contractor
Habitat destruction	See under SOIL	Ops & Contractor
Poaching, especially tortoises and small mammals	The greater area around building sites should be searched for snares during the construction phase and after construction is complete.	Ops
	Restriction of contractor staff movement	Ops
	Inspection of contractor staff housing	Ops
Damage to/removal of protected species	Continuous monitoring to ensure that no protected species are impacted.	Ops & Contractor
Damage to vegetation	Motorised access should be limited to existing tracks and defined development areas. As far as possible, no new roads or tracks should be developed within this area.	All
	The clearance of or damage to trees and shrubs beyond the development footprint must be prevented.	All
	As many trees and shrubs as possible should be retained within the development area.	All
	All mature trees and shrubs remain.	All
	Ensure that only permitted access roads and paths are used by construction workers and vehicles at all times.	All
	No firewood may be collected.	All
Spread of invasive vegetation	No alien invasive or plants that do not occur locally will be planted.	All
	Introduced construction materials must be free from seedlings and seeds of alien invasive vegetation.	Ops & Contractor
Landscape disturbance from construction activities	Upon closure of construction, site must be rehabilitated using only indigenous vegetation.	Ops & Contractor
<b>Hydrology</b>		
Groundwater contamination	No construction activities may take place within 1:100 year flood line of any watercourse or within 50m of a spring.	All
Erosion of river banks	Rivers to be entered and exited using only existing approaches and entrance/exit points.	All
Surface water contamination	The mixing and use of concrete and cement must be only take place in designated areas so as not to contaminate the sites in any way.	Ops & Contractor



NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
	All hydrocarbons and chemicals must be stored, handled and dispensed so as not to contaminate sites in any way.	Ops & Contractor
<b>Visual impact</b>		
Vehicle tracks	As far as possible, no new roads or tracks should be developed. Building materials should be transported on either existing tracks or tracks that will be used during operations. Contractors and their staff are made aware of driving protocols and heavy fines are levied for any form of off-road driving.	All
Construction structures and temporary facilities	Construction site office and other temporary facilities are put on sites that will definitely be used during the operational phase. Everything is dismantled and removed after construction.	Ops & Contractor
Support infrastructure is ugly	Towers, raised tanks, communication infrastructure, solar panels and other prominent maintenance structures and equipment should be sited out of sight of the public. High structures should be sited below the skyline of ridges/koppies/dunes.	Ops.
	Road signs should be made from materials and in colours that contribute to the sense of place.	
	Pipes and cables are buried or otherwise hidden from view.	
Buildings intrude on a pristine landscape and detract from a sense of place	The lodge, back of house and support buildings should be designed to blend into the natural environment. Shapes should not contrast with the surrounding area (e.g. no high rise buildings) and colours should be chosen to be in harmony with the environment.	
<b>Solid waste, sewage and waste water discharge</b>		
Ecological damage from solid waste	Littering is not permitted and all waste must be placed in appropriate receptacles.	All
	The contractor will provide a suitable, animal proof receptacle to contain all daily refuse. 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 dump site.	Contractor
	All building rubble is consolidated in a suitable location, removed from the area and disposed of in a suitable and legal location in an environmentally acceptable manner.	Contractor
	Used oils and other workshop waste to be stored in suitable receptacles and dispatched to appropriate waste facility.	Contractor
Ecological damage from sewage and waste water discharge	Fat/grease traps will be installed at kitchen outlets.	Ops & Contractor
	Adequate temporary ablutions to be provided for workers.	Contractor
	Ablutions are regularly serviced and the sewage disposed of at a suitable designated location and in an environmentally appropriate manner.	Contractor
Unpleasant odours	Regular maintenance of sewerage system as per company policies & procedures	Contractor
	Should unpleasant odours be identified, the source of the odours must be identified and remedied within one day.	Contractor

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
<b>Machinery &amp; vehicles</b>		
Noise pollution	Efficient, modern, silenced generator only.	Contractor
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
	Drip trays to be placed under any leak that is identified.	Contractor
	Vehicles and machinery with fuel, oil or hydraulic fluid leaks must be removed from service for repair.	Contractor
	No servicing or major repair of vehicles and machinery may take place on-site.	Contractor
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 vehicles used in the area must be operated with low tyre-pressure to minimise negative impacts on tracks and roads.	All
<b>Construction staff damage local environment</b>		
Disruption of ecological processes through physical acts and/or pollution	The contractor and his employees shall adhere to all rules and regulations prescribed by the relevant authority at all times, as well as to the management measures presented in this document.	Contractor
	The contractor will ensure the proper supervision of employees at all times and their compliance with rules and regulations.	Contractor
	All employees will be educated 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.	Ops & Contractor
	Access to the site is restricted to contractor's employees only.	Ops & Contractor
<b>Bush fires: destruction of habitat and death of animals</b>		
Outbreak of fire	Take all precautions to prevent the outbreak and spreading of fires and ensure all employees are aware of the necessary precautions.	Ops & Contractor
	Gas canisters to be housed in Bureau of Standards approved structures.	Ops & Contractor
Fire in construction area spreads to bush	Fire extinguishers strategically located throughout construction area.	Ops & Contractor
	Bush firefighting equipment placed with easy access	Ops & Contractor
<b>Health and Safety of staff</b>		
Injury to persons	Compliance with Health & Safety regulations: all persons on the construction site should adhere to industry Health & Safety regulations at all times	Contractor
	Equipment and tools handled only by persons qualified in their use.	Contractor
Burn injuries	Fire extinguishers strategically located on construction site and staff trained in usage.	Contractor

## 5.2 Operational phase

Table 4 contains a new, updated set of management/mitigation measures for the operational phase.

Table 4. Prevention and management measures during operations

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
<b>BIODIVERSITY</b>		
Impacts associated with human-wildlife interaction	Guests and employees are made aware that they are in a sensitive environment, and are taught the appropriate way to interact with wildlife.	Mgt. Guides
Damage to animal habitats, including plants	Trained guides escort guests at all times, no self-drive or walking other than in designated areas.	Guides
	No harvesting of plants or collection of firewood should be permitted. No plants or animals may be disturbed, violated, destroyed or removed.	All
	Employees should be educated to refrain from the destruction of plants and animals, indiscriminate defecation, waste disposal and pollution of soil and water.	Mgt.
Animal species and/or individuals are disturbed in their daily behaviour or destroyed by moving vehicles, earthworks, etc.	No hunting, consumption or possession of game or game products should be allowed. The police and MEFT should be notified immediately if anyone, including an employee or contractor, is found with a firearm, wild animal, game meat or other wild animal products, e.g. skins, pangolin scales, tortoise shells.	All
	Employees and contractors should be educated on this provision, and be made aware IN WRITING of the consequences of transgression. Any breach of this provision should be treated as a criminal offence.	Ops. Mgt.
	Game viewing protocols should be followed, especially in the vicinity of dens and burrows.	Mgt. Guides
	Avoid areas with nests, dens or burrows, both on the lodge site and while on game drive.	All
	Nests that are found on buildings or other infrastructure may not be removed or destroyed. If the nest or animal presence poses a health or safety risk, call in a specialist to deal with it.	All

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
	Reptiles are particularly vulnerable to destruction when roads are graded or any form of earthworks is being done. Snakes are often killed on sight regardless of its venomousness, and tortoises are killed for food. Ongoing education of staff and contractors is essential to prevent the arbitrary killing of snakes, tortoises and other reptiles, many of which are protected species.	Ops. Mgt.
	The lodge site, its boundaries and game drive routes should be inspected for snares and traps, and when found they should be removed immediately.	Mgt. Maint.
Plant species are affected by operational activities, maintenance or construction.	No protected, rare or endangered plants should be disturbed, damaged or removed.	All
	Identify rare, endemic and protected plants before any construction or land clearing activities, fence the plants and/or assemblage of plants, and ensure the area is treated as a no-go zone.	All
	Trees and shrubs should be inspected for bird and mammal nests, and signs of breeding and roosting before any land clearing commences.	Mgt
Damage to plants	Only permitted access roads and paths should be used by employees, guest and vehicles at all times.	All
	No off-road driving should be allowed.	All
Spread of invasive vegetation	The area should be kept free of alien and invasive vegetation.	Mgt. Ops.
<b>SOLID WASTE</b>		
Large volumes of waste are generated	Minimise waste by buying supplies in bulk and using re-usable packaging and transport options.	Ops.
	Minimise water bottle waste by promoting local tap water and providing re-usable water bottles to guests.	Mgt. Guides
Waste management	All physical waste should be either recycled or appropriately disposed.	Mgt. Maint.
	No waste may be buried on the concession.	All
	Appropriate waste bins are provided at the point of source. All waste bins are covered and secured to be animal proof.	Mgt.
	Separation of waste should be done at point of source.	All

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
	Temporary storage of waste should be in an enclosure that is bird, animal and wind proof. The floor should be impermeable to prevent ground seepage.	Ops. Maint.
	Recyclable waste (glass, cans, plastics, paper) should be stored on site and then transported for recycling.	Mgt
	Organic waste should be donated to a neighbouring community or sealed and removed from the concession with the recyclable waste.	Mgt
	All waste that cannot be recycled or sold should be stored on site in suitable containers, then disposed of at a permitted waste site.	Maint.
	Limited amounts of packaging may be burned in an incinerator. The incinerator should be enclosed and have a high enough chimney so that sparks or burning material cannot escape.	Maint.
Hydrocarbons cause soil and groundwater contamination	Used hydrocarbons should be collected at point of use and stored in sealed containers.	Maint.
	Used hydrocarbons should be despatched to an appropriate waste facility.	Mgt.
<b>ENERGY</b>		
Excessive use of fossil fuels	Energy use (electricity, diesel, petrol, paraffin, gas) should be metered and monitored. Readings should be compared with target usage to ensure optimum efficiency.	Mgt. Maint.
	A solar system provides at least 80% of energy for the entire operation, including staff and maintenance areas.	
	Generator should be used as back-up only.	Mgt.
	Geysers are solar powered.	Ops.
	All cooking should be done with gas.	Ops. Mgt.
	All electrical appliances are energy-efficient models. Fridge and freezer doors seal tightly and are kept closed.	Ops. Mgt.
Generator noise disturbs the natural quiet	Generator should be housed in noise-limiting container; use generator only during daylight or for limited hours.	Ops. Mgt.
Firewood collection affects ecosystems and denudes the landscape	Firewood should be bought from renewable sources. No firewood should be collected in the concession.	All

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
<b>WATER CONSUMPTION</b>		
Loss of water through leaks in reticulation system	Maintenance programme for pipes and tanks should be in place. Leaks and faults are repaired immediately upon detection.	Maint.
Water conservation measures	Water conservation should be actively promoted among guests and staff. Guests are informed of water scarcity and encouraged to participate in water conservation.	Mgt.
	A water meter should be installed and water usage should be measured and recorded on at least a monthly basis.	Mgt.
	Usage should be less than 100 litres per bednight (including guests, staff, contractors and non-paying visitors).	Mgt.
	Vehicles and floors are washed with a bucket and not hosepipe.	Mgt.
<b>SEWERAGE AND WASTEWATER</b>		
Contamination of soil, as well as surface and groundwater, due to sewage and waste water discharge	Sewerage system is maintained.	Maint.
	Bio-degradable toilet cleaners are used to preserve bacteria in the septic system.	Mgt.
	All toilets are flush-type toilets and drain into septic tanks. Liquid overflow from the septic tanks must drain into an evaporation pond. The pond must be fenced to prevent animal access and it must have anti-contamination measures such as a reed bed.	
Ecological impacts	Fat/grease traps are installed at kitchen outlets and maintained.	Maint.
	Septic tanks and soak-aways are maintained.	Maint.
Unpleasant odours	Qualitative monitoring of odours.	Maint.
	The source of unpleasant odours are identified and remedied within 1 week of identification.	Maint.
<b>VEHICLE USAGE</b>		
Erosion of roads and tracks	Regular maintenance of roads and tracks.	Maint.
	Implement measures to disperse concentrated water flow and repair erosion at such locations.	Maint.

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
Damage to roads and tracks	Low tyre pressure on all operational vehicles.	Mgt. Guides
	Operational vehicles are 4-wheel drive and of standard width.	Mgt.
Off-road driving causes compaction of and damage to soil	No off-road driving should be allowed. Only permitted access roads and paths are used by employees, guests and vehicles at all times.	All
	Making tracks next to a road should be not allowed. Taking shortcuts should be not allowed.	All
	New roads and tracks have to be authorised and are developed according to the road plan.	Ops.
	Vehicles are concessioned only in designated concessioning areas.	All
Exhaust emissions cause air pollution	Vehicles are serviced regularly and monitored for excessive exhaust emissions.	Maint.
Driving in rivers disrupts surface water hydrology	Rivers are entered and exited only at existing and designated points. No off-road driving is permitted once a river is exited.	Guides
Driving over flooded or moist areas disrupts surface water hydrology	No driving in seasonally inundated areas when flooded or moist.	Guides
<b>OPERATIONAL ACTIVITIES</b>		
Toiletries and cleaning chemicals cause contamination of the soil, as well as surface and ground water	Kitchen and housekeeping soaps and detergents are biodegradable and eco-friendly.	Mgt.
	Biodegradable and eco-friendly guest amenities are provided.	Mgt.
Vehicle parking, servicing and other workshop activities cause soil and groundwater contamination	Vehicle servicing should be done on an impervious, bunded surface or over oil pans.	Maint.
Fuel storage and refuelling procedures cause soil and groundwater contamination	Fuel should be stored in appropriate receptacles and on a bunded, impermeable surface.	Maint.
	Fuel should be dispensed over impervious, bunded surface or drip trays.	Maint.
Noise disturbs the natural quiet	Graders, tractors and power tools are used during daylight only.	Mgt.

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
	Radio, tv, staff voices, revving cars, drones are some sources of noise that should not be allowed or at least strictly controlled.	All
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.	Mgt. Maint.
<b>DESIGN AND LANDSCAPING</b>		
Light pollution at night	Only subdued or directional lighting should be used.	Ops.
<b>HEALTH AND SAFETY</b>		
Labour policies	The company should be in compliance with all national legislation and regulations governing workplace equity and diversity.	Ops.
Staff and guest health and safety	The company should be in compliance with all national legislation and regulations governing health and safety measures.	Ops.
	Protective clothing, as appropriate to operations, should be provided to employees.	Ops.
	Adequate first aid kits are available and regularly maintained. A suitable number of employees should be trained in first aid.	Ops.
	On-site staff housing should be large enough, secure and clean. Staff have access to running water, adequate sanitation and safe, clean energy.	Ops.
	Employees and guests are made aware of procedures to follow in the event of an emergency, e.g. which person to contact, how to contact him/her during the night; evacuation routes.	Mgt.
	An awareness and prevention programme should be in place for HIV/Aids and infectious diseases.	Ops.
	Employees responsible for guest transport have valid licences and public driving permits.	Mgt.
Fire	All precautions are taken to prevent the outbreak and spread of fires. Employees are aware of the necessary precautions.	Mgt.



NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
	Fire fighting equipment should be available, regularly maintained, and employees are trained in fire safety.	Mgt.
	Gas canisters are stored in Bureau of Standards approved structures.	Mgt.
	Fire extinguishers are strategically located throughout the developed area.	Mgt.
<b>CULTURAL RESOURCES</b>		
Heritage objects and sites of conservation significance	The sites are demarcated in an appropriate way. Staff and guests are informed of their value.	Mgt. Ops.
	The sites are no-go areas.	
<b>IMPLEMENTATION OF EMP</b>		
Eco Awards certification	Apply for an assessment. Keep up to date according to the programme regulations. Submit self-assessments before expiry date.	Ops.
Ensure effective implementation of the EMP	Biannual environmental report is sent to MEFT.	Ops.

### 5.3 Closure and decommissioning

It is unlikely that decommissioning and rehabilitation will be required for the lodge, but rather that the management be transferred to another party. If this should be the case, the new management will be required to continue implementing the management measures outlined in this document.

In the unlikely event that it is necessary to close and rehabilitate Hobatere Lodge, the site will be suitably re-vegetated or if this is not appropriate then it will be covered with scrub to ensure that soil erosion does not result and to provide protection for reseeding vegetation. A site assessment will be carried out after closure to ensure that no structures remain and that the site rehabilitation has been fully achieved.

At a conceptual level, decommissioning will be considered a reverse of the construction phase activities with the demolition and removal of the majority of the surface infrastructure and activities very similar to those described with respect to the construction phase, and is summarised in Table 5.

The rehabilitation phase occurs after the cessation of all decommissioning activities. Relevant decommissioning activities are those related to the after care and maintenance of remaining structures, if any structures remain.

The four primary closure objectives are:

1. Protect public health and safety, as well as faunal health and safety.
2. Alleviate or eliminate environmental damage.
3. Return the site to its original condition.
4. Provide sustainable social and economic benefits to the extent possible.

Table 5. Prevention and management measures for closure

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
<b>Soil</b>		
Compaction of and damage to soils, contamination	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Animals: habitat disturbance; death of animals</b>		
Poaching, habitat or behaviour disturbance	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Vegetation: destruction of &amp; damage to plants; disturbance of soil</b>		
Soil erosion	The site will be suitably re-vegetated. If this is not appropriate, then it will be covered with scrub to prevent soil erosion and to provide protection for colonising vegetation.	Ops & Contractor
Alien plant invasion	Follow-ups will be done to ensure that alien or invasive plants and weeds have not flourished.	Ops & Contractor

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
Damage to vegetation	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Infrastructure</b>		
Buildings and support infrastructure	All structures will be completely removed to the satisfaction of MEFT.	Ops & Contractor
Roads and tracks	As required by MEFT, roads and tracks will be rehabilitated to a state as close as possible to the original condition of the area.	Ops & Contractor
Pathways	All pathways will be rehabilitated to a state as close as possible to the pre-construction condition.	Ops & Contractor
<b>Hydrology</b>		
Contamination of ground and surface water, erosion of river banks	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Negative visual impact</b>		
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.	Ops & Contractor
Water pipes	All pipe lines will be removed from the concession.	Ops & Contractor
Electricity lines	All electricity infrastructure will be removed from the concession.	Ops & Contractor
Foundations, concrete slabs, holes in ground	All structures in or on the ground will be removed. All holes, pits and depressions will be filled.	Ops & Contractor
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.	Ops & Contractor
Construction structures and facilities	Construction site office, facilities and structures to be dismantled and removed once decommissioning is completed	Ops & Contractor
<b>Solid waste, sewage and wastewater discharge</b>		
Large volumes of rubble, materials and equipment	Everything will be removed from the concession and taken to a registered landfill.	Ops & Contractor
	Nothing will be burnt or buried on the concession.	Ops & Contractor
Ecological damage	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Machinery &amp; vehicles: noise, contamination of soil and water by liquids, erosion of roads</b>		
Noise, contamination of soil and water, erosion	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Construction staff damage local environment</b>		

NATURE OF IMPACT	MITIGATION	RESPONSIBILITY
Disruption of ecological processes through physical acts and/or pollution	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Bush fires: destruction of habitat and death of animals</b>		
Outbreak of fire	Construction guidelines will apply to ensure limited impact.	Ops & Contractor
<b>Health and Safety of staff</b>		
Injury to persons	Construction guidelines will apply to ensure limited impact.	Ops & Contractor

## 6 IMPLEMENTATION OF THE EMP

This section describes the roles and responsibilities for implementing the different parts of the EMP.

### 6.1 Journeys Namibia

As Concession Operator, Journeys Namibia has overall responsibility for environmental management during the operational and rehabilitation phases, and for ensuring this EMP is implemented. Journeys Namibia is responsible for managing and monitoring the environmental issues associated with the facilities/activities. Journeys Namibia is also overall responsible for the management of the lodge.

Journeys Namibia is responsible for assisting the Conservancy Warden with all environmental issues, and specifically to ensure that the commitments as set out in this EMP are implemented for the duration of the construction, operation and rehabilitation activities.

### 6.2 #Khoadi-//Hôas Conservancy

The conservancy is accountable to MEFT for responsible, sustainable development and usage of the concession. Their role is to monitor that Journeys Namibia complies with the EMP, give support to Journeys Namibia when requested, and report to MEFT.

### 6.3 MEFT

MEFT is the custodian of the land and its living assets. As concessionaire, MEFT is responsible for supporting the conservancy and Journeys Namibia in conservation-related matters, as well as for monitoring compliance with the EMP.

### 6.4 Maintenance

The maintenance team maintains vehicles and machinery, as well as the sewerage and waste water systems.

### 6.5 Guides

Guides transport guests in and around the concession. The guides are responsible for ensuring that human-wildlife interactions take place in an appropriate manner.

## 6.6 Contractors

Contractors will be legally required to comply with the measures in this EMP. Each contractor will be required to develop their own individual EMPs and/or a statement of methods based on this EMP and on any other relevant requirements and specifications. The contractor EMP will focus on the specific aspects of the contractor's work requirements and work areas.

The Conservancy Warden and the relevant contractor's environmental officer will conduct daily informal inspections at contractor areas. Non-compliances will be recorded and action plans developed in conjunction with the contractor that contravened the clause of the EMP.

Contractors will be formally audited on a monthly basis in order to determine compliance with the relevant EMPs/MSs. In the event of non-conformances, the contractor will be required to take corrective action according to the requirements of #Khoadi-//Hôas Conservancy.

## 7 EMERGENCY PROCEDURES

### Sewage or wastewater spills

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

- The spillage should be contained (bunded earth walls) and the source turned off. Depending on the amount of spillage it could be remediated in situ or in the case of a large amount of spillage that is contained, could be removed.
- The leakage must be stopped, and source of the spill must be repaired.

### Hydrocarbon or chemical Spills

The objective is to contain and remediate spillages of hydrocarbons (petrol, diesel, oil, lubricants) and other chemicals.

The following actions must be taken:

- A spill kit will be placed on site.
- Procedure dealing with various types of spills will be drawn up.
- Contact the lodge management in the event of a spill.
- The spillage should be contained (bunded earth walls) and the source turned off.
- The lodge management organises a team to do the clean-up.
- 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 and disposed as hazardous waste.
- The leakage must be stopped, and the source of the spill must be repaired.

## 8 RECOMMENDATIONS

The Water Resources Management Act, 2013 came into effect on 29 August 2024 and two permits are required for this project by the Water Resources Management Regulations (no 269 of 2023):

- Water abstraction permit from the Ministry of Agriculture, Water and Land Reform
- Effluent discharge/sewage permit from the Ministry of Agriculture, Water and Land Reform

It is the responsibility of the proponent to obtain these permits and ensure they are up to date.

The recommendations in the Environmental Monitoring Report are repeated here:

### 8.1 Solid waste

A holding facility for solid waste needs to be constructed. It should be bird and mammal proof and have a concrete floor to ensure easy cleaning and prevent seepage into the soil.

### 8.2 Fires

It is recommended that the burning of cardboard boxes be minimised and that they be transported with other recyclable waste. Dirty cardboards, e.g. where blood has leaked, may be burnt to avoid health risks.

There is a fireplace in front of every staff unit. Cooking fires contribute to air pollution and staff should be educated and encouraged to cook on the gas stoves provided in each unit. The stoves should be maintained and in working order at all times.

### 8.3 Fat traps

The fat trap at the lodge kitchen has been bypassed by installing a pipe above it. Fat traps are only efficient if they are cleaned and maintained. Training of staff and supervision by the manager are recommended once the existing fat trap has been repaired or replaced.

A fat trap should be installed in the staff village at a point before wastewater enters the sewerage system.

Diligent adherence to maintenance routines is necessary to keep the equipment functional.

### 8.4 Fuel

Diesel and other hydrocarbons should be stored and dispensed on an impermeable, bunded floor. Measures should be taken to contain accidental spills and there should be a disposal protocol for accidental spills.

It is recommended that a fuel storage and dispensing area with a low retaining wall is built, and that no fuel or oil is allowed to be dispensed from anywhere else. Spill trays should be provided, and staff should be trained in their use.

## **8.5 Water savings**

Install a water meter, at least one for the total usage of the lodge and ideally one meter for every usage zone e.g. guest areas, staff village, management housing and workshop so that leaks can be detected and repaired quickly. Record water use and measure it against conservation targets.

## **8.6 Off-road driving**

There are many secondary tracks and signs of off-road driving despite a prohibition on any off-road driving in the SOP and Guiding Protocol. Since MEFT officials from Galton Gate regularly patrol the game drive routes, it is recommended that Hobatere and MEFT cooperate to eliminate this destructive behaviour.

## **8.7 Environmental training**

Education of staff in all aspects of the EMP is recommended. An understanding of the reasons why certain behaviours are encouraged and others prohibited usually results in a higher level of compliance.

# **9 CONCLUSION**

There is a medium-high level of compliance with the EMP. Some negative impacts were identified, all of them with a medium level of significance. By implementing the recommendations made in this document, their significance can be mitigated to a very low level.

It is suggested that:

- a) Environmental Clearance be renewed, and
- b) In their next biannual report, Journeys Namibia update their compliance with the recommendations in Section 8.