

#GAINGU HERITAGE BOMA & SAFARIS cc

P.O. Box 222

Swakopmund

RENEWAL OF ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC) FOR CONSTRUCTION AND OPERATION OF TOURISM TENTED CAMP AND CAMPSITE FACILITIES IN SPITZKOPPE, DAURES CONSTITUENCY, ERONGO REGION

**This
Environmental Management Plan (EMP)
is prepared to support renewal of ECC issued to
#Gaingu Heritage Boma & Safaris**



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1. INTRODUCTION

In **April 2017**, #Gaingu Heritage Boma & Safaris (Or the “**Proponent**”) was issued a Clearance Certificate (ECC) for the proposed development of a tented camp and tourism site in the #Gaingu Conservancy. The Proponent was unable to construct or operate due to financial challenges and the ECC expired in **April 2019** without any activities completed.

This EMP (Environmental Management Plan) explains how the Proponent will take environmental protection into account while carrying out various project-related tasks and activities during the construction and operation phases. A policy-like document, an EMP is usually simple to implement for businesses that have environmental policies.

This EMP is prepared in accordance with Namibia’s Procedures and Guidelines for Strategic Environmental Assessment (SEA) and Environmental Management Plan (EMP).

1.1. Goal and objectives

The goal of this EMP is to provide a succinct and transparent baseline environmental monitoring plan that demonstrates how the proponent intends to implement the EMP. Specific objectives are to:

- List documentations (e.g. permits, methods statement, SOPs, etc) required for constructing and operating a fish shop.
- Establish baseline environmental conditions before and after construction, and
- Monitor environment during the operation phase.

2. ENVIRONMENTAL CERTIFICATIONS AND DOCUMENTATIONS

Environmental certifications will include permits and certificates needed to authorize construction and operation of the campsite and tourism facilities (or “Boma tourism enterprise”) as well as undertake all activities as required by law. Documentations will be communicable materials that will be required to describe, explain or instruct and communicate information regarding Boma tourism enterprise operational procedures.

The following environmental certifications and documentations are necessary before the proposed Boma tourism enterprise can start:

Table 1: Permits and authorization.

Certification and documentation	Institution/competent authority	Contact person/details
Environmental clearance certificate (ECC)	Ministry of Environmental, Forestry and Tourism	Environmental Commissioner
Baseline environmental monitoring plan.	Ministry of Environment, Forestry and Tourism	Department of Environmental Affairs

3. GRIEVANCE MECHANISM

The procedure the management will apply to deal with the employees' grievances will be enforced as follows:

3.1 Timely Action

The prompt resolution of complaints as they are filed is a fundamental requirement in grievance handling. The sooner a grievance is settled, the lesser it will affect employees' performance. This necessitates training for first line supervisors on how to identify and swiftly and properly handle a grievance.

3.2 Accepting the Grievance

When an employee expresses a grievance, the supervisor must acknowledge it and accept it. Acceptance does not necessarily imply agreement with the complaint; rather, it demonstrates the supervisor's readiness to investigate the issue impartially and unbiasedly.

3.3 Identifying the Problem

The employee's complaints may occasionally be purely emotional, overstated, fictitious, or ambiguous. As a result, the supervisor must recognize or resolve the issue raised by the employee.

3.4 Collecting the Facts

The supervisor should then gather all the pertinent information and evidence pertaining to the complaint once the issue has been confirmed as a genuine issue. To prevent factual misinterpretation, the information thus gathered must be kept apart from ideas and feelings.

3.5 Analysing the cause of the Grievance

The next phase in the grievance procedure is to identify and analyse the cause that gave rise to the claim after all the relevant information and data have been gathered. Studying several components of the complaint, such as the employee's past experience, the frequency of the incident, management procedures, union procedures, etc., is required for the investigation of the cause. The management can take corrective action to resolve the complaint and stop it from happening again with the help of the cause of the complaint being identified.

3.6 Taking Decision

Alternative courses of action must be developed in order to make the best option possible regarding how to handle the complaint. The impact on the offended employee, the union, and management is then considered while evaluating these. A choice made should, in the end, best suit the circumstances. Such a choice ought to establish a precedent for the department and the business.

3.7 Implementing the Decision

The employee must be informed of the decision right away, and the appropriate authority must also carry it out. If the issue is not resolved, the supervisor must once more go through the entire grievance resolution process step-by-step in order to get to a suitable conclusion.

4. MITIGATION ACTIONS

Detailed mitigation actions are provided in the EMP in *table 1*.

4.1 Risk preparedness and response plan

What is the difference between a risk and an impact?

A cRisk is an event that may or may not happen; whereas an impact is what will happen if a risk occurs.

Risks poses significant impact on people, the environment and/or property. Although they may not happen, there is a need to be prepared to respond to risks at all times during construction and operation phase of Boma tourism enterprise.

All response actions should be geared toward the following priorities and in the order below:

- **Safety** of people (always **First**);
- **Protection** of the Environment, and
- **Protection** of Assets or equipment.

Emergency preparedness and response management involves 5 basic steps as follows:

- **Preventative actions** are taken to avoid an incident.
- **Mitigation measures** are actions taken to prevent an emergency, reduce the chance of an emergency happening, or reduce the damaging effects of unavoidable emergencies.
- **Preparedness** increases the proponent's ability to respond when a risk occurs. Typical preparedness measures include developing a method statement and emergency exit procedures, awareness and training for both response personnel and affected parties and conducting drills to reinforce training and test capabilities.
- **Response** is an action carried out immediately before, during, and immediately after a hazard impact, which is aimed at saving lives, reducing economic losses, and alleviating suffering. Response actions may include activating the emergency operations center, evacuating threatened employees or equipment, opening shelters and providing mass care, emergency rescue and medical care.
- **Recovery**. These are actions taken to return to normal or near-normal conditions, including the restoration of basic services and the repair of environmental, social and economic damages. Typical recovery actions include debris cleanup, financial assistance to individuals, rebuilding of infrastructures and key facilities, and sustained mass care for displaced marine animal populations.

5. EXTERNAL COMMUNICATIONS

External communications shall be handled in line with company procedures.

6. REPORTING

Baseline monitoring and environmental monitoring should be reported to the Ministry of Environment, Forestry and Tourism.

7. Procedures and Guidelines for Strategic Environmental Assessment (SEA) and Environmental Management Plan (EMP)



- [Step 1: Define Organization's Goals for EMS](#)
- [Step 2: Secure Top Management Commitment](#)
- [Step 3: Select An EMS Champion](#)
- [Step 4: Build An Implementation Team](#)
- [Step 5: Hold Kick-Off Meeting](#)
- [Step 6: Conduct Preliminary Review](#)
- [Step 7: Prepare Budget and Schedule](#)
- [Step 8: Secure Resources, Assistance](#)
- [Step 9: Involve Employees](#)
- [Step 10: Monitor and Communicate Progress](#)

REFERENCES

Dr. Sindila Mwiya of Risk-Based Solutions (RBS) and the project undertaken in consultations with the Directorate of Environmental Affairs, Environmental Assessment Regulations Steering Committee comprising: Mr. Teofilus Nghitila (Chair), Dr. Freddy Sikabongo (MET-DEA), Mr. Sem Shikongo (MET-DEA) and Dr. Kirsten Probst (GTZ Advisor to MET), Ms. Saima Angula (MET-DEA) and Ms. Paulina Kadila (MET-DEA).

Table 1: environmental management plan.

Phase	Issue	Mitigation	Monitoring actions and method	Performance Indicator	Responsible personnel
Construction	Access control	Appointed Contractor should submit a detailed method of statement explaining exactly how the construction phase will be implemented and how impacts will be mitigated. Residents living in the surrounding should be informed of intended activities prior to commencement of construction and subsequent activities.	Contractor, should fence off the perimeter where construction will take place. Location of all underground services and servitudes must be identified and confirmed.	Method statement.	Contractor and subcontractors.
	Delayed construction influenced by rainfall, which has cost implications and causes low user satisfaction	Plan such that delays are factored into construction schedule and communicate this to stakeholders and I & APs. Include the best practical options in the methods statement. Communicate updated schedule with all stakeholders and at community meetings to ensure all are on track with the latest schedules.	Constantly monitor delays and adapt method statement and update stakeholders and I & APs.	Method statement. Record number of feedback meetings.	Contractor and subcontractors, Resident Engineer (RE) and Proponent.
	Poor quality materials used.	Only quality materials should be used for construction. Where appropriate rocks from the areas should be used but without compromising on safety of guests and workers.	RE to include construction materials specifications in the method statement.	Method statement.	Resident Engineer (RE). Proponent.

		Cheapest instead of reputable contractor used.			
	Safety, health and environment	<p>The Contractor is responsible to prepare method statement including implementation of the Public Health and Public Safety Plan and submit this to Proponent.</p> <p>The Contractor should appoint a safety, health and environmental (SHE) officer or representative.</p> <p>Avoid construction materials blown to nearby properties and dangerous areas.</p>	<p>Proponent should appoint an Environmental coordinator (ECO) who should ensure method statement is implemented during construction.</p> <p>Regular visual inspections for approval.</p> <p>The work areas must be set out and isolated using danger tape on a daily basis.</p> <p>The demarcated work area may only contain materials, equipment, and personnel required to execute the work.</p> <p>Fire extinguishers must be in close proximity to fuel on site. There should be trained personnel to handle this equipment.</p> <p>Portable toilets should be availed onsite in the following ratio (example): 2 toilets for every 20 females and one for every 20 males. Once the work for the day is completed, the demarcated area must be cleaned of any spilled materials and waste products. This must be disposed of in the allocated containers.</p>	<p>Quarterly written reports by the SHE officer and approved by the RE.</p> <p>Monthly written reports by the ECO and approved by the Proponent.</p> <p>Record number of inspections approved.</p>	<p>RE</p> <p>SHE officer</p> <p>Environmental coordinator (ECO)</p> <p>Proponent</p>
	Excavation safety	Excavations should be left open for an absolute minimum time.	Monitor excavation/backfill schedule in the site instruction records.	Record number of trenches backfilled.	<p>RE</p> <p>ECO</p>

		<p>Excavate short lengths of trenches and box areas for services or foundations in such a way that the trench will not be left unused for more than 24 hours.</p> <p>Apply demarcation standards for work areas as above for all excavation works. Include all soil stockpiles in the demarcated area.</p> <p>Provide additional warning signals in areas of movement and in 'no personnel' areas where workers are not active.</p>			Proponent
	Level of noise	<p>Noise should be kept at minimal by using well maintained construction machineries and vehicles where necessary. Noise generating activities should be restricted within normal working hours.</p> <p>Use, where possible, local workforce to mitigate noise.</p>	<p>For this project noise should be monitored in different locations using a portable noise monitoring metre. Modern portable noise monitors are left measuring for about 1 week, during which time they run on the internal battery and store all the measurements automatically. After a week the unit can be retrieved and returned to the office or a portable computer (laptop) can be taken to the site, and all the data is downloaded. If monitoring is ongoing then the battery can be exchanged for a fully charged one.</p>	Noise level.	SHE officer. ECO.

<p>Dust and gaseous emissions</p>	<p>Ground surface should be watered to minimise level of dust.</p> <p>Heavy equipment such as bulldozers and other construction equipment will produce exhaust emissions from diesel engines leading to temporary increase in Sulphur dioxide, Nitrogen oxides, Carbon dioxides, and Carbon monoxide concentrations.</p> <p>Increased concentration of these gases depends on the content of fuel used and emissions from engines could be reduced by using unleaded fuel for machineries. The proponent should instruct Contractor to use unleaded fuel.</p>	<p>Dust and atmospheric contents (or aerosols) should be measured and recorded regularly.</p> <p>Various dust particle measuring devices are used to measure outdoor air quality. For example, the PCE-RCM 15 enables the measurements of Carbon dioxide, Carbon monoxide, fine dust, temperature and humidity.</p>	<p>Record measurements of dust particles and gaseous concentrations.</p>	<p>ECO.</p>
<p>Loss of reptiles and amphibians diversity</p>	<p>Identify habitats of each species and how they utilise them.</p> <p>Avoid construction in areas known to be nesting, feeding, and breeding or nursery habitats of animals.</p>	<p>Erect fencing to exclude reptiles or amphibians from the working areas and relocate any reptiles in the working areas to safe areas.</p> <p>The ecological footprint of car parking should be limited to areas of low to medium value for all species.</p> <p>Create new or alternative basking, feeding and hibernation habitat.</p>	<p>Baseline reptile and Amphibia biodiversity survey report.</p> <p>Bi-monthly monitoring survey of reptiles and amphibians.</p> <p>Survey reports.</p>	<p>ECO.</p>

			Before construction, carry out surveys to assess baseline conditions for reptile and Amphibia biodiversity and monitor this during the construction and operation phases.		
	Loss of herbaceous	<p>Although recovers really quickly, herbaceous vegetation clearance should be kept at minimal.</p> <p>Removal of species of certain ecological value should not be done without approval from relevant authority.</p> <p>Species of certain species of ecological value should be removed and planted elsewhere.</p>	<p>Baseline herbaceous biodiversity survey report.</p> <p>Bi-monthly monitoring survey of reptiles and amphibians.</p> <p>Survey reports.</p>	<p>Baseline reptile and Amphibia biodiversity survey report.</p> <p>Bi-monthly monitoring survey of reptiles and amphibians.</p> <p>Survey reports.</p>	ECO.
	Loss of topsoil	<p>Topsoil should be removed and stored somewhere for rehabilitation after construction.</p> <p>Rehabilitate with plants that are not exotic in the area.</p>	<p>Before construction carry out a soil assessment survey to determine soil types and composition.</p> <p>Monitor types and soil composition throughout the project phase.</p>	Types of soil and composition.	ECO.
	Habitat modifications	<p>Avoid disturbing sensitive areas. This could be achieved when selecting suitable sites for construction of campsites.</p> <p>Carry out baseline survey to assess reptile and amphibian populations in the project area before and after construction.</p>	Carry out survey to establish baseline conditions and compare this to conditions during and after construction.	Habitat conditions before and after the project.	ECO.

		Continue to monitor reptile and amphibian populations.			
	<p>Sustainability and socio-economic issues</p> <p>Conflicts that may arise as a result of resources use such as water and land need to be rectified within relevant and applicable laws.</p> <p>Increased HIV/AIDS and associated healthy and social problems including fatigue, low productivity, and absenteeism and fatality.</p>	<p>Do not fence off the property or campsites in order to allow free movements of animals especially elephants that frequently roam in the area.</p> <p>Fence off important heritage sites (if any) and graveyard.</p> <p>When recruiting consider current occupants working for Rhino Trust Fund who are unemployed. This will limit number of outsiders who might bring with them social ills.</p> <p>No alcohol will be allowed on site.</p>	<p>The Contractor is responsible to plan for and coordinate the implementation of the Public Health and Public Safety Plan.</p> <p>Daily monitoring by Contractor and RE.</p> <p>Daily monitoring by Contractor. Spot checks.</p> <p>Suspension without payment and immediate removal from site.</p>	<p>Record number of court cases submitted.</p> <p>Record number of incidents.</p> <p>Site employment record.</p>	<p>Contractor SHE officer</p>
Operation	Traffic and safety				
	Road use	<p>Enforce speed limit to reduce animal road kills.</p> <p>Road signs should be placed to indicate speed limit.</p> <p>Where less speed is required put stop or yield signs.</p>	Install speed cameras.	Record number and causes.	Campsite manager.

		All drivers should have driver's licence.			
	Water resources				
Water pollution	<p>All grease, oil, and similar wastes should not be discarded in the river. These should be contained and temporarily stored before disposing off properly.</p> <p>During borehole installation or maintenance care should made to avoid polluting underground water.</p> <p>The sewage septic tanks should be carefully lined to avoid leaching. Dish washing and laundry detergents should be biodegradable.</p>	Water quality monitoring to determine contamination.	<p>Use a combination of multi-parameter, titration methods and other analytical procedures to measure and record basic water parameters such as pH, BOD, total alkalinity, TDS, TSS, Nitrates, Nitrites, total Phosphate, Chlorine, as well as total hardness, hardness due to Calcium and Magnesium.</p> <p>Contaminated water has a pH lower than 6 and pH higher than 8.</p> <p>The TDS of normal water is below 500 mg/l.</p> <p>Water with low BOD is not fit for human consumption.</p> <p>Good quality water should have the following properties: conductivity (<75 mS/m), turbidity (<12 NTU), TDS (<500 mg/l), TSS (<100 mg/l), COD (<100</p>	ECO.	

				mg/l), BOD (<30 mg/l), SO ₄ (<40 mg/l), Cl (25 mg/l), F (1.5 mg/l), Nitrate (10 mg/l), CaCO ₃ (300 mg/l), Ca (150 mg/l), Mg (70 mg/l), Na (100 mg/l), K (200 mg/l), Fe (0.1 mg/l) and Mn (0.05 mg/l).	
	Water use				
		<p>Campsite should implement effective maintenance and water saving measures to prevent wastage and conserve water.</p> <p>Among others the following should be applied:</p> <ul style="list-style-type: none"> -Install water efficient appliances. -Fit appliances with water efficient devices. -Water-saving fittings: shower heads and taps should be fitted with aerators or specific water-saving fittings. -The typical flow-rate of a water-saving shower head should be less than 10 liters per minute. -No 'towel change' option should be offered to guests. 	<p>Monitor monthly water consumption.</p> <p>Check monthly water bill.</p>	<p>Monthly water consumption.</p>	<p>Campsite manager.</p>

		<p>Guests need to be informed on how to opt for this service i.e. to hang towels up if no change is required by housekeeping, or leave on the floor if a change is required.</p>			
	Waste generation	<p>All waste materials must be contained and disposed of according to the relevant legal requirements.</p> <p>Waste must be stored in such a manner that no pollution of the environment occurs at any time.</p> <p>All domestic waste generated must be disposed of in a proper manner at the Local Authority Landfill site.</p> <p>Spill clean-up kits and absorbent materials must be kept on site to assist in immediate clean-up of any hazardous material spills.</p>	<p>Monitor volume of waste generated and volume disposed off monthly.</p>	<p>Record volume of waste generated and dumped.</p>	<p>Campsite manager.</p>
	Solid waste	<p>For each campsite, waste collection bins should be provided.</p> <p>Since campsite will not be fenced, animal proof garbage bins should be used. For example, garbage could be secured in cages at each campsite.</p> <p>In addition, garbage bins will be located at each ablution block.</p>	<p>Monitor volume of solid waste generated and volume disposed off monthly.</p>	<p>Record volume of solid waste generated and dumped.</p>	<p>Campsite manager and ECO.</p>

		Garbage bins should be collected routinely and solid waste transported and disposed at an authorised solid waste facility.			
	Liquid waste	Ensure regular maintenance of sewerage dump stations to prevent overflow or clogging that may occur as result of poor maintenance. Other issues will include bathing, toilets, garbage collection, sewage dump stations and fire protection.	Monitor liquid waste leakage. Monitor liquid waste volume generated and dumped.	Tidiness.	Campsite manager.
Energy	Solar energy	Invest in solar energy and limit usage of firewood. Install energy saving light sensors Appliance such as TV, DVD and others should be switched off (and not left on stand-by mode).	Atmospheric air content composition.	Percentage usage of solar energy. Substitution of fossil fuel m,as a source of energy.	ECO and Campsite manager.
	Generators	Where necessary generators should make use of unleaded fuel.	Monitor GHGs or volume of fuel used.	Percentage usage of unleaded fuel.	Campsite manager and proponent.
Gardening and landscaping	Introduction of exotic species	Plants used should be carefully selected to prevent introduction of exotic plant species. Canopy structures of plants used should not protrude into any pedestrian walkways, and should not be more than 2.1 m.	Monitor growth of exotic plant species. Cut down any suspected exotic plant species.	Zero tolerance for exotic plant species.	ECO and Campsite manager.

		Where steps en-route to facilities, a no-step route to be provided.			
General operational issues		<p>On-site representative must be contactable 24 hours, 7 days a week.</p> <p>Where applicable, any meal/s and beverages must be provided from outlets within the boundary walls of the property.</p> <p>Servicing of rooms 7 days a week (this includes linen/towel change, removal of rubbish and cleaning).</p> <p>Formal reception area must be provided.</p> <p>Provide onsite parking with security for guests.</p> <p>Provide full housekeeping and laundry services provided.</p>	Investigate whether guests are satisfied.	Results for guest suggestion box.	Campsite manager.

Your application is verified

From [Ministry of Environment and Tourism](#) on 2023-09-05 21:25

[Details](#) [Plain text](#)



REPUBLIC OF NAMIBIA

Ministry of Environment, Forestry & Tourism

2023-09-06

Dear NAEMI NELUMBU,

This email serves to inform you that your application **APP-002079** has been verified

Taking the following into considerations:

- Location of the project
- Pollution potential
- Scale of operation of the project

Please upload the following documents:

- Updated EMP to effect amendment
- Confirmation of screening notice received (through email) in terms of assessment procedures (Section 35 (1)(a)(b) of the Environmental Management Act, No 7 of 2007)

- Preliminary Site Map with coordinates (decimal degrees) and a Legend
- Copy of the previous Environmental Clearance Certificate issued in terms of Section 37(1)(a) of EMA
- CV of Environmental Assessment Practitioner (EAP)

Please login onto our portal to upload required documents, if any
<https://eia.met.gov.na>

NB- for the purpose of Section 38 of the Environmental Management Act, 2007 read with Regulation 4(d), kindly forward copies of all relevant documents i.e (application forms, EIA, Scoping reports, EMP etc) to the office of the Environmental Commissioner

Thank you