

PART 1
ENVIRONMENTAL MANAGEMENT PLAN (EMP) for 2025 (UPDATED)
NAMBWA TENTED LODGE APP 250826-006301
in the KWANDO CORE AREA of BWABWATA NATIONAL PARK,
ZAMBEZI REGION

REQUEST for the RENEWAL of the
ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC)



Figure 1: Rustic en-suite chalets at Nambwa Tented Lodge with view from the deck of the Kwando River floodplains (E Klingelhoefter).

APP reference number issued by the EC office of MET *APP 250826 006301*

PROPONENT

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16 September 2025

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**ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
of African Monarch Lodges CC/2019/07533: APP 250826-006301**

APPLICATION FOR THE ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC)

No. 4878

Government Gazette 6 February 2012

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**ANNEXURE 1
FORMS**

Form 1

REPUBLIC OF NAMIBIA

ENVIRONMENTAL MANAGEMENT ACT, 2007

(Section 32)

APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE



PART A: DETAILS OF APPLICANT

- | | |
|---|--|
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APP 250826 006301 |
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☐ Tick (☐) the appropriate box

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PART B: SCOPE OF THE ENVIRONMENTAL CLEARANCE CERTIFICATE

1. The environmental clearance certificate is for:

- ☒ To request for renewal of current Environmental Clearance Certificate (ECC)
- ☒ To submit an updated EMP
- ☒ Operation of Nambwa Tented Lodge for Tourism activities

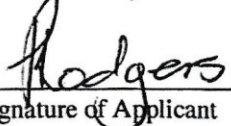
2. Details of the activity(s) covered by the Environmental clearance certificate:

[Note: Please attach plans to show the location and scope of the designated activity(s), and use additional sheets if necessary:

Title of Activity: Tourism activities in a protected area (Bwabwata National Park)
Nature of Activity: Tourism
Location of Activity: Latitude South: 17.875922 and Longitude: East 23.317616
Scale and Scope of Activity: Summary overview and location is attached

PART C: DECLARATION BY APPLICANT

I hereby certify that the particulars given above are correct and true to the best of my knowledge and belief. I understand the environmental clearance certificate may be suspended, amended or cancelled if any information given above is false, misleading, wrong or incomplete.

 Tinolla Rodgers Owner/Managing Director
Signature of Applicant Full Name in Block Letters Position

on behalf of African Monarch Lodges

08 /09/2025
Date

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ABSTRACT

African Monarch Lodges had been granted permission on 24 October 2014, with a 25 year concession, by the Ministry of Environment and Tourism (MET), to establish tourist destinations within the Kwando Core Area of Bwabwata National Park (BNP). On 18 September 2016 Nambwa Tented Lodge (NTL) opened its doors officially for business.

The Background Information Document (BID) submitted on 25 August 2025, provides background information relevant to this EMP. The Carbon Foot Print of NTL covers 5.5ha area.

The uniqueness of NTL is that 100% of all solid waste is removed weekly and taken to Sijwa Project (run and owned by African Monarch Lodges). The waste is converted to jewelry and ornaments and sold to guests.

The site for solid waste storage to be fenced off and to have each waste type separated in containers ready for transport to the Sijwa Project.

“Best practices” regarding waste management is being implemented by management at NTL:

- **avoid, minimize or remedy adverse impacts to the environment**
- **enhance the environmental and social benefits**
- **ensure that residual adverse impacts are kept within acceptable levels**
- **phase out the soak away gravel pits for the grey and black water and be replaced with the 4-way septic tank digester**

Note: AI was not used to compile and generate this report.

CONSULTING TEAM

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ACRONYMS

BID	Background Information Document
DEA	Department of Environmental Affairs
DWA	Department of Water Affairs
EC	Environmental Commissioner
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GDP	Gross Domestic Product
KAZA TFCA	Kavango-Zambezi Trans Frontier Conservation Area
KIL	Kazile Island Lodge
KM	Katima Mulilo
MET	Ministry of Environment and Tourism
NC	Nambwa Camp
NTL	Nambwa Tented Lodge
UNAM	University of Namibia

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SECTION 1: OVERVIEW: INSTRUCTIONS, LOCALITY, NTL LAYOUT, INFRASTRUCTURE, EMP OBJECTIVES

for NAMBWA TENTED LODGE

**Operation of a tourism establishment adjacent to a channel on the western banks of the
Kwando River in the Kwando Core Area of Bwabwata National Park (BNP),
Zambezi Region**

1 INTRODUCTION

African Monarch Lodges had been granted permission on 24 October 2014, with a 25 year concession, by the Ministry of Environment and Tourism (MET), to establish tourist destinations within the Kwando Core Area of Bwabwata National Park (BNP). On 14 March 2014 Nambwa Tented Lodge (NTL) was issued an Environmental Clearance Certificate (ECC) and on 18 September 2016 NTL opened its doors officially for business.

In 2019, through Mr. Jo Tagg, the appointed EAP, an application for the **renewal of the ECC** for NTL was submitted based on an updated EMP (refer to Section 2 of this report). However, due to the untimely passing of Mr. Dusty Rodgers in 2019, the ECC issued by the EC of MET to Mr. D Rodgers, cannot be located.

For further clarity supporting documentation is hereby attached:

- **Document 1:** The ECC issued by the EC office of MET for NTL in March 2014
- **Table 2 in Section 2** of this report: The updated EMP submitted by Jo Tagg to the EC office for NTL in March 2019.

Dr Ekkehard Klingelhoef, the appointed EAP, was requested to formally apply for the renewal of the current Environmental Clearance Certificate (ECC), which had elapsed during the COVID 19 epidemic, and to update the current EMP currently in force.

Due to the COVID 19 epidemic, NTL was partly closed and kept running during the period of 2020 to 2023 on a bare bones principle until numbers increased as of 2024. During the past years management embarked on the following major activities:

- extensive maintenance of the buildings
- constructing a pool
- modifying an existing building for students
- re-location of camp sites to a new location

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In addition, new approaches were adopted in minimizing waste and to beautify the area. These included:

- Upgrading the “Waste Management Protocols” with focus on recycling
- De-cluttering of the premises
- Ongoing training of staff
- Recycling of up to 90% solid waste material at the Sijwa Project

During my visit in August 2025, it became apparent that NTL offers genuine hospitality in a relaxed and informal atmosphere where the tourist is well received and is being provided with professional hospitality.

As per the instructions of the EC office of MET on 27 August 2025, the EMP of 2019, submitted by Jo Tagg, is to be updated including all relevant official documentation as per Documents 1-6 (attached). The information provided in this report, are based on one visit to NTL including correspondence per email and phone calls. In addition, extensive reading was conducted on possible impacts a lodge along a river can pose to the environment and personal discussions held in Windhoek with the Proponent on 9 September 2025.

The objective of this EMP, was to re-emphasize that the *key action verbs* applicable at every lodge operating in Namibia, should focus on: **to rethink** on how to **reduce**, to **reuse**, to **recycle solid wastes**. In addition, the EAP was guided by:

- observations made at the Nambwa Tented Lodge
- the EMP of March 2019 (Jo Tagg)
- the Waste Management Policy of 2018 (MET)
- the Guide of 2008 to the EMP of Act No 7 of 2007
- discussions held with the Proponent

This report has four Sections which include:

- **Section 1: Overview of Nambwa Tented Lodge**
- **Section 2: Summary of current EMP of 2019 in place (Jo Tagg)**
- **Section 3: Potential Impacts and Recommended Mitigation for 2025**
- **Section 4: Recommendations and Conclusion**

Note: Together with this report the Background Information Document (BID) needs to be consulted. The BID (submitted to EC office of MET on 26 August 2025), provides an overview of the current status of African Monarch Lodges with focus on NTL.

2 LOCALITY

Nambwa Tented Lodge, which is situated on the western part of the Kwando River wetland, can be reached by vehicle and by boat (**Fig. 2**). The vegetation at NTL is mostly deciduous trees and

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provides a refuge to bushbuck, genet, impala and elephant that pass through by night. The road leading to the reception makes a visitor appreciate the uniqueness of NTL on this raised and wooded “Island”.

Coordinates for Nambwa Tented Lodge (center) are as follows, with a footprint expressed in ha:

NAME	LATITUDE (South)	LONGITUDE (East)	AREA (ha)
Nambwa Tented Lodge	17.87599	23.31776	5.0-5.5

Nambwa Tented Lodge (NTL)

This lodge is situated on one of the numerous channels of the Kwando River as it meanders to the Linyanti River (**Fig. 2**). The lodge lies on an elevated vegetated “Island” (920m above sea-level) populated with knob-thorn, jackal-berry, mangosteen, combretum, terminalia and sausage trees, and surrounded by grassland, sedges and reeds.

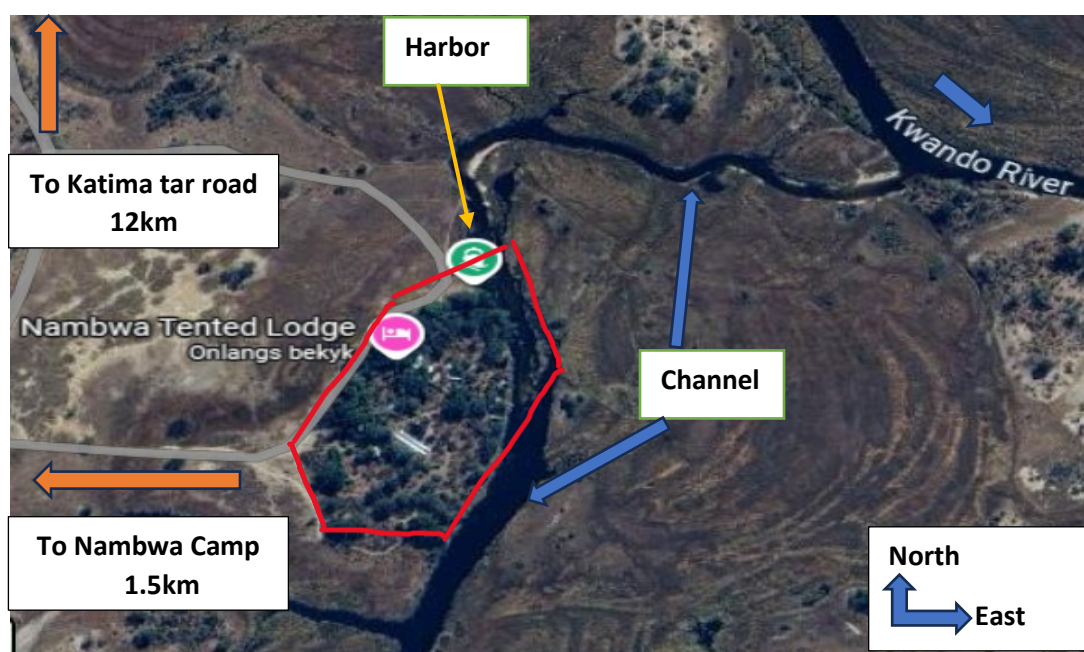


Figure 2: Satellite image indicating the location of Nambwa Tented Lodge (Red Block), on a 5.5ha raised landscape adjacent to a channel west of the Kwando River.

Visitors can often observe a variety of wildlife from the deck (**Fig. 3**) overlooking a pool. The establishment offers boat cruises including sundowner cruises and fishing (catch and release), game drives, guided walks, and a junior ranger course.



Figure 3: View from the deck to the wetlands where the waterhole is situated, which is fed from a borehole.

3 INFRASTRUCTURE

Nambwa Tented Lodge offers:

- 10 rustic en-suite chalets on stilts (**Fig. 4**) letting one feel close to nature and an open front facing the Kwando River floodplains; these chalets are built on stilts of 4-6m height
- Restaurant, deck, reception/office, boutique
- Kitchen and storage facilities
- Solar power units and back up engine
- Accommodation: for management, staff quarters and student units
- Septic tanks (2000 liter each) at each chalet, manager and student accommodation and 4000 liter capacity for the kitchen/laundry and also at main staff quarters; 5m from each septic tank a soak away gravel pit is established
- Borehole (80m depth)
- Swimming pool and WIFI access
- Harbour: 1x 8 seater (**Fig. 5**), 1x 6 seater and 2x skimmer boats

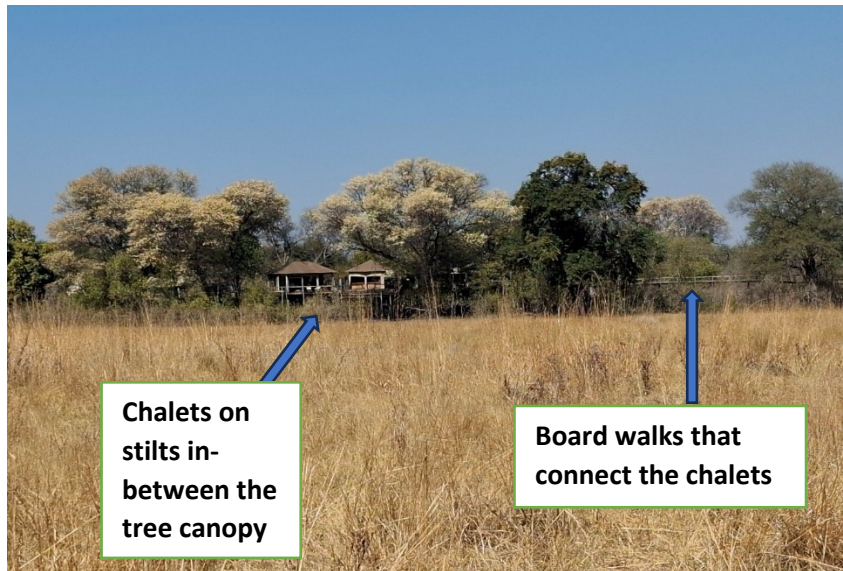


Figure 4: En suit chalets on stilts amongst the tree canopy.



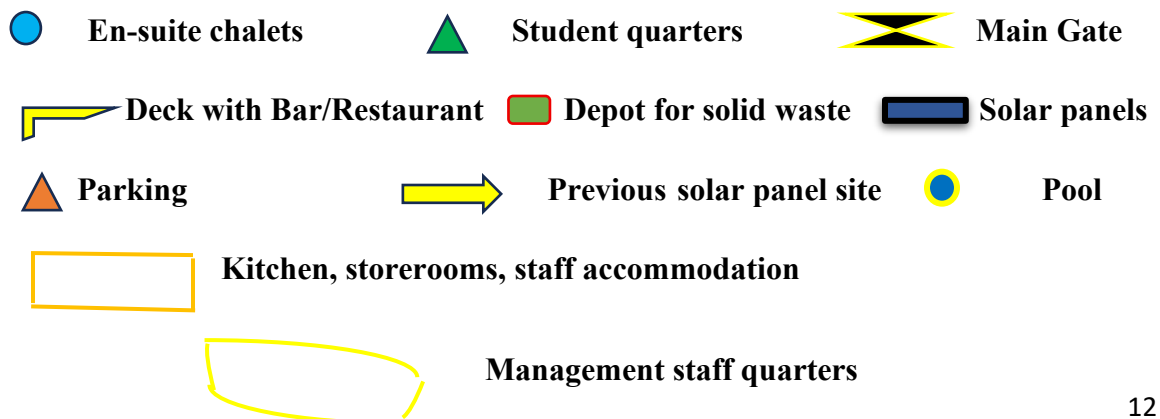
Figure 5: NTL boats moored at the harbour which ferries guests to scenic places on the Kwando river wetland ecosystem.

A detailed layout of NTL is provided in **Fig. 6**, which indicates tented chalets, staff accommodation, kitchen, restaurant, deck, storerooms.

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Figure 6: Satellite image (2024), indicating the location of NTL with a detailed layout of current infrastructure. Note: each unit has its own septic tank and soak away system



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Table 1: GPS (in decimals) of Infrastructure at Nambwa Tented Lodge

Locality	Latitude South	Longitude East
Reception/Deck/Restaurant	17.87521	23.31759
Kitchen/ Freezer/Food store	17.87532	23.31760
Management accommodation	17.87581	23.31837
Staff accommodation	17.87549	23.31804
Student accommodation	17.87662	23.31776
Car parking for guests	17.87553	23.31730
Storerooms	17.87547	23.31176
Proposed new septic tank site at previous solar panel site	17.87626	23.31804
Harbour (boats)	17.87438	23.31831
Pool	17.487711	23.31780
Previous Solar panel site	17.87626	23.31804
New Solar panels	17.87772	23.31702
Main Gate	17.87762	23.31734

Note: New site for septic tank digesters for grey and black water recommend to be at center of NTL and out of site from guests

4 ALLOCATION OF APP NUMBER

After having officially registered a request on portal (MET – DEA) for an ECC, the application was registered and the APP number allocated for the renewal of the Clearance Certificate (ECC) was provided on 26 August 2025 i.e. **APP 250826-006301 (Document 2)**.

5. INSTRUCTIONS FROM EC OFFICE

Following the receipt of the APP number, the EAP received clear instructions/verification from the EC office on the 27 August 2025 (**Document 3**), as to the official documents and reports which need to be submitted in both a soft and hard copy. The instructions provided by the EC office took the following into consideration:

- Location of the establishment
- Pollution potential (soil/water table)
- Scale of
- operation of tourism offered

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Instructions include:

- i)** An updated EMP to effect amendment
- ii)** Confirmation of screening notice received in terms of assessment procedures (Section 35 (1) (a) (b) of the Environmental Management Act, No 7 of 2007)
- iii)** Site map with coordinates (decimal degrees) and a legend
- iv)** Copy of previous ECC issued in terms of Section 37 (1) (a) of EMA
- v)** CV of the Environmental Assessment Practitioner (EAP)
- vi)** Declaration for the Submission of Assessment Reports and other Support Documents (upload Declaration Form)

In addition, the following reports and forms need to be completed and loaded onto Portal:

- i)** Formal application for ECC + stamp duties
- ii)** EMP 2019 (by Jo Tagg) to be summarized: Impact/Mitigation/Compliance
- iii)** BID – Background Information Document on African Monarch Lodges - NTL
- iv)** To compile a final report and to prepare 3 bound copies (MET EC office, Proponent, EAP)
- v)** To load all information as per above requests onto the MET portal for final verification and review

6 PURPOSE OF BACKGROUND INFORMATION DOCUMENT (BID)

The purpose of the Background Information Document (BID), which was submitted as a separate report when applying for APP numbers, was to provide a brief description of African Monarch Lodges and its three establishments viz. Nambwa Tented Lodge (NTL), Kazile Island Lodge (KIL) and Nambwa Camp (NC). All three establishments are operational and require updated EMPs for which Environmental Clearance Certificates (ECCs) are requested.

This background information (dated 25 August 2025), serves to provide the EC office of MET with information on the operation of NTL, relating to:

- Location
- The Proponent: company overview
- Environmental Assessment Practitioner: role and function
- Infrastructure and activities offered
- Tourism potential in the Zambezi Region
- Expired ECC and current EMP in place
- Application for APP and screening notification and instructions
- Additional Official Forms submitted as per EC office request

7 EMP OBJECTIVES

The objective of this updated Environmental Management Plan (EMP) is to formulate measures which are to guide the Proponent and its staff, in the execution of the EMP with focus to:

- Mitigate adverse impacts on various environmental components,
- Protect environmental resources where possible,
- Monitor day to day operations and to take appropriate action

Furthermore, this EMP is to assist management of NTL to address its regulatory requirements in a systematic and cost-effective manner. A proactive approach can help NTL to further reduce the risk of non-compliance and improve health and safety practices for employees and guests.

In summary the steps that the Proponent needs to follow and adhere to, include:

Commitment, Planning, Implementation of EMP, Evaluation and Review

The National Solid Waste Management Strategy by MEFT (2018) was used as a guiding principle in this section of the report. A description of potential hazard waste and current mitigation practices in place, for NTL, are listed in **Table 4.1**.

In addition, it is the objective of this updated EMP to list and to provide guidelines to the Proponent in which sectors he could improve mitigation to ensure compliance according to the Environmental Management Act of 2007 (refer to **Table 4.2 & Table 4.3**) The EMP is a recognized tool that can provide the assurance that the Proponent is able to make suitable provisions for mitigation.

The ultimate aim at NTL, regarding waste management of solids and grey/black water, is:

- to reduce (minimize/prevent) waste
- to reuse waste generated (construction/maintenance)
- to recycle (compost)
- to dispose residue to minimal amounts; according to the Proponent the aim is to achieve a > 10% ecological footprint .

The EMP is the document that provides the Proponent a description of the methods and procedures for mitigating and monitoring impacts. Furthermore, the EMP also contains environmental objectives and targets which the Proponent needs to achieve in order to reduce or eliminate the negative impacts.

This EMP document is to be seen as a living document which is to be used throughout the day to day operation of the establishment for which the ECC has been issued.

SECTION 2: SUMMARY OF MAIN POINTS RAISED IN THE EMP
by Mr. Jo Tagg, March 2019

Overview

The EMP of March 2019, titled “**Environmental Management Plan, Nambwa Tented Lodge**”, was submitted by the lead consultant Mr. Jo Tagg, to the EC office of MET.

Based on this report, the Environmental Clearance Certificate (ECC) was subsequently issued. However, due to the untimely passing of Mr. Dusty Rodgers in 2019, the ECC was misplaced.

Applications for Environmental Clearance Certificates are regulated in terms of the Environmental Management Act (EMA) (No. 7 of 2007). This Act addresses issues of concern and potential environmental and social impacts, that need to be identified and assessed.

Below, is a summary overview of the main points addressed and major findings and recommendations made in the EMP report of March 2019 compiled by Jo Tagg:

- Day to day operation (guest and staff rooms, restaurant, kitchen and bar, laundry operation, activities offered to tourists, general maintenance, recycling i.e. waste management)
- List of impacts and recommended mitigation
- Compliance
- Roles and responsibilities to ensure that “Best Management Practices” are in place

It is to be noted that the EAP by Jo Tagg focused on training and conservation related aspects. Relevant text and tables of the March 2019 EMP (Jo Tagg), are attached as per **Table 2** (pages 17-21).

In summary the concerns identified by the consultant Jo Tagg, can be summed up as follows:

- i) Training for staff on the objectives of an EMP and its implementation
- ii) Socio economic benefits: joint venture is adhered to
- iii) Protection of plants and wildlife
- iv) Minimize impacts on the water resources
- v) Avoid soil and water pollution
- vi) Promote bio-diversity

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**Table 2: Tabulated EMP of March 2019 for Nambwa Tented Lodge submitted by
Mr. J Tagg: operational, socio-economic, conservation issues**

Objective	Management Measures	Monitoring Action & Method	Responsibility	Findings
To ensure that EMP and the Scoping Report understood by management & staff	EMP & Scoping Report incorporated into contract of lodge manager	Contract which aligns EMP & Scoping Report	Operator	Manager, Tinus Adriaanse, is aware of the EMP and acknowledges the importance of it. Further, he has undertaken to ensure that it is used in the daily operational management.
	Staff receive training and understand the implications and reasons for the EMP	Training held & roles and responsibilities of various staff members clearly spelt out and included in job descriptions	Lodge manager	While the roles of staff are not included in job descriptions, the new manager is following a process of ensuring that various functions are assigned to specific persons. The maintenance manager assumes responsibility for all maintenance tasks that potentially have environmental impacts - solid waste, sewerage, waste water, disposal of oils etc.
To ensure that the agreed socio-economic benefits of the JV contract are achieved	Implement contract monitoring tool	Ensure that reviewed and acted upon at JMC meetings between operator and conservancy	Operator Lodge manager Conservancy MET	JMC meetings held and benefits shared as per JV contract.
Minimise impacts on vegetation	Existing vegetation in lodge area is not removed except	Conduct regular inspections and keep staff informed	Lodge manager	Great care taken to protect vegetation during construction and during operations.

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	where it is a hindrance to lodge operations			
	Introduced ornamental plants must only be indigenous to the area	Approval from MET	Lodge manager	No plants introduced.
	Staff do not fell trees or damage vegetation	Inform staff of policy as well as the repercussions should there be non-compliance. Include in code of conduct for staff	Lodge manager	Firewood purchased from community forest and no timber gathered in Bwabwata National Park.
	Track network at the site is confined and that no new tracks developed without authority from MET	Inform staff and self-drive guests	Lodge manager	No new local tracks developed in lodge area.
Minimise impact on wildlife	Ensure that guests are aware of the potential danger of wild animals entering lodge/camping site	Guides to be trained in responding to elephant, hippo and predators	Lodge manager	All guests are briefed upon arrival of the presence and dangers of wild animals. Guides have received training and have received certificates on elephant behaviour. African Monarch invests heavily on training their lodge staff and their guides and are exemplary in setting a very high standard.
	Staff do not have an impact on wildlife	Staff to be aware of the legal implications and company policy in catching, trapping or	Operator Lodge manager	The manager and staff are aware of the privilege of operating in a national park and are aware of the

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		killing wild animals		implications of illegal activities.
Capitalise on presence of lodge for biodiversity management	Complete wildlife monitoring forms on all game drives as requested by MET	Submit summary to conservancy once per month	Lodge manager with assistance from MET/NGOs	Guides complete wildlife monitoring forms while predator sighting are reported as required.
	Provide reports on species of special interest as required	Share records with MET (or their appointed partners) as required	Lodge manager Guides	Lodge guides respond to any requests for reporting sightings of species for MET approved research projects.
	Maintain integrity of the area	Report any suspicious behaviour to MET and conservancy	Lodge manager Guides	Lodge management are well aware of their responsibility to report any illegal activities. The Chief Warden, S. Siloka, was consulted and he confirmed that African Monarch are trusted concession holders.
Minimise land degradation & erosion	Rainfall run-off at lodge site does not cause undue erosion	Regular inspections and if required remedial contouring or drainage	Lodge manager	No signs of erosion.
	Ensure that tracks used exclusively for lodge activities are not subjected to erosion or excessive waterlogging	Undertake inspections regularly and, if required, install additional drainage or undertake whatever repairs required to rehabilitate and reduce erosion	Lodge manager	No undue impacts noted.
	Minimise impacts of boat activities on river banks	Training provided to boat guides on the	Lodge manager Guides	There are few exposed banks in the area of operations but guides

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		impacts of boat wakes on exposed river banks and methods to reduce impacts		shall receive on-going training/reminders of the need to reduce impacts of wake action from the boats on exposed river banks.
To preserve scenic quality & "sense of place"	Mitigation measures implemented during construction phase are maintained	Regular inspections of screens etc. hiding services & installations are functional and if required repair	Lodge manager	The "sense of place" received attention during planning of the lodge.
Minimise impact on water resources	Staff are aware of the need to not use water wastefully	Undertake staff training	Lodge manager	Staff receive on-going awareness of the need to use water wisely.
	Water usage & consumption is within the "best practice guidelines"	Monitor water usage on a monthly basis and calculate usage per guest and for staff members and compare against targets	Lodge manager	Lodge shall install water meter to monitor water use. Monitoring not undertaken during time of inspection.
	There is no leakage from water systems	Undertake regular inspections of all water pipes	Lodge manager	No leaks detected.
Minimise soil & water pollution	Spillages of potentially harmful substances must be cleared immediately and disposed of at an appropriate site	Inspection and follow-up clean-ups if required	Lodge manager	No spillages to date but manager was made aware of the need to monitor regularly.
	Functional septic tanks	Undertake regular inspections and, if required, de-sludge	Lodge manager	Micro-enzymes added to septic tanks regularly to ensure that they function optimally. No odours detected and

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				this suggests that functioning optimally.
	Functional fat traps	Inspect & clean on a regular basis and store matter in sealed containers	Lodge manager	Fat trap needs improvement and lodge owners shall fit.
	Functional soak-aways	Inspect on a regular basis	Lodge manager	All appear to be functional.
	Functional and leak-free waste water pipes	Inspect on a regular basis and repair if required	Lodge manager	No leaks detected.
	Use of environmentally friendly soaps & detergents	Ensure that procurement specifies this need	Lodge manager	Correct soaps used.
	No contamination of soil or water by fuels or oil	Ensure that all fuels stored and managed to reduce risk of spillages	Lodge manager	Fuels stored in locked room with concrete floor.

SECTION 3: UPDATED ENVIRONMENTAL MANAGEMENT PLAN (EMP) for 2025

IMPACTS IDENTIFIED and RECOMMENDED MITIGATION of SOLID WASTE and GREY & BLACK WATER DISPOSAL

Legal framework and policy

The Ministry of Environment and Tourism (MET) in this case, requires that the current EMP of 2019 for NTL, is to be updated. A tourism operation is a listed activity that may have a significant impact on the environment, and which consequently requires authorization from the relevant environmental authority (**Table 3**). The regulations further specify the assessment process and the information that is required to enable DEA (MET) to take a decision regarding the activity.

Table 3: Regulation 29 to conform to, based on the type of activity conducted.

Legislation	Description of listed activity	Relevance to proposed activity
Regulation 29 of: Government Notice No. 29 of 2012	TOURISM DEVELOPMENT ACTIVITY 6: The construction of resorts, lodges, hotels or other tourism hospitality facilities	EXISTING & OPERATIONAL LODGE & CAMP <u>Note</u> : No EIA but only an EMP is to be conducted

The following documents were consulted which have relevance on the update of the current EMP in place:

- i) Environmental Management Act (EMA), No 7 of 2007
- ii) Environmental Management Act (EIA Regulation), GG No 30 of 2012
- iii) Guide of 2008 to the EMA No 7 of 2007, MEFT
- iv) National Solid Waste Management Strategy (MEFT), 2018
- v) EMP for NTL (Mr. Jo Tagg), 2019

Furthermore, this report responds to the instructions received from the EC office to ensure that the activities at NTL comply with provision of the EMA of 2007 and its Regulations of 2012. In addition to the compliance of policies and legislation, NTL strives to ensure that the best practices in managing the environment and to mitigate the impacts are adhered to.

Overview

The focus of this report is to provide background information on the NTL and to update the current EMP of 2019 in force. A detailed description of the potential environmental impacts identified and current mitigation in force, are listed (**Table 4.1**), which are being monitored and managed by the

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Proponent. A list of *actions* that are *recommended* to ensure *mitigation* of potential impacts, are provided in **Table 4.2 & 4.3**.

The objective of this EMP is to re-emphasize the key action verbs applicable at every tourism establishment operating in Namibia, viz: **to reduce (minimize), to reuse and to recycle** solid waste.

Major improvements made at NTL since 2019, include:

- The camp sites have been closed and relocated 1,5km west of NTL referred to as Nambwa Camp
- Student quarters for undergraduates during their field attachments established
- All solid waste transported weekly to Sijwa Project where up to 90% is being recycled into jewelry, ornaments and building material
- Construction of a pool
- Drill of a borehole

Potential Impacts at NTL

Any action taken be it road infrastructure, mining, agriculture, fishing, including tourism establishments, has a reaction. The challenge is on how *to reduce* and *to minimize potential impacts* brought about by development and in this case the day to day operation of NTL on the southern banks of the Zambezi River.

During the two visits to NTL the following observations were made:

- That the Proponent is committed to accommodate best ecological management practices and to showcase the camp as an eco-friendly tourism destination.
- Main source of impacts on the environment arise from:
 - Grey water (shower, wash basin, laundry, kitchen sink)
 - Black water (staff, guests, students and managers toilets)
 - Solids (plastic, paper, glass, tins)
 - Organic waste (food left-overs and garden refuse)
 - Other (oil, fuel and batteries)

Locality

NTL, which is situated on the western bank of the Kwando River, within a National Park, has its challenges regarding waste disposal. It is to be noted that on a weekly basis all solid waste is taken by boat to the Sijwa Project (refer to BID for more detail on this recycling initiative by African Monarch Lodges), where recycling takes place of the tins, paper and glass. This ensures that all solid waste is not taken to a landfill but leaves the National Park where it is being recycled into eco-fuel bricks (from paper/cardboard boxes), beads (from glass) and ornaments and jewelry (from tins).

Waste types, their potential impacts and mitigation in place (Table 4.1)

NTL can be referred to as a low to medium impact operation which can cater for a maximum of 20 guests on a day, however, due to its proximity to the Kwando River wetland within a National Park, a detailed EMP needs to be in place.

The potential impacts identified in August 2025 (**Table 4.1**) are linked to the day to day operation of the tourism establishment. A qualitative approach was taken to assess the current management practices in place regarding waste disposal i.e. to identify and to understand the complex phenomena of waste collection and disposal through in-depth, open-ended data collection, interviews, previous EMP submitted (by Jo Tagg) and analysis thereof.

The approach taken was to list and tabulate “**Type of Activity**”; “**Potential and severity of Impacts**”, “**Current mitigation in place**” and “**Gaps identified**”. Furthermore, socio-economic and conservation issues listed by Jo Tagg in 2019, were re-evaluated and assessed (refer to **Table 4.2**),

The updated EMP has been arranged into 3 Tables as follows:

Table 4.1: Current operational activities and its potential environmental impacts identified and mitigation in place: 2025

Table 4.2: Current training of staff, social-economic and conservation issues raised by Jo Tagg (re-evaluated and assessed)

Table 4.3: Action (who responsible) and mitigating protocols recommended based on findings

In summary the following activities/infrastructure were identified:

- i) Kitchen operation (restaurant, deck/bar, braai area, toilets) – main building
- ii) Reception/office/boutique
- iii) Accommodation (guests/staff/students)
- iv) Laundry operation
- v) Garden and lawns
- vi) Storeroom safety (generator/workshop implements/paints/petrol/oils)
- vii) Boat operations
- viii) Maintenance of buildings
- ix) Sorting and storage of solid waste

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Table 4.1: Current operational activities and its potential environmental impacts identified & mitigation in place: August 2025

No.	ACTIVITY	WASTE TYPE	DESCRIPTION	STRATEGY IN PLACE	IMPACT +/-	MITIGATION
1	Reception/Restaurant (office, kitchen, bar, deck, boutique, toilets) <u>Note:</u> 1x septic tank with a capacity of 4000 liter catering for the above: directed to a soak away gravel pit)	Grey water	Washing of dishes, vegetables, fruit, glass ware, pots and pans	Directed to the 4000 liter septic tank away from the river (laundry water is also directed to this septic tank)	Medium	25mm drain pipes in place; check daily for leakage; 5m away the soak away gravel pit Bio enzymes added on a daily bases to facilitate in breakdown of grey water
		Black water	Male/female toilets for guests and staff	Directed to the septic tank away from the river joined to a soak away gravel pit	Medium to high	110mm pipe directly to septic tanks; all septic tanks emptied by KMTC; check daily for overspill and leakage Bio enzymes added on a daily bases to facilitate in breakdown of solids
		Solids	Glass, paper, plastic wrappings, tins, and cans	All waste is sorted and packed for transport to the Sijwa Project 100% waste is removed from NTL on a weekly basis	Low	Glass, tins and paper are all recycled – trash to treasure; Plastic currently to the communal official dump site 7km east of Sijwa Project (Mayuni Conservancy)
		Organic	Food left- overs, peels, tea bags, etc.	Compost beneficial for plants	Insignificant	Clear separation

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No.	ACTIVITY	WASTE TYPE	DESCRIPTION	STRATEGY IN PLACE	IMPACT +/-	MITIGATION
2	Accommodation (guests, managers, staff, students)	Grey water	Shower and washbasin water	Directed to the septic tank	Low	Septic tanks connected via pipe to soak away gravel pit
		Black water	Toilets	Directed to the septic tanks	Medium in the short term;	Passive seepage to the water table is of concern. Direct discharge to septic tanks and the soak away gravel pit
		Solids	Tins, plastic, paper, glass from guests	All items are sorted and packed for transport to the Sijwa recycling Project	Low	100% removal of solids from NTL
3	Laundry operation	Grey water	Water residue from washing linen and clothes	Directed to the 4000 liter septic tank; bio-degradable soaps used	Low but in the long term could be of concern	Septic overflow to the soak away gravel pit Bio-degradable soap is used
		Solids	Washing powder packages	To the dedicated storage area	Medium	Refuse taken weekly to Sijwa Project for recycling
4	Water abstraction facility	Potential noise factor from pumps	Pumped from the channel to holding tanks (max per month 260 000 liter) Borehole (80m depth with 2000 liter per hour)) out of view from guests;	To avoid wastage from leaks, abstraction pipe and borehole flow to "pan" are checked daily	Low	Training to staff and guests on why to use water sparingly is an ongoing activity

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5	Storeroom safety (petrol, chemicals, paint, lubricant oil, backup generator)	Hazardous	Oil change from generator and potential petrol spill	Collected and used for treating wood; only certified containers used for fuel	Medium	Storeroom is well secured & locked at all times; cement floors in place
		Solids	Empty cans & tins	To recycling depot adjacent to main gate	Low	To Sijwa Project on a weekly basis for recycling
6	Harbour/Boat trips Evening sundowner cruises on the Kwando River and transport of goods from and to Sijwa Project	Solids	Tins, plastic, paper, bottles and other solid waste	To recycling depot at the Sijwa Project for further processing	Low	All refuse generated on board is taken back to NTL : sorted, stored and thereafter taken to Sijwa Project and recycling: Trash to Treasure
7	Road network to and at NTL	Tracks	EAP was informed that no new tracks are made	Training for guides and staff: to stick to existing road network of MET	Low	Heavy rains; roads outside and inside NTL are well maintained
8	Garden /landscaping activities	Organic	Leaves, twigs, grass: collected and placed at compost heap No exotic plants are planted	All garden refuse is collected	Insignificant	Mainly compost made
9	Sorting and storing area for solid waste	Solids	Glass, paper, plastic wrappings, tins	Dedicated designated area adjacent to storerooms prior transport to Sijwa Project	Medium	Visual impact not pleasing; the area (15sq.m) to be fenced with a gate; fence to be covered with reeds or shade net
10	Maintenance of buildings	Building left-over trash	Building rubble, empty containers, plastic pipes, etc.	Rubble used to fix roads. Residue to Sijwa Project	Low	On a weekly basis all residual waste taken away from NTL to the Sijwa Project

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**Table 4.2: Current status on: training of staff, social-economic and conservation issues
raised by Jo Tagg in 2019 (re-evaluated & assessed)**

Goal: Aim & Objective	Procedures on how	Action: implementation	Current status quo on findings August 2025	Who to be responsible
To ensure that EMP understood and being implemented by management & staff	Management to provide dedicated formal training on the EMP Report for NTL	EMP report, to be incorporated into contract of the lodge manager and Environmental Compliance Officer (ECO)	The Proponent, lodge manager and Enviro Compliance Officer are aware of the EMP and acknowledge the importance of it. Furthermore, ECO has undertaken to ensure that the EMP is used in the daily operational management.	Proponent, lodge manager and Environmental Compliance Officer (ECO)
	Staff to receive training and understand the implications and reasons for the EMP	Training held & roles and responsibilities of various staff members clearly spelt out and included in job descriptions	Roles of all staff to be included in job descriptions, regarding compliance of the EMP. The maintenance manager to assume responsibility for all maintenance tasks that potentially have environmental impacts i.e. solid waste, sewerage, waste water, disposal of oils etc.	Lodge manager and ECO
To ensure that the agreed socio-economic benefits of the JV contract are achieved	Implement contract monitoring tool bi-annually	All JMC meetings to be attended by the proponent and the conservancy management	Ongoing: JMC meetings held and benefits shared as per JV contract.	Proponent, lodge manager, conservancy, MET
Impacts on vegetation to be kept at a minimum at NTL and within the BNP	The guides, maintenance and gardening teams to be enlightened on the sensitivity of keeping the vegetation at NTL intact .	ECO officer to conduct regular inspections and raise at regular staff meetings the importance of taken care of the environment	Continue to take care to protect vegetation during the day to day operations of the NTL	Enviro Compliance Officer (ECO)
	No exotic plants to be introduced.	Approval from MET Forestry Directorate	No exotic plants were detected	Lodge manager and ECO

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	Staff do not fell trees for cooking purposes	Inform staff of Act/Regulation as well as the repercussions should there be non-compliance. Include in code of conduct for staff	At the Sijwa Project eco-fuel bricks are made from recycled paper and cardboard boxes; Firewood purchased from community forest and no timber is gathered within Bwabwata National Park.	Lodge manager and ECO
	No new tracks to be developed without authority from MET	Inform staff, guides and self-drive guests	No new local tracks are being developed in lodge area. The vegetation is kept intact.	Lodge manager and ECO
Minimise impact on wildlife	Ensure that guests are aware of the potential danger of wild animals entering lodge	Guides to be trained in responding to elephant, hippo and predators at NTL and its surroundings	All guests are briefed upon arrival of the presence and dangers of wild animals. Guides have received training and have received certificates on elephant behaviour. African Monarch Lodges invests heavily on training their lodge staff and their guides and are exemplary in setting a very high standard.	Lodge manager and ECO Request by MET that Lodge manager be more approachable when assistance is requested
	Staff do not disturb wildlife unnecessarily	Staff to be aware of the legal implications and company policy in catching, trapping or killing wild animals	The lodge manager and staff are aware of the privilege of operating in a National Park and are aware of the implications of illegal activities.	Proponent and lodge manager
Citizen Science: to capitalise on presence of lodge for biodiversity management	Complete wildlife monitoring forms on all game drives as requested by MET and NGOs	Submit summary to MET/Conservancy and NGOs quarterly	Ongoing activities: Guides complete wildlife monitoring forms while predator sighting are reported as required.	Lodge manager and guides with assistance from MET/NGOs
	Provide reports on	Share records with MET (or	Ongoing activities: lodge guides respond to any requests for	Lodge manager and

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	species of special focus	their appointed partners) as required	reporting sightings of species for MET approved research projects.	guides
	Maintain integrity of the area	Report any suspicious behaviour to MET and the Mayuni and Mashi Conservancy	Lodge management are well aware of their responsibility to report any illegal activities. The Control Warden (Zambezi Region), L Muyoba was consulted and he confirmed that African Monarch Lodges are trusted concession holders. Request by MET that the lodge manager to be more approachable when assistance is requested by MET	Lodge manager and guides
Minimise impact on water resources	Staff are aware of the need to not use water wastefully	Undertake staff training	With the ongoing lack of flooding of the Kwando River, staff receive on-going awareness of the need to use water wisely.	Lodge manager
	Water usage & consumption is within the "best practice guidelines"	Monitor water usage on a monthly basis and calculate usage per guest and for staff members and compare against targets	According to the proponent and ECO, water abstraction from the channel and borehole are monitored; a water abstraction licence for both the borehole and water abstraction from the Kwando River system is in process with the Ministry of MAWLR.	Proponent, lodge manager and ECO
	Plumbing layout plan for NTL a necessity	Undertake regular inspections of all water pipes	No leaks detected and verified by ECO. A layout of piping for grey and black water, including water abstraction from the channel to be in place	ECO
Minimise soil & water pollution into the Kwando River meandering channels	Spillages of potentially harmful substances must be cleared immediately and disposed of at an	Inspection and follow-up clean-ups if required	No spillages to date but ECO was made aware of the need to monitor regularly. The soak away system in place will have negative effects in the long term and gradually seep back to the meandering channels due to the proximity of the channels to NTL infrastructure;	Proponent, lodge manager and ECO

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	appropriate site		furthermore, NTL is located on a high water table. A new enviro friendly digester for black/grey water at NTL is being recommended.	
	Functional septic tanks with soak away system; to be phased out over time	Undertake regular inspections and, if required, de-sludge;	Ongoing: Micro-enzymes added to septic tanks regularly to ensure that they function optimally. No odours detected and this suggests that functioning optimally.	Lodge manager and ECO
	Oil collection in kitchen	Inspect & clean on a regular basis and store matter in sealed containers	No fat trap installed at the kitchen; staff permitted to collect used cooking oils to take home	ECO
	Functional soak-aways 5m from each septic tank	Inspect on a regular basis; however, soak away system at NTL to be phased out	Each chalet, and staff quarters has its own septic tank with soak away. All appear to be functional; refer to Table 4.3 – the soak away system is currently being replaced	Lodge manager and ECO
	Use of environment-friendly soaps & detergents	Ensure that procurement specifies this need	The correct recommended biodegradable soaps used.	Lodge manager and ECO
	No contamination of soil or water by fuels or oil	Ensure that all fuels stored and managed to reduce risk of spillages	Verified that all fuels (petrol and oil) are stored in locked room with concrete floor.	ECO

In summary – Current Mitigation

- Grey and black water from each chalet and staff quarters feed into separate 2000 liter septic tanks; each unit is daily fed with enzyme digesters; 5m from each septic tank there is a “soak away” pit filled with gravel stones
- The kitchen and laundry (4000 liter capacity) have the same system as above
- Currently daily enzyme digesters are added to enhance breakdown of black/grey water at each septic tank
- All refuse (plastic, paper, glass, containers) are ferried weekly to the Sijwa Project
- Staff receive ongoing training

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NTL can be referred to as an eco-friendly lodge which strives to:

- Maintain low key impact waste generated
- Protocols are in place to reduce, reuse and recycle solid waste generated
- Overall best practice procedures for waste management are followed

Mitigating solid waste, grey & black water disposal

Due to the type and nature of the business, NTL operation strives to be in line with the best tourism industry practice. Mitigation measures are key to the operation of NTL and need to be revised from time to time i.e. to minimize the environmental effects at the specific location on adjacent to a channel on the western bank of the Kwando River. It is for this reason that the existing EMP of 2019 has been updated and presented in **Table 4.3**.

NTL is a tourism-based business venture that impacts the environment in one way or the other, that calls for consideration of different alternatives to:

- reduce the risks to both the environment and public health
- promote staff and community awareness on strategies to be considered and implemented in the “waste minimization”

In this Environmental Management Plan (EMP), the mitigation principles focus on:

- avoiding, minimizing, or compensating for negative environmental impacts arising from an activity, through measures like reducing pollution, conserving resources, and restoring ecosystems.

It is to be mentioned that ALL solid waste is removed weekly from NTL. Currently there is a designated area for the sorting and storage of solids adjacent to the storerooms. On a weekly basis all solid waste generated at NTL is taken by boat to the Sijwa Project where a team of 33 staff recycle the tins, paper/cardboard and glass. There are currently plans in place to mold tiles from the plastic collected.

It is recommended that the designated area of approximately 15m² for solid waste, be entirely fenced off and fitted with a gate. The current storage facility is located under a tree and accessible to rodents, carnivores and primates.

During a visit of the EAP to Impalila Island in May 2025, the KAZA Safari Lodge operated and managed by Brett McDonald, was visited. The aim of the visit was to investigate lodge waste management protocols. This lodge makes use of the 4-way septic tank digester (**Fig. 6**). This supports discussions held with the EC Mufeti and his team that the current soak away systems at lodges in close proximity of rivers, channels and lakes over time must be phased out.

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Note: Following the meeting of the EMP with the Proponent in September 2025, the purchase of this unique oxidation system for grey and black water has been initiated.



Figure 6: Example of the 4-compartment digester for grey and black water; the sludge proceeds through each septic tank with an UV light attached between digester 3 to digester 4 .

In **Table 4.3**, mitigation on potential negative impacts on the environment including improvements, are provided.

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Table 4.3: Action (who responsible) and mitigating protocols recommended based on findings: August 2025

No.	ACTIVITY	WASTE	POTENTIAL IMPACTS	MITIGATION-ACTION
1	Reception/Restaurant (office, kitchen, bar, deck, boutique, toilets)	Grey water	Soap and detergents in case of spillage or leakage harmful to micro-organisms in the soil	<p>It is recommended that:</p> <p>i) protocols be in place on the hygienic operation of the restaurant and refuse disposal</p> <p>ii) staff to receive ongoing training in service delivery, hygiene, the recycle & reuse concept</p> <p>iii) left-over organic foods to be removed daily to compost heap</p> <p>iv) all toilets to be checked daily if no leakage present</p> <p>v) recycle bins to be tightly closed each evening</p> <p>vi) all septic tanks to be checked daily to determine capacity</p> <p>vii) designated refuse storage area adjacent to stores to be entirely fenced off</p>
		Black water	In case of septic tank overflow blocked the smell and seepage into the sandy soil a possibility	
		Solids	If not contained can aesthetically spoil the environment; plastic harmful to wildlife when swallowed	
		Organic	Rotting food leaves bad smell	
2	Accommodation (guests, managers, staff, owner: bathroom)	Grey water Black water Solids	<p>Soap and detergents in case of spillage or leakage harmful to microorganisms in the soil</p> <p>In case of septic tank overflow blocked a foul smell and seepage into the sandy soil a possibility</p> <p>Pollute the unique environment if not contained (aesthetics/wildlife)</p>	<p>Housekeeping staff to report leakage and to ensure that all solids are well stored at designated refuse storage site</p> <p>Note: only biodegradable soaps are being used at the laundry and kitchen</p>

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No.	ACTIVITY	WASTE	POTENTIAL IMPACTS	MITIGATION-ACTION
3	Laundry operation	Grey water	Detergents used potential harmful to soil microorganisms should a leak occur	Exit piping to be checked daily To continue to use only biodegradable soaps
		Solids	Soap packages if left unattended can leach into the soil	Solids to designated storage site prior disposal to Sijwa project for recycling
4	Water abstraction facility	Redundant pipes ! Noise factor	Aesthetics of pump station and borehole Noise pollution	Ensure that pump system and borehole protected at all times from wildlife (hippo, crocodile, elephant) Operate pumps only during daylight hours
5	Storeroom safety (petrol, chemicals, paint, lubricant oil, backup generator)	Hazardous	Potential spillage of oil, diesel & petrol – lead to contamination of soil	Certified containers used to store fuels and oil; Recycle oils from engine services e.g. treat wood; Storeroom is locked at all times; floor of storeroom is of concrete
		Solids	Solids if not controlled can pollute the environment; plastics danger to wildlife	Solids to recycling depot (Sijwa Project) where recycling is carried out by a team of 33 workers
6	Harbour/Boat trips Evening sundowner cruises on the Kwando River and transport of goods from and to Sijwa Project	Solids	Solids if not well secured could land in the river and cause unnecessary pollution Containers If not well secured could spill over into the river during rough weather	A bin on board – all solids collected and to be taken back on shore during sundowner trips and ferrying of goods to and from Sijwa Project All solids to recycling depot (Sijwa Project) where the trash is converted to treasure

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No.	ACTIVITY	WASTE	POTENTIAL IMPACTS	MITIGATION-ACTION
7	Road network to/from NTL	Excessive vehicle traffic New roads and potholes	Lead to potential erosion and land degradation	No new roads to be initiated without the consent of MET Potholes to be filled with building rubble
8	Garden /landscaping activities	Leave, twig, branch litter Excessive use of water for plants at NTL	Increase in water abstraction during dry periods	Only to plant indigenous trees and shrubs that occur in BNP that are adapted to the climate. Water the gardens with recycled water from the new 4 way septic tank digester to be installed
9	Sorting and storing area for solid waste	Solids (glass, tins, paper, plastic))	Potential attraction to wild animals (rodents, carnivores, primates)	Designated sorting area adjacent to the storerooms to be fenced with a gate that can be locked; fence to be covered with shade net (aesthetics); area max of 15sq meter; All solid waste is ferried weekly to the Sijwa Project for recycling
10	Maintenance of buildings	Building rubble, discarded tins, pipes, glass etc Left over trash from building	Disrupt uniqueness of NTL (aesthetics) and danger to animals if trash is left unattended at NTL Sub-contractors inclined to leave rubble on site	Rubble to be used to fix flooded roads Rubble to be used to fix potholes; rest of discarded building material to be taken to Siywa Project for recycling

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Solid waste management at NTL: a success story

It is to be mentioned that all solid waste accumulated at NTL is removed from the lodge and taken to the Sijwa Project 10km downstream.

This implies that NO solid waste is deposited in a landfill at the establishment which makes it one of the few tourist destinations that remove 100% of their solid waste from site. However, this is only possible due to the proximity of the Sijwa Project where paper, glass and tins are being recycled.

In Table 4.3 action points are listed to ensure that mitigation is maintained at all times.

The **Sijwa Project** was established by the owners of African Monarch Lodges in 2018 with a vision of empowering the community. The generous leasehold of land west of the Kwando River by Chief Mayuni made this project a reality. Chief Majuni, a staunch conservationist, has endorsed the Sijwa project as a joint venture with the community and AML. The project re-purposes and re-invents all recyclable waste from African Monarch Lodges as well as from the local community, turning it into exquisite saleable art and craft (**Fig. 7 & Fig. 8**). It has also an organic permaculture nursery which supplies food for locals and lodge guests



Figure 7: The Sijwa Project is located on the east bank of the Kwando River where solid waste generated at the lodges and camp sites, is being recycled (e.g. tins into jewelry).



Figure 8: The Sijwa Project operated by AML within the Mayuni Conservancy, produces jewelry from recycled material (e.g. tins and glass).

At its core, the Sijwa Project is a testament to creative sustainability. The project re-imagines waste from the lodges and the local community, transforming recyclable materials into exquisite art and craft. Plastic, glass, and cans find new life as beautiful artifacts, a testament to the transformative power of conscious recycling.

A notable aspect of the Sijwa Project is its commitment to community and environmental conservation. Twelve percent of all monthly revenue generated is dedicated to the Mayuni Conservancy, reflecting a pledge to give back to the natural surroundings that sustain the project. Currently 33 staff are employed who all have received training from experts in:

- Eco-fuel bricks from paper and cardboard boxes
- Bead making from glass bottles
- Jewelry (necklace, bracelets)
- Molding ornaments from cans
- Sewing of dresses, bags, pouches etc. from discarded material.

All products are of high quality and are sold in the boutiques at NTL and at Sijwa.

In conclusion, the Sijwa Project can be rated as a transformative journey of sustainability, community empowerment and the recycling of glass, paper and cans in its truest form i.e. **Turning Trash to Treasure.**

SECTION 4: RECOMMENDATIONS AND CONCLUSION

Nambwa Tented Lodge is determined to take appropriate action to deliver sustainable and safe methods of waste management that minimize environmental impact on the fauna and flora and which in turn will support the socio-economic viability of the local community of the Mayuni and Mashi conservancies.

The Proponent is complimented on the current efforts in place to mitigate waste disposal and was requested to continue to strive and to maintain “best practices” regarding waste management, namely to:

- **avoid, minimize or remedy adverse impacts to the environment i.e. to find better alternatives and ways of doing things**
- **enhance the environmental and social benefits**
- **ensure that residual adverse impacts are kept within acceptable levels**
- **phase out the soak away gravel pits and to replace all septic tanks with the 4 way septic tank digester**

The management of NTL has recognized the urgent need to improve on their solid waste storage location which is located adjacent to the kitchen. It is recommended that the Proponent make the following activities a priority i.e. to:

- to fence off an area (15 square meter) used for the solid waste storage and to have each waste type separated in containers ready for transport to the Sijwa Project
- continue to investigate strategies to be considered and implemented in “waste minimization”
- reduce the risks at all times to both the environment and public health

In addition, this EMP outlines the roles and responsibilities of the proponent and management, to ensure that the best environmental management practices are in place. It is to be re-emphasized that NTL is a medium sized lodge which caters for a maximum of 20 tourists per day during peak season. Overall, the environmental impact can be rated as low. Management has in place procedures which focus on safe-guarding adverse environmental impacts to both the abiotic and biotic environment. It is the mission of NTL to continue to promote its lodge as an environmental eco-friendly destination.

In conclusion

The unique location of NTL, which is positioned in the heart of KAZA TFCA, is contributing to the following entities:

- Promoting and operating an effective and efficient tourism niche
- Contribution to Namibia’s GDP
- Positive upliftment to the socio-economic structure of Mayuni and Mashi Conservancies
- Contribution to livelihoods of people through job creation

**ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
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- Stimulate, attract and encourage tourism in the KAZA TFCA and to provide guests the best wildlife experience ever.

Furthermore, it is to be mentioned that Mr. Morne du Toit has recently been appointed as the Environmental Compliance Officer (ECO) and handyman to ensure that the EMP is well understood by all staff and implemented

According to the Proponent, 100% of all solid waste (glass, tins, paper, plastic) accumulated is removed from NTL on a weekly basis.

Policies, procedures and practices are available to the Proponent that can assist to manage and reduce the impact of waste on the immediate environment. It is the responsibility of the Proponent to continue to identify, evaluate and mitigate environmental impacts.

I trust and believe that once the Proponent has the waste collection area redesigned to a more aesthetic appearance, NTL can enter the Eco Award Namibia competition geared for the tourism/hospitality sector.

This Eco Award Namibia is a mark of distinction for accommodation establishments that are planned and managed according to eco-friendly principles.

In conclusion, management is encouraged at all times to aim to: *reduce* (avoid/minimize), *reuse* and *recycle* waste where and whenever possible, which NTL currently strives to ensure that their lodge is rated and known for its environmental eco-friendly operation on the western banks of the Kwando River where the carbon footprint is negligible.

References

- i) Environmental Management Act (EMA), No 7 of 2007
 - ii) Environmental Management Act (EIA Regulation), GG No 30 of 2012
 - iii) The 2008 Guide to the EMA No 7 of 2007, MEFT
 - iv) Google maps (2025)
 - v) National Solid Waste Management Strategy (MEFT), 2018
 - vi) EMP Report for Nambwa Tented Lodge (Mr. Jo Tagg, 2019)
- Note: AI was not used to compile/generate both the BID and EMP reports**

Atlantic (Aquatic / Terrestrial) Consulting Services

t/a Dr. Ekkehard Klingelhoefter

ekkehardwk@gmail.com

[Cell No. 081 719 3939](tel:0817193939)

**Plot No. 18, Kubu and Kwena at Kaliembeza Village,
Katima Mulilo, Zambezi Region, NAMIBIA**

ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
of African Monarch Lodges CC/2019/07533: APP 250826-006301

RELEVANT DOCUMENTS 1 - 6 AS PER EC REQUEST

Document 1: **ECC issued on 14 March 2014**



REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT AND TOURISM

Tel: +264 61 2842701
Fax: +264 61 240339
Enquiry: Ms. Saima Angula

Capital Centre, 6th Floor
Private Bag 13306
Windhoek

14th March 2014

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

The Managing Director
African Monarch Lodges
P.O. Box 5072
Windhoek, Namibia

Dear Sir or Madam

**SUBJECT: ENVIRONMENTAL CLEARANCE FOR THE PROPOSED NAMBWA TENTED
CAMP IN BWABWATA NATIONAL PARK, ZAMBEZI REGION**

The Environmental Scoping and Environmental Management Plan (EMP) submitted is sufficient as it made provisions of the environmental management concerning the proposed activities. From this perspective regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored from time to time.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project. From this perspective, I issue this clearance with the following condition: all key stakeholders must be properly consulted and written consent obtained prior to any development activities.

On the basis of the above, this letter serves as an environmental clearance for the project to commence. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project activity. Instead, full accountability rests with the proponent and his/ her consultants.

Yours sincerely,

Teofilus Nghitila

ENVIRONMENTAL COMMISSIONER



All official correspondence must be addressed to the Permanent Secretary

Document 2: **Appointment letter of EAP Dr E Klingelhoefter**



**AFRICAN MONARCH
LODGES**

**The Environmental Commissioner
Dr Timothy Mufeti
Ministry of Environment and Tourism
Private Bag 13306
WINDHOEK**

REQUEST for the RENEWAL of ENVIRONMENTAL CLEARANCE CERTIFICATE

for the operation of

AFRICAN MONARCH LODGES

APPOINTMENT OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

Dr Ekkehard Klingelhoefter

Dear Dr. Mufeti,

I make reference to the letter from the then Environmental Commissioner (EC) Mr. T. Nghitila, dated 7 August 2025 (find attached). This is to inform your kind office, that African Monarch Lodges was closed for an extended period due to COVID 19 during March 2021 to December 2022 and only has commenced with operation as of January 2023. During the past years management has embarked on the following activities:

- extensive maintenance of the buildings and both lodges and the camp site
- upgrade of the solar power unit
- upgrade of the waste management protocols
- implement extensive marketing strategies to attract clients

Project Name: Operation of AFRICAN MONARCH LODGES in BWABWATA NATIONAL PARK, Zambezi Region

Nature of Activity: AFRICAN MONARCH LODGES operating on both the western and eastern bank of the Kwando River within Bwabwata National Park.

For **AFRICAN MONARCH LODGES** to be accredited as 2 (two) operating lodges and a camp site, as prescribed by the Environmental Management Act No. 7 of 2007, we are

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**ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
of African Monarch Lodges CC/2019/07533: APP 250826-006301**

aware that our Environmental Clearance Certificate to operate the 2 (two) lodges and a campsite, in the Kwando Core Area within Bwabwata National Park, needs to be reviewed every three years.

We hereby wish to inform your kind office that I have appointed Dr. Ekkehard Klingelhoef, of Atlantic Consulting Services CC/ 2021/03824 as the Environmental Assessment Practitioner (EAP), to assist my company to be re-issued an Environmental Clearance Certificate. His task will be as follows:

1. To ensure that the Environmental Management Plan is updated and implemented
2. To ensure that a rigorous Waste Management Protocol is in place

Dr Klingelhoef will be provided with a copy of the existing EMP and the current ECC including any additional documents relevant to the EMP that the EAP requires to update our current EMP.

Please let me know if there is any additional information that is required by your kind office to ensure that our Environmental Clearance Certificate can be re-issued for a period of 3 years.

Yours sincerely,

Tinolla Rodgers

Mrs. Tinolla Rodgers
Email: tinolla@africanmonarchlodges.com
Cell no: 081- 865 3052

Date: 7 August 2025

Document 3: APP number allocation from EC office (26 August 2025)



REPUBLIC OF NAMIBIA
Ministry of Environment, Forestry & Tourism

2025-08-26

Dear Ekkehard Klingelhoefter,

Thank you for applying for an Environmental Clearance Certificate (ECC) for Nambwa Tented Lodge (African Monarch Lodges).

Your application has been registered with application number
250826006301

Thank you

Phillip Troskie Bulding
P/Bag 13306, Windhoek | Tel: +264 61 284 2111 | DEA: +264 61 284 2701

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Correspondences can be done on the portal or please use
eia@met.gov.na

**Document 4: Screening notification & instructions received from EC
office (27 August 2025)**

Ministry of Environment and Tourism

27 Aug 2025,
09:07 (1 day ago)

to me



REPUBLIC OF NAMIBIA
Ministry of Environment, Forestry & Tourism

2025-08-27

Dear Ekkehard Klingelhoefter,

This email serves to inform you that your application **APP-006301** for Nambwa Tented Lodge (African Monarch Lodges) 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

**ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
of African Monarch Lodges CC/2019/07533: APP 250826-006301**

- 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 (Project boundaries) 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)
- Declaration for the Submission of Assessment Reports and other Support Documents (upload Declaration Form from www.eia.mef.gov.na (downloads)

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

Phillip Troskie Building
P/Bag 13306, Windhoek | Tel: +264 61 284 2111 | DEA: +264 61 284 2701

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eia@met.gov.na

ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
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Document 5: Declaration for the Submission of Assessment Reports

Declaration of authorship

APPLICATION NUMBER: 250826-006301

Project Title:

Project 1: Background Information Document (BID) for Nambwa Tented Lodge t/a African
Monarch Lodges, in Bwabwata National Park, Kwando Core Area

Project 2: Environmental Management Plan (EMP) 2025 (Updated) for Nambwa Tented Lodge

I, Ekkehard Klingelhoef (full name of Environmental Assessment Practitioner - EAP) understand and agree that the information I have furnished in this submission will be reviewed by the Office of the Environmental Commissioner (OEC). I accept that the Environmental Commissioner, will hold me accountable in terms of Section 43(1)(b) of the Environmental Management Act, Act No. 7 of 2007 for any inaccurate or misleading information knowingly provided in the following documentation.

Tick the box (es) applicable to your submission:

- ☐ Pro Forma Environmental Contract for Mining Claim(s)
- ☐ Environmental Questionnaire For Mining
- ☒ Scoping report / BID
- ☐ Environmental Impact Assessment (EIA)
- ☒ Environmental Management Plan (EMP),
- ☐ Consent from Relevant Authority

I certify, and, acknowledge that the provision of such information will impede the lawful carrying out of the duties, responsibilities and functions of the Environmental Commissioner. I declare that the information submitted is my own work. All direct or indirect sources used are acknowledged as references.

Consultancy Name: ATLANTIC CONSULTING SERVICES cc 2021/03824

EAP Signature: Ekkehard Klingelhoef

Date: 17 September 2025

NB- To be submitted jointly with Scoping Report, EIA, EMP documents to the Office of the Environmental Commissioner

Document 6: Abbreviated CV of EAP Dr E Klingelhoefter – August 2025



Ekkehard Klingelhoefter

Domicile

Wasserfall Street No. 2
Swakopmund,
Erongo Region

Plot No 18
Kubu and Kwena, Kaliembeza Village
Katima Mulilo, Zambezi Region

Contact details

Email: ekkehardwk@gmail.com

Cell-phone: 081 719 3939

Marital status Married to Marion (Homeopathic Practitioner); they have a daughter and a son.

Higher Education Qualifications achieved:

- BSc degree major in Botany and Zoology
- BSc (Hons) in Wildlife Management
- MSc in Terrestrial Ecology: Tongaland Elephant
- PhD in Fishery Management and Oceanography
- Diploma in Tertiary Education (focus on Androgocis and Gerongocis)
- Diploma in Oceanography: Open University, UP

Languages spoken

- a. English (fluent); b. German (fluent); c. Afrikaans (fluent) ;
d. Numerous Nguni dialects (basic to fluent)

**ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
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Positions held to date

- Student researcher: on human elephant conflict amongst the Tonga community (30 months), Kwa Zulu Natal, RSA
- Regional Conservation Ecologist (4 years), Mpumalanga, RSA
- Lecturer to future teachers (2 years) at Mgwenya Teachers College: Biology, RSA
- Lecturer to future wildlife conservationists (3 years) at NUST (Polytechnikon of Namibia)
- Principal scientist of the horse mackerel research unit: Swakopmund, Atlantic Ocean (7 years)
- Chief scientist of the oceanographer research unit: Swakopmund, Atlantic Ocean (6 years)
- Director & Deputy Director: Aquaculture & Inland Fisheries (8 years) for MFMR
- Regional Training Officer for: Angola, Namibia, South Africa: BCC (Benguela Current Commission - 1 year)
- Lecturer & HoD: Department of Wildlife Management and Tourism Studies -UNAM (10 years)
- Currently operating as a Freelance Environmental Consultant (EIA and EMPs)

Atlantic Consulting Services cc

Director of this CC and as a team of professionals offer the following services with focus on Wildlife, Fisheries, Tourism, Compliance (EMPs) and student support.

- EIA/EMP with focus on aquaculture & aquaponics projects and lately waste management at tourism establishments
- Guide for international students on educational tours in Namibia
- Part time lecturing and student support (research proposals, editing Hons, MSc and PhD thesis)
- Logistics for student internships, practical and field excursions
- Aquaculture license application
- Business plans relating to conservation and aquaculture
- Consultancies in other related fields disciplines

Other fields of expertise

- a. Acquired skills in project implementation and management e.g. GRN capital projects (Aquaculture Units) and co-ordinated the development of infrastructure for a Wildlife/Tourism Campus at Katima Mulilo.
- b. Feasibility studies e.g. aquaponics for Hans Seidel Foundation.
- c. EIA/EMP consultancies: focus on aquaculture e.g. Salmon Farming in the sea off Luederitz, EMP for waste management at Lodges.
- d. Capacity building to staff and students within the Department of Wildlife Management and Tourism Studies (DWMTS), at Katima Mulilo UNAM Campus.
- e. Experience in staff structure development for different Divisions/Directorates based on expected outcomes/deliverables.
- f. Pre-planning, implementation, monitoring and evaluation of donor agency projects within the Ministry of Fisheries and Marine Resources e.g. with GTZ/GIZ, JICA, VietNam, Cuba, Spain, Norway, Finland, Iceland and lately KfW (through UNAM).
- g. Gained experience in working with international / regional organizations such as GTZ/GIZ; KfW; NORAD; ICEDA; JICA; NNF; IWC, Tuna Commission, NAMPAB, Spanish Agency (SAIDC); Benguela Current Commission - BCC (Angola, and South Africa).
- h. Represented Namibia at the:
 - International Whaling Commission in Grenada and Newfoundland

**ENVIRONMENTAL MANAGEMENT PLAN (EMP) for Nambwa Tented Lodge
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- FAO in Rome, Italy on Fisheries related issues.
- i. Ability to teach and mentor students – at Polytechnic (NUST) and UNAM pertaining to conservation, wildlife management, HWC, plant taxonomy, entomology, ornithology, ecology, coastal and inland fishery research – to name a few.
- j. Instrumental in promoting and developing the aquaculture sector in Namibia; assist in drafting the Aquaculture Strategic Plan, Act and Regulations.
- k. Curriculum development in conservation, wildlife management and aquaculture programs.
- l. Develop the field Attachment (Internship) Training Manual for students of the Polytechnikon (1988) and revised/updated for the Department of Wildlife Management and Tourism Studies (2014 and 2023).
- m. Conducted a feasibility study on the potential of aquaponics in the Zambezi Region as an alternative livelihood, for the Hans Seidel Foundation (Windhoek) in 2021.

Latest co-author Publication

Meyer, M., **Klingelhoefter, E.**, Naidoo, R., Wingate, V., and Börner, J...2021. Tourism opportunities drive woodland and wildlife conservation outcomes of community-based conservation in Namibia's Zambezi Region. *ECOLEC*, Vol. 180 (c). DOI: 10.1016/j.ecolecon.2020.1068638.

Currently in draft:

- i) Biannual bird counts in the Kasai Channel at Impalila Island, of the Zambezi Region.
- i) Vegetation mapping of Impalila Island, in the Zambezi Region.

Self-drive ambitions:

It is my ambition to contribute through new innovative approaches to:

- ☐ the betterment of the livelihoods of communities in rural areas
- ☐ lecture students and to ensure that they acquire the necessary skills to enter the job market or to be self-employed (entrepreneurship)
- ☐ to continue to promote and to support the aquaculture industry (mariculture and aquaponics)
- ☐ encourage lodges to implement best practices in waste management
- ☐ contribute to the sustainable management and utilization of the natural marine and terrestrial resources
- ☐ to offer student support and mentorship in research projects, internship and field excursions.