

# **ONDJOMBO LODGE**

## **Environmental Management Plan**



Prepared for Ondjombo Lodge for the Renewal of its Environmental Clearance  
Certificate

**App-003477**

Prepared by: Ekwao Consulting

|                        |  |
|------------------------|--|
| <b>PROJECT NAME</b>    | <p><b>An Environmental Management Plan for the Upgrading and Renovation as well as the day-to-day Operational Activities of a New Lodge at Omudhu-WaHauwanga, Ruacana Constituency, Omusati Region</b></p> <p><b>Renewal of an Environmental Clearance Certificate</b></p>             |
| <b>REPORT STATUS</b>   | <b>Final Report</b>  |
| <b>APPLICATION NO.</b> | <b>APP - 003477</b>  |
| <b>PREPARED FOR</b>    | <p><b>ONDJOMBO LODGE</b></p> <p>Contact Name: Mrs Anna Tshoopora<br/> Designation: Lodge Manager<br/> Tel: 081 310 1653<br/> Cell: 081 310 1653<br/> Email: N/A<br/> Address: P O Box 1263, OSHAKATI, Namibia</p>  |
| <b>PREPARED BY</b>     | <p><b>EKWAO CONSULTING CC</b></p> <p>Joel Shafashike<br/> Ekwao Consulting CC<br/> P O Box 25021, Windhoek, Namibia<br/> Cell: 081 127 3027<br/> Fax: 08864 5026<br/> Email: <a href="mailto:ekwao@iway.na">ekwao@iway.na</a><br/> Address: 4350 Lommel Street, Ongwediva, Namibia</p> |
| <b>DATE PREPARED</b>   | <b>February 2022</b>   |

## EXECUTIVE SUMMARY

Ondjombo Lodge is a hospitality establishment located in the rural district of Ruacana, managed and promoted by the women's wing of the SWAPO Party. The establishment is along the C35 highway, ±10 km from the from Kamanjab-Outapi turnoff, in the direction of Kamanjab.

The lodge was planned to be developed in a phased in approach, with the first phase having been successfully completed. This phase consists of a guest wing section with 16 en suite bedrooms and a kitchen linked to a restaurant section. The restaurant can sit up to 50 guests. Carried out during the first phase, were the drilling of a borehole to supply water to the lodge and the installation of a 3-phase transformer to supply electricity.

Under phase two, provision has been made for the construction of onsite staff accommodation, five thatched bungalows, a caravan park, a swimming pool, recreation amenities and landscaping.

In March 2019, Ondjombo Lodge was granted an Environmental Clearance Certificate (ECC) following a scoping EIA carried out by Ekwao Consulting. The ECC was precipitated by plans to proceed with the implementation of phase two. This is because, the lodge cannot operate without phase two having been completed.

The ECC is due to expire at the end of March 2022 and Ekwao has been retained to handle the renewal process. A site visit to the lodge was undertaken in February 2022 with a view to assess the lodge's level of compliance to the terms of the EMP as well as to compare the current physical environmental conditions against the baseline information gathered during the EIA process in August 2018.

It was noted during the site visit, that phase two, which included vital upgrades essentially for the operation of the lodge has not been implemented. In fact, no activities took place since the EIA was carried out. From a financial perspective, it would appear that the foresight of management to delay the renovation and upgrades had spared the lodge from the devastation of Covid-19 outbreak which hit the local tourism sector.

Management would like to have the ECC renewed and the EMP has been upgraded accordingly.

It is recommended that the ECC be renewed to allow Ondjombo Lodge to proceed with its lodge development.

# TABLE OF CONTENTS

|  |    |
|--|----|
| <b>EXECUTIVE SUMMARY</b>                 | i  |
| <b>LIST OF ACRONYMS</b>                  | iv |
| <b>DEFINITION OF TERMS</b>               | v  |
| <b>1. INTRODUCTION</b>                   | 1  |
| <b>2. PURPOSE OF THE ECC</b>             | 1  |
| <b>3. PROJECT DESCRIPTION</b>            | 1  |
| 3.1 Location                             | 1  |
| 3.2 The Land                             | 1  |
| 3.3 Lodge Facilities                     | 3  |
| 3.3.1 Lodge Development - Phase 1        | 3  |
| 3.3.2 Lodge Development - Phase 2        | 3  |
| 3.3.3 Project Current Status             | 5  |
| <b>4. INFRASTRUCTURE AND SERVICES</b>    | 5  |
| 4.1 Water Supply                         | 5  |
| 4.2 Electricity Supply                   | 5  |
| 4.3 Wastewater and Sewage                | 5  |
| 4.4 Site Drainage                        | 6  |
| 4.5 Solid Waste                          | 6  |
| 4.6 Access to the Lodge                  | 6  |
| 4.7 Design and Landscape                 | 6  |
| <b>5. THE EMP</b>                        | 8  |
| 5.1 Management Actions                   | 8  |
| 5.2 Implementation of the EMP            | 8  |
| 5.2.1 Roles and Responsibilities         | 8  |
| 5.2.2 The Renovation/Upgrading Phase     | 8  |
| 5.2.3 The Operational Phase              | 9  |
| 5.2.4 Decommissioning Plan               | 9  |
| <b>6. EMP MONITORING</b>                 | 10 |
| 6.1 Water Monitoring                     | 10 |
| 6.2 Monitoring of Other Consumables      | 10 |
| 6.3 EMP Compliance Inspection            | 10 |
| <b>7. CONCLUSIONS AND RECOMMENDATION</b> | 11 |
| 7.1 Conclusions                          | 11 |
| 7.2 Recommendation                       | 11 |

## FIGURES

|  |   |
|--|---|
| Figure 1: Project Location-----                    | 2 |
| Figure 2: Guest Accommodation Section -----        | 4 |
| Figure 3: The Kitchen and Restaurant Section-----  | 4 |
| Figure 4: Borehole Drilled on the Property-----    | 4 |
| Figure 5: Water Storage Tanks -----                | 4 |
| Figure 6: Electricity Supply -----                 | 4 |
| Figure 7: Sewage Drainage -----                    | 4 |
| Figure 8: Sewage Drainfield -----                  | 7 |
| Figure 9: Main Entrance to the Lodge -----         | 7 |
| Figure 10: Vegetation around the Rock Fissure----- | 7 |
| Figure 11: Rock Fissure Opening-----               | 7 |
| Figure 12: Erosion around the Rock Fissure -----   | 7 |
| Figure 13: Fence around the Lodge -----            | 7 |
| Figure 14: View from C35 tar road-----             | 7 |
| Figure 15: Natural water drainage -----            | 7 |

## TABLES

|  |    |
|--|----|
| Table 1: Roles and Responsibilities of Various Parties .....                         | 12 |
| Table 2: Impacts Associated with Establishment of the Contractor's Camp.....         | 14 |
| Table 3: Management of Construction Induced Environmental Impacts .....              | 16 |
| Table 4: Management of Post Upgrade Environmental Impacts .....                      | 22 |
| Table 5: Management of Potential Impacts Associated with the Operational Phase ..... | 23 |
| Table 6: Environmental Performance Parameters .....                                  | 34 |

## ANNEXURE

|   |     |
|---|-----|
| Annexure1: ECC Originally Granted ----- | -36 |
|---|-----|

## LIST OF ACRONYMS

| Acronym         | Expansion                                     |
|-----------------|---|
| BAT             | Best Available Technology                     |
| BID             | Background Information Document               |
| CO              | Carbon Monoxide                               |
| EIA             | Environmental Impact Assessment               |
| EMA             | Environmental Management Act                  |
| EMP             | Environmental Management Plan                 |
| GPS             | Global Positioning System                     |
| GRN             | Government of the Republic of Namibia         |
| HAN             | Hospitality Association of Namibia            |
| HDI             | Human Development Index                       |
| HPP             | The Harambee Prosperity Plan                  |
| IAPs            | Interested and Affected Parties               |
| m <sup>2</sup>  | square meters                                 |
| m <sup>3</sup>  | cubic meters                                  |
| MEFT            | Ministry of Environment, Forestry and Tourism |
| NAAQS           | National Ambient Air Quality Standards        |
| NAMPOWER        | Namibia Power Corporation Pty Ltd             |
| NAMWATER        | Namibia Water Corporation Ltd                 |
| NHC             | National Heritage Council                     |
| NSI             | Namibia Standards Institute                   |
| NTB             | Namibia Tourism Board                         |
| NWR             | Namibia Wildlife Resort                       |
| ORC             | Omusati Regional Council                      |
| PPE             | Personal Protective Equipment                 |
| RCO             | Ruacana Constituency Office                   |
| RCLB            | Regional Communal Land Board                  |
| RTC             | Ruacana Town Council                          |
| SHE             | Safety, Health & Environment                  |
| SME             | Small and Medium Enterprises                  |
| SO <sub>2</sub> | Sulphur Dioxide                               |
| UTA             | Uukolonkadhi Traditional Authority            |

| DEFINITION OF TERMS                    |  |
|--|--|
| Term                                   | Expansion  |
| <b>Anthropogenic impact</b>            | Human impacts on the environment which includes changes to the biophysical environments, ecosystems, biodiversity and natural resources caused directly or indirectly by human activities including global warming, environmental degradation, etc.  |
| <b>Biodiversity</b>                    | The variability among living organisms from all sources including terrestrial marine and other aquatic ecosystem and ecological complexes which they are part of.  |
| <b>Ecology</b>                         | The study of the interrelationship between the organisms and their environments.   |
| <b>Environment</b>                     | All physical, chemical and biological factors and conditions which influence an object and or organism. It is also defined as the surroundings within which human beings exist and is made up of the land, water, atmosphere, plants and animal life (micro and macro) including interrelationships between the factors and the physical or chemical conditions that influence human health and well-being |
| <b>Environmental Impact</b>            | Any change to the environment whether adverse or beneficial, wholly or partially, resulting from human activities, products or services.   |
| <b>Environmental Impact Assessment</b> | A process of evaluating and assessing the likely environmental impacts that a proposed project or development will have on the environment taking into account the inter-related socio-economic, cultural and human-health impact, both beneficial and adverse.  |
| <b>Indigenous</b>                      | An indigenous species is a species which occurs or has historically occurred, naturally in a free state within the borders of Namibia. Species which have been introduced to Namibia as a result of human activity are excluded.   |
| <b>Vulnerable</b>                      | A species is 'vulnerable' when it is not critically endangered or endangered but is not facing a high risk of extinction in the wild in the medium term.   |
| <b>Environmental Management Plan</b>   | An EMP is a legal binding document which stipulates environmental and socio-economic mitigation measures which must be implemented and complied with by several parties responsible for proposed development throughout the duration of the said development.  |
| <b>Interested and Affected Parties</b> | Any person, group of persons or organisation interested in or affected by an activity contemplated in an application for Environmental Clearance Certificate, or any organ of state that may have jurisdiction over any aspect of the activity.  |
| <b>Construction Activity</b>           | A construction activity is any action taken by the Contractor, its subcontractors, suppliers or personnel employed by such a contractor during the construction process as defined in the Roads Authority Act (Act No. 17 of 1999)   |
| <b>Developer or Promoter</b>           | A promoter or developer remains responsible for ensuring that the project or development is implemented in compliance of the provisions and guidelines as provided for in the EMP - throughout all phases of the project – construction, operational and decommissioning.  |
| <b>Mitigation</b>                      | The implementation of practical measures to reduce adverse impacts to the environment  |
| <b>Watercourse</b>                     | A river or spring; a natural channel in which water flows regularly or intermittently; a wetland, lake or dam into which, or from which, water flows; and any collection of water. A reference to a watercourse includes where applicable its bed and banks.   |
| <b>Public Participation Process</b>    | A process through which interested and affected parties are informed about the proposed development and are afforded the opportunity to provide their inputs and comments as well as to voice any concerns or objections which they might have on the proposed development   |
| <b>Species</b>                         | Means a kind of animal, plant or other organism which does not normally interbreed with individuals of any kind. The term 'species' include any sub-species, cultivar, variety, geographic race, strain or hybrid  |
| <b>The Contractor</b>                  | The contractor is the entity contracted by the developer to carry out construction works on the site and is therefore responsible for ensuring that the provisions of the EMP are adhered to and complied with at all times during the construction phase.   |

## **1. INTRODUCTION**

Ondjombo Lodge is a hospitality establishment located in the rural district of Ruacana, in the Omusati Region. The lodge is managed and operated by women's wing of the ruling party – the SWAPO Women Council (SWPC) who are resident in the Omusati Region.

The lodge was granted an Environmental Clearance Certificate (ECC) in March 2019 following an Environmental Impact Assessment (EIA) scoping study conducted by Ekwao Consulting. The ECC is due to expire on 26 March 2022 and this report is prepared in support of the renewal application for the said ECC.

## **2. PURPOSE OF THE ECC**

The ECC granted to Ondjombo Lodge was intended to achieve two objectives. The first objective was to ensure that the establishment and its day-to-day operational activities were permitted and conducted in full compliance with the provisions of the Environmental Management Act. The first phase of the lodge was developed without an EIA having been carried out.

The second objective for the ECC was to permit major renovations and extensions which Ondjombo Lodge intended to carry out under phase two of the lodge development.

Described in this EMP report is, therefore, the current status of the project in terms of infrastructure, services and activities. The presentation has been made in a table format and includes an evaluation of factors that could potentially have negative impacts on the environment as well as suggested management actions that aim to prevent and or to mitigate such potential impacts.

## **3. PROJECT DESCRIPTION**

### **3.1 Location**

Ondjombo Lodge is situated along the C35 highway, in the rural district of Ruacana at a small village known as Omudhu waHauwanga. From the town of Ruacana, the lodge is in the southern direction and about 9 km away (**Fig. 1**). It is a few meters away from the assortment of cuca shops popularly known in the area as 'Okamboola'.

### **3.2 The Land**

The lodge is on communal land which falls under the jurisdiction of the Uukwaludhi Traditional Authority (UTA). Consent for the land to be used for the purpose of operating a hospitality establishment has been granted to Ondjombo Lodge by UTA. However, the allocation has not been ratified by the Regional Communal Land Board (RCLB) because there was no certificate denoting ownership in terms of the Communal Land Reform Act.



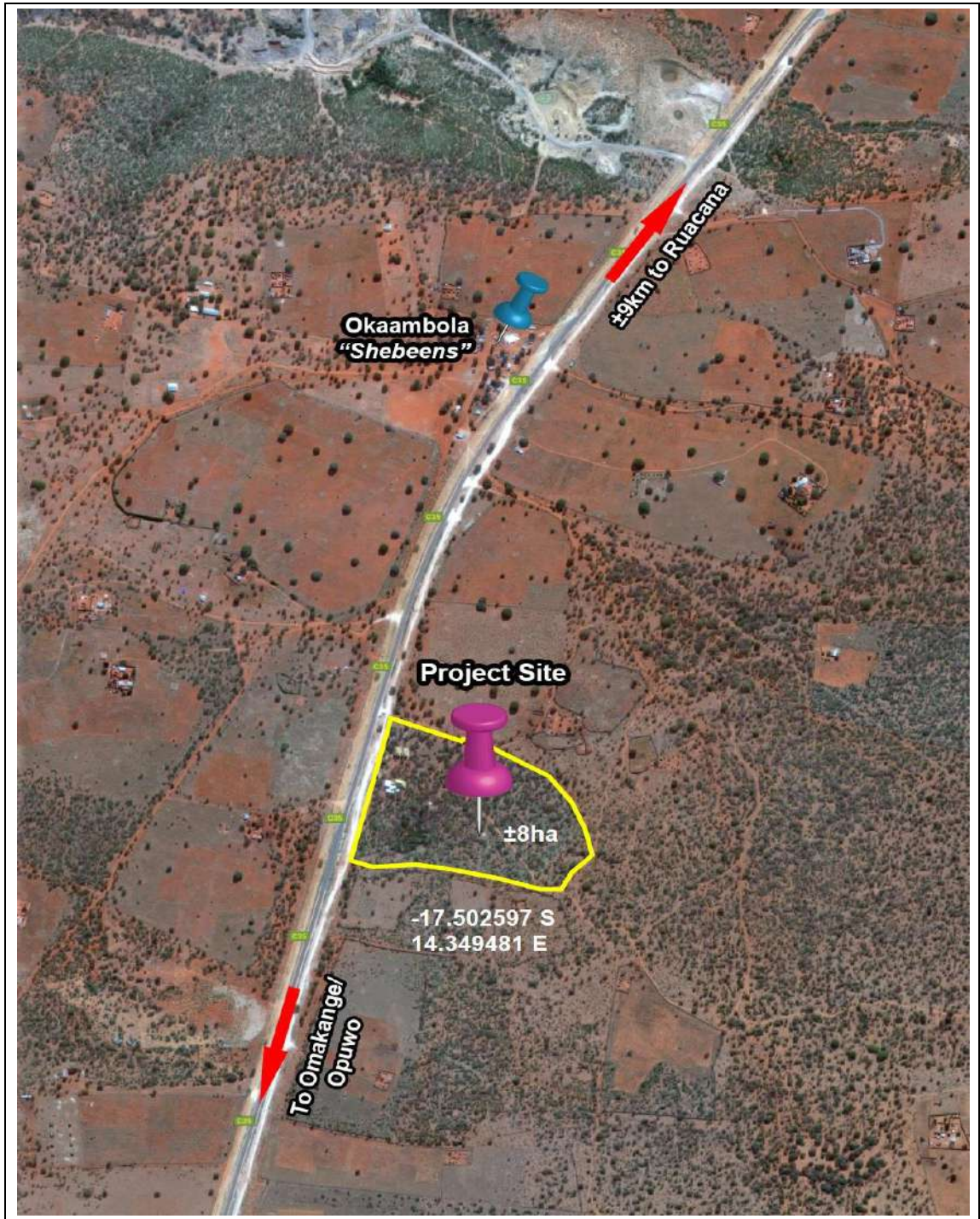


Figure 1: Project Location

### 3.3 Lodge Facilities

The Lodge was planned to be developed in two phases. The first phase has been completed but the second phase has not been completed yet. It is the construction of the second phase which precipitated the scoping EIA conducted by Ekwaio in August 2018.

#### 3.3.1 Lodge Development - Phase 1

The following accomplishments have been achieved under the first phase of the lodge development:

- Guest room accommodation comprising of two double story buildings – each building consisting of eight bedrooms, four bedrooms on the ground floor and another four bedrooms on the first floor as more or less depicted in **Fig. 2**. All bedrooms are en suite and have built-in-cupboards. There is no furniture in the bedrooms.
- The kitchen is attached to the restaurant in which a small bar has been accommodated. This section is about 50 m from the guest room (**Fig. 3**). The kitchen is complemented by two fridge/freezer room and a storage room. Depending on the furniture configuration once installed, the restaurant is big enough to accommodate up to 50 guests. Outside the kitchen is a laundry and a drying yard (**Fig. 3**).

The sixteen (16) guest rooms were still empty and without any appliances and furniture. Metal roofing tile sheets have been used on the existing building which give the lodge property an attractive appearance and blending in fairly well with the natural environment (**Figures: 2, 3 & 4**). According to management, the lodge cannot start operating until the second phase has been completed.

#### 3.3.2 Lodge Development - Phase 2

The renovation and upgrades planned for development under phase two will consist of the following amenities:

- 12 x Low budget housing for support staff
- 5 x Additional thatched bungalows
- Caravan park for a maximum of 15 guests
- Conference facilities
- Swimming pool
- Paved internal roads
- Paved parking areas
- Landscaping
- Laundry and related facilities
- Braai facilities around the swimming pool areas

There were no designs yet to confirm the actual upgrades and renovations that are estimated to cost in the region of N\$20 million. The lodge has its objective to promote tourism in the region benefiting from its strategic location, along the C35 highway road which is used by many tourists visiting the well marketed Kunene Region, formerly known as the Kaokoveld.



Figure 2: Guest Accommodation Section



Figure 3: The Kitchen and Restaurant Section



Figure 4: Borehole Drilled on the Property



Figure 5: Water Storage Tanks



Figure 6: Electricity Supply



Figure 7: Sewage Drainage

### 3.3.3 PROJECT CURRENT STATUS

The implementation of phase two of the lodge development, which initiated the EIA conducted in August 2018 was not done for reasons that are outside the control of Ondjombo Lodge. One such reason is the outbreak of Covid-19 which devastated the local tourism sector. From this perspective, the foresight of management to delay the renovation and upgrades had bode well for the company as capital would have been tied up in a facility that is not yielding returns due Covid-19 restrictions.

The development planned under phase two is vital to the operation of the lodge. In fact, without completing the development, it will be a tough call to successfully operate the lodge. One of the upgrade components is the construction of staff accommodation, an aspect which is essential and critical for successful operation of Ondjombo Lodge, given its distant location from the town of Ruacana where housing is available.

Ondjombo management has been watching the resumption of activities in the tourism sector and would therefore like to keep the ECC valid and in good standing so that the implementation of phase two could proceed, once management decides to put out tenders for the construction.

## 4. INFRASTRUCTURE AND SERVICES

Based on the fence, constructed around the perimeters of the property, the lodge has a footprint measuring about  $\pm 8$ ha of the communal land. An aerial Google map is as shown in **Fig. 1**.

### 4.1 Water Supply

A borehole has been drilled on the property to supply water to the lodge (**Fig. 4**). From the borehole, water is pumped into three storage tanks placed on a steel column stand of about 9 m high (**Fig. 5**). Information regarding the borehole depth, yield and quality of the water was not made available to the consultant. However, the neighbouring community is drawing water from a borehole situated about 500 m from the lodge, which is of good quality and consumed by both human and livestock without any purification.

### 4.2 Electricity Supply

A 3-phase transformer has been installed to supply electricity to the lodge (**Fig. 6**). In future, the lodge could consider the use of solar energy to cut its dependence on grid power which is quite expensive. It will also be wise and cost effective to use geysers that are of solar hybrid system.

### 4.3 Wastewater and Sewage

A gravity sewerage system has been constructed to serve the property. Sewage from the two sections (guestrooms and kitchen/restaurant) of the property will flow under gravity to a collective double chamber screened septic tank (**Fig. 7**). There is a fat trap system at the kitchen area for grey water from the main lodge and laundry. The volume of the fat trap system has not been indicated.

Once the sewage collects in the septic tank, heavy solids would settle to the bottom where bacteria breaks them down to form a sludge layer. The liquid portion of the wastewater would move through the middle or clear zone of the tank and flows out of the outlet pipe into a drainfield (**Fig. 8**). Normally for every litre of wastewater that enters the septic tank, one litre of water is pushed out of the tank through the baffle and enters the drainfield. Solids remain in the septic tank and gradually build up and should be removed at least once in 12 months.

#### **4.4 Site Drainage**

The landscape is relatively flat to the northwest and northeast sections of the property, but has a gentle slope towards the southeast where a fracture has formed a significant wide, deep crevice (fissure) in which rainwater from a dry river stream is collected (**Figures: 10 & 11**). Site drainage is therefore towards this section of the property (**Fig. 15**)

The southern area is quite rocky and construction in this part of the property could be a serious challenge. The fissure has been fenced in to prevent livestock on the property from falling into the gaping hole. Significant soil erosion around the fissure has taken place (**Fig. 12**).

#### **4.5 Solid Waste**

The lodge did not operate since the ECC was granted and therefore no solid waste was generated and handled. During the renovation/construction and operational phases, solid waste should be handled as provided in the solid waste section of this EMP.

#### **4.6 Access to the Lodge**

Ondjombo Lodge is served and accessed from the C35 tar road – the route which starts from the coastal town of Henties Bay up to Ruacana via the towns/settlements of Uis, Khorixas, Kamanjab and Omakange settlement. It is a popular route used by many tourists who visit the Kunene Region. At present C35 is being tarred between Henties Bay and Uis and Kamanjab and Khorixas. This will facilitate easy movements of tourists and the lodge could capture a portion of such tourist market.

#### **4.7 Design and Landscape**

The first phase of Ongobo Lodge was designed and executed in a manner that made it appear as an extension of the natural landscape itself, rather than an imposition on the existing landscape. A sense of place was maintained throughout by curving lines and muted natural colours, however there was no effort made to make use of natural occurring materials such as wood, sand, stones, thatch and locally sourced rocks.

It is understood that the renovations planned under phase two will make use of the naturally occurring materials. No trees are to be removed or damaged during construction and staff have to be trained to actively preserve naturally occurring vegetation. Paved walkways will ensure that guests and staff walk in designated areas only.



Figure 8: Sewage Drainfield



Figure 9: Main Entrance to the Lodge



Figure 10: Vegetation around the Rock Fissure



Figure 11: Rock Fissure Opening



Figure 12: Erosion around the Rock Fissure



Figure 13: Fence around the Lodge



Figure 14: View from C35 tar road



Figure 15: Natural water drainage

## 5. THE EMP

The EMP has been updated and reviewed to accommodate the envisaged renovation and upgrades described in section 3.3.2 as well as the day-to-day running of the lodge under its operational phase.

The EMP has these main objectives:

- to identify potential negative impacts associate with the project; and
- to propose measures to prevent or to mitigate such negative impacts.

The implementation actions are intended to minimise negative impacts and enhance positive impacts that originate from the project. It should be kept in mind that the EMP is a living document that is updated as new information, policies, authority guidelines and technologies are developed and become available.

### 5.1 Management Actions

Ondjombo Lodge will be required to develop guidelines and clear procedures to govern the implementation of its management actions. Guidelines and procedures should be developed by management to cover these aspects:

- Ondjoba Lodge marketing and promotion management plan;
- human resources guidelines;
- standard operating procedures, and
- health and safety annual audits.

### 5.2 Implementation of the EMP

Management measures to mitigate potential negative impacts are presented in table formats comprising of five tables, described briefly as follows:

#### 5.2.1 Roles and Responsibilities

Throughout the lifespan of the lodge, a number of individuals and entities are expected to fulfill various roles and responsibilities to ensure the effective implementation of the EMP.

In **Table 1**, various parties have been listed and their respective roles with respect to the project mentioned.

MEFT is the only statutory stakeholder listed, but the promoter is expected to have liaised with, NTB, another important statutory stakeholder, during the conceptual stage of the lodge facility and ultimately during the operational phase of the lodge.

#### 5.2.2 The Renovation/Upgrading Phase

The renovation and upgrading is expected to be carried out by an experienced and reputable contractor who will be appointed by the promoter through a tendering process. Impacts associated with the upgrading and renovation phase have been presented in **three** tables detailing mitigation measures to be implemented as follows:

- In first table, **Table 2** under the renovation phase upgrades, the management of impacts associated with the establishment of the site camp for the contractor who will be appointed to carry out the renovations, have been provided.
- In the second table, **Table 3** under the upgrade phase, management measures for the induced construction impacts are provided.
- In the third table, **Table 4** under the upgrading phase, management measures for the post construction rehabilitation have been described.

The timing and the party responsible for the various activities are also indicated in the tables.

### **5.2.3 The Operational Phase**

Once the renovation and upgrades have been completed, the contractor will hand over the site to the lodge management to commission the business phase of the project. The environmental impacts associated with this business phase have been listed in **Table 5**.

### **5.2.4 Decommissioning Plan**

Despite massive disruptions caused to the local hospitality and tourism sectors by the outbreak of the COVID-19 pandemic, projections by experts are that the tourism will bounce back and that the Namibian tourism sector has good prospects to attract foreign and local tourists in large numbers. Thanks to NTB, two years prior to the pandemic, annual tourist arrivals by foreign nationals into Namibia were hitting the one million mark.

Considering this assurance by the experts and the fact that the tourism sector has an indefinite projected lifespan combined with the huge investments made by the promoters in the form of immovable assets, there are no plans by the promoter to discontinue with the project. There is therefore no provision made for decommissioning in this EMP.

Should closure and decommissioning of Ongoba Lodge be contemplated, an extensive decommissioning plan will have to be drawn up and meticulously followed according to the highest standards of environmental management best practices. The objective for closure will be to return the land as closely as possible to the pre-construction condition. Measures will be taken to prevent soil erosion and provide protection so that plants can re-colonise.

A site assessment will be carried out after closure to ensure that no structures remain and that site rehabilitation has been fully rehabilitated achieved.



## **6. EMP MONITORING**

It is imperative for the lodge management to ensure that compliance to the EMP is monitored on a regularly basis. In **Table 6**, key simplified environmental monitoring performance indicators that should be checked and monitored are provided. The indicators listed in the table should be considered as guidelines only and are intended to assist management in the early detection of environmental impacts. The lodge management has the prerogative to add to such parameters and to delegate certain functions to staff members for the efficient operation of the lodge.

### **6.1 Water Monitoring**

The objective of the water monitoring plan is to assess the consumption and impact of water use on groundwater quality and availability. It is a specific requirement of the Water Management Act, (Act No. 11 of 2013), that groundwater usage is metered and recorded on a monthly basis so as to monitor and manage the consumption. It is also a requirement of the Water Management Act that groundwater quality is monitored at the point of use and tested, at least annually for mineral and bacteria content to ensure that it remains fit for human consumption.

### **6.2 Monitoring of Other Consumables**

For the efficient management of the lodge, it imperative that consumables such as electricity and fuel used for lodge vehicles are measured and the use thereof monitored and kept within budgeted parameters. Measuring the electricity used by the lodge will make cost comparisons and justification whether to switch to solar powered units more easier.

### **6.3 EMP Compliance Inspection**

An EMP compliance inspection should be carried out at least annually to ensure that that management continues to comply and to improve its obligations and commitments made in the EMP. It is important for the lodge to keep records of environmental monitoring data and for such data to be included in the annual report from the lodge management to promoter.

## **7. CONCLUSIONS AND RECOMMENDATION**

### **7.1 Conclusions**

This EMP has described the management measures that have to be implemented for the purpose of preventing and or minimising the negative environmental impacts that are likely to be associated with the upgrading/renovation phase and the operational phase of the lodge. Measures aimed at enhancing positive impacts which will accrue from the development such as employment and stimulation of economic activities in a rural environment, have also been suggested.

The EMP is a legal document which commits Ondjombo Lodge to comply with all the management measures, monitoring and other plans presented in the document. In essence, the EMP is a practical, working protocol to be used in accordance with the principles of adaptive management. It must be amended when new information, technology, legislation and management measures become available.

Management has the flexibility to adjust the management measures suggested in this EMP in order to conform with the current best practice guidelines, while remaining within the economic means of the business.

### **7.2 Recommendation**

Due to conditions outside the control of the promoters, including the Covid-19 pandemic, the renovation and upgrade were not carried out during the validity period of the ECC. Without the upgrade proposed under phase two, the lodge cannot operate using the facilities constructed under the first phase. There was nothing done since March 2019 when the ECC was approved and granted to Ondjombo Lodge.

It recommended that the ECC be renewed to allow the upgrade and renovation to start and for the lodge to move into the business phase once the construction has been successfully completed.

**TABLE 1: ROLES AND RESPONSIBILITIES OF VARIOUS PARTIES**

| Role Player   | Responsibilities   |
|---|--|
| <p><b>The Environmental Commissioner (EC)</b></p>   | <p>The Environmental Management Act (EMA) is implemented by the Office of Environmental Commission which resorts under the Ministry of Environment, Forestry and Tourism (MEFT) and the Environmental Commissioner (EC) is a statutory office responsible for ensuring and enforcing compliance with the relevant Environmental legislations and regulations. Amongst the roles and responsibilities of the EC</p> <ul style="list-style-type: none"> <li>• granting of ECC and renewals thereof;</li> <li>• ensuring overall compliance with the provisions of the EMP;</li> <li>• reviewing this document and any revisions thereof;</li> <li>• undertaking site audits at their discretion;</li> <li>• reviewing environmental audit reports;</li> <li>• reviewing of major environmental related incidents and or accidents,</li> <li>• enforcing legal mechanisms for contraventions to the EMP</li> </ul>                |
| <p><b>Lodge Promotor (LP)</b></p>   | <p>The promotor, as owner of the lodge has roles and responsibilities which relate to all phases of the development: planning, construction, operational and decommissioning. These are:</p> <ul style="list-style-type: none"> <li>• To ensure compliance with the guidelines provided by NTB.</li> <li>• To ensure compliance with the EMP in a legal and timely manner.</li> <li>• To appoint EIA Consultant to conduct the EIA and to obtain the ECC.</li> <li>• To appoint an architect to design phase two of the lodge upgrade.</li> <li>• To appoint the contractor to build infrastructure under phase two.</li> <li>• To provide a copy of the EMP to the appointed contractor and to ensure that the obligations of the contractor in terms of the EMP are understood and complied with.</li> <li>• To ensure that the construction is carried out in compliance with guidelines recommended in the EMP.</li> </ul> |
| <p><b>The Contractor or Site Manager (SM)</b><br/>- who will be appointed to carry out the renovations under phase 2)</p> | <p>The successful contractor is expected to:</p> <ul style="list-style-type: none"> <li>• To ensure that its employees, subcontractors and suppliers of construction materials are acquainted with the environmental impacts related to the construction activities and the suggested mitigation measures.</li> <li>• To ensure that training is provided to all employees on matters related to the EMP. Ideally, construction materials (bricks, concrete stones, etc.) should be sourced from suppliers who are environmental compliant, i.e. in possession of ECC.</li> <li>• The SM must ensure that the neighbouring residents are informed well in advance of the construction activities taking place and the person to be contacted in the event of complainants of problems. A courtesy call to the Office of the Constituency Councilor and Village Headman is also advisable.</li> </ul>                           |

**TABLE 1: ROLES AND RESPONSIBILITIES OF VARIOUS PARTIES**

| Role Player   | Responsibilities  |
|---|---|
|   | <ul style="list-style-type: none"> <li>• The SM must accept liability for any violations or infringement of the provisions of the EMP during the construction phase. This responsibility is extended to the service providers of the contractors.</li> <li>• To ensure that all complainants received from any stakeholder during the construction period is recorded, investigated and corrective action taken.</li> </ul>   |
| <p><b>The Lodge Operator or Lodger Manager (LM)</b></p> | <p>During the operational (business) phase of Ondjombo Lodge, the overall responsibilities will be vested in the lodge management, headed by a <b>Lodge Manager</b>, who should be suitably qualified, skilled and experienced.</p> <p>Amongst the roles and responsibilities of the LM are:</p> <ul style="list-style-type: none"> <li>• To manage the day-to-day operational activities of the lodge establishment in compliance with all relevant national legislations, regulations and policies including the terms of the EMP.</li> <li>• To ensure that the staff and all employees have been given an induction training on the provisions of the EMP.</li> <li>• To ensure that the necessary environment authorizations and permits are obtained and kept on file at the site office</li> <li>• To maintain good open communications with all stakeholders and authorities.</li> <li>• To report any significant environmental incidents, accidents and or emergencies to the relevant local authority.</li> <li>• To ensure that all recommendations made in the monitoring and audit reports are implemented and complied with throughout the operational life cycle of the facility.</li> <li>• To ensure that any complaint received from any stakeholders and or patrons is recorded, investigated and corrective action taken.</li> </ul> |

TABLE 2: MANAGEMENT OF IMPACTS ASSOCIATED WITH ESTABLISHMENT OF THE CONTRACTOR'S CAMP

| Activity/Aspect      | Mitigation Measures   | Timing   | Responsible Party |
|----------------------|---|--|-------------------|
| Site Demarcation     | <p><b>Camp Location:</b> Minimise construction impacts to the environment by siting the camp within the lodge property to areas previously disturbed during the first phase.</p> <p><b>Activities:</b> Demarcate where key activities are to take place within the camp, i.e. concrete mixing area, storage for construction materials, cooking area, workshop section, equipment storage area, etc.</p> <p><b>Visual:</b> Site the construction camp and storage of construction materials in the least visual location.</p>   | Prior to moving on to the lodge property.  | LP/<br>SM/LM      |
| Onsite Accommodation | <p><b>Sanitation:</b> If employees are allowed to overnight onsite, suitable sanitation facilities should be provided. Temporary chemical toilets should be provided and should have adequate ventilation and lighting.</p> <p><b>Water:</b> Adequate clean water for drinking, washing and cleaning purposes should be provided at the site.</p> <p><b>Food Preparation:</b> Designate an area for food preparation and consumption and ensure that facilities are available to store, prepare and consume food as well as to wash up afterwards.</p> <p><b>Bush Toilet:</b> Under no circumstances may employees use the bush on the property as 'toilet'. Urinating of men in full public view is unhygienic and should be discouraged.</p> <p><b>Access:</b> A security guard should be appointed to control access to the lodge via the security gate. Livestock grazing around should not be allowed to enter the lodge property.</p> <p><b>Guests:</b> Only employees of the Contractor should be allowed access to the site camp. Guests may be allowed with the permission of the Site Manager.</p> <p><b>Alcohol:</b> Alcohol, drugs and firearms are not allowed unless the firearm is used by the security guard.</p> | <p>Once site has been handed over to contractor.</p> <p>Throughout the renovation period</p> | SM                |
| Access Roads         | <p><b>Existing Road:</b> Only existing internal routes should be use, i.e. roads made during the first phase, instead of creating new access roads through the natural vegetation areas. Any new access roads created should be well planned and clearly demarcated.</p>  | Every month throughout the renovation period.  | SM/LM             |

TABLE 2: MANAGEMENT OF IMPACTS ASSOCIATED WITH ESTABLISHMENT OF THE CONTRACTOR'S CAMP

| Activity/Aspect | Mitigation Measures   | Timing | Responsible Party |
|-----------------|---|--------|-------------------|
|                 | <p><b>Movements:</b> Restrict movements over the construction site. Personnel, vehicles and equipment should move along designated routes only. This applies to trucks delivering construction materials, bricks, sand, stones, cement, etc.</p> <p><b>Rehabilitation:</b> All disturbed areas along the fringes of internal routes created during the construction period should be rehabilitated on completion.</p> |        |                   |

**TABLE 3: MANAGEMENT OF CONSTRUCTION INDUCED ENVIRONMENTAL IMPACTS**

| Environmental Aspects | Recommended Mitigation Measures   | Timing   | Responsible Party                       |
|-----------------------|---|--|---|
| Air Quality           | <p><b>Gaseous Emissions:</b> All construction machinery, trucks and equipment brought onto the site should be regularly serviced and well maintained to reduce unwanted gaseous emissions. Where practically feasible, diesel of low sulphur content (50 ppm) should be used in the construction vehicles and machinery to reduce gaseous emissions.</p> <p><b>Internal Lodge Routes:</b> All internal routes should be kept dampened during the construction period to minimize dust emissions. This can be done by spraying water on such routes. On completion of the construction period all internal routes are expected to have been paved or spread with crushed stones or river gravel.</p>   | Throughout the upgrading phase   | SM                                      |
| Noise Pollution       | <p><b>Working Hours:</b> Noise generation must be kept to a minimum and construction activities must be confined to day light hours from Monday to Friday. No work on Sundays and public holidays</p> <p><b>Personal Protective Equipment:</b> People working in areas where noise levels are high should be provided with suitable PPE. Wearing of such devices should be enforced.</p> <p><b>Noise Abatement:</b> Reduction of intensity and amount can be implemented by ensuring that machinery and equipment in use are well maintained. Machineries must be switched off when not in use. Unnecessary hooting, idling and engine revving should be avoided<br/>All machine operators must be well trained and well acquainted with the provisions of this EMP.</p> <p><b>Complaints:</b> Any complaints related to noise disturbances should be recorded, immediately investigated and corrective action taken.</p> | <p>During working hours</p> <p>Every time</p> <p>Throughout the renovation period</p> <p>Whenever reported</p> | <p>SM</p> <p>SM</p> <p>SM</p> <p>SM</p> |
| Dust Pollution        | <p><b>Dampening:</b> Appropriate dust suppression measures should be used during high dust conditions such as dampening with water or other suppression measures especially on internal lodge routes.</p> <p><b>Foundations:</b> Areas demarcated for digging of foundations for buildings, walkways, parking bays, etc. should be sprayed with water to temper dust emissions.</p>   | Throughout the upgrading period  | SM                                      |

**TABLE 3: MANAGEMENT OF CONSTRUCTION INDUCED ENVIRONMENTAL IMPACTS**

| Environmental Aspects                | Recommended Mitigation Measures  | Timing                                 | Responsible Party |
|--------------------------------------|--|--|-------------------|
|                                      | <p><b>Internal Lodge Routes:</b> Internal routes should be paved or covered/spread with crushed stones to reduce dust emissions. Any new routes which may be constructed under Phase 2 should be properly planned and clearly demarcated.</p> <p><b>Personal Protective Equipment (PPE):</b> People working in the construction areas where dust is generated should be provided with suitable PPE. Wearing of such PPEs should be enforced at all times.</p> <p><b>Equipment Maintenance:</b> Construction equipment should be properly maintained and regularly serviced. Limit idling times to minimize NO<sub>2</sub> emissions and associated impacts. Where at all possible, fuel with low sulphur contents should be used.</p> <p><b>Speed limits:</b> Speed limits within the working areas should be adhered to and enforced at all times - 10 km/hour on all lodge internal routes.</p> <p><b>Working Hours:</b> Construction activities should only be conducted during day light time between these hours.</p> <ul style="list-style-type: none"> <li>○ Monday to Friday between 07h00 and 17h00</li> <li>○ Saturday between 07h00 to 13h00</li> <li>○ Sunday and Public holiday – no work</li> </ul> <p><b>Complaints:</b> Any complaints or claims emanating from lack of dust control should immediately be investigated and corrective action taken.</p> |  |                   |
| <p><b>Storm Water Management</b></p> | <p><b>Natural Water Channels:</b> Under no circumstances should the lodge buildings be constructed over the natural water channels on the property. All natural water channels should be retained, kept open and litter-free.</p> <p><b>Building Rubbles:</b> No waste such as building rubble (unused concrete, unused mortar, broken bricks, etc.) may be dumped and concealed in water channels on the property.</p> <p><b>Drainage:</b> Water drainage structures/facilities should be well designed, matched to the anticipated water flow and properly installed. Drains should direct water from the catchment</p>  | <p>Throughout the renovation phase</p> | <p>SM</p>         |



**TABLE 3: MANAGEMENT OF CONSTRUCTION INDUCED ENVIRONMENTAL IMPACTS**

| Environmental Aspects | Recommended Mitigation Measures   | Timing                          | Responsible Party |
|-----------------------|---|---------------------------------|-------------------|
|                       | <p>areas to the rock fissure on the southeast section of the property. Cascades may be installed to break the impact of water flowing in the drains.</p> <p><b>Maintenance:</b> Drainage and all other water catchment facilities on the lodge should be well maintained, inspected before the rainy period and cleaned after the rainy period.</p> <p><b>Soil Erosion:</b> Ensure that excavated materials are protected and not washed away into drains and rainwater channels. Loose soil should be compacted to minimise wind erosion. Under no circumstances may excavated materials be dumped into the natural water channels on the property.</p>  |                                 |                   |
| <b>Fuel Handling</b>  | <p><b>Inspections:</b> All construction vehicles on site should be inspected for oil and fuel leaks before work commences each day. Repairs must be promptly done when oil or fuel leaks are detected.</p> <p><b>Re-fueling:</b> Any on-site refueling of construction vehicles should be done on a hard impermeable surface or over drip pans to ensure that spilled fuel is captured and cleaned up.</p> <p><b>Flammable Products:</b> No fuel may be stored near flammable products such as paints. No smoking is allowed in areas where refueling is being conducted.</p> <p><b>Fuel Security:</b> Any oil and fuel stored on site should be kept in containers fitted with lids which are kept firmly shut at all times. Smoking and naked flames must not be allowed in the vicinity of the fuel storage area.</p> <p><b>Repairs:</b> Any repairs of construction vehicles should be done on a hard impermeable surface. All spills from engine repairs should be cleaned up and disposed of at suitable waste bins.</p> <p><b>Signage:</b> Symbolic signage clearly depicting “No Smoking” “Danger” &amp; “No Naked Lights” must be clearly displayed and must conform to local standards.</p> | Throughout the renovation phase | SM                |
| <b>Fire Hazards</b>   | <p><b>Electricians:</b> Only qualified and certified electricians should be hired to do the installations and to connect all electrical apparatus including the wiring of the lodge building and laying of electrical cables.</p>   | Throughout the renovation phase | SM                |

**TABLE 3: MANAGEMENT OF CONSTRUCTION INDUCED ENVIRONMENTAL IMPACTS**

| Environmental Aspects                   | Recommended Mitigation Measures   | Timing   | Responsible Party             |
|---|---|--|-------------------------------|
|   | <p><b>Fire alarms:</b> Fire alarms should be installed at strategic locations throughout the lodge buildings. It is important to ensure that the fire alarms are kept in a functioning state – this should be checked from time to time.</p> <p><b>Fire Response:</b> Develop and adapt an emergency fire response plan for the lodge. Emergency numbers for the Ruacana Town Council and Omusati Fire Response Teams should be clearly displayed.</p> <p><b>Firefighting:</b> Ensure that adequate firefighting equipment is provided, regularly serviced and maintained. Employees should be trained on firefighting methods and techniques and firefighting drills should be performed by the employees.</p>   |  |                               |
| <p><b>Solid Waste Management</b></p>    | <p><b>Building Rubble:</b> All building rubbles should be removed from the lodge property and transported to the Ruacana Town Council’s landfill site.</p> <p><b>Recyclables:</b> Recyclable waste such as cans, bottles, packaging and plastics should be stored in separate waste bins and offered to recycling companies.</p> <p><b>Hazardous Waste:</b> Construction vehicles should be inspected daily for oil and fuel leakages. Maintenance and washing of vehicles should take place only at a designated area which is lined with concrete.</p> <p><b>Trained Personnel:</b> Hazardous waste should be handled by trained personnel. Spill management kits, PPEs and relevant emergency procedures should be available. Any spills should immediately be contained and cleaned up.</p> | <p>Quarterly subject to quantities</p> <p>Daily</p> <p>Upon hiring</p> | <p>SM</p> <p>SM</p> <p>SM</p> |
| <p><b>Sewerage Waste Management</b></p> | <p><b>Sanitation:</b> Clean and tidy toilets should be provided at the construction site. Toilets should have adequate ventilation and lighting. Ideally, separate toilets for male and female should be provided but if this is not possible, as a minimum, rooms with lockable doors are required.</p> <p><b>Toilet papers:</b> Toilet papers and hand cleaning agents should be supplied in the toilets. Control should be maintained to discourage abuse and wastefulness.</p> <p><b>Bush Toilet:</b> Under no circumstances may employees use the bush on the property as ‘toilet’. Urinating of men in public should also be discouraged.</p>   | <p>Weekly</p> <p>When reported</p>                                     | <p>SM</p> <p>SM</p>           |

**TABLE 3: MANAGEMENT OF CONSTRUCTION INDUCED ENVIRONMENTAL IMPACTS**

| Environmental Aspects                    | Recommended Mitigation Measures  | Timing   | Responsible Party                   |
|--|--|--|-------------------------------------|
|  | <p><b>Facilities:</b> Clean and tidy washing facilities with sufficient ventilation and lighting are required next toilets. Soap or other cleaning agents should be provided.</p> <p><b>Drinking Water:</b> An adequate supply of drinking water should be provided at the construction site with suitable cups or other drinking vessels.</p>   | Daily  | SM                                  |
| Archaeological & Cultural Heritage Sites | <p><b>Archaeological Sites:</b> Should a Cultural Heritage site or an Archaeological site of interest be uncovered or discovered during the excavations or trenching the following procedure should be applied:</p> <ul style="list-style-type: none"> <li>○ If operating a machine or equipment, stop work immediately;</li> <li>○ Demarcate the site with plastic warning tape;</li> <li>○ Cease any works in the immediate vicinity</li> <li>○ Report findings, site location and actions taken to SM who should report the same to the NHC in Windhoek</li> <li>○ Recover, pack and label findings for transfer to the National Museum as guided by NHC</li> </ul> <p><b>Human Remains:</b> Should human remains be found, the following actions will be required:</p> <ul style="list-style-type: none"> <li>○ Apply the procedure as described above.</li> <li>○ Schedule a field inspection with an archaeologist to confirm that remains are human.</li> <li>○ Advise and liaise with the NHC and the Police.</li> <li>○ Remains will be recovered and removed by the police for transport to either the National Museum or the National Forensic Laboratory.</li> </ul> <p><b>Training:</b> Employees should be trained on the provisions of the EMP including aspects related to Archaeological and Cultural Heritage</p> <p><b>Rock Fissure:</b> The integrity of this feature should be upheld and protected. A paved footpath should be constructed leading from restaurant to the rock fissure and correct notices/signboards with instructions of what to do and not to do should be clearly displayed. Known information on the rock fissure should be provided on a notice board.</p> | <p>Throughout the construction period</p><br><p>Throughout the construction phase</p><br><p>At the beginning of the wet season</p> | <p>SM</p><br><p>SM</p><br><p>SM</p> |

**TABLE 3: MANAGEMENT OF CONSTRUCTION INDUCED ENVIRONMENTAL IMPACTS**

| Environmental Aspects              | Recommended Mitigation Measures   | Timing                                    | Responsible Party |
|------------------------------------|---|---|-------------------|
| <b>Health &amp; Safety Aspects</b> | <p><b>Emergency Response:</b> Develop an emergency response plan and for the construction activities to deal with any incidents or accidents.</p> <p><b>Personal Protective Equipment (PPE):</b> Provide and supply suitable PPE to employees.</p> <p><b>Good Housekeeping Practice:</b></p> <ul style="list-style-type: none"> <li>○ Maintain good housekeeping.</li> <li>○ Comply with the guidelines in the EMP.</li> <li>○ Limit speed to 20 km/hour on internal lodge routes.</li> <li>○ Enforce good housekeeping and ensure proper handling of all waste products.</li> <li>○ Ensure adherence to the relevant health and safety legislation.</li> </ul> | <p>Beginning of the construction</p>      | <p>SM</p>         |
|                                    | <p><b>Covid-19 Pandemic Protocols:</b><br/>Respect and obey guidelines recommended by the MHSS regarding the pandemic including the following measures:</p> <ul style="list-style-type: none"> <li>○ Maintain a safe distance when in a crowded place.</li> <li>○ Avoid large gathering such as weddings, funerals, etc.</li> <li>○ Maintain a high standard of hygiene by regularly washing your hands with clean water.</li> <li>○ Avoid handshakes.</li> <li>○ Wear a safety mask when in public places.</li> <li>○ Get vaccinated.</li> </ul>   | <p>Throughout the construction period</p> | <p>SM</p>         |

**Handover:** Once the upgrade have been completed, before the lodge facility is handed over to the owner, the contractor has to ensure that rehabilitation of the site is implemented immediately upon completion of construction activities. The following measures are recommended:

| TABLE 4: MANAGEMENT OF POST UPGRADE ENVIRONMENTAL IMPACTS   |  |
|---|--|
| Recommended Mitigation Measures   | Timing   |
| <p><b>The land:</b> After construction is complete, the land must be cleared of rubbish, surplus materials, equipment, and all sections of the land must be left in a condition as close to that prior to construction.</p> <p><b>Topsoil:</b> Any excess topsoil is to be spread evenly over the area in a manner that blends in well with the natural topography. Excess stockpiled building materials are to be removed completely and the area levelled.</p> <p><b>Disturbed areas:</b> All disturbed areas must be levelled and cleared of any foreign materials. It is unacceptable to leave foreign material behind with the knowledge that it will become hidden amongst the rejuvenating vegetation with time.</p> <p><b>Earth embankment:</b> All disturbed sites should be rehabilitated by breaking the surface crust and erecting earth embankment to prevent erosion, while vegetation should be re-established.</p> <p><b>Indigenous Plants:</b> The use of planting indigenous plants, to replace the plants destroyed by the construction activities, is encouraged as opposed to planting no-indigenous plants sourced elsewhere. Plants that are removed /propagated during construction may be maintained on site and used to re-vegetate the disturbed soil.</p> <p><b>Cordon off:</b> Access to rehabilitated areas should be limited and restricted until such time that the re-vegetation is considered successful. The rehabilitated area may be cordon off to limit access.</p> <p><b>Monitoring:</b> The rehabilitated areas should be monitored on a regular basis to ensure that the re-vegetation process has been successful, plants are maintained, weeds and invaders are removed, and that areas where replanting has been unsuccessful are re-planted.</p> | <p>At the end of the construction before site is handed back to promotor</p> |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect                               | Recommended Management Measures  | Timing  | Responsible Party |
|--------------------------------------|--|---|-------------------|
| <p><b>Storm Water Management</b></p> | <p><b>Natural Water Channels:</b> Natural water channels should be kept clean at all times. No waste may be dumped in the natural water channels on the property.</p>  | <p>Once yearly at beginning of rainy season</p>         | <p>LM</p>         |
|                                      | <p><b>Drainage:</b> Keep drainage clean, tidy and waste-free. Drains should direct water from the catchment areas to the rock fissure on the southeast section of the property. Drainage should be inspected for cracks before the rainy season and immediately after the rainy period.</p>  | <p>Twice annually before and after the rainy period</p> | <p>LM</p>         |
|                                      | <p><b>Runoff water:</b> Runoff from internal roads and paved areas should be monitored to avoid erosion and pollution related problems. Excessive runoff could lead to sediment transportation.</p>  | <p>Twice annually before and after the rainy season</p> | <p>LM</p>         |
|                                      | <p><b>Waste traps:</b> Where possible install waste traps in the storm water system to trap litter and other wastes from entering natural water stream leading to the Rock Fissure on the southern side of the property. Waste traps should be regularly cleaned and inspected to ensure their efficient functioning.</p>  | <p>Quarterly</p>  | <p>LM</p>         |
|                                      | <p><b>Sensitive areas:</b> Measures should be put in place to adequately protect areas identified as being sensitive to erosion and or sediment impacts.</p>   | <p>Once annually</p>                                    | <p>SM/LM</p>      |
|                                      | <p><b>Maintenance:</b> Drainage and all other water catchment facilities on the lodge should be well maintained, inspected before the rainy period and cleaned after the rainy period. All erosion damaged areas should be repaired as soon as possible.</p> <p><b>Rehabilitated areas:</b> All rehabilitated areas should be monitored for at least one year following the construction phase. Vegetation re-planted should be monitored to establish growth.</p> |   |                   |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect                | Recommended Management Measures  | Timing  | Responsible Party             |
|-----------------------|--|---|-------------------------------|
|                       | <p><b>Water Storage Tanks:</b> Suitable water storage tanks should be provided and installed to harvest rainwater from the roof catchment areas. This will help to reduce the volume of water carried by the drains.</p> <p><b>Training:</b> Employees should be trained and educated on the importance of keeping natural water channels, drainage and water storage tanks clean, tidy and free of waste</p>  |   |                               |
| Waste Management Plan | <p><b>Waste Management Plan:</b> Develop a waste management plan for the lodge which should stipulate procedures to be followed for waste separation and disposed.</p> <p><b>Landfill Site:</b> The Ruacana Town Council has a landfill about 10 km from the lodge. The LM must obtain consent from the Council for use of the landfill. Council has also a suitable waste removal vehicle and can be contracted to transport the waste from the lodge to its landfill.</p> <p><b>Recyclables:</b> Recyclable waste such as cans, bottles, packaging and plastics should be stored in separate waste bins at the lodge and offered to recycling companies. Waste storage receptors should have lids and preferably labeled or colour coded. The lids will prevent waste from being blown away by wind and therefore becoming a visual nuisance.</p> <p><b>Organic waste:</b> Organic waste from the kitchen (vegetable peels and waste food) should be stored in separate containers and given to the neighbouring residents to feed their pigs and chicken. Uncollected organic waste will start to decay /rot on the premises attracting rats and flies to the lodge and giving off odour which is unpleasant to the lodge guests and employees.</p> <p><b>Hazardous Waste:</b> Hazardous waste should be separated at source from general waste. In the context of this lodge, hazardous waste will include chemicals, used oils, oil contaminated waste, used cooking oils, fats and greases from extraction fans/filters, paint waste, fluorescent bulb waste, etc. All hazardous waste should be stored in the correct designated area until collected for disposal. Loading and unloading of hazardous waste should be done in a manner which reduces spillage of such waste.</p> | <p>Once, and review annually</p> <p>Monthly or quantity may dictate</p> <p>Weekly or as the quantity involved may dictate</p> | <p>LM</p> <p>LM</p> <p>LM</p> |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect         | Recommended Management Measures  | Timing  | Responsible Party   |
|----------------|--|---|---------------------|
| Sewerage Waste | <p><b>Maintenance:</b> Ensure that the sewerage system installed for the lodge is well maintained and kept in an operational state at all times. It is imperative to ensure that the facility is not overloaded and that it is allowed to function within its design capacity. If necessary output capacity should be reduced or increased. Removal of the sludge if required should be done by qualified personnel.</p> <p><b>Services:</b> Ensure that the sewerage system is maintained and serviced by qualified personnel in accordance with operating procedures.</p> <p><b>Leaks and Spills:</b> Ensure that measures are put in place to prevent the sewerage system from leaking or spilling its content. In the event of a failure or overflow situation at the sewerage system, implement a back-up system which will ensure that no sewerage is discharged into the environment.</p> <p><b>Monitoring:</b> Ensure that all treated effluent meets or exceeds water quality specifications. Conduct quarterly inspections of wastewater.</p> <p><b>Sewage Drainfield:</b> The drainfield where treated sewage water drains into the soil, could attract different bird species to the pond. This would have a positive impact on the birds and tourist pleasure in viewing the birds</p> <p><b>Bush Toilet:</b> Under no circumstances may employees resort to the use of the bushes on the property as 'toilet'. Employees or guests found defecating behind bushes should be given reprimands. Urinating of men in public is both uncivilized and unhygienic and should be discouraged.</p> | <p>At least once annually</p> <p>Once annually unless when broken</p> | <p>LM</p> <p>LM</p> |
| Access Road    | <p><b>Movements:</b> Regulate and control movement over the lodge property. Personnel, vehicles and equipment should move along designated internal lodge routes. Off-road driving should be prohibited. Signage should be prominently displayed highlighting the restriction of offload driving.</p> <p><b>Maintenance:</b> All internal lodge routes should be maintained and kept in good conditions to prevent dust and erosion. Any runoff from roads must be managed to avoid erosion and pollution related problems.</p>  | <p>Throughout the lifespan of the lodge</p>                           | <p>LM</p>           |



**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect              | Recommended Management Measures  | Timing   | Responsible Party |
|---------------------|--|--|-------------------|
| Resource Management | <p><b><u>Water:</u></b></p> <p><b>License:</b> Ensure that a water use license for the property is obtained from the line ministry and is kept up to date.</p> <p><b>Consumption:</b> Monitor water consumption to ensure that there is no undue waste. If a consumption limit is granted ensure that consumption does exceed such limits.</p> <p><b>Leaks:</b> Install a leak detection system, and promptly attend to any leaks when detected</p> <p><b>Quality:</b> Conduct water quality monitoring periodically to ensure that the output quality of the water complies with the minimum prescribed water quality standards.</p> <p><b><u>Electricity</u></b></p> <p><b>Save energy:</b> Electricity is very expensive and should be used sparingly. Ensure that the staff is trained in the electricity wise principle and that they practice prudent use of electricity.</p> <p><b>Lights:</b> Lights should be switched off when not being used.</p> <p><b>Gas:</b> Consider the use of gas powered stoves in the kitchen instead of electrical powered ones.</p> <p><b>Alternative Energy:</b> Consider the use of solar energy for water heating appliances such as solar geysers.</p> | Throughout the operational lifespan of the lodge | LM                |
| Noise Impact        | <p><b>Amenity Values:</b> Protect amenity values by ensuring that noise levels during those times when there are private functions such as conferences, weddings, birthday parties, etc. are kept within allowed parameters so as not to disturb ambience in the rural neighbourhood.</p> <p><b>Hooting:</b> Guests arriving at night should not hoot to alert the security guard on duty. Hooting in the middle of the night will disturb other guests and staff on the property.</p>   | Throughout the lifespan of the lodge             | LM                |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect                  | Recommended Management Measures  | Timing   | Responsible Party |
|-------------------------|--|--|-------------------|
|                         | <p><b>Complaints:</b> Any complaints related to noise disturbances received from stakeholders/community should be recorded, immediately investigated and corrective action taken.</p>  |  |                   |
| <b>Dust Disturbance</b> | <p><b>Amenity values:</b> Protect amenity values by ensuring that dust levels are kept within statutory parameters at the lodge.</p> <p><b>Internal Routes:</b> Internal lodge routes (roads, parking bays, walkways, caravan park, etc. should be paved or covered/spread with crushed stones to reduce dust emissions</p> <p><b>Speed limits:</b> Speed limits of 10 km/hour on the internal routes should be adhered to and enforced at all times.</p>  | Monthly or as the need arises                  | LM                |
| <b>Fire Hazard</b>      | <p><b>Fire alarms:</b> Fire alarms should be installed at strategic locations throughout the lodge buildings. It is important to ensure that the fire alarms are kept in a functioning state.</p> <p><b>Fire Response:</b> Develop an emergency fire response plan for the lodge. Ensure that there a fire assemble point. All emergency numbers (Ruacana Police, Omusati Region Fire Response Brigade, etc.) must be readily available.</p> <p><b>Firefighting:</b> Ensure that adequate firefighting equipment is provided and such equipment is regularly serviced and maintained. Employees should be trained on firefighting methods and techniques.</p> <p><b>Signage:</b> Provide adequate fire hazard signs such as 'No Smoking' and 'Exit Direction' signs. Such signs should be clearly displayed.</p> | Throughout the lifespan of the lodge           | LM                |
| <b>Visual Intrusion</b> | <p><b>Natural Vegetation:</b> Retain and maintain the natural vegetation in all areas outside of the lodge development footprint. All personnel and vehicle movements on the lodge should be restricted to walkways and internal routes.</p> <p><b>Appearance:</b> Maintain the general appearance of the lodge facility as whole including all internal roads, walkways, parking areas, caravan park and the natural rock fissure. Good appearance will enhance a positive visual impact.</p>   | Throughout the operational phase of the lodge. | LM                |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect   | Recommended Management Measures  | Timing   | Responsible Party             |
|--|--|--|-------------------------------|
|  | <p><b>Routes:</b> Maintain all internal routes to forgo erosion and suppress dust. Rubbish strewn roads will result in an unpleasant visual decay.</p> <p><b>Monitoring:</b> Monitor rehabilitated areas and implement remedial action as and when required.</p> <p><b>Buildings:</b> Maintain the general appearances of all buildings and infrastructure by repainting from time to time. Poor maintenance and neglect to repaint buildings and infrastructure will result is visual decay.</p> <p><b>Light Pollution:</b> Any security light used at night should illuminate targeted objects within the lodge boundary and may not offend the village residents or the public using the adjacent C35 Highway road.</p> <p><b>Waste:</b> Wind-blown papers and plastics around the lodge boundary fence should be regularly picked up to avoid visual nuisance. Maintain a high standard of housekeeping.</p>   | <p>When required</p> <p>Clean annually<br/>repaint on three<br/>year basis</p> <p>Clean and remove<br/>daily</p> | <p>LM</p> <p>LM</p> <p>LM</p> |
| <p><b>Archaeological &amp; Cultural Heritage</b></p> | <p><b>Rock Fissure:</b> Whilst not specifically recognized as an archaeological site, the rock fissure on the lodge property should be preserved and protected against vandalism. It can be a great asset to the lodge. Rainwater from the dry river on the southern section of the property drains into this fissure creating a pleasing atmosphere to view during the rainy season.</p> <p><b>Walkway:</b> The integrity of this rock fissure should be upheld and protected. A paved footpath should be constructed leading from restaurant to the rock fissure and correct notices/signboards with instructions of what to do and not to do should be clearly displayed. Amongst the notices to the guests/tourists viewing the fissure could be:</p> <ul style="list-style-type: none"> <li>○ No dogs &amp; cats allowed</li> <li>○ No throwing objects around</li> <li>○ No children without supervision</li> <li>○ Do not cross the barrier fencing</li> <li>○ Do not enter the cave</li> </ul> | <p>Daily during the wet<br/>period</p> <p>Weekly</p>   | <p>LM</p> <p>LM</p>           |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect           | Recommended Management Measures   | Timing                         | Responsible Party |
|------------------|---|--------------------------------|-------------------|
|                  | <ul style="list-style-type: none"> <li>○ Do not harm reptiles &amp; other creatures</li> <li>○ No weeing</li> </ul> <p><b>Information:</b> Any known information on the rock fissure should be provided on a notice board. The Geological Survey of Namibia could have some background information on the rock fissure.</p>   |                                |                   |
| Faunal diversity | <p><b>Springbucks:</b> Guests and employees should be informed about the springbucks introduced on the property and where they are likely to be found (drinking place). These wild animals are not to be hurt, snared or chased around. Feeding of springbucks is prohibited.</p>   | At beginning of the employment | LM                |
|                  | <p><b>Other species:</b> Generally, species such as snakes, lizards, chameleons, spiders, scorpions and rats are quite common in the area. Personnel are to be briefed about these species and that they should not be hurt or killed when encountered on the property.</p>   | Quarterly                      | LM                |
|                  | <p><b>No Domestic Animals: (Dogs and Cats):</b> Dogs will hunt down the springbucks introduced on the property and should not be allowed on the promises. Cats will also kill reptiles, rodents and other small living creatures causing a population imbalance on the property.</p>  | Throughout the lodge lifespan  | LM                |
|                  | <p><b>Sewage Drainfield:</b> The drainfield to which clean water from the sewage tank is discharged is likely to attract bird species which could add a positive impact to the lodge as the guests could enjoy viewing such bird species. Such birds should not be disturbed.</p>   | Once annually                  | LM                |
|                  | <p><b>Littering:</b> Wilful littering of plastics, papers, tins, cans, food containers, etc. is prohibited. Provide suitable waste bins on the lodge premises. Out of curiosity, springbucks will feed on plastics and papers if such waste is allowed to be windblown around on the property.</p> <p><b>Lodge Gates:</b> The entrance gates to lodge should be kept closed so that livestock (cattle, goats and donkeys) grazing around in the area does not gain entry to the lodge property.</p> | Daily                          | LM                |



**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect                               | Recommended Management Measures   | Timing                               | Responsible Party |
|--------------------------------------|---|--------------------------------------|-------------------|
|                                      | <ul style="list-style-type: none"> <li>○ Provide employees with PPEs who may be working in areas in which they are exposed to danger.</li> </ul> <p><b>Training:</b></p> <p>All employees should be given an induction workshop on the EMP as well as on-the-job training opportunities to improve their skills level which ultimately leads to high productivity and efficiencies.</p>   |                                      |                   |
| <b>Labour and Working Conditions</b> | <p><b>Good Relationships:</b> Develop and maintain good working relationships with employees, the neighbouring community and service providers. Join local organizations/associations in the hospitality industry for networking.</p> <p><b>Dress Code:</b> Provide employees with uniforms to convey a strong signature to promote and reinforce a strong brand for the lodge.</p> <p><b>Labour Laws:</b> Respect and comply with the labour laws, labour legislations, labour policies and labour regulations.</p> <p><b>Trade Unions:</b> Allow the employees to exercise their rights to join and belong to a trade union of their choice. Allow each employee charged with a misconduct the right to be represented during a disciplinary hearing.</p> <p><b>Respect Culture &amp; Traditions:</b> Respect and accommodate employees who may have different cultures, beliefs and traditions. Employees who cannot work on Sundays on religious or cultural grounds should be accorded that respect.</p> <p><b>Records:</b> Proper records should be kept with respect to the number of people employed whether fulltime or part-time, salaries &amp; wages paid, etc.</p> | Throughout the lifespan of the Lodge | LM                |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect   | Recommended Management Measures   | Timing   | Responsible Party             |
|--|---|--|-------------------------------|
| <p><b>Social and Community Impacts</b></p>               | <p><b>Objective:</b> Provide opportunities for local business, promote industrial relations, and contribute to socio-economic stability.</p> <p><b>Tourism:</b> Encourage and promote tourism by offering discounts to Namibian nationals on accommodation.</p> <p><b>Goods &amp; Services:</b> Support local business by sourcing goods &amp; services for the lodge, from local businesses (chicken, meat, fish, vegetables, maize meal, rice, eggs, potatoes, etc.) office requirements (fax machine, telephone, computers, furniture, stationery, etc.) and safety wear (uniforms, PPEs, etc.).</p> <p><b>Namibia Tourism Board:</b> It is mandatory to submit reports to NTB on the number of tourists who visited the lodge as well as whether they were locals or foreign guests. Such reports are compiled annually to indicate the number of tourists who visited Namibia. Such reports should be produced by the lodge as part of its management reports to NTB.</p> <p><b>Corporate Social Responsibility:</b> Support a worthy cause within the district of Ruacana or the region of Omusati as part of putting back to the community in which the lodge is built and operating.</p> <p><b>Complaints:</b> All complaints from the community with regard to the lodge should be recorded, investigated and corrective action taken.</p> | <p>Festive periods</p> <p>Throughout the existence of the lodge</p> <p>When reported</p> | <p>LM</p> <p>LM</p> <p>LM</p> |
| <p><b>Health and Safety for employees and guests</b></p> | <p><b>Objective:</b> Protect amenity values and business efficiency by ensuring that a high standard of health and safety is maintained in all operational activities of the lodge.</p> <p><b>Health &amp; Safety Plan:</b> Develop a Health and Safety Plan which makes provision for raising of awareness, sharing of information as well as access to health care services.</p>  | <p>Beginning of the business phase</p>   | <p>LM</p>                     |

**TABLE 5: MANAGEMENT OF POTENTIAL IMPACTS ASSOCIATED WITH THE OPERATIONAL PHASE**

| Aspect | Recommended Management Measures  | Timing   | Responsible Party                       |
|--------|--|--|---|
|        | <p>The health and safety of employees as well as guests to the facility should be protected and safeguarded at all times.</p> <p><b>Emergency Response:</b> Develop an emergency response plan for the lodge operation to deal with any safety incidents or accidents occurring.</p> <p><b>Personal Protective Equipment (PPE):</b> Provide and supply suitable PPE to all employees working in the maintenance and cleaning sections of the lodge operation.</p> <p><b>Covid-19 Pandemic Protocols :</b> Respect and obey guidelines recommended by the MHSS regarding the pandemic including the following measures:</p> <ul style="list-style-type: none"> <li>○ Maintain a safe distance when in a crowded place</li> <li>○ Avoid large gathering such as weddings, funerals, etc.</li> <li>○ Maintain a high standard of hygiene by regularly washing your hands with clean water and soap</li> <li>○ Avoid hand shakes</li> <li>○ Wear a safety mask when in public places</li> <li>○ Get vaccinated</li> <li>○ Seek medical help when feeling unwell</li> </ul> <p><b>Good Housekeeping Practice:</b> Promote and encourage good housekeeping practices amongst the employees through the following measures:</p> <ul style="list-style-type: none"> <li>○ Comply with the guidelines in the EMP.</li> <li>○ Ensure that speed limit on internal lodge routes is maintained.</li> <li>○ Keeping the lodge clean and litter-free through effective handling of waste.</li> <li>○ Adherence to the relevant health and safety legislation.</li> <li>○ No consumption of alcohol during working hours is allowed.</li> <li>○ No theft of company properties.</li> <li>○ No use of drugs.</li> <li>○ No firearms on company property unless used by security personnel guarding the premises.</li> <li>○ Guests should be treated with respects.</li> <li>○ No use of foul language.</li> </ul> | <p>At the inception of the operational phase</p> <p>At the inception of the business phase</p> <p>At least free PPE twice annually</p> <p>As long as the pandemic prevail</p> <p>Throughout the lodge lifespan</p> | <p>LM</p> <p>LM</p> <p>LM</p> <p>LM</p> |



**TABLE 6: ENVIRONMENTAL PERFORMANCE PARAMETERS**

| Aspect to be Monitored  | What to Check/Monitor   | Frequency   | By Who |
|---|---|-------------|--------|
| <b>Waste</b>  | Onsite secure storage of waste before removal   | Weekly      |        |
|   | Kitchen & restaurant waste  | Daily       |        |
|   | Guest rooms, bar, caravan park, etc.  | Daily       |        |
|   | Garden waste  | Daily       |        |
|   | Wet waste storage area  | Daily       |        |
|   | Dry waste storage area  | Weekly      |        |
|   | Garden waste storage area   | Weekly      |        |
|   | Waste sorting (recyclable and non-recyclable)   | Once weekly |        |
|   | Inspection of waste bins  | Quarterly   |        |
|   | Kitchen fat traps – inspect and clean filters   | Weekly      |        |
| <b>Water</b>  | Compare water usage over a period of time and determine approximate volume of water used by the lodge against occupancy rate. | Monthly     |        |
|   | Where huge discrepancies in usage are recorded, check any leaks from the tanks  | Monthly     |        |
|   | Water installation – check all steel structures for stability and integrity.  | Quarterly   |        |
|   | Check and inspect water storage tanks and distribution pipes for any leaks.   | Monthly     |        |
|   | Check and inspect all taps for leaks  | Monthly     |        |
|   | Water pipes – check and inspect for leaks   | Monthly     |        |
|   | Sanitation – check and inspect for cleanliness and any leaks  | Weekly      |        |
|   | Water treatment facility – inspect and check functionality of the system and purification equipment                           | Monthly     |        |
|   | Borehole – check and inspect pump connection, and any visible leaks   | Monthly     |        |
|   | Borehole – have the water quality tested for human and animal consumption   | Yearly      |        |
| Clean rainwater gutters and downpipes of leaves before the wet season | Yearly  |             |        |
| <b>Sewage System</b>  | Check and inspect the septic tank covers  | Yearly      |        |
|   | Check and inspect the septic chambers including the inlets and outlets  | Quarterly   |        |
|   | Check and measure the scum layer  | Yearly      |        |

**TABLE 6: ENVIRONMENTAL PERFORMANCE PARAMETERS**

| Aspect to be Monitored | What to Check/Monitor   | Frequency  | By Who |
|------------------------|---|--|--------|
|                        | Check the baffles above the scum<br>Remove and clean outlet baffle filter<br>Check and inspect the drainfield of the septic tank and the perforated pipes.<br>Check for any bad smell (odour) and any damp areas<br>Soak-away – check and clean drainages<br>Check for any unintended leaks from the system | Yearly<br>Yearly<br>Yearly<br>Quarterly<br>Yearly<br>Quarterly                         |        |
| <b>Vehicles</b>        | Check for any oil leaks under the vehicle<br>Check for water level/coolant in the radiator<br>Check engine oil level<br>Check tyres pressure<br>Check general cleanliness of vehicles<br>Check for vehicle license validity & roadworthiness<br>Check and inspect the spare wheel                           | Daily<br>Daily prior to use<br>Daily before use<br>Daily<br>Daily<br>Yearly<br>Monthly |        |
| <b>Infrastructure</b>  | Check and inspect the condition of the walkways<br>Check and inspect the driveways<br>Check and inspect boundary fence of the property<br>Check and inspect the motor gates to the property<br>Check and inspect that the gates, hinges, latches, etc. are free from rot                                    | Weekly<br>Weekly<br>Weekly<br>Daily<br>Monthly   |        |

## ANNEXURE 1: ECC GRANTED TO ONDJOMBO LODGE



REPUBLIC OF NAMIBIA

### MINISTRY OF ENVIRONMENT AND TOURISM

Tel: (00 26461) 284 2111  
Fax: (00 26461) 232 057  
E-mail: [simon.hengule@mot.gov.na](mailto:simon.hengule@mot.gov.na)  
Enquiries: Mr. Simon Hengule

Car: Robert Mugabe &  
Dr Kenneth Kaunda Street  
Private Bag 13306  
Windhoek  
Namibia  
27 March 2014

#### OFFICE OF THE ENVIRONMENTAL COMMISSIONER

The Manager  
Ondjombo Lodge  
P O Box 1263  
Oshakati

Dear Sir/Madam

**SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE PROPOSED DEVELOPMENT OF A NEW LODGE AT OMUDHU WAHAUWANGA VILLAGE, RUACANA CONSTITUENCY OMUSATI REGION**

The Environmental impact assessment and Environmental Management Plan submitted are sufficient as these have made an adequate provision of the environmental management for 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 throughout this process.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project.

On the basis of the above, this letter serves as an environmental clearance certificate 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's activities. Instead, full accountability rests with Ondjombo Lodge and their consultants.

This environmental clearance is valid for a period of (three) 3 years, from the date of issue unless withdrawn by this office.

Yours sincerely,

  
F.M. Sikabongo  
DEPUTY ENVIRONMENTAL COMMISSIONER



**"Stop the poaching of our rhinos"**

All official correspondence must be addressed to the Permanent Secretary.