

**ENVIRONMENTAL MANAGEMENT PLAN (EMP)
FOR THE CONSTRUCTION AND OPERATION OF A RECREATIONAL PARK AND
ACCOMMODATION FACILITY AT
OSHONDO VILLAGE, ANAMULENGE CONSTITUENCY, OMUSATI REGION**



PROJECT DETAILS

Title	ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE ESTABLISHMENT AND OPERATION OF A RECREATIONAL PARK AND ACCOMMODATION FACILITY AT OSHONDO VILLAGE, ANAMULENGE CONSTITUENCY, OMUSATI REGION		
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RESUBMISSION

ABBREVIATION

AIDS	Acquired Immunodeficiency Syndrome
CC	Close Cooperation
DEAF	Department of Environmental Affairs and Forestry
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
ECO	Environmental Compliance Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
HIV	Human Immunodeficiency Virus
MEFT	Ministry of Environment, Forestry and Tourism
NTS	Namtranslation Services
PPE	Personal Protective Equipment

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1. INTRODUCTION

Namtranslation Services cc (NTS) is a wholly Namibian owned company established in 2005. NTS intends to establish and operate a recreational park and accommodation facility at Oshondo village within Anamulenge constituency, Omusati region. The planned development will be established on a land measuring approximately 3 hectares at Oshondo village. The land had been granted by the Ombalantu Traditional Authority (OTA) to NTS after following all the correct procedures. The Traditional Authority has given NTS a permission to construct and operate a recreational park and accommodation facility at the village, since it will contribute immensely to cultural tourism in the area as well as economic upliftment of the village. The envisioned recreational park and accommodation facility will enhance recreational activities and cultural tourism in the community and at the same time create the much-needed employment opportunities to the local people. Oshondo village is situated within the Anamulenge constituency and has been identified as the potential area due to its proximity to the town of Outapi including surrounding villages in the proximity of Anamulenge. The place has accessibility to electricity and water and schools which make the proposed recreational park available to the intended users due to its strategically location. The construction of the proposed development will include listed activities in terms of Namibia's Environmental Management Act (No. 7 of 2007) and EIA regulations (GN 30 of 6 February 2012). Therefore, an Environmental Clearance Certificate (ECC) from the Office of the Environmental commissioner, Department of Environmental Affairs and Forestry (DEAF) within the Ministry of Environment, Forestry and Tourism (MEFT) is required and this prompted the Environmental Impact Assessment (EIA) to be conducted.

Namtranslation Service cc, hereinafter referred to as the proponent intends to carry out the following activity:

- **Environmental Impact Assessment (EIA) for the establishment and operation of a recreational park and accommodation facility at Oshondo village, Anamulenge Constituency, Omusati region.**

The objective of the intended Environmental Assessment is therefore required to assess the potential social and environmental impacts associated with the establishment and operation of a recreational park and accommodation facility at Oshondo village, within the Anamulenge constituency and formulate mitigation measures for the conceivable impacts.

The above is a listed activity in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012).

In terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), the following listed activities in **Table 1** were triggered by the proposed development:

Table 2: List of triggered activities identified in the EIA Regulations which apply to the proposed development.

Activity description and No(s):	Description of relevant Activity	The portion of the development as per the project description that relates to the applicable listed activity
Activity 7 (Agriculture activities)	The introduction of alien species into the local ecosystem.	The proposed project entails the introduction and planting of alien species within the recreational park to improve the aesthetic value of the area.
Activity 6 (Tourism development activities)	The construction of other tourism and hospitalities facilities.	The proposed project entails the construction of a campsite and accommodation facility for tourism purposes.

An Environmental Management Plan (EMP) is one of the imperative outputs of the EA process as it details all of the proposed mitigation and monitoring arrangements, establish timeline as well as explicit dispensed tasks. This EMP provide the mitigation and monitoring actions to be applied during the subsequent phases of the proposed developments:

- Construction phase – the period during which the proponent, having dealt with the necessary legislative and administrative arrangements, appoints a contractor to engage in the construction of a recreational park and accommodation facility;
- Operational phase - the period during which the proponent commenced with the operation of the recreational park and accommodation facility.

The rehabilitation of the of a recreational park and accommodation facility is not expected to take place once the facility commences with the operation, but it is extremely suggested that the subject area assumes economically viable alternative uses and not cause adverse hazard to local people optimising this lands; when the facility ceases its operation some suggested recommendation is detailed in **Section G**.

2. PROJECT LOCATION

The proposed recreational park and accommodation facility will be established at Oshondo village located approximately 3 Km east of Outapi and 1 Km north of Anamulenge Roman Catholic Missionary within the Anamulenge constituency in Omusati region (see **Figure 1** below for the proposed site).



Figure 1: Proposed area for the recreational park and accommodation facility (red perimeter) at Oshondo village, Anamulenge constituency, Omusati region.

Table 2: GPS coordinates for the proposed recreational park and accommodation facility at Oshondo village, Anamulenge constituency, Omusati region.

Way point no.	Latitude S	Longitude E
1.	-17.488252	15.007294
2.	-17.488284	15.008757
3.	-17.489501	15.008312
4.	-17.489128	15.007438
5.	-17.488941	15.007285

3. PURPOSE OF THE EMP

This Environmental Management Plan (EMP) covers the appropriate framework which encompasses the mitigation approach, monitoring actions and management control programs to condense possible environmental impacts to inconsequential levels. In addition, the roles and responsibility of persons accountable for in the proposed establishment and operation of a recreational park and accommodation facility at Oshondo village. This EMP includes the mitigation measures for the potential impacts associated with the proposed establishment and operation of the facility.

4. COMPLIANCE TO THE EMP

This EMP is justifiably a lawful binding document as given under the provisions of the Environmental Management Act, 2007 (Act No. 7 of 2007). Thus, **NTS** as well as the appointed contractors must comply with the mitigation measures detailed in this document. It should be noted that the EMP is a living document and is subjected to modification depending on the variation with the state of the environment and new information that may be imminent, hence, it must be reviewed and updated accordingly with the provision of the EMA.

5. LEGAL AND POLICY FRAMEWORK

The proposed project shall be established and operated under the provision of the relevant statutory framework of Namibia and international laws of which Namibia is signatory.

5.1 Applicable and relevant statutory framework of Namibia

Table 3. Legal requirements for the proposed establishment and operation of a recreational park and accommodation facility at Oshondo village.

Legislature/Policies	Relevant provision	Project Implication
The Constitution of the Republic of Namibia	<p>Article 95(1) of the Constitution of Namibia states that: “The State shall actively promote and maintain the welfare of the people by adopting policies aimed at the maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future”.</p> <p>Article 91 (c) provides for duty to guard against “the degradation and destructions of ecosystems and failure to protect the beauty and character of Namibia”.</p>	<p>To undertake the EA in order to maintain the ecological process and diversity of ecosystem.</p> <p>The proponent shall advocate for sound environmental management as stipulated in the Constitution through the implementation of the environment management plan prepared for this project.</p> <p>The operation for a recreational park and accommodation facility should be done in a sustainable manner to ensure that the beauty of the area and/or Namibia is maintained.</p>

Environmental Management Act No. 7 of 2007 (EMA)	<p>Section 2 outlines the objective of the Act which is to promote the sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment; to provide for a process of assessment and control of projects which may have significant effects on the environment. The Act gives legislative effect to the Environmental Impact Assessment Policy.</p> <p>Additionally, the act also provides procedure for adequate public participation during the environmental assessment process for the interested and affected parties to raise and register their opinions and concern about the proposed project.</p>	The management of this project must be informed by the EMA.
EIA Regulations GN 28, 29, and 30 of EMA (2012)	GN 29 Identifies and lists certain activities that cannot be undertaken without obtaining an environmental clearance certificate. GN 30 provides the regulations governing the environmental assessment (EA) process.	Construction and clearing of vegetation are one of the listed activities hence this EIA study.
Environmental Assessment Policy of Namibia (1995)	The Policy seeks to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process, and that the term ENVIRONMENT is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.	This EA should consider the term "Environment".
The Occupational Safety and Health Act No. 11 of 2007;	Safety risk is a statistical concept representing the potential of an accident occurring, owing to unsafe operation and/or environment. In the working context "SAFETY" is regarded as "free from danger" to the health injury and to properties.	The construction and operation of a recreational park and accommodation facility should comply with the guidelines outlined.

	Occupational Health is intended at the promotion and maintenance of the highest degree of physical, mental and social wellbeing of workers in all occupations. This is done by ensuring that all work-related hazards are prevented and where they occur, managed.	
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered by the proponent in the scoping process.	The EA should incorporate the aspects outlined in the guidelines.
Public Health Act No. 36 of 1919	The Act serves to protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.	The construction and operation of a recreational park and accommodation facility should adhere to this regulation.
Namibian Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	Care should be taken that the construction and operation of a recreational park and accommodation facility; do not lead to the degradation and destruction of the habitat.
Water Resources Management Act No. 11 of 2013	Section 13(1) deals with the prohibition of pollution of underground and surface water bodies. The Act also provides provision for the control, conservation and use of water for domestic, agricultural, urban and industrial purposes. In addition, the Act clearly gives	The pollution of water resources should be avoided at all costs during both the construction and operation of a recreational park and accommodation facility.

	provision that pertain with license or permit that required abstracting and using water as well as for discharge of effluent.	The use of mobile toilets during the construction phase should be properly positioned while placement of permanent ablution facilities for the recreational park and accommodation facility should be far from watercourse to avoid any see page into existing water course, or infiltration into soil.
The Ministry of Environment and Tourism (MET) Policy on HIV & AIDS	MET has recently developed a policy on HIV and AIDS. In addition, it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.	The proponent is required to adhere to the guidelines provided to manage the aspects of HIV/AIDS.
Communal Land Reform Act 5 of 2002	Section 36 B. Stipulates the allocation of rights in respect to communal land to anyone who seek to occupy land for the purposes of providing public services.	The proponent acquired land from the relevant traditional authority.
Labour Act No. 11 of 2007		Given the employment opportunities presented through the construction and operation of a recreational park and accommodation facility, compliance with the law by contractors and sub-contractors is necessary.
Public and Environmental Health Act of 2015	This Act (GG 5740) provides a framework for a structured uniform public and environmental health system in Namibia. It covers notification, prevention and control of diseases and sexually transmitted infections; maternal, ante-natal and neo-natal care; water and food supplies; infant nutrition; waste management; health nuisances;	The construction and operation of a recreational park and accommodation facility should comply with these legal requirements.

	public and environmental health planning and reporting. It repeals the Public Health Act 36 of 1919 (SA GG 979).	
Hazardous Substances Ordinance No. 14 of 1974	This ordinance gives provision to control the handling of hazardous substance in all circumstances, such as manufacturing, imports and exporting of these to ensure human and environmental safety.	The proponent should comply with this legislation.
Nature Conservation Ordinance No. 4 of 1975	Chapter 6 provides for legislation regarding the protection of indigenous plants.	Indigenous and protected plants must be managed within the legal confines.
Soil Conservation Act 6 of 1969 Ministry of Agriculture, Water and Forestry	The Act advocates for the prevention and combating of soil erosion; the conservation, Improvement and manner of use of the soil and vegetation; and the protection of water sources.	Soils should not be polluted or left unrehabilitated.
National Heritage Act No. 27 of 2004	The Act provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. Part V Section 46 of the Act prohibits removal, damage, alteration or excavation of heritage sites or remains, while Section 48 sets out the procedure for application and granting of permits.	Any material of cultural, heritage or archaeological importance shall be reported in accordance with this act.
African Convention on the Conservation of Nature and Natural	Article 9 subsection (h) Article IX subsection (h), on Species and Genetic Diversity is particularly noteworthy, stating that signatory states “shall strictly control the international and, as far as possible, accidental introductions, in any area, of species which are	Care should be taken to ensure that the introduction of alien species does not threaten the natural environment and proper management plans should be in place to prevent

Resources (African Union, 2003)	not native to that area and endeavor to eradicate those already introduced where the consequences are detrimental to native species or to the environment in general.”.	the alien plants from escaping into the natural environment.
Forestry Act 12 of 2001 & Nature Conservation Ordinance 4 of 1975	Prohibits the removal of protected plants species. The Act further requires any project activity that will result in clearance of certain Forests to obtain a Forest Permit before-hand.	These regulations should be adhered to for the conservation of vegetation. Species protected under this Act must be conserved as per requirements.
Pollution Control and Waste Management Bill	The Bill aims to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management. The Bill will be licensed is charge into watercourses and emissions into the air.	All activities shall be conducted within the framework of this Bill
Word's Best Practises	<p><i>Precautionary Approach Principle</i></p> <p>This principle is worldwide accepted when there is a lack of sufficient knowledge and information about the possible threats to the environment. Hence if the anticipated impacts are greater, then precautionary approach is applied. In this project, there are no eminent uncertainty however in cases when they arise, this approach should be applied.</p> <p><i>Polluter Pays Principle</i></p>	<p>Major construction activities particularly in the area with underground aquifer can be detrimental to the underground water. Therefore, precaution must be taken to avoid the contamination of underground water.</p> <p>In the event of any soil contamination pollution, the proponent must be responsible to clean up the environment.</p>

	<p>This principle ensures that proponents take responsibility of their actions. Hence in cases of pollution, the proponent bears the full responsibility to clean up the environment.</p>	
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6. ROLES & RESPONSIBILITIES

6.1 Environmental Compliance Officer (ECO)

The Ministry of Environment, Forestry and Tourism (MEFT) is the upholder of environmental protection. The Environmental Compliance Officer shall be an appointed Environmental Officer from the Directorate of Environmental Affairs delegated to enforce compliance as per the provision of the EMA. The ECO may carry out inspection at any given time to impose compliance. Based on his/her work schedule, the ECO shall visit the site at any time for environmental inspection and monitoring.

6.2 The Proponent

NTS shall hold the all-encompassing responsibility of environmental management by adequately executing the environmental management plan. Furthermore, it shall be a full responsibility of the **proponent** to execute the following activities.

- Appoint an Environmental Manager;
- Ensures that all workers and contractors are acquainted with the Environmental Management Plan (EMP) and induction on safety measures pertaining to construction and operation of the training facility are initiated;
- Ensure a safe and healthy working environment;
- Provide workers with appropriate Personal Protective Clothing (PPE);
- Monitor the employees works with regard to safety;
- Ensure good environment performance and compliance;
- Contract an environmental consultants or specialist to carry out environmental audits.

6.3 Environmental Manager

The Environmental Manager shall represent the proponent and should ensure that the daily operations of the project are monitored and employees and contractors are conforming with the EMP. The copy of the EMP shall be available at the site at all time and all the employees must be acquainted with the EMP.

6.4 Employees and Contractors

All stakeholders, particularly employees and contractors must;

- Comply and adhere to the EMP;

- Ensuring that all employees have personal protective gears at all time when working;
- Report damaged PPE and request for replacement;
- Adhere to the company rules and policies.

7. DISCIPLINARY ACTION

The EMP is considered as a live and a legally binding document. Therefore, any nonconformity on compliance to the EMP must result in thoughtful disciplinary legal action against the proponent such as;

- Deferment of work;
- Pecuniary consequences.

The punitive deed shall be determined as per the provision of EMA and relevant statutory legal framework. Under Section 27 (4), *Any person who contravenes subsection (3) commits an offence and is on conviction liable to a fine not exceeding N\$500 000 or to imprisonment for a period not exceeding 25 years or to both such fine and such imprisonment*".

8. THE ENVIRONMENTAL MANAGEMENT PLAN

This EMP should be read together with the EIA of the proposed construction and operation of a recreational park and accommodation facility and closure phase of the proposed development. The following tables details the management actions recommended to contain the potential impacts acknowledged in the scoping-level environmental assessment conducted for this development. These management actions have been organised temporally according to the proposed developments which comprises of Social, Environmental, Safety and Occupational Health related aspects.

SECTION A: STAFF INDUCTION

Table 4: Staff Induction Mitigation Measures

Environmental or Social Aspects	Objective	Proposed Mitigation Measures	Monitoring Indicators	Responsibility
<p>Staff Induction</p>	<p>To ensure that all employees are conversant with the requirements of the EMP including environmental policy and procedures.</p>	<p>All employees and contractors must go through a thorough induction course on all the provisions of the EMP including environmental policy and procedures.</p> <ul style="list-style-type: none"> • There must be an annual induction course for all the workers. • New employees must not start work without going through the induction course. 	<p>Induction minutes and attendance register signed by each staff member.</p> <p>Induction report</p>	<p>Proponent representative or Environmental Manager</p>
	<p>Disciplinary</p>	<ul style="list-style-type: none"> • The proponent must adopt a disciplinary system to discipline staff for non-conformity, such as not wearing PPE while working onsite etc. • Stringent measures must be put in place for any employee found 	<p>Disciplinary meetings and actions</p> <p>Disciplinary letters / Warnings</p>	<p>Proponent representative or Environmental Manager</p>

Environmental or Social Aspects	Objective	Proposed Mitigation Measures	Monitoring Indicators	Responsibility
		<p>contravening provisions of the EMP, must be granted a warning letter.</p>		
	<p>Availability of the EMP and Environmental Policy Statement at the site for ease of reference.</p>	<ul style="list-style-type: none"> • Ensure that a copy of the EMP and Environmental Policy Statement are kept at the site at all time and it should be readily accessible. 	<p>Empirical view of the EMP and Environmental Policy Statement.</p>	<p>Proponent representative or Environmental Manager</p>
<p>Communication</p>	<p>To ensure effective communication and improve environmental management and awareness.</p>	<ul style="list-style-type: none"> • The proponent must develop a communication strategy • Correspondences must be in writing • The contact numbers for the Environmental Manager must be available, displayed at key areas at the site in case of emergencies. • There must be an assembly point for emergency communication. • All employees who are in a position to make or take actions that will influence the conservation and 	<p>Communication Strategy</p> <p>Letters, e-mail, notices, minutes</p> <p>Display of the Environmental Manager and emergency numbers at key areas of the recreational park as well as accommodation facility.</p>	<p>Proponent representative or Environmental Manager</p>

Environmental or Social Aspects	Objective	Proposed Mitigation Measures	Monitoring Indicators	Responsibility
		management of the environment must be vested with a good knowledge of their respective responsibilities in order to ensure accurate implementation of the EMP, Environmental Policy Statement and Environmental Management System.		

SECTION B: HEALTH AND SAFETY

Table 5: Health and Safety Measures to be implemented

Environmental / Social Aspects	Objective	Construction and Operation Phases Mitigation Measures	Monitoring Indicators	Management Indicators	Responsibility
Health & Safety	Adhere to the Health and Safety Regulations, Government Notice 156/1997 (GG 1617).	<ul style="list-style-type: none"> The proponent must develop a health and safety plan; A compulsory safety induction course must 	Health and safety included and reflected in the induction minutes	Approved certification of completion.	Proponent representative or Environmental Manager

Environmental / Social Aspects	Objective	Construction and Operation Phases Mitigation Measures	Monitoring Indicators	Management Indicators	Responsibility
		<p>be given to all employees.</p> <ul style="list-style-type: none"> Each employee must be provided with personal protective equipment (PPE) and must be worn at all time during working and when onsite. Ensure all employees are inducted on the dangers of the risks associated with working at facility and the available emergency response; There must be clear health and safety signs at designated area such as, ASSEMBLY AREA, 	<p>Visual Inspection</p> <p>Visual Signs available</p>	<p>Visual Inspection</p> <p>Availability of fire extinguishers on the facility wall and evidence of training (e.g. minutes, training pictures etc). Visible signages</p>	

Environmental / Social Aspects	Objective	Construction and Operation Phases Mitigation Measures	Monitoring Indicators	Management Indicators	Responsibility
		<p>NO SMOKING “DANGER”, “ENTRANCE PROHIBITED” etc.</p> <ul style="list-style-type: none"> • Employees must NOT be exposed to noise levels above the required -85dB (A) limit over a period of 8 hours. Should the noise level be higher than 85dB, the proponent must implement a hearing conservation program such as noise monitoring; • Employees must be provided with 	<p>Record of hearing loss</p> <p>No noise signs at the accommodation facility.</p>	<p>Report of health check ups</p>	

Environmental / Social Aspects	Objective	Construction and Operation Phases Mitigation Measures	Monitoring Indicators	Management Indicators	Responsibility
		<p>appropriate PPE such as industrial earmuffs;</p> <ul style="list-style-type: none"> • Supply safe drinking water. • Ensure adequate, hygienic and user-friendly ablution facilities for all employees at the site and visitors; • Inspect ablution facilities at the site regularly. • Supervisors must undertake an occupational health and first aid course. 	<p>Clean water</p> <p>Clean toilets at all time</p> <p>Proof of Certification</p>	<p>Laboratory analysis report</p> <p>Clean toilets at all time</p>	
Open fires	To prevent veld fire	<ul style="list-style-type: none"> • No open fires may be made anywhere at the site. 	Visual Inspection	Visual Inspection	Proponent representative or Environmental Manager

Environmental / Social Aspects	Objective	Construction and Operation Phases Mitigation Measures	Monitoring Indicators	Management Indicators	Responsibility
Road safety		<ul style="list-style-type: none"> • Demarcate roads clearly. • Off-road driving should not be allowed. • All vehicles that transport materials and visitors to and from the site must be roadworthy. • Drivers that transport materials and visitors to the facility should have a valid driver's license and should adhere to all traffic rules. • Loads upon vehicles should be properly secured to avoid items falling off the vehicle. 	Road signs	Road signs	Proponent representative or Environmental Manager

Environmental / Social Aspects	Objective	Construction and Operation Phases Mitigation Measures	Monitoring Indicators	Management Indicators	Responsibility
		<ul style="list-style-type: none"> • Limit and control the number of access points to the facility. • The road leading to the facility should be properly maintained so as to reduce dust emissions when they are being used by heavy vehicles. 			
Establish and Maintain Occupational health and Safety Management System (SMS)	Improved occupational health and safety at work place	<ul style="list-style-type: none"> • Maintain high safety standards at the facility and arrange annual audits by credible institutions. 	Accident records	High standards of occupational health and safety ratings is maintained.	Proponent representative or Environmental Manager

SECTION C: POLLUTION CONTROL AND WASTE MANAGEMENT

Table 6: Pollution and Waste Management Mitigation Measures

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
Vehicle Emissions	Reduce greenhouse gas (GHG) emissions from vehicles / machinery	<ul style="list-style-type: none"> All equipment and vehicles must be kept in good working condition and serviced frequently to prevent emission of noxious smoke etc. Switch off engines when vehicle is not operations 	<p>Vehicle service records books</p> <p>Reports of smoke emissions from machinery</p>	Endorsement by the management	Proponent representative or Environmental Manager
Surface and ground water contamination / pollution	To prevent soil and water pollution	<ul style="list-style-type: none"> Contaminated runoff from the various operational activities should be prevented from entering any surface water bodies. 	<p>Service records</p> <p>Visible drip trays</p>		Proponent representative / Environmental Manager

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
		<ul style="list-style-type: none"> • Ensure that surface water accumulating on-site are channelled and captured to be treated in an appropriate manner before disposal into the environment. • Disposal of waste from the properties should be properly managed. 	Proper storage with concrete bund surface		
Oil Spillages	To prevent oil spill from tanks and during re-fuelling	<ul style="list-style-type: none"> • Oils, lubricants and hydrocarbons must be stored in a proper storage facility with concrete bunds. Or impermeable lined materials. • Refuel vehicles at existing filling stations in Outapi. 	Place warning signs	Site inspection and record keeping	Proponent representatives / Environmental Manager

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
Oil leakage	To prevent fuel leakages during construction and operation of the facility.	<ul style="list-style-type: none"> • All stationary vehicles and machinery must have drip trays to collect leakages of oils and lubricant. • Vehicle and machinery to be used during construction and landscaping of the facility must be in good condition and well serviced to avoid leakages of oils and lubricants; • Although not anticipated to be significant, oil drops for instance of less than 500ml, if it happens to contaminate the soils must be collected and be treated with bioremediation waste. 	Visible monitoring		Proponent representatives / Environmental Manager

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
Waste generation	To prevent littering	<ul style="list-style-type: none"> • The facility shall be kept clean and free of litter and no litter from the site shall be allowed to disperse to surrounding areas. • All personnel shall be instructed to dispose of all waste in the proper manner. • The facility must have adequate wheelie bins and skip containers for onsite waste disposal. 	<p>Waste bins and skip containers</p> <p>Waste management plan</p>	<p>Waste bins and skip containers</p> <p>Waste management plan</p>	Proponent representatives / Environmental Manager

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
		<ul style="list-style-type: none"> • Sufficient weather and scavenger-proof bins (with lids, to prevent the escape of litter) shall also be provided, and be easily accessible at all points where wastes are generated. • The proponent shall identify and separate materials that can be reused or recycled to minimise waste e.g. metals, packaging and plastics, and provide separate marked bins for these items. 			

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
		<ul style="list-style-type: none"> • No dumping of waste products of any kind in or in close proximity to any surface water bodies. • No waste may be burned on site. • General waste is to be collected either by the local Municipality or removed by the proponent or by the contractor. • The frequency of collections will be such that waste containment receptacles do not unduly accumulate at the site or overflow. 			

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
		<ul style="list-style-type: none"> Ensure that Namibian National Solid Waste Management Strategy of 2017 is in place and enforce. 			
Dust		<ul style="list-style-type: none"> A watering truck should be used on roads/tracks with the heaviest vehicle movement especially during dry and windy conditions. However, appropriate consideration should be given to water restrictions during times of drought. 	Dust monitoring	Dust monitoring	Proponent representatives / Environmental Manager

Environmental / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Management Indicator	Responsibility
		<ul style="list-style-type: none"> • The use of waterless dust suppression means (e.g. lignosulphonate products such as Dustex) should be considered. • Dust protection masks should be provided to workers if they complain about dust. • During high wind conditions the project manager must make the decision to cease works until the wind has calmed down. 			

SECTION D: ENVIRONMENT

Table 7: Environmental Mitigation Measures to be implemented

Aspect	Objective	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Responsibility
Biodiversity	Maintain the ecosystem services and protect the fauna and flora.	<ul style="list-style-type: none"> • No workers should be permitted to disturb, remove or collect any plant or its materials. • Pick, uproot, fell or damage any plant materials growing in the area without a permit. • Prevent the destruction of protected tree species in the area. • The establishment of the facility should incorporate existing trees. • Encourage the planting of indigenous tree species for landscaping purposes. • Disciplinary actions must be taken to any person not complying and strict penalties shall be imposed. 	Disciplinary records Vegetation management plan	Proponent representatives / Environmental Manager
Illegal harvesting of any plant materials	To prevent illegal harvesting of plant materials and genetic resources.	<ul style="list-style-type: none"> • No worker and contractors are permitted to collect plant materials, wood and veld food, etc. during the construction and operational phase, neither to 	Disciplinary records	Proponent representatives / Environmental Manager

Aspect	Objective	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Responsibility
		<p>harvest any plant materials such as wood without a valid permit.</p> <ul style="list-style-type: none"> Any illegal harvesting of plant materials should be report to the relevant authority. 		
Water Resource	Conservation of water resource	<ul style="list-style-type: none"> No pollution or contaminant should be allowed to enter the water. A no-go buffer area of at least 30 m should be allocated to any water bodies in the area. Recycle water and promote the re-use of water. Monitor and control water usage and minimise if possible. Keep record of water consumption, set target and put action plan when targets are exceeded. 		Proponent representatives / Environmental Manager
Soil Erosion		<ul style="list-style-type: none"> Appropriate erosion control structures must be put in place where soil may be prone to erosion. Checks must be carried out at regular intervals to identify areas within the facility where erosion is 		

Aspect	Objective	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Responsibility
		<p>occurring. Appropriate remedial actions are to be undertaken wherever erosion is evident.</p> <ul style="list-style-type: none"> It is recommended that most the construction and renovation of the facility takes place outside of the rainy season in order to limit potential flooding and the run off of loose soil causing further erosion. 		
Alien Invasive	Maintain natural ecosystem	<ul style="list-style-type: none"> No alien invasive plant species may be permitted to be planted at the facility. No pets are allowed to stay on the facility. 	Alien invasive species record.	Proponent representatives / Environmental Manager

SECTION E: HERITAGE AND ARCHEOLOGICAL SITES

Table 8: Archaeology and Heritage Mitigation Measures

Environment / Social Aspect	Objectives	Construction and Operation Phase Mitigation Measure	Monitoring Indicator	Responsibility
Heritage Resources / Artefacts	Preserve Heritage and Archaeological materials	<ul style="list-style-type: none"> • The management should be made aware of the provision of the National Heritage Act regarding prompt reporting of any archaeological findings. • Immediately inform the Environmental Manager or management, who will inform the NHC. • Retain all the artefacts recovered and where feasible; maintain a photographic record, take note of the date, time, location and type of artefacts found in the logbook; • Contract an archaeologist in consultation with NHC to survey the area. • Avoid construction within 500m from the centre once the area has been surveyed in order to obtain the baseline data, a 2-3 baseline data is recommended. 	Sighting report/s of heritage resources / artefacts	Proponent representatives / Environmental Manager

SECTION F: SOCIO ECONOMIC

Table 9: Social Economic Mitigation Measures

Environmental / Social Aspects	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Responsibility
Employment	Promote benefits to the local resident	<ul style="list-style-type: none"> • Adopt a local first policy to ensure that all general work is reserved for local people from Oshondo village and surrounding settlements and villages within the Anamulenge constituency, unless in circumstances where specialised skills are required. • Ensure that wellness program includes all the employees. • Employ local contractors e.g. SMEs • Where possible expand wellness programs to contracted SMEs. • Fair compensation and labour practise as per Namibian Labour Laws must be followed. 	Employee structure and proportion of local employment	Proponent representatives / Environmental Manager

Environmental / Social Aspects	Objectives	Construction and Operation Phase Mitigation Measures	Monitoring Indicator	Responsibility
Corporate Social Responsibility	Enhance the livelihood of the local communities	<ul style="list-style-type: none"> With the resources available support appropriate initiatives to improve the community welfare particularly at Oshondo and surrounding villages. 	Undertaking corporate social responsibility activities.	
HIV/AIDS	To prevent the spread of HIV/AIDS	<ul style="list-style-type: none"> Provide HIV/AIDS awareness at induction. 	HIV/AIDS awareness campaigns.	
Alcohol and Drug use	Prevent alcohol and drug use	<ul style="list-style-type: none"> Ban the use of alcohol and drugs onsite. Teach employees about dangers alcohol and substance abuse. Employees must be screen with the breathalyser on ad hoc basis to avoid intoxicated personnel to entering the facility. 	Drunk / Misbehaving employees Breathalyser report	Proponent representatives / Environmental Manager
Working hours	Adhere to the Labour Act No. 11 of 2007	<ul style="list-style-type: none"> Operate within the prescribed working days and hours as per the Namibian Labour laws and regulations 	Labour unrest / Demonstration	Proponent representatives / Environmental Manager

SECTION G: DECOMMISSIONING/CLOSURE

Table 10: Decommissioning/closure Mitigation Measures to be implemented

Aspect	Objective	Construction and Operation Phase Mitigation Measure	Monitoring Indicator	Responsibility
Closure Plan	To ensure and attain the decommission/closure targets.	<ul style="list-style-type: none"> • Ensure closure plan is continuous throughout the life cycle of the project. • When construction ceased the building rubbers should be stockpiled in a demarcated area and used rehabilitating of the gullies found in the area. • Plant materials should be collected and taken at a designated landfill to decompose. • Collect all relevant information throughout the life cycle of the project to ensure that all environmental risks are quantified and managed properly. • Submit the closure plan to the office of the Environmental Commissioner for approval. 	Updated decommissioning/closure plan.	Proponent representatives / Environmental Manager
Financial provision for the decommissioning	Enhance decommissioning/closure and rehabilitation	<ul style="list-style-type: none"> • Allocate substantial operational cost in order to attain the EMP objectives by ensuring that potential impacts are managed or monitored. 	Protection and Indemnity (P&I) Insurance Cover.	Proponent representatives / Environmental Manager

Aspect	Objective	Construction and Operation Phase Mitigation Measure	Monitoring Indicator	Responsibility
/closure of the facility and rehabilitation.		<ul style="list-style-type: none"> • Maintain sufficient Protection and Indemnity (P&I) Insurance Cover for the purpose of closure and rehabilitation liabilities. • Reserve adequate funds for specialist assessments in the event that the closure of the facility will be taking place and resources for continuous monitoring. 		

9. CONCLUSION AND RECOMMENDATIONS

The proposed establishment and operation of a recreational park as well as accommodation facility had different aspects that were assessed for possible environmental, social and economic impacts. The potential environmental impacts for the proposed establishment and operation of a recreational park and associated facility project will be primarily localised to the proposed site. Most of the negative impacts associated with this development can be reduced to insignificant levels if the mitigation measure detailed in this EMP are properly employed.

All potential impacts were identified, and mitigation measures proposed were provided with high confidence. The closure of the recreational park and accommodation facility at Oshondo village is less likely to take place but there is possibility for the abandonment of the project. The closure plan must be done, in consultation with the community of Oshondo and provides them with an opportunity to develop alternative uses of the facility and use the infrastructure for other economic viable projects. The information provided and mitigation measures recommended for the establishment and operation of the recreational park and accommodation facility are adequate, therefore it is recommended that the Environmental Clearance Certificate shall be issued to necessitate the construction and ultimately the operation of the facility to commence. Nevertheless, with continuous alteration of the environment, regular monitoring must be put in place, therefore, the proponent must appoint a Consulting Engineer and an Environmental Consultant to continuously oversee and supervise the engineering works as well as conducting environmental audits and prepare reports for submission to the office of Environmental Commissioner.