SERJAHGE CONSULTANTS

Comprehensive Environmental Management Plan (EMP)

The Existing Operational Activities of the Okomutati Base Camp in Ehirovipuka Conservancy, Kunene Region, Namibia

ECC Application No.: **APP-007411**

Proponent: **Kunene Conservation (*Non-Profit Association Incorporated under Section 21 of the Companies Act 28 of 2004)***

P. O. Box 5691, Windhoek, Namibia

May 2026

Declaration of authorship

APPLICATION NUMBER: 007411

Project Title:

The Existing Operational Activities of the Okomutati Base Camp and Associated Activities in Ehirovipuka Conservancy, Kunene Region Namibia

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

Tick the box (es) applicable to your submission:

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

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

Consultancy Name: Serja HGE Consultants cc

EAP Signature: FShagama

Date: 22/05/2026

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

DOCUMENT INFORMATION

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CamScanner

SERJA'S STATEMENT OF INDEPENDENCE

As the Appointed Environmental Consultant to develop the Comprehensive Environmental Management Plan (EMP) for the Existing Operational Activities of the Okomutati Base Camp in Ehirovipuka Conservancy, Kunene Region, Namibia, Serja Hydrogeo-Environmental Consultants cc declares that we:

- do not have, to our knowledge, any information or relationship with the Kunene Conservation (Proponent), nor the Ministry of Environment, Forestry and Tourism (MEFT)'s Department of Environmental Affairs and Forestry (DEAF) that may reasonably have the potential of influencing the outcome of this EMP and the subsequent Environmental Clearance Certificate applied for.
- have knowledge of and experience in conducting environmental assessments, the Environmental Management Act (EMA) No. 7 of 2007, and its 2012 Environmental Impact Assessment (EIA) Regulation, as well as other relevant national and international legislation, guidelines, policies, and standards that govern the project activities as presented herein.
- have performed work related to the ECC application in an objective manner, even if the results in views and findings, or some of these may not be favourable to the Proponent.
- have complied with the EMA and other relevant regulations, guidelines, and other applicable laws as listed in this document.
- declare that we do not have and will not have any involvement or financial interest in the undertaking/implementation of the project and its associated activities, other than remuneration (professional fees) for work performed to apply for the ECC in terms of the EIA Regulations and MEFT requirement as an Environmental Assessment Practitioner (EAP).

Disclaimer: Serja Hydrogeo-Environmental Consultants will not be held responsible for any omissions and inconsistencies that may result from information that was not available at the time this document was prepared and submitted for evaluation.

…….

Signature:

Fredrika N. Shagama: Principal Environmental Assessment Practitioner & Hydrogeologist

Date: May 2026

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
DEAF	Department of Environmental Affairs and Forestry
DWA	Department of Water Affairs
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GG; GN	Government Gazette; Government Notice
I&APs	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Fisheries, Water, and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
MEIYSAC	Ministry of Education, Innovation, Youth, Sport, Arts and Culture
MHSS	Ministry of Health and Social Services
MIME	Ministry of Industries, Mines and Energy
MJLR	Ministry of Justice and Labour Relations
MURD	Ministry of Urban and Rural Development
NACSO	Namibian Association of CBNRM (Community-based Natural Resource Management) Support Organisations
NHC	National Heritage Council (NHC) of Namibia
NTB	Namibia Tourism Board
OkBC borehole	Okomutati Base Camp Borehole
PPE	Personal Protective Equipment
Reg, S	Regulation, Section
SANS	South African National Standards

1 INTRODUCTION

1.1 Project Background and Location

Kunene Conservation (Non-Profit Association Incorporated under Section 21 of the Companies Act 28 of 2004) (hereinafter referred to as *Kunene Conservation*, or *the Proponent*) operates the Okomutati base camp primarily serving as an operational base for Kunene Conservation's personnel while carrying out their project operations in the Kunene Region. The base camp is located about 70km northeast of Warmquelle Settlement and 15km south of Otjetjekua Village in Kunene Region - Figure 1-1. The base camp leasehold covers an area of 96.71 hectares, with the actual camp footprint covering only 4.4 hectares (ha) of the land within the Ehirovipuka Conservancy (locally spelled in *Otjiherero* language as ‘*’Ehi-Rovipuka”*, loosely translated from *Otjiherero* as ‘’the place/land of wild animals’’), Opuwo Rural Constituency (Figure 1-2). Added to that, Kunene Conservation intends to develop a small one-party-only (1-8 pax) exclusive campsite for the Ehirovupuka Conservancy to manage and benefit from. The exclusive campsite will consist of an ablution, a basic washup area, and a fireplace.

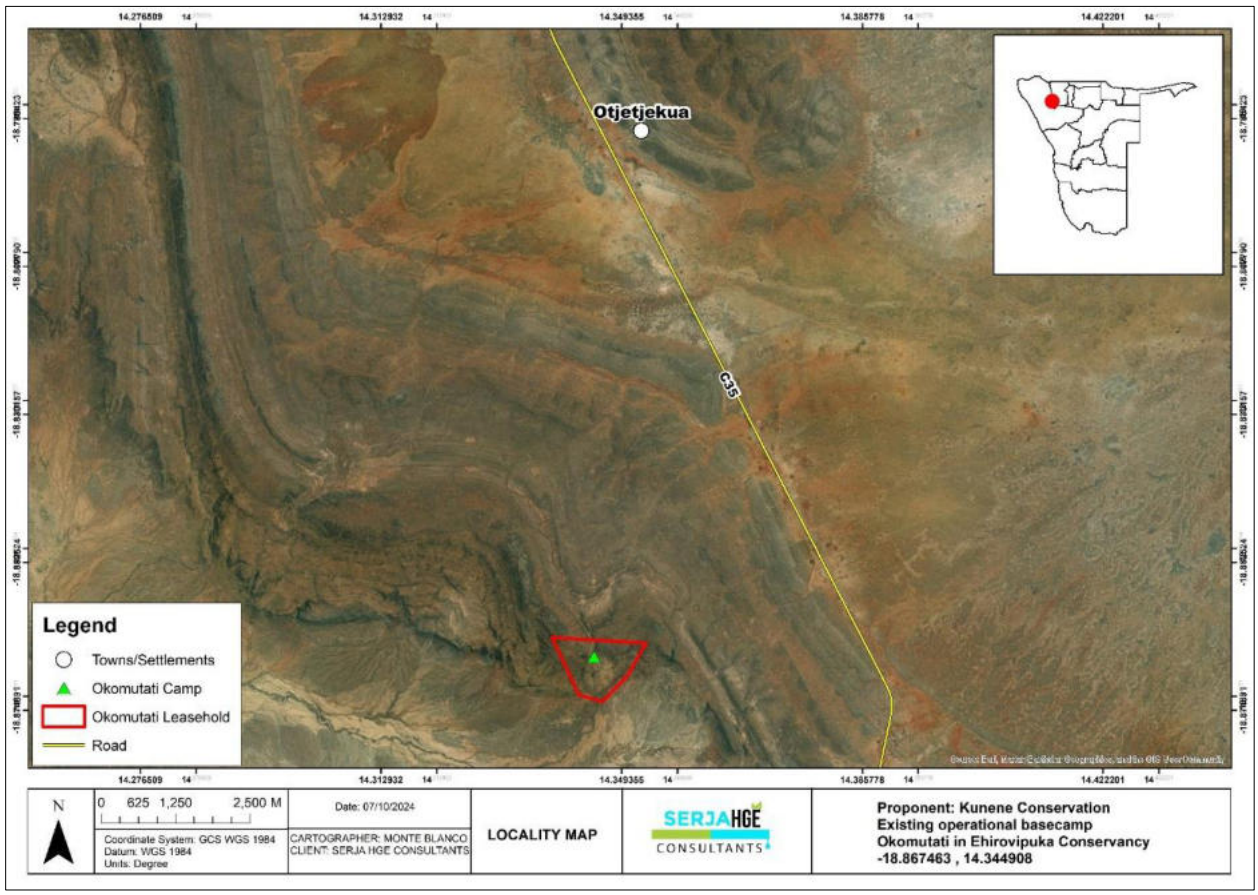

Figure 1-1: Locality map of the Existing Okomutati Base Camp in the Kunene Region

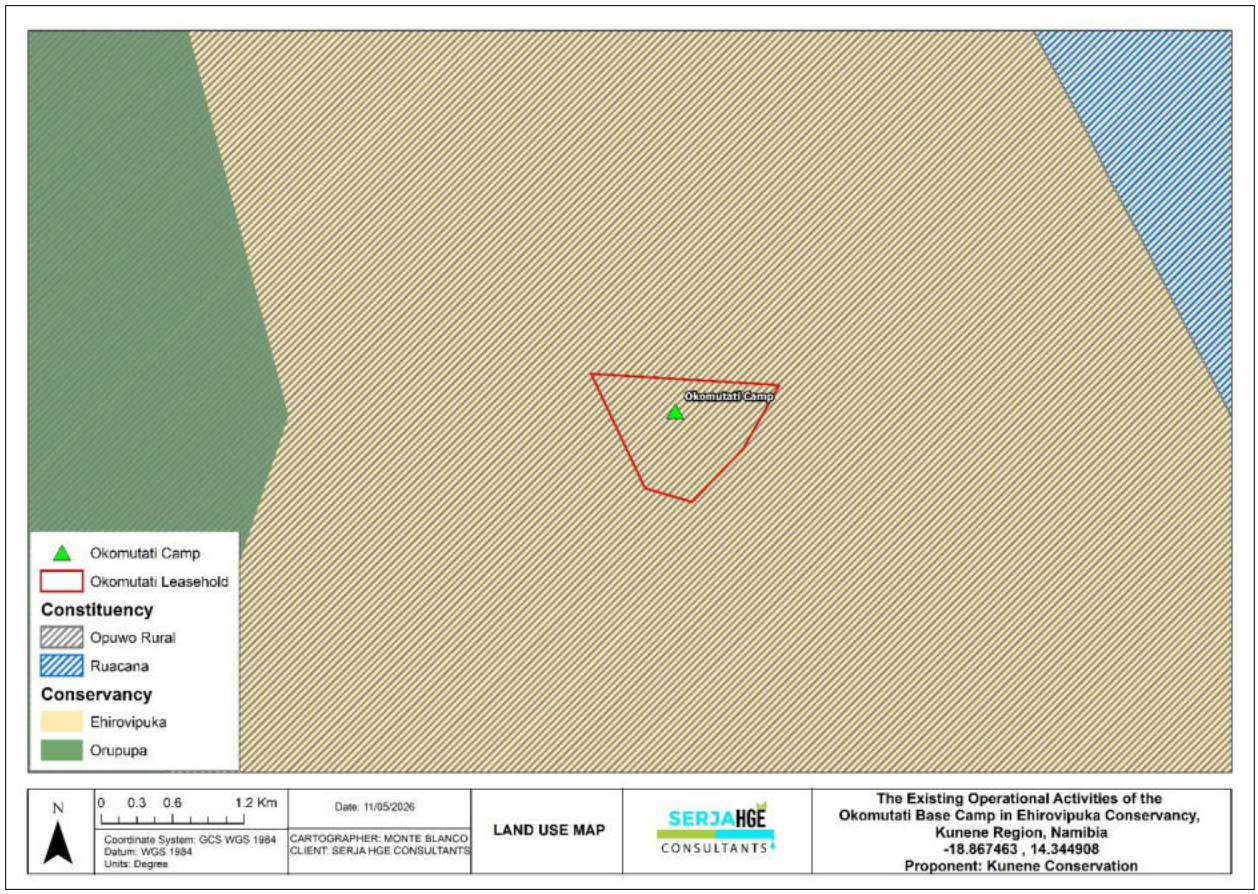

Figure 1-2: The land use map of the Okomutati Base Camp in relation to its position within the Ehirovipuka Conservancy and the Opuwo Rural Constituency

1.2 The Project Need and Justification

Okomutati camp serves as an operational base (site) for the Proponent's personnel while carrying out their project operations in the Kunene Region, which has the following benefits:

- The development of an exclusive campsite for the Ehirovipuka Conservancy.
- The camp will provide timely essential services such as food, water, accommodation for personnel, and storage for equipment, thus facilitating smooth operations.
- Strategic positioning close to key areas of operations, allowing quicker response times.
- A centralized location fosters better communication and coordination among the project personnel and units, which improves overall operational performance and effectiveness.
- The camp offers rest areas and other amenities that boost the morale and mental well-being of personnel.
- Establishing a presence in the area/Region can allow for better relationships with local communities (Conservancy management), which can be crucial for operational support.

1.3 The Need for the Environmental Clearance Certificate (ECC)

Tourism-related development and associated activities fall under the listed activities in the 2012 EIA Regulations of the Namibian Environmental Management Act (EMA) No. 7 of 2007 that need to be issued an ECC. The listed activities that are relevant to project activities are as follows:

LISTED ACTIVITY 6. TOURISM DEVELOPMENT ACTIVITIES

- Listed activity 6: the construction of resorts, lodges, hotels, or other tourism and hospitality facilities

Associated listed activity

LISTED ACTIVITY 8. WATER RESOURCES DEVELOPMENT

- Listed activity 8.1: the abstraction of ground or surface water for industrial or commercial purposes.

Subsequently, to comply with the EMA and its EIA Regulations and ensure environmental sustainability, the Proponent has appointed Serja Hydrogeo-Environmental Consultants CC (Serja HGE Consultants), independent environmental consultants, to apply for the ECC on their behalf. An application for the ECC has been submitted to the Ministry of Environment, Forestry and Tourism (MEFT)'s Department of Environmental Affairs and Forestry (DEAF) by Kunene Conservation. Upon screening and verification of the Background Information Document (BID) prepared by Serja HGE Consultants, an Environmental Management Plan (EMP) is required for the ECC application. The required documents will be submitted to the MEFT for evaluation and consideration for the ECC.

1.4 Purpose of the Comprehensive Environmental Management Plan (EMP)

This EMP was developed in accordance with Regulation 8(j) of the EIA Regulations (2012), which states that it should be included in the Environmental Assessment Scoping report. A '**Management Plan**' is defined as:

> *"…a plan that describes how activities that may have significant environmental effects on the environment are to be mitigated, controlled, and monitored."*

An EMP is one of the most important outputs of the EIA process, as it synthesizes all proposed management & mitigation actions and monitoring actions, sets them to a timeline, and assigns specific responsibilities. It provides a link between the impacts identified in EIA processes and the required mitigation measures to be implemented to manage project impacts. It is important to note that an EMP is a statutory document, and a person who contravenes the provisions of this EMP may face imprisonment and/or a fine. This EMP is a living document and can be amended to address project changes/or environmental conditions, and compliance monitoring feedback.

Given the fact that only the EMP was requested for the ECC application of the Okomutati Base Camp and its associated activities, a comprehensive EMP was developed. This was done to include the baseline environmental conditions of the project site as well as to assess the potential impacts anticipated from the project activities.

The comprehensive EMP is therefore aimed at guiding environmental management throughout these phases of the project, namely construction of the additional facilities (refurbishment (continued upgrading)) and operational and maintenance of the site.

1.4.1 Construction (site refurbishment and or upgrading works)

The stage during which some of the Base Camp infrastructure and structure will be established to complement the existing structures for better and improved operations. This will also be the stage during which the exclusive campsite will be established for the Ehirovipuka Conservancy.

1.4.2 Operational and maintenance phase

The phase during which the Base Camp continues to operate, and maintenance is carried out by Kunene Conservation, and if necessary, an external maintenance contractor would be appointed. It is also during this phase (stage) that the exclusive campsite will be operated and managed by the Conservancy management, and as assisted by Kunene Conservation when and where needed.

The description of the project and associated activities, as well as the key supporting services and infrastructure, is provided in the next chapter.

2 BRIEF DESCRIPTION OF THE PROJECT ACTIVITIES

The project activities will entail the addition and operation of four tents of 12,100m x 4,200m, each one will have an ensuite bathroom and a small kitchen. The tent container structure and floor plan outline are shown in Figure 2-1.

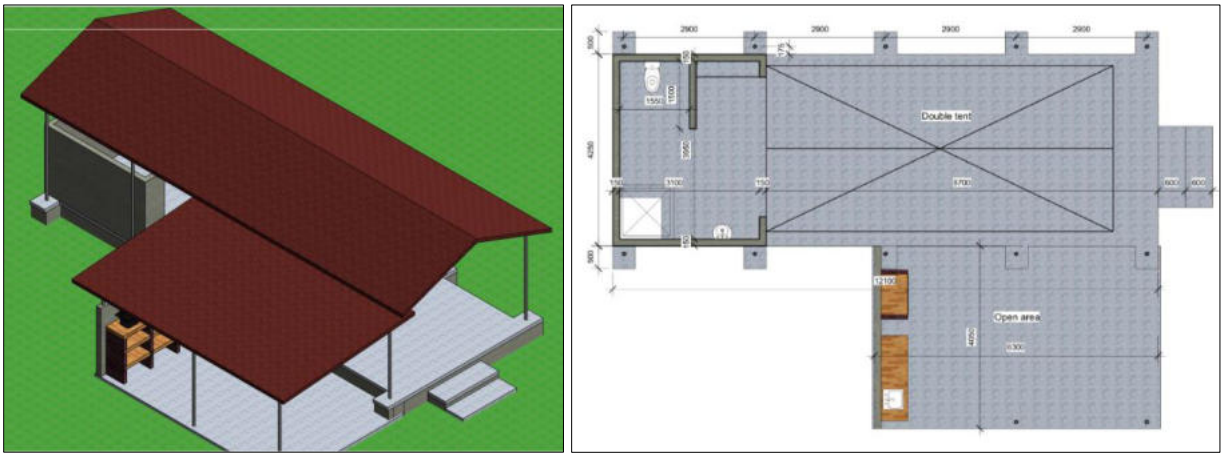

Figure 2-1: An Example of the proposed Okomutati structures and the proposed design of the Okomutati structure floor plan

The proposed shade structure to be erected using gum poles in 2026 is shown in Figure 2-2.

Figure 2-2: The proposed shade structures to be erected

2.1 Key Service Infrastructure

The base camp is associated with the following resources, services, structures, and infrastructures:

- The addition and operation of four tents of 12,100m x 4,200m, each one will have an ensuite bathroom and a small kitchen.
- Site footprint: The actual footprint of the base camp is 4.4ha, while the leasehold area is 96.71ha.
- Accommodation: For the site personnel, there are three small houses built from the local rock materials (Figure 2-3A), and each house now has a small veranda installed to it (see Figure 2-3B), where each person has their own washup and cooking area.

Figure 2-3: The staff housing structures with their verandas at the Okomutati Base Camp

It should be noted that there is and will be no fencing around the camp, as this is not allowed in conservancies.

2.1.1 Human resources (project personnel)

There are currently two permanent people (caretakers) on-site, who are also accommodated on-site. Furthermore, the full project staff will consist of the Community Programme Manager, Rangeland Coordinator, Conservation Manager, and Ecological Monitoring Coordinator. The staff will be on-site about 75% of the time.

2.1.2 Power and Water Supply

The site is powered by a solar system for lighting and heating. The food is prepared using a gas stove.

Water is sourced from one borehole near the camp and stored in 5 x 500-litre tanks, and collected from two water taps installed on-site (Figure 2-4 A, B, and C). The water is piped within the camp, and each of the above houses (in Figure 2-3) has piped water. The Okomutati Base Camp borehole (herein after the *OkBC* borehole) has a yield of 9.27m^3/hour, i.e., 9,270 liters/hour. The estimated water requirement per person per day (on an average of 6 people in a camp) will be 90 litres; therefore, 540 litres per day (540 litres/day/person). Therefore, the monthly water use will be 16,740 litres or cubic meters (16.74m^3). The base camp has also installed a small trough for watering wildlife passing near the base camp (Figure 2-4D).

Figure 2-4: The Okomutati Base Camp water taps (A, B, and C) and the wildlife trough (D)

2.1.3 Supporting structures

The site has supporting structures such as the workshop and storeroom, office, and boardroom container (Figure 2-5A and B), as well as a shade structure (Figure 2-5C).

Figure 2-5: The Okomutati Base Camp workshop (A) and storeroom containers, and (B) the office and boardroom container, as well as the shade structure built in October 2025 (C)

2.1.4 Waste management

The project waste will be handled as follows.

- Solid waste: The waste is currently contained onsite and transported to Windhoek for recycling. However, should the volume of waste increase, it will be transported for disposal at Opuwo Town's dumpsite or the nearest approved solid waste management site. The site is equipped with enough waste collection and temporary storage bins, as shown in Figure 2-6.

Figure 2-6: The Okomutati Base Camp solid waste collection bins

- Sewage (human waste): The Okomutati Base Camp has toilets and showers (Figure 2-7) with septic tanks and soak ways. The two-stage chambered septic tank systems are designed according to recognized standards (e.g., South African National Standards (SANS)).

Figure 2-7: The Okomutati Base Camp toilets and some of the showers on-site

- Hazardous waste (fuels): waste fuel, grease, and oils will be properly captured, stored on site in designated waste containers, and transported to the appropriate hazardous waste management facility (in Windhoek). Therefore, no hazardous waste will be disposed of in the project area or any other unapproved waste management facility in the project area or the Kunene Region at large.

2.1.5 Site accessibility (road)

The C35 tarred road from Kamanjab to Opuwo, and Ruacana provides excellent access for visitors to the area, while small tracks through the conservancy lead west to the Hoanib River and Sesfontein, but require four-wheel drive and are recommended only with the services of a knowledgeable guide (NACSO, 2025). The base camp is accessible from the C35 on the eastern side, then via a local single-track access road. The site has clean and clear access and paths for both vehicles and people on foot (Figure 2-8).

Figure 2-8: The cleaned paths at the Okomutati Base Camp

2.1.6 Vehicles and parking areas

Operations (project) vehicles are currently parked in open spaces at the camp, as there are no designated parking areas. The Proponent will construct a parking area as a covered parking bay. The site currently has 4 vehicles on site, with one more vehicle which will be procured. Some of the vehicles for the project are shown in Figure 2-9.

Figure 2-9: Some of the Okomutati Base Camp vehicles (4x4-wheel drive cars)

2.1.7 Occupational Health and Safety

In terms of workers' health and safety involved in the project and its associated activities, the following measures are in place:

- Personal protective equipment (PPE): All project personnel are supplied with appropriate and adequate personal protective equipment (PPE) while carrying out project activities onsite.

- First aid kit: the site has a fully furnished first aid kit, for which the site staff will be trained on how to administer first aid. It is important to note that since the base camp already exists, first aid training has taken place previously, and refresher courses will be conducted for existing staff, and new personnel will also have the required training.
- Accidental fire outbreaks: the site will be equipped with at least two fire extinguishers, in case of accidental fire outbreaks. Basic firefighting training to be offered to site staff.

2.2 The Construction and Operations of the Exclusive Campsite

The proposed campsite will be established by Kunene Conservation and will be operated and maintained by the Ehirovipuka Conservancy management. The site will be a small, low-impact, exclusive campsite within the Ehirovipuka Conservancy area. The campsite is intended to provide a private nature-based tourism experience for a single group of visitors at a time, accommodating approximately 1–8 people per booking, i.e., 1-8 pax. This much-needed development forms part of the conservancy's community-based natural resource management and eco-tourism initiatives. This is because the campsite will positively contribute to local livelihoods (tourism revenue generation) through accommodation fees, employment opportunities, and tourism-related activities) aimed at generating sustainable income and socio-economic benefits for local communities. The exclusive campsite is planned as such to maintain a controlled level of visitor access to protect the surrounding environment and wildlife (through supporting conservation activities within the conservancy).

Furthermore, the proposed exclusive campsite will consist of minimal infrastructure designed to blend with the surrounding natural environment and maintain a low environmental footprint. The facilities that will be associated with the campsite will include the following:

- A small ablution facility containing a toilet and shower.
- A basic wash-up area for food preparation and dishwashing.
- A designated fireplace/braai area for cooking and recreational use.
- A small cleared camping area for temporary tent setup and parking.

It is important to note that there will be no permanent luxury accommodation structures for the campsite, as visitors will make use of tents and or temporary camping equipment. The campsite will primarily cater to low-volume eco-tourists seeking an exclusive wilderness experience within the conservancy area.

Construction activities are expected to be short-term (1 – 2 months) and localized, with efforts made to minimise disturbance to surrounding vegetation, wildlife, and natural drainage patterns. The construction stage will entail the following components:

- Site surveying and demarcation of the campsite area.

- Limited vegetation clearing and ground preparation for the camping and infrastructure areas.
- Excavation works for foundations and sanitation infrastructure.
- Construction of the ablution facility and wash-up area using locally suitable materials, where possible.
- Installation of water supply and wastewater management systems.
- Establishment of the designated fireplace/braai area.
- Minor earthworks and levelling for vehicle access and parking.
- Transportation of construction materials, equipment, and workers to and from the site.
- Temporary storage of building materials and waste during construction.

Once operational, the conservancy will manage and maintain the campsite, including visitor management, cleaning and maintenance of facilities, waste collection and disposal, water supply management, and implementation of environmental protection measures. The project is expected to contribute positively to local livelihoods through tourism revenue generation, employment opportunities, and support for conservation activities within the conservancy.

2.3 Decommissioning of project upgrading works and site rehabilitation

Given the fact that there will be minimal construction works associated with the establishment of four tents and the conservancy exclusive campsite, there will be potential land (soil) disturbance and other environmental and social disturbances. Therefore, it is best practice for the Proponent through their contractor (if not establishing the tents and campsite themselves) to ensure the project and associated activities are ceased and completed in an environmentally friendly manner, and any disturbed sites are rehabilitated. The following brief measures are recommended for post-construction site rehabilitation:

- Dismantling and removal of associated infrastructures from the project site.
- Carrying away all project equipment that would no longer be required for operations.
- Clean up of site working areas and transporting the recently generated waste to the nearby approved waste management site.
- Backfilling of holes and trenches from the establishment of project tents and the exclusive campsite. This is to ensure that holes and trenches do not pose a risk to both people and animals in the area.
- Levelling of stockpiled topsoil (if any) to ensure that the disturbed land sites are left as close to their original state as possible.

The project and its associated activities are governed by a certain legal framework, and these are presented in the next chapter.

3 LEGAL FRAMEWORK: PERMITTING AND LICENSES

The Proponent is responsible for ensuring that project activities and the EA process conform to the principles of the EMA and that employees act in accordance with such principles. Table 3-1 The list below sets out the requirements of an EMP as stipulated by Section 8(e) of the EIA Regulations, primarily regarding specific approvals and permits that may be required for the project activities.

Table 3-1: List of legal requirements and permits for the project activities

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Environmental Management Act EMA (No 7 of 2007): **regulated by the Ministry of Environment, Forestry and Tourism (MEFT)**	Requires that projects with significant environmental impacts undergo an environmental assessment process (Section 27). Details of the principles that are to guide all EAs.	The EMA and its regulations should inform and guide this EA process. Should the ECC be issued to the Proponent, it should be renewed every 3 years, counting from the date of issue. For any amendments to the EMP (and subsequent ECC), an appropriate application should be submitted to the Office of the Environmental Commissioner at the Department of Environmental Affairs (DEAF) and Forestry of the MEFT. The contact details are: **Mr. Timoteus Mufeti:** Environmental Commissioner **Tel: +264 61 284 2701**
Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878): **regulated by the MEFT**	Details requirements for public consultation within a given environmental assessment process (GN 30 S21). Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).	
Water Resources Management Act No. 11 of 2013 and 2023 Water Regulations: **regulated by the Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR)**	The water resources should be managed, protected, and conserved in a manner consistent with, or conducive to, the fundamental principles set out in Section 66 - protection of aquifers, Subsection 1 (d) (iii) provide for preventing the contamination of the aquifer and water pollution control (Section 68).	The MAFWLR, Department of Water Affairs (DWA), is responsible for issuing the borehole abstraction licenses as well as the wastewater discharge permits. **Therefore, a water abstraction and use license for the OkBC borehole should be applied for**. **Contact: Mr. Franciskus Witbooi: Deputy Director, Water Affairs (Water Law Administration & Policy)** **Tel: +264 61 208 7226**

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
	Thus, the protection (both quality and quantity/abstraction) of water resources should be a priority. A groundwater abstraction & use license is required for commercial purposes.	For any project wastewater planned for discharge into the environment, a discharge permit should be applied for and obtained. Contact: **Ms. Elise Mbandeka: Senior Hydrologist, Water Environment Division** **Tel: +264 61 208 7167**
Forestry Act (Act No. 12 of 2001: **regulated by the MEFT**	The Act provides for the management and use of forests and forest products. Permits are required for the removal of protected plant species.	The Proponent will apply for the relevant permit under this Act if it becomes necessary to remove protected trees for project activities. These tree species are as follows, and photos are provided under **Appendix 2**: Mopane (*Colophospermum mopane),* Black thorn *(Senegalia mellifera),* Namaqua corkwood *(Commiphora capensis),* Ana tree (white acacia) *(Faidherbia albida),* Leadwood (*Combretum imberbe),* Shepherd's tree (*Boscia albitrunca*). The nearest MEFT Forestry Directorate Office in the Kunene Region is in Opuwo. **Mr. Johnson Ndokosho: Director: Forestry (Head Office)** **Tel: +264 61 208 7666**
Nature Conservation Ordinance No. 4 of 1975 (as amended): **regulated by the MEFT** The Parks and Wildlife Management Bill of 2008: **regulated by the MEFT**	The management of protected areas, to conserve biodiversity, should be promoted. Thus, consent to undertake exploration activities should be obtained from the management of the conservation areas.	The project and its associated activities are within the Ehirovipuka Conservancy. Therefore, they should be engaged before and throughout the project life cycle. The consent has been obtained from the Conservancy management (**Appendix 3**). The land use agreements should be entered into, and agreements and conditions set by the conservancy management should be adhered to. **Mr. Amo Kapi: Ehirovipuka Conservancy Chairperson, Tel: +264 81 670 3394/+264 81 434 7386**

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Traditional Authority Act (Act No. 25 of 2000): **regulated by the Ministry of Urban and Rural Development (MURD)**	The Act also stipulates that Traditional Authorities (TAs) should ensure that natural resources are used sustainably to conserve the ecosystem. The Act implies that TAs must be fully involved in planning land use and development in their area. It is the responsibility of the TAs' customary leadership, the Chiefs, to exercise control on behalf of the state and the residents in their designated area.	The Okomutati Base Camp falls within the Vita Royal House Traditional Authority. Therefore, they should be consulted regarding land-use consent (**Appendix 3**), and engagement should continue throughout the project. **Mr. Tjombamba Tjijahura: Senior Traditional Councillor, Vita Royal House Traditional Authority** **Mobile No. +264 (0) 81 383 54444**
Namibia Tourism Board Act 21 of 2000: **regulated by the MEFT**	The Proponent should obtain the necessary authorisation for the tourism-related campsite and register with the Namibia Tourism Board.	A license to operate the exclusive campsite should be applied for from the Namibia Tourism Board (NTB). The NTB should be continuously engaged regarding new changes in the regulations or if major changes are needed for the Okomutati Base Camp or the Conservancy's exclusive campsite. If issued, ensure compliance with the NTB license conditions. Contact the NTB Office: **Mr. Sebulon Chicalu: Chief Executive Officer** **Tel: +264 61 290 6013**
Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001): **regulated by the Ministry of Industries, Mines and Energy (MIME)**	Regulation 3(2)(b) states that "No person shall possess or store any fuel except under authority of a licence or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area."	Should the Proponent decide to install a fuel tank on-site with a capacity of 600 litres or more, a consumer installation certificate should be applied for from the Ministry of Industries, Mines and Energy (MIME). **Mr. Carlo McLeod: Acting Director of Petroleum Affairs at the MIME** **Tel: +264 61 284 8291**

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
National Heritage Act No. 76 of 1969: **regulated by the Ministry of Education, Innovation, Youth, Sport, Arts and Culture (MEIYSAC)**	Call for the protection and conservation of heritage resources and artefacts.	Should any archaeological material, such as bones, unknown graves, old weapons/equipment, etc., be found onsite, work should stop immediately, and the National Heritage Council of Namibia must be informed as soon as possible. The Heritage Council will then decide whether to clear the area or conserve the site or material. Contact Details at the National Heritage Council (NHC) of Namibia. The Chanice Finds Procedure (CFP) is appended hereto as Annexure 1. **Mrs. Erica Ndalikokule – Director: NHC** **Tel: +264 61 301 903**
Hazardous Substance Ordinance, No. 14 of 1974: **regulated by the Ministry of Health and Social Services (MHSS)**	The ordinance provides for the control of toxic substances. It covers manufacture, sale, use, disposal, and dumping, as well as import and export. Although the environmental aspects are not explicitly stated, the ordinance provides for the importing, storage, and handling.	The handling, storage, and use of hazardous substances should be managed properly to prevent harm or compromise to the site environment. For better management and handling of waste fuel, the contractor can contact **Waste Oil Recyclers (Oiltech Namibia CC, Windhoek, https://oiltech.com.na/)** **Tel: +264 81 343 5676**
Pollution Control and Waste Management Bill: **regulated by the MEFT**	The bill aims to "prevent and regulate the discharge of pollutants to the air, water, and land." Of particular reference to the Project is: Section 21 "(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse."	Kunene Conservation and its employees, as well as contractors, should continue with the good waste management work (directly or indirectly) to ensure that the waste does not cause an environmental threat or risk. Since the Bill is still not in force by early 2026, reference is made to the 2012 EIA regulations of the EMA No. 7 of 2007 for pollution control obligations in the interim, specifically Part 7: 27 (2)(i)) waste and sewage disposal; chemical treatment. **No permit or license required.**

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
	Section 55 "(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of, or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment."	
Public Health Act (No. 36 of 1919): **regulated by the MHSS**	Section 119 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."	Kunene Conservation and all its employees, as well as contractors, should ensure compliance with the provisions of these legal instruments. **No permit or license required.**
Health and Safety Regulations GN 156/1997 (GG 1617): **regulated by the MHSS**	Details various requirements regarding the health and safety of labourers.	
Public and Environmental Health Act No. 1 of 2015: **regulated by the MHSS**	To provide a framework for a structured, uniform public and environmental health system in Namibia, and to provide for incidental matters.	
Labour Act (No. 11 of 2007) as amended by the Labour Amendment Act 2 of 2012: **regulated by the Ministry of Justice and Labour Relations (MJLR)**	The Act is aimed at ensuring harmonious labour relations through promoting social justice, occupational health and safety, and enhanced labour market services for the benefit of all Namibians. The MJLR ensures effective implementation of the Labour Act No. 11 of 2007, specifically Part B, Chapter 44: relating to health, safety, and welfare of employees at work.	Kunene Conservation should ensure that the site operations and maintenance works do not compromise the safety and welfare of employees. **No permit or license required.**

4 ENVIRONMENTAL BASELINE (THE RECEIVING ENVIRONMENT)

The Okomutati Base Camp and associated activities are undertaken in specific environmental and social conditions. Therefore, understanding the existing conditions of the environment aids in describing the status quo versus future projections of environmental conditions once the project is implemented. The baseline information also aids in identifying the sensitive environmental features and how best suitable management and mitigation measures can be recommended for implementation. The summary of selected biophysical and social baseline information about the project area is given below.

The baseline information presented below is sourced from the combined site visit done on the 27th of October 2024 and new information provided in April 2026. The baseline site information has also been complemented by online sources ranging from old reports, books, and publications, as well as other relevant research information in the broader area. The project baseline that is deemed necessary for the project activities is as follows.

4.1 Biological Environment

The faunal and floral environment of the project site area is presented under 4.1.1 and 4.1.2.

4.1.1 Fauna

The project site (Okomutati Base Camp and its associated activities) is in the Ehirovipuka Conservancy, which was registered in January 2001. The Conservancy covers an area of 1,980km2 with an approximate population of 2,500 (NACSO, 2025).

According to NACSO (2025), Ehirovipuka Conservancy is home to a great variety of charismatic game, including four of the Big Five – elephant, black rhino, lion, and leopard. Giraffe, and both Hartmann's mountain zebra and Burchell's zebra occur here, as well as many of Namibia's antelope species, such as eland, kudu, gemsbok, hartebeest, black-faced impala, and springbok. Further animals in the conservancy include duiker, steenbok, klipspringer, and Damara dik-dik, baboon, ostrich, and warthog. The contingent of predators is made up of cheetah, serval, caracal, spotted and brown hyena, and jackal. Situated on the eastern fringes of the escarpment, the conservancy also provides habitat for many of Namibia's near-endemic birds, including bare-cheeked babbler, Carp's tit, rosy-faced lovebird, Rüppell's parrot, Hartlaub's francolin, violet wood-hoopoe, Rüppell's korhaan, Damara hornbill, Monteiro's hornbill (Figure 4-1), white-tailed shrike, Herero chat, and rockrunner (NACSO, 2025).

Figure 4-1: The yellow-billed Hornbill (*Tockus leucomelas*) near the Okomutati Base Camp wildlife water trough, and prints of wildlife hooves were found south of the base camp

4.1.2 Flora

In terms of flora (vegetation), the vegetation structure of the site is mainly characterized by woodland, as shown on the vegetation map in Figure 4-2.

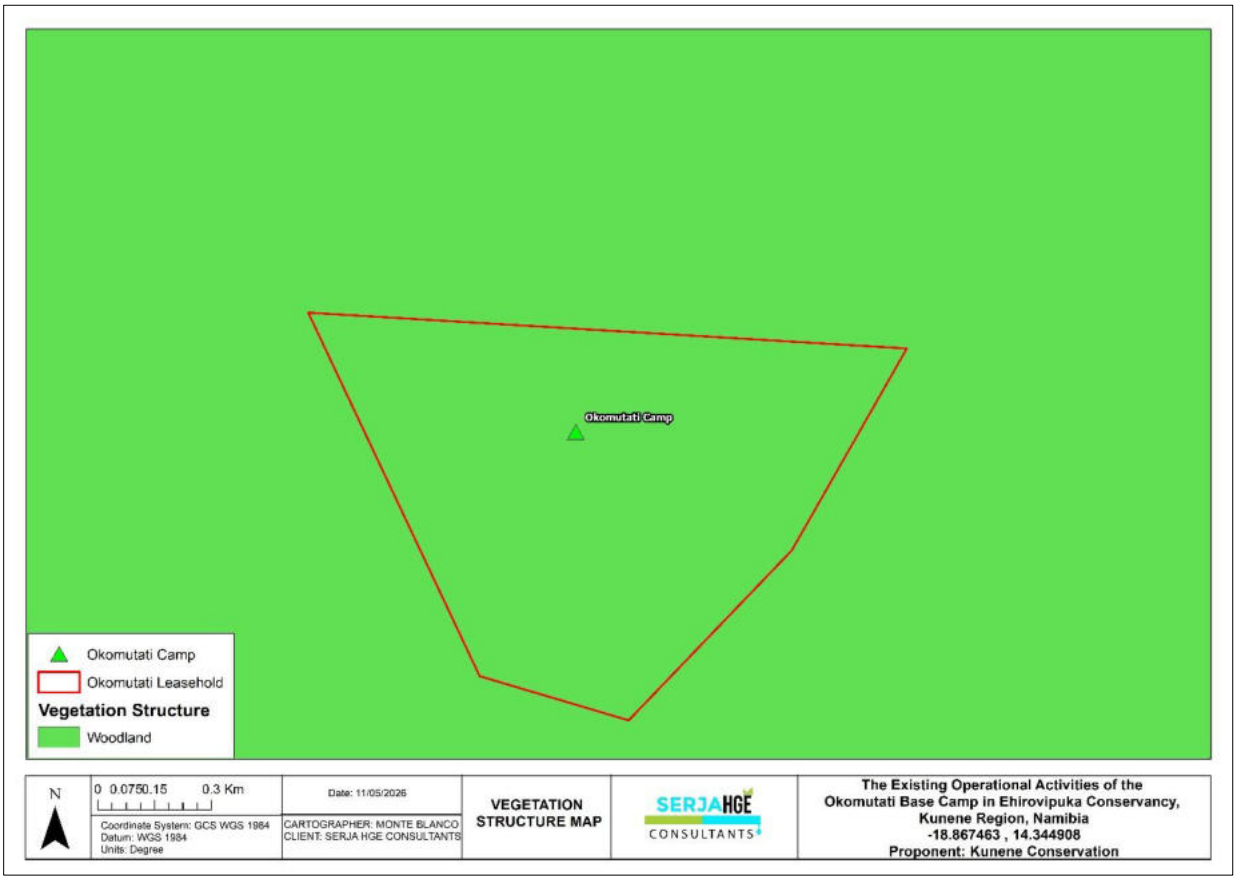

Figure 4-2: The vegetation map of the project site (Okomutati Base Camp) and surrounding areas

The project site is covered by vegetation (such as grass, shrubs, and trees), which is typical for a conservation area. The base camp is within the rocky semi-arid savanna and woodland systems of the Ehirovipuka Conservancy, and the site area vegetation is characterised by the western Kalahari woodland/mopane savanna ecotone with strong karstveld and rocky hill influences. The area is further characterized by rocky calcrete/dolomite outcrops, sparse thornveld shrubland, mopane-dominated woodland patches, dry ephemeral drainage lines, and arid savanna grasses and scattered trees.

Moreover, according to NACSO (2025), the large parts of the Ehirovipuka Conservancy are dominated by mopane savannah, but the rugged hills support a great mix of vegetation, including Commiphora and Euphorbia species, shepherd's trees, and the enigmatic bottle tree. Huge ana trees, camel thorn, and leadwood grow along the courses of the larger ephemeral rivers.

The common species observed on and around the site are: Mopane (*Colophospermum mopane*), red bushwillow (*Combretum apiculatum*), black thorn (*Senegalia mellifera*), corkwood species (*Commiphora spp.*), leadwood (*Combretum imberbe*), and the shepherd's tree (*Boscia albitrunca*). Some photos of the vegeaiton on and aorund the site are shown in Figure 4-3.

Figure 4-3: The vegetation on and around Okomutati Base Camp

4.2 Physical Environment

4.2.1 Climate

The rainfall in the area is relatively low and unpredictable, with an annual average of between 250 and 300 millimetres (250 and 300mm) (NACSO, 2025).

4.2.2 Landscape and Topography

The landscape of the project site is Karstveld (Figure 4-4). This landscape is underlain exclusively by rocks formed from sediments deposited 750–600 million years ago in a shallow sea covered by mats of microbial organisms. These rocks are quite soluble in rainwater and thus slowly dissolve over time, leaving cavities that may develop into extensive aquifers, cave systems, and underground lakes (Atlas of Namibia Team, 2022).

The base camp and much of its leasehold area are on plains and rocky mountainous ground (the northern side) with elevations ranging between 1,216 and 1,453 metres above sea level, and the rest of the site area falls on flat areas with elevations ranging between 951 and 1,216 metres above sea level (Figure 4-4).

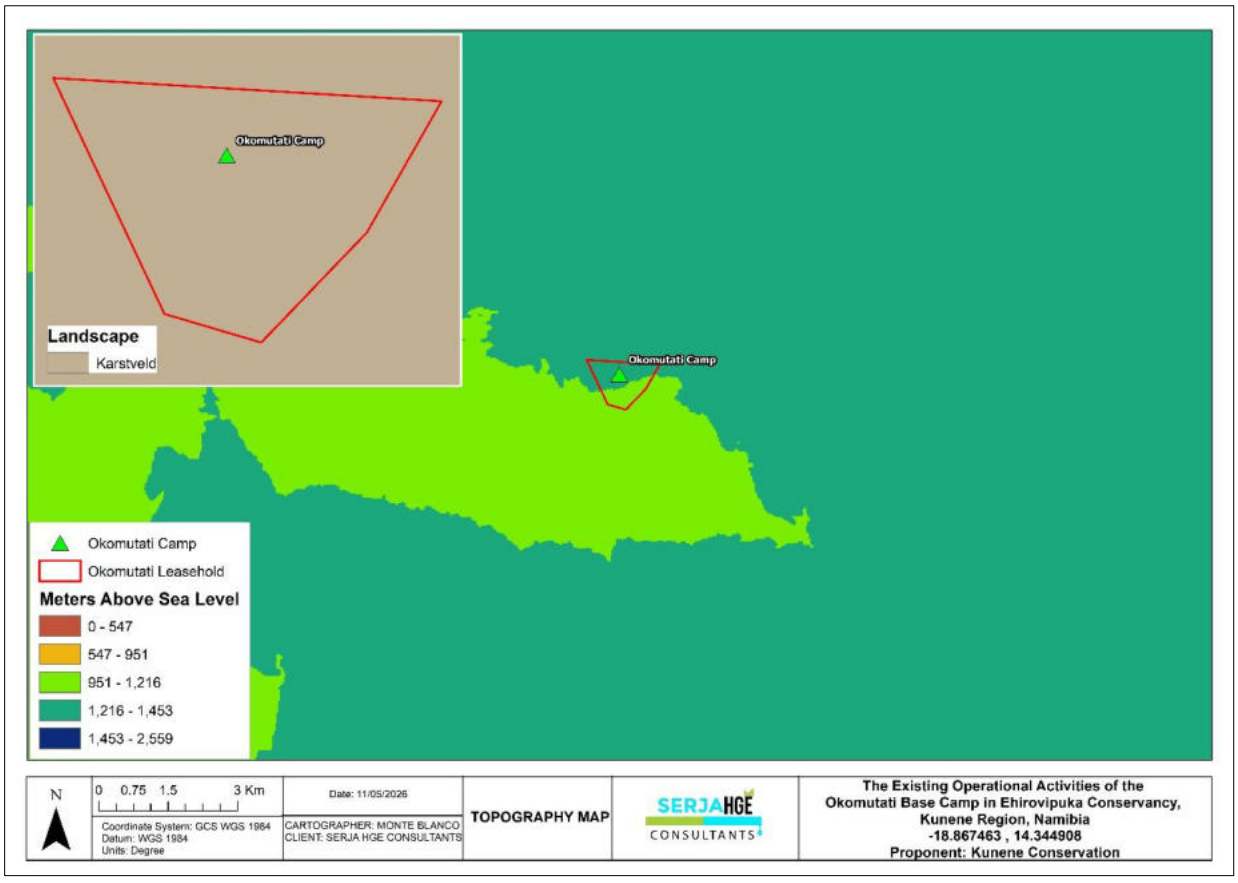

Figure 4-4: The topography and landscape on and around Okomutati Base Camp

The landscape of the southern side of the base camp is shown in Figure 4-5.

Figure 4-5: Photos of the southern side of the Okomutati Base Camp (about 2km to the south)

4.2.3 Geology

The geology around the site indicates that the site mainly lies on rock units comprising mixtite, minor schists, shale, quartzite, and ortho-amphibolite in the southern part of the project site (and base camp location), as shown on the map in Figure 4-6. The northern and northeastern part of the site is underlain by rock units of dolomite, limestone, shale, and chert.

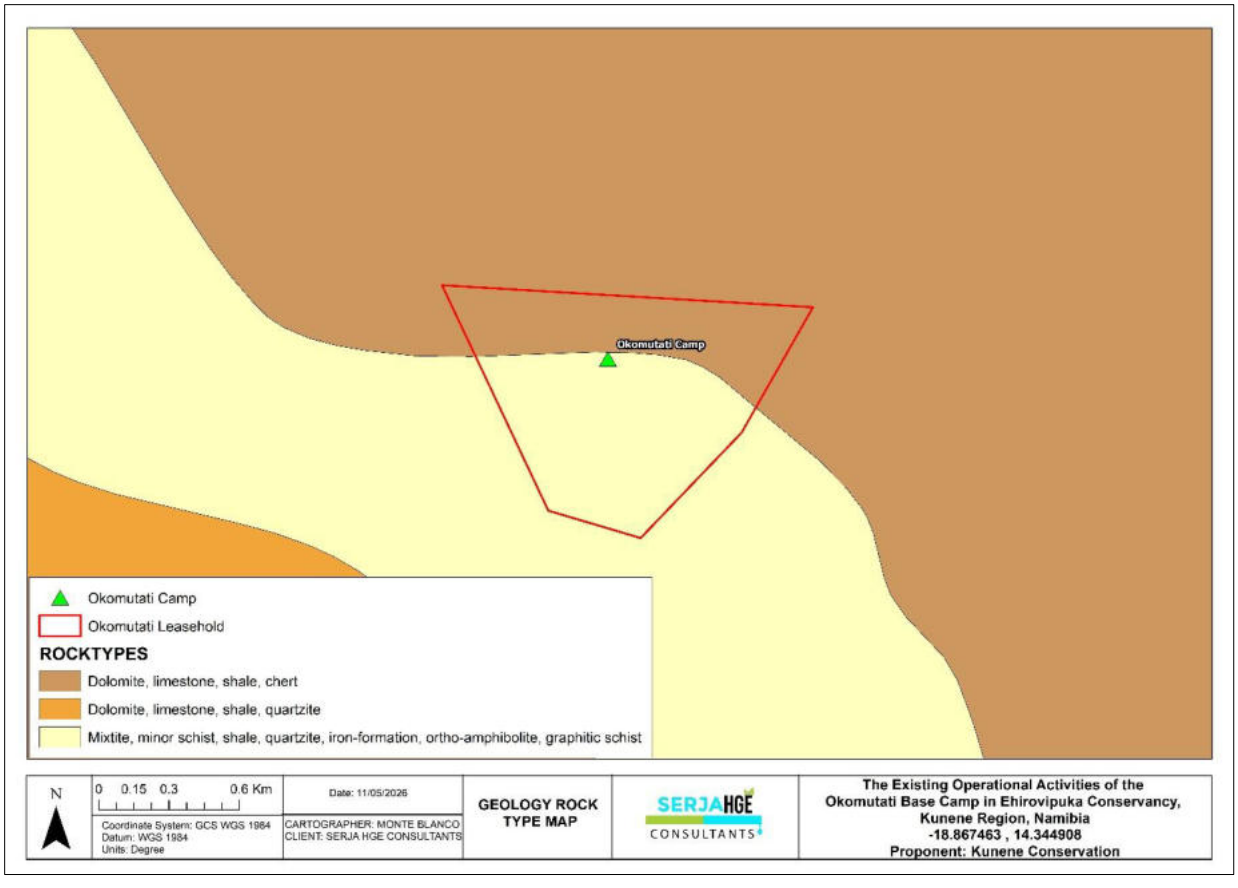

Figure 4-6: The geology map of the Okomutati Base Camp and its leasehold area

The rock units observed on and around the base camp are shown in Figure 4-7

Figure 4-7: The rock units at the Okomutati Base Camp and within its leasehold area

4.2.4 Soils

The project area lies on thin soils that are underlain by rock outcrops that characterise about 99% of the base camp and the leasehold area, as shown on the soil map in Figure 4-8. The small part is covered by eutric regosols. According to Mendelsohn et al (2002), eutric soils are fertile soils with high base saturation. The Atlas of Namibia Team (2022) defines regosols as young, almost undeveloped soils with no diagnostic horizons and little evidence of soil-forming processes. They are found where soil formation has been inhibited by arid conditions or interrupted by erosion or recent deposition of sediments. They are normally medium to finely textured unconsolidated materials common in young sediments. Regosols on slopes are easily eroded due to their unconsolidated structure and are prone to desiccation, which limits their potential for cultivating rain-fed crops (The Atlas of Namibia Team, 2022).

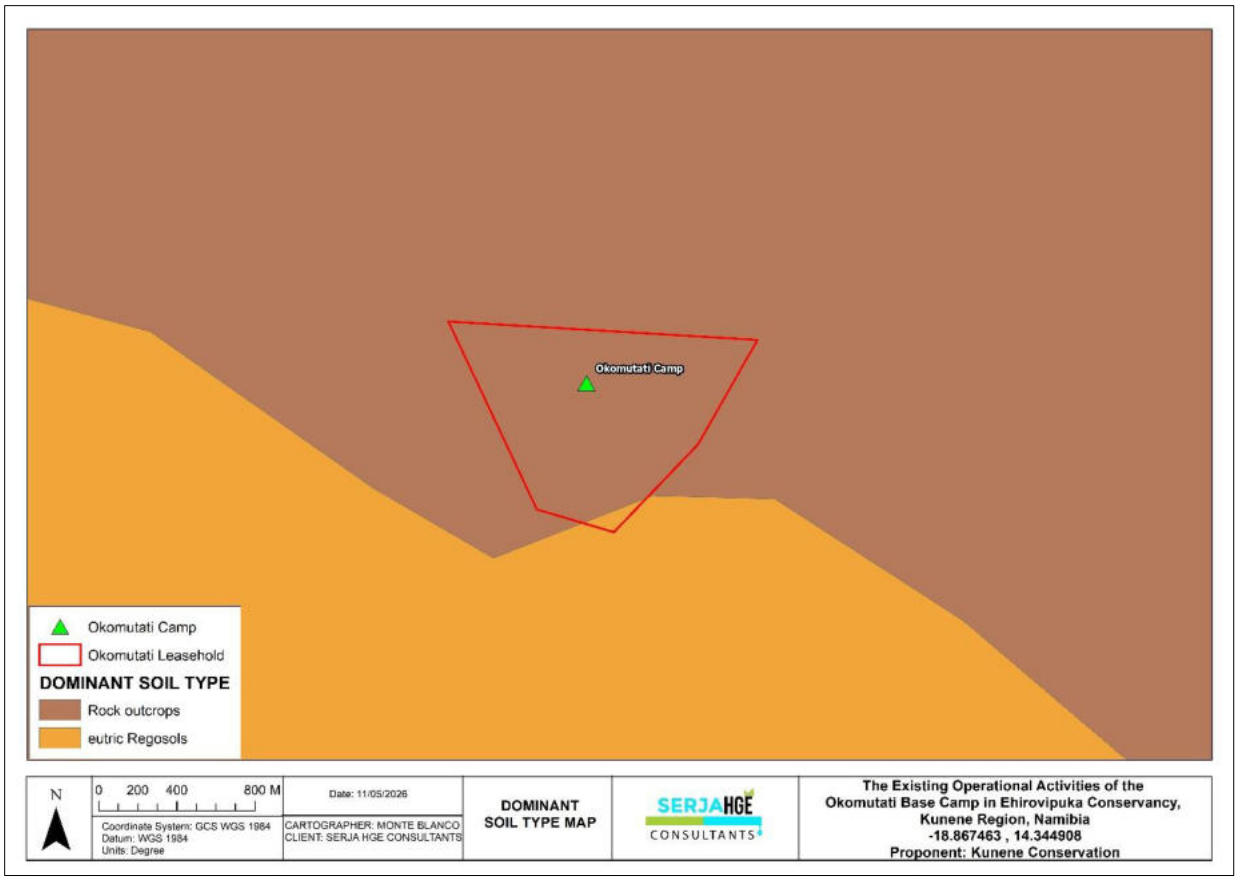

Figure 4-8: The soil map of the Okomutati Base Camp and its leasehold area

The localised soils observed on and around the Okomutati Base Camp are brown in colour and light grey in areas that are dominated by rock outcrops, as shown in Figure 4-9.

Figure 4-9: The observed brown and light grey soils at and near the Okomutati Base Camp

4.2.5 Water Resources: Hydrology and Hydrogeology

In terms of surface water, there is an ephemeral river (Aaprivier) located on the western side of the base camp and another (with a north-south trend) small ephemeral river close to the campsite in a westerly-south-easterly trend, as indicated on the geohydrology map.

Groundwater in the project area is hosted either in fractured, fissured, or karstified aquifers or rock bodies with little groundwater potential. Lohe et al (2021) stated that recharge from rainfall is an important parameter determining the groundwater potential, but the degree of metamorphism also affects the groundwater potential. The groundwater potential of the rocks decreases as the degree of metamorphism increases.

In terms of local groundwater sources and as extracted from the national groundwater database (available data), there are several boreholes around the base camp, as shown on the geohydrology map in Figure 4-10 and their information in Figure 4-11. The Okomutati Base Camp and its leasehold area largely lie on rock with groundwater potential, as shown on the geohydrology map.

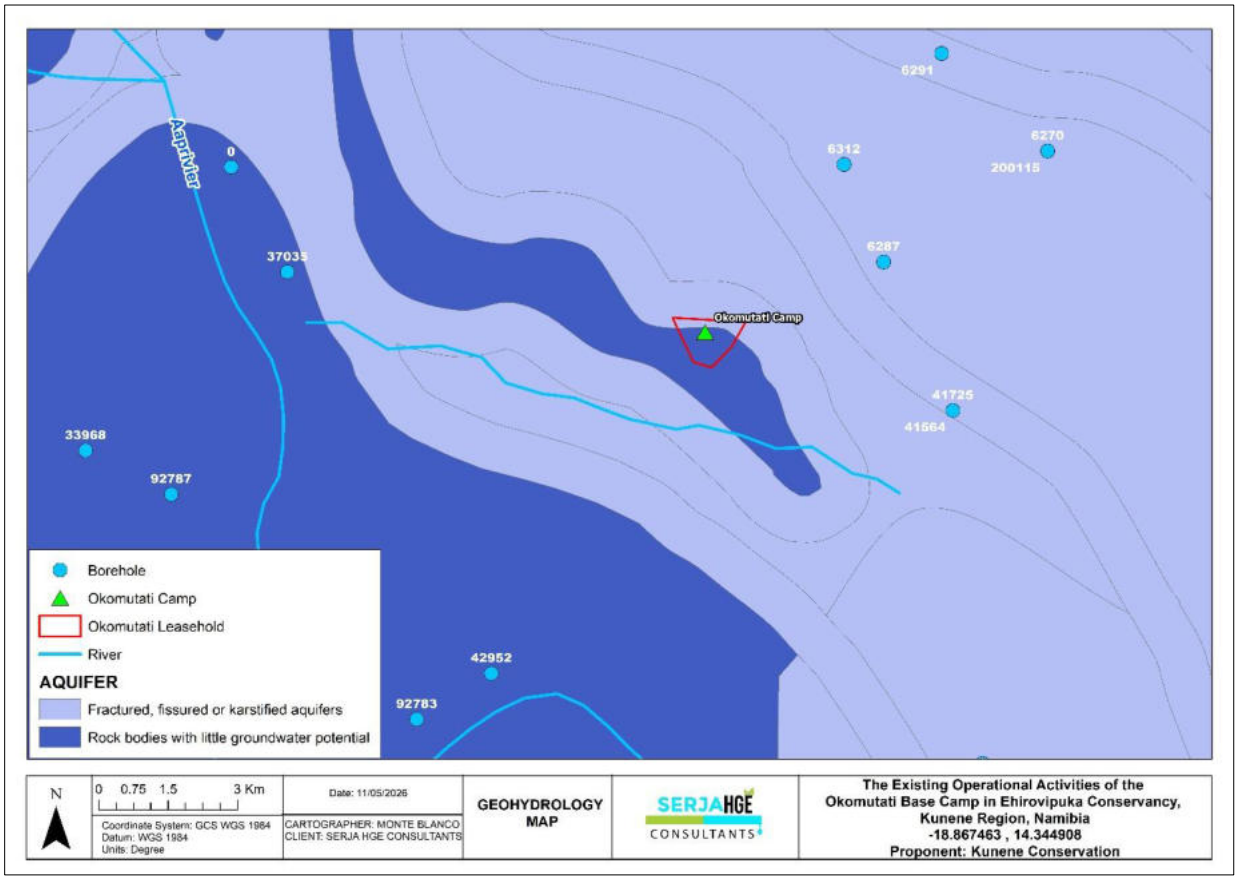

Figure 4-10: The geohydrology map of the Okomutati Base Camp area

Borehole

FID	Shape *	BOREHOLENO	TOPOSHEETN	OLDWELLNUM	OLD_WWNUMB	LATITUDE	LONGITUDE	ELEVATION	DRILLSTART	DRILLENDDA	YIELD	APPARENTWA	LOCATION	INITIALEC	INITIALWAT	TOTALDEPTH	DIAMETER
2256	Point	92787	1814CC	0		-18.89833	14.24117		01/01/1900				Okotjitenda				
25713	Point	33968	1814CC	5	WW33968	-18.8898	14.2245		25/01/1993	January 31, 1	0.6		Okongutirua		45.0	109.0	168.0
25826	Point	92783	1814CD	0		-18.9421	14.289		01/01/1900				OTJIUAWA				
38476	Point	6287	1814CD	3	WW6287	-18.8531	14.3799		12/11/1959	January 1, 19	1.4		Otjivero		25.0	61.3	150.0
38477	Point	6312	1814CD	4	WW6312	-18.8341	14.3722		11/03/1960	January 1, 19	0.4		Otjivero		22.9	59.8	150.0
38482	Point	6291	1814CD	9	WW6291	-18.8125	14.3912		05/12/1959	January 1, 19	1.2		Otjetjekwa		13.7	67.1	150.0
38483	Point	6270	1814CD	10	WW6270	-18.8315	14.41185		28/10/1959	January 1, 19	3.3		Oromatupa - O		19.8	50.0	150.0
51559	Point	200115	1814CD	0		-18.8315	14.41185		20/02/2006	February 23,	5.0	Good	Oromatupa		46.0	100.0	250.0
51713	Point	37035	1814CD	0		-18.85503	14.2638		09/02/1998	February 10,	4.5	FRESH WAT	EKOTO			100.0	215.0
51848	Point	41564	1814CD	0		-18.882	14.3934	1270.0	01/01/1900				okatjange				
52027	Point	41725	1814CD	0		-18.882	14.3934		01/08/1997	March 1, 1998			okatjange				
53494	Point	42952	1814CD	0		-18.93318	14.30353		01/01/2008		12.0		Oviombo 2		8.0	67.0	160.0
53580	Point	0		0		0	0		12:00:00 am								

Figure 4-11: The information on boreholes in the Okomutati Base Camp area (reference to the map in Figure 4-10)

4.2.5.1 Okomutati Base Camp (OkBC) Borehole

The base camp operations are supplied with water from a borehole (*OkBC* borehole) located within 500m of the base camp (Figure 4-12). The borehole has a yield of more than 6.5m^3/hour at the time of drilling in 2024, as per the borehole information in Table 4-1 (obtained from the borehole completion report). Currently, the borehole yield stands at 9.27m^3/hour (9,270 litres/hour), which is considered good for the project, considering the groundwater potential of the area. Regardless, the yield is deemed sufficient for the project's water needs, and it will continue to supply the base camp activities. During the site visit, the borehole is drilled in one of the streams near the base camp, and possibly recharged by the stream through its base.

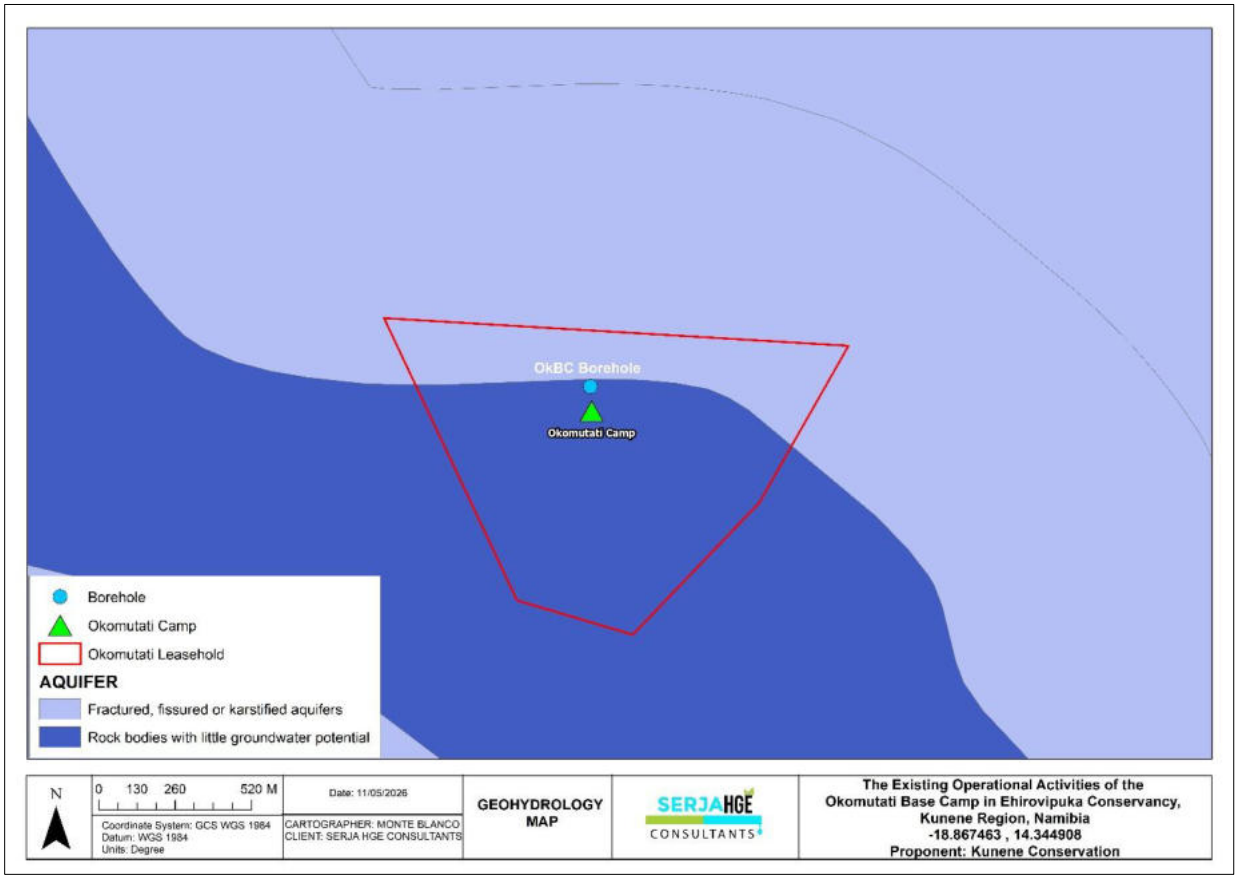

Figure 4-12: The Okomutati Base Camp (OkBC) Borehole on the geohydrology map

Table 4-1: The Okomutati Base Camp borehole information

Borehole ID	GPS coordinates	Drill Date	Depth (m)	Water level (*mbgl)	Yield (m^3/hr)
**OkBC	-18.86602 14.34514	25.02.2024	67	6	>6.5

****Meters below ground level*; ***The borehole does not seem to have an abstraction and use license, upon which a WW national borehole identification number would be assigned to it.*

4.3 Social and Economic Environment

4.3.1 Regional and Constituency Demography

According to the Namibia Statistics Agency (NSA) (2024a), the Kunene Region has a total population of 120,762 as per the 2023 National Population and Housing Census. Of the total population, 60,189 were females, and 60,573 were males. The base camp and proposed exclusive campsite are both within the Opuwo Rural Constituency, which has a population of 14,894.

Furthermore, the Kunene Region has a population density of 1.0 persons per square kilometre (km^2), while the Opuwo Rural Constituency has a population density of 0.7 persons/km^2 (NSA, 2024b). The Kunene Region has a literacy rate of 63.8% (of 15 years and above). The early childhood development (age 0 to 5) stands at 11.0%, while for the population of 15+ years of age, 37.6% have never attended school, 14.6% is the population that is currently in school, and 45.9% have left school (NSA, 2024a). Furthermore, NSA (2024a) indicates that the population of 3 years and above has access to the internet is 14.2%, and that owns a cellphone is at 36.4%.

Namibia Statistics Agency (NSA). (2024b). Stats by Region: Kavango West. Windhoek. Available from https://census.nsa.org.na/kavango-west-region/.https://census.nsa.org.na/kunene-region/

4.3.2 Economic Activities

According to the NSA (2024a), the main sources of income in households in the Region are farming (16.2%), wages and salaries (35.0%), old age pension (12.8%), and business (non-farming) at 4.7%.

4.3.3 Livelihood Activities in the Ehirovpuka Conservancy

The livelihood activities in Ehirovipuka are centred around livestock, but include a variety of other activities and income sources. Large gardens supply maize, watermelons, beans, and other vegetables, and create an important income for people. These activities are supplemented by income from employment, government pensions, and remittances (NACSO, 2025). The conservancy has been zoned for different land uses, including livestock farming, hunting, tourism, and mixed use. The zoning facilitates effective land use and avoids conflicts between different activities.

The Ehirovipuka Conservancy has created new livelihood options, provided direct employment, and created opportunities for jobs and income in the tourism and trophy hunting industries. Added to that, conservancy currently generates most of its income from trophy hunting, offering an excellent hunting product with a large variety of trophy species. The conservancy owns the beautiful hunting camp, and some of the staff employed by the hunting operator are being trained to become registered hunting guides. Game meat from trophy hunting as well as own-use hunting is distributed to member households, the schools, and the traditional authority (NACSO, 2025).

4.3.4 Accommodation facilities in the Ehirovpuka Conservancy

There is currently no fixed tourism accommodation within the Ehirovipuka Conservancy, but this is likely to change (NACSO, 2025). It is for this reason that Kunene Conservation intends to help the conservancy with developing an exclusive campsite for the tourists/visitors in the area that will be managed by the conservancy and benefit from it.

The roles and responsibilities of implementing this document are presented in the next chapter.

5 EMP IMPLEMENTATION RESPONSIBILITIES

Kunene Conservation (the Proponent) is ultimately responsible for implementing the EMP. However, the Proponent may delegate this responsibility, or any part of it, at any time as they deem necessary. The roles and responsibilities of all delegates/parties involved in the effective implementation of this EMP are set out. Table 5-1.

Table 5-1: The EMP implementation responsibilities for the Okomutati Base Camp operations and associated activities

Role	Responsibilities
Kunene Conservation (The Proponent)	-Managing the implementation of this EMP and updating and maintaining it when necessary. -Management and monitoring of individuals and/ or equipment on-site in terms of compliance with this EMP and issuing fines for contravening EMP provisions.
Project/Site Manager (who is also the Okomutati Base Camp Manager and Campsite Manager)	The Project/Site Manager will be responsible for the overall management, operation, environmental oversight, and stakeholder engagement for the Okomutati Base Camp and associated exclusive campsite activities. The Manager's duties and responsibilities will include: -Ensuring that all project activities are completed on time and in accordance with the Environmental Management Plan (EMP). -Ensuring compliance with all commitments and mitigation measures contained in the EMP. -Training relevant staff on operational, environmental, health, and safety procedures applicable to their duties. -Maintaining records of all relevant environmental and operational documentation for the project. -Reviewing the EMP annually and updating the document where necessary. -Conducting regular site inspections and monitoring compliance with the EMP. -Addressing and resolving non-compliance issues related to environmental, health, and safety requirements. -Coordinating communication and engagement with stakeholders, interested and affected parties (I&APs), conservancy representatives, and local communities.

Role	Responsibilities
	-Managing daily operational schedules and overseeing staff and maintenance personnel where applicable. -Managing public and community relations matters and ensuring effective communication regarding project activities. -Managing the day-to-day operation, maintenance, and environmental performance of the campsite facilities. -Ensuring that campsite infrastructure, including ablution facilities, wash-up areas, fireplaces, and associated infrastructure, is properly maintained and functional. -Receiving and assisting guests, managing bookings, and overseeing visitor conduct within the campsite. -Monitoring water usage and promoting sustainable use of available water resources. -Implementing waste management measures, including the collection, storage, and disposal of solid waste and wastewater. -Monitoring and minimising environmental impacts such as littering, vegetation disturbance, soil erosion, and fire risks. -Reporting infrastructure damage, environmental incidents, and maintenance requirements to the conservancy management committee where necessary. -Coordinating with conservancy leadership regarding tourism activities, operational matters, and community benefits. -Ensuring that all operations are conducted in a safe, responsible, and environmentally sustainable manner.
Project Contractor, or simply the " Contractor, who is also responsible for their subcontractors (based on the phase of the project)	The Contractor's representative or site supervisors (as appropriate) will be required to: -Ensure that the relevant commitments contained in the EMP Action Plans are adhered to. -Compile relevant procedures and method statements for approval by the Project manager before initiation of project activities on the sites. -Ensure that all relevant staff are trained in procedures. -Maintain records of all relevant environmental documentation applicable to their work.

6 ENVIRONMENTAL IMPACTS AND MANAGEMENT MEASURES

The potential impacts associated with the project activities are listed below (under sections 6.1 and 6.2), while the impact description and assessments are provided in Table 6-3 and Table 6-4.

6.1 Potential Positive Impacts (benefits)

The potential positive impacts from the project activities are as follows:

- Socio-economic development through employment for the people in the area.
- The camp provides timely essential services such as food, water, accommodation for personnel, and equipment storage, which facilitates smooth operations in the area.
- Strategic positioning close to key areas of operations allows quicker response times.
- The camp's presence in the area can allow for building better relationships with local communities (Conservancy management), which is crucial for operational support and future developments.
- The camp fosters better communication and coordination among team members and units, improving overall operational effectiveness.
- The establishment and operation of the Ehirovipuka Conservancy's exclusive campsite: socio-economic and environmental benefits.
- Socio-economic development through the provision of local services and goods.

6.2 Potential Negative Impacts

The key potential negative impacts identified, described, and assessed in the EIA Report, for which the management measures (action plans) have been provided, are listed below:

- Physical disturbance to the site soils resulting in soil erosion (compaction by vehicles driving in the area) during the establishment of structures for the base camp and exclusive campsite.
- Impact on biodiversity: The disturbance of local fauna and flora due to the movements of site personnel and vehicles, land clearing (vegetation removal), and illegal hunting (poaching) of wild fauna/animals and harvesting of wild flora/plants by project staff or related site visitors.
- Environmental pollution (littering) through the mishandling of project-related waste associated with the project.
- Soil and water resources pollution from waste generated onsite (if not properly handled and correctly disposed of).

- Occupational health and safety: improper handling of materials, vehicles, and equipment, and lack of PPE and respective operational training may cause health and safety risks to workers (personnel/staff).
- Impact on local services infrastructure (roads and water supply)
- Noise from project activities (the movement of heavy machinery, equipment, and trucks).
- Vehicular Traffic Safety.
- Potential archaeological and cultural heritage impact through the inadvertent unearthing of unmarked graves or buried archaeological resources (sites and objects).

6.3 Impact Assessment Methodology

The Environmental Assessment process primarily ensures that potential impacts that may occur from project activity are identified and addressed with environmentally cautious approaches and legal compliance. The impact assessment method used for this project is per Namibia's Environmental Management Act No. 7 of 2007 and its 2012 EIA Regulations, as well as the International Finance Corporation (IFC) Performance Standards.

The identified impacts were assessed in terms of scale/extent (spatial scale), duration (temporal scale), magnitude (severity), and probability (likelihood of occurring), as presented in Table 6-1. To enable a scientific approach to the determination of the environmental significance, a numerical value is linked to each rating scale. This methodology ensures uniformity and that potential impacts can be addressed in a standard manner so that a wide range of impacts are comparable. It is assumed that an assessment of the significance of a potential impact is a good indicator of the risk associated with such an impact. The following process will be applied to each potential impact:

- Provision of a brief explanation of the impact,
- Assessment of the pre-mitigation significance of the impact, and
- Description of recommended mitigation measures.

The recommended mitigation measures prescribed for each of the potential impacts contribute towards the attainment of environmentally sustainable operational conditions of the project for various features of the biophysical and social environment. The following criteria (in Table 6-1) were applied in this impact assessment:

Table 6-1: Criteria used for impact assessment (extent, duration, intensity, and probability)

The Criteria used to assess the potential negative impacts.				
Extent or (spatial scale) - extent is an indication of the physical and spatial scale of the impact.				
Low (1)	**Low/Medium (2)**	**Medium (3)**	**Medium/High (4)**	**High (5)**

The Criteria used to assess the potential negative impacts.				
Impact is localised within the site boundary: Site only	Impact is beyond the site boundary: Local	Impacts felt within adjacent biophysical and social environments: Regional	Impact widespread far beyond the site boundary: Regional	Impact extends beyond National or international boundaries
Duration- Duration refers to the timeframe over which the impact is expected to occur, measured in terms of the lifetime of the project				
Low (1)	**Low/Medium (2)**	**Medium (3)**	**Medium/High (4)**	**High (5)**
Immediate mitigating measures, immediate progress	Impact is quickly reversible, short-term impacts (0-5 years)	Reversible over time; medium term (5-15 years)	Impact is long-term	Long term, beyond closure, permanent, irreplaceable, or irretrievable commitment of resources
Intensity, Magnitude/severity - Intensity refers to the degree or magnitude to which the impact alters the functioning of an element of the environment. This is a qualitative type of criterion.				
H-(10)	**M/H-(8)**	**M-(6)**	**M/L-(4)**	**L-(2)**
Very high deterioration, high quantity of deaths, injury or illness / total loss of habitat, total alteration of ecological processes, extinction of rare species	Substantial deterioration, death, illness, or injury, loss of habitat/diversity or resource, severe alteration, or disturbance of important processes	Moderate deterioration, discomfort, partial loss of habitat/biodiversity or resource, moderate alteration	Low deterioration, slight noticeable alteration in habitat and biodiversity. Little loss in species numbers	Minor deterioration, nuisance or irritation, minor change in species/habitat/diversity or resource, no or very little quality deterioration.
Probability of occurrence - Probability describes the likelihood of the impacts occurring. This determination is based on previous experience with similar projects and/or based on professional judgment.				
Low (1)	**Medium/Low (2)**	**Medium (3)**	**Medium/High (4)**	**High (5)**
Improbable; low likelihood; seldom. No known risk or vulnerability to natural or induced hazards.	Likely to occur from time to time. Low risk or vulnerability to natural or induced hazards	Possible, distinct possibility, frequent. Low to medium risk or vulnerability to natural or induced hazards.	Probable if mitigating measures are not implemented. Medium risk of vulnerability to natural or induced hazards.	Definite (regardless of preventative measures), highly likely, continuous. High risk or vulnerability to natural or induced hazards.

6.4 Impact Significance

Impact significance is determined through a synthesis of the above impact characteristics. The significance of the impact “without mitigation” is the main determinant of the nature and degree of mitigation required. As stated in the introduction to this chapter, for this assessment, the significance of the impact without prescribed mitigation actions was measured.

Once the above factors (Table 6-1) have been ranked for each potential impact, the impact significance of each is assessed using the following formula:

SP = (magnitude + duration + scale) x probability

The maximum value per potential impact is 100 significance points (SP). Potential impacts were rated as high, moderate, or low significance, based on the following significance rating scale (Table 6-2).

Table 6-2: Impact significance rating scale

Significance	Environmental Significance Points	Colour Code
High (positive)	>60	H
Medium (positive)	30 to 60	M
Low (positive)	<30	L
Neutral	0	N
Low (negative)	>-30	L
Medium (negative)	-30 to -60	M
High (negative)	>-60	H

For an impact with a significance rating of high, mitigation measures are recommended to reduce the impact to a low or medium significance rating, provided that the impact with a medium significance rating can be sufficiently controlled with the recommended mitigation measures. To maintain a low or medium significance rating, monitoring is recommended for a period to enable the confirmation of the significance of the impact as low or medium and under control.

The assessment of the project phases is done for both pre-mitigation (before implementing any mitigation) and post-mitigation (after mitigation is implemented). The objective of the mitigation measures is to firstly avoid the risk, and if the risk cannot be avoided, mitigation measures to minimize the impact are recommended. Once the mitigation measures have been applied, the identified risk will be of low significance.

The management and mitigation measures are provided under the next chapter for implementation.

6.5 Environmental Impact Assessment

The potential impacts of the project activities are described and assessed in 6.5.1 and 6.5.2 (Table 6-3 and Table 6-4). The management and mitigation measures in the form of management action plans are provided in the section 6.6.

6.5.1 Assessment of positive impacts

The assessment of the benefits of the project and its associated activities is presented in Table 6-3.

Table 6-3: The Description and Assessment of the positive impacts of Okomutati Base Camp and associated activities on the environment

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
Employment creation and income	The project activities will generate income for the employed staff, who will continue to support themselves and their families. It is also anticipated that employment opportunities will double over the next 3 years.	L / M-2	L / M - 2	L / M - 4	L / M - 2	L - 16	M/H - 4	L/M - 4	M/H - 4	H - 5	M - 60
Presence and operation of the base camp	The base camp provides timely essential services such as food, water, accommodation for personnel, and equipment storage, which facilitates smooth operations in the area.	L / M - 2	L / M - 2	L / M - 4	L - 1	L - 8	M / H - 4	H - 5	M - 6	H - 5	H - 75
	Strategic positioning close to key areas of operations allows quicker response times.	L / M - 2	L / M - 2	L / M - 4	L - 1	L - 8	M / H - 4	H - 5	M - 6	H - 5	H - 75
	The camp's presence in the area can allow for building better relationships with local communities (Conservancy	L / M - 2	L / M - 2	L / M - 4	L - 1	L - 8	M / H - 4	H - 5	M - 6	H - 5	H - 75

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	management), which is crucial for operational support and future developments.										
	The camp fosters better communication and coordination among team members and units, improving overall operational effectiveness.	L / M - 2	L / M - 2	L / M - 4	L - 1	L - 8	M / H - 4	H - 5	M - 6	H - 5	H - 75
The establishment and operation of the Ehirovipuka Conservancy's exclusive campsite: socio-economic and environmental benefits	The campsite can create direct and indirect employment opportunities for local community members. These opportunities include job creation during the establishment (construction) of the campsite, campsite operations, guiding, maintenance, security, and hospitality services. Furthermore, the operations of the campsite will generate revenue from tourism activities, which can strengthen the conservancy's financial sustainability and support community development initiatives. Local suppliers and small businesses may also	L / M - 2	L / M - 2	L / M - 4	L - 1	L - 8	M / H - 4	H - 5	M - 6	H - 5	H - 75

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	benefit from increased demand for goods and services.										
Socio-economic development: local services and goods	The provision of local services and goods contributes to local economic development and income generation for local businesses.	L / M-2	L / M - 2	L / M - 4	L - 1	L - 8	M - 3	M / H - 4	L / M - 4	M / H - 4	M - 44

6.5.2 Assessment of negative impacts

The assessment of the benefits of the project and its associated activities is presented in Table 6-4.

Table 6-4: The Description and Assessment of the negative impacts of Okomutati Base Camp and associated activities on the environment

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
Physical disturbance to the site soils resulting in soil erosion (compaction by vehicles driving in the area) during the establishment of structures for the base camp and exclusive campsite	The land clearing and excavations to enable the erection of structures, installation of infrastructure, and movement of vehicles will potentially result in soil disturbance, leading to compaction of site soils. This will, however, be a short-term and localized impact.	M - 3	M / H - 4	L / M - 4	M / H - 4	M – 44	L - 1	L / M - 2	L - 2	L / M -2	L - 10

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
Biodiversity: The disturbance of local fauna and flora due to the movements of site personnel and vehicles, as well as land clearing (vegetation removal)	The land clearing and excavation works may potentially result in the removal of vegetation, resulting in loss of species and wildlife habitats. Moreover, the potential for noise from earthwork activities and vehicles during construction may be a nuisance to wildlife roaming near the sites of operations. However, the project equipment is of medium size, and the noise level is bound to be limited to the site boundaries only, and for the duration of the establishment (refurbishment/construction).	M - 3	M - 3	M - 6	M / H - 4	M – 48	L / M - 2	L / M - 2	L - 2	L / M - 2	L - 12
Illegal hunting (poaching) of wild fauna/animals and harvesting of wild flora/plants	The presence of additional people in the area during site refurbishment and operations may result in the illegal hunting (poaching) of wild fauna and illegal harvesting of wild flora within the Conservancy by project staff or related visitors. The poaching of wild animals may result in a potential loss of valuable wildlife and plants, which are important attractions for the Conservancy in the area.	M - 3	M - 3	M - 6	M / H - 4	M – 48	L / M - 2	L / M - 2	L - 2	L / M - 2	L - 12

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	If no measures are in place, the potential impact is considered medium to slightly high. However, upon the implementation and monitoring of the mitigation measures, the impact significance will be low.										
Environmental pollution (littering)	Solid and liquid waste may be generated on-site during structure establishment and operational activities. If the generated waste is not disposed of in a responsible way, this may lead to environmental pollution may occur on and around the site. If solid waste, such as papers and plastics, is not properly stored or just thrown into the environment (littering), it may be consumed by livestock and wildlife in the area, and this could be detrimental to their health, the integrity, and value of the conservancy.	M: -3	M: -3	M / L: -4	M / H: 4	M: -40	L / M - 2	L / M - 2	L - 2	L / M - 2	L - 12
Soil and water resources pollution	There is a potential for soil and groundwater pollution from waste generated at both during site establishment (refurbishments) and operational activities at both the base camp	M - 3	M / H - 4	L / M - 4	M / H - 4	M - 44	L / M - 2	L / M - 2	L - 2	L / M - 2	L - 12

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	and exclusive campsite. The project activities may be associated with a variety of potential pollution sources (i.e., lubricants, fuel, and wastewater). If not properly handled and correctly disposed of, these may contaminate the surrounding soils and eventually surface and groundwater. Surface water pollution would occur through run-off of polluted water to nearby surface water bodies (ephemeral rivers) during rainy seasons. Groundwater pollution would occur through the leaching of liquid wastes from the surface into the groundwater systems. Pollution of groundwater could negatively affect downstream areas where abstraction from the same aquifer on which the camps rely for water supply. However, the scale and extent of the activities where potential pollution may occur will be small and much localized.										

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
Water use: over-abstraction	The required water volumes will be sourced from an existing borehole at the Okomutati Base Camp. The project utilises 1.m^3/day (16,740 litres) per month. The amount of water required for the project is relatively small compared to standard developments/projects. Groundwater resources in the area have low to moderate potential as the borehole is located close to a river, hence, the reasonable yield from the borehole. Therefore, given the amount of water required for the project and its associated activities, the impact on groundwater will be moderate.	M - 3	M - 3	M - 6	M / H - 4	M – 48	L / M - 2	L / M - 2	L - 2	L / M - 2	L - 12
Occupational Health and Safety Risks	Project personnel (workers) involved in project activities may be exposed to health and safety risks associated with the mishandling of project equipment and materials. These would happen if equipment, vehicles, and materials are not properly secured to prevent any harm or injury to the project personnel and people on-site.	M - 3	M - 3	M - 6	M / H - 4	M – 48	L / M: - 2	L / M: -2	L / M: -4	L / M: 2	L: -16

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	The use of heavy equipment and other flammable materials on-site may result in accidental fire outbreaks. This could pose a safety risk to the project personnel, locals, as well as the immediate conservancy area.										
Impact on local services infrastructure (roads and water supply)	The project and associated activities (the base camp and exclusive campsite) may place additional pressure on local roads. The increased vehicle movement by tourists, staff, and suppliers can contribute to the deterioration of access roads and increased dust generation in the area. In terms of water supply, the base camp and campsite may increase demand for groundwater sources, which potentially exerts stress on limited water resources in the area, especially during dry periods. If not properly managed, this could affect water availability for surrounding communities, livestock, and wildlife.	M - 3	M - 3	M - 6	M / H - 4	M – 48	L / M - 2	L / M - 2	L - 2	L / M - 2	L - 12
Noise from project activities	Potential for noise from earthwork activities and vehicles associated with the project and	L/M - 2	L/M - 2	M - 6	M/H - 3	M - 30	L - 1	L / M - 2	L - 2	L / M -2	L - 10

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	associated activities could disturb wild animals in the conservancy near the camps. Excessive noise without any protective measures in place can also be a health risk to workers on-site. The project equipment is of medium size, and the noise level is bound to be limited to the site boundaries only.										
Vehicular Traffic Safety	Roads such as the C35 and existing access roads to and from the site are the main transportation routes for all vehicular movement in this part of the project area. Therefore, there would be a short-term potential increase in traffic on some days because of the transportation of associated project materials, supplies, and services to and from the site. Depending on project needs, vehicles will frequent the site area during site establishment (and refurbishment) and then during operations. The slow-moving vehicle traffic on these roads could potentially lead to traffic congestion and or road accidents. However, the project	M - 3	M / H - 4	L / M - 4	M / H - 4	M - 44	L - 1	L / M - 2	L - 2	L / M -2	L - 10

Impact	Impact Description	Impact Assessment									
		Pre-mitigation Rating					Post-mitigation Rating				
		Extent	Duration	Intensity	Probability	Significance	Extent	Duration	Intensity	Probability	Significance
	establishment and refurbishment activities will be short-term and site-specific. Therefore, it can be considered of medium significance if no measures are implemented.										
Archaeological and Heritage resources	The earthworks for the establishment of the exclusive campsite, especially may result in the inadvertent uncovering of buried archaeological objects on-site.	M: -3	M: -3	M / L: -4	M / H: 4	M: -40	L - 1	L / M - 2	L - 2	L / M -2	L - 10

6.6 Environmental Management and Mitigation Measures

Management actions are aimed at avoiding the above-listed potential negative impacts where possible; where this is not possible, measures are provided to reduce their significance. Management and mitigation measures recommended for the potential impacts were based on the following:

- Refurbishment (Construction) and Upgrading phase (Table 6-5).
- Operational and Maintenance phase (Table 6-6).

6.6.1 Construction (Refurbishment/Upgrading): Management and mitigation measures for impacts from the project activities

The measures proposed for implementation to manage and mitigate the environmental and social impacts during the construction phase are presented in Table 6-5.

Table 6-5: Management and mitigation measures for the impacts from the project and associated activities – Construction and Refurbishment (Upgrading) Phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
EMP implementation and training	Lack of EMP awareness and implications thereof	-EMP training should be provided to all workers on-site before commencing work. -All site personnel should be aware of the necessary health, safety, and environmental considerations applicable to their respective work. -The Project Manager should be briefed and informed that it is their responsibility to implement all provisions of this EMP. Furthermore, the Project Manager should be fully informed that they are also responsible for fulfilling the role of public relations officer, as well as safety, health & environment officer at both the base camp and the exclusive campsite. -The implementation of this EMP should be monitored. The site should be inspected daily throughout the construction. -The EMP non-compliance penalty system should be implemented.	-Records of a once-off EMP Training -The ECC is renewed every 3 years -The Project Manager is fully aware of their responsibility of implementing and monitoring the EMP on-site	-Kunene Conservation Management	Throughout this phase, through the operational and maintenance phase
Employment opportunities	'Outsiders' are given employment opportunities at the expense of capable locals. Unfair employment practices between men and women	-Make provision to maximise the use of local labour. All unskilled labour shall be sourced from local communities. -Specific recruitment procedures should be spelled out. -At least 25% of recruits must be women for non-strenuous jobs. -Employment contracts should be well prepared for every employee, and compensation should follow the stipulated minimum wage.	-Kunene Conservation makes provision for a detailed recruitment plan in the establishment and continued operational plans	-Kunene Conservation Management, with the advice of the local leadership and management, to determine employment considerations	Pre-construction, and where necessary throughout the operational phase
Procurement of goods and services	The awarding of services and goods contracts to out-of-area/region	-The procurement stage for the project construction works should follow a fair and transparent process. -Encourage the provision of goods and services that are locally available, and should be sourced from locally available businesses, especially small and medium businesses in the	-Records of local or regional businesses involved in the service provision to the project	-Kunene Conservation Management	Pre-construction, and where necessary throughout the

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
	companies at the expense of local businesses	area and nearby Towns in the Region. If companies are not available in the Kunene Region, companies in nearby Towns should be considered. -If the campsite construction contract is awarded to an out-of-area company, they should be obliged to team up with an available local company to ensure capacity building for locals.		-Contractor (and subcontractors)	operational phase
Visual: applicable to the exclusive campsite	Aesthetics: Visual or aesthetic issues	-The exclusive campsite (structures) should be aesthetically pleasing, in a style that fits in with the natural environment. -Use shapes that do not contrast with the surroundings. -Use sympathetic colours (i.e., do not contrast) with the environment. -Use natural materials as much as possible (e.g., rocks from the area, wooden poles, and thatch). -Campsite signs should not be intrusive, e.g., a parking sign could be painted on a rock, rather than metal-made. -Walkways should be demarcated simply by rocks along the edges. -Walkways must not be straight, but rather winding, taking care to go around major obstacles (trees). -Avoid razor wire, security fences, and burglar bars as much as possible. -Minimise the use of shade cloth – rather use reeds or poles (shade cloth becomes shabby after a short while). -Specify that all services (e.g., pipes and cables) are to be buried underground as far as possible. -Place service areas (e.g., parking, storage, clothes drying) out of sight of tourists.	-All the designs are done as recommended or better	-Kunene Conservation Management -Contractor (and subcontractors)	Pre-construction, and where necessary throughout the phase
Water resources: applicable to the exclusive campsite	Water efficiency: use and management: Over-abstraction and over-use of water	-Design all toilets to drain into properly designed septic tanks (i.e., using the relevant South African National Standard) and place them at least 5 metres from any structure. -The borehole should not be pumped at rates beyond the sustainable yield. This is to ensure that groundwater flow directions are not altered or induced toward the borehole.	-All the designs are done as recommended or better	-Kunene Conservation Management	Pre-construction and throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-As far as possible, install only showers in the campsite, not baths, to reduce water consumption. -Specify low-flow shower-heads for the showers. -Specify appropriate minimal-water flushing devices in the toilets.			
Energy resources: applicable to the exclusive campsite	Energy efficiency: Over-utilization of energy	-The guest rooms (tents) should be designed to facilitate passive cooling. -Solar power systems should be used to run the Campsite apparatus as much as possible. Generators should be used as little as possible.	-All energy-saving measures are put in place and part of the design.	-Kunene Conservation Management	Pre-construction
Soils	Physical soil/land disturbance and loss of topsoil	-Stockpiled topsoil and excavated materials should be used to backfill the excavated and disturbed sites after completing work on the pits. -Soils that are not within the intended footprints of the project activities should be left undisturbed, and soil conservation implemented as far as possible. -Project vehicles/machinery should stick to the access routes provided and not unnecessarily create further tracks on-site and in the environment by driving everywhere, causing soil compaction and erosion. -The movement of vehicles to and across the site should be controlled. Construction materials required should be moved to where they are needed, using wheelbarrows (when possible) instead of vehicles to minimize soil impact.	-No proliferation of informal vehicle tracks created by project activities. -No new erosion gullies. -No signs of soil compaction -No disturbance to unmarked areas on-site.	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
Pest management: applicable to the exclusive campsite	Pest control and management: Occurrence and attraction of pests on-site	-Specify fly-screens on openable windows in the guest rooms, Camp area, kitchen area, etc., so that there is less need to use insect repellents. -Design and construct scavenger-proof storage areas for food and waste.	-The Campsite designs align with pest control measures	-Kunene Conservation Management	Pre-construction
Occupational health and safety	Health and safety risks to the workers and the community	-Before starting on the project, all project workers should undergo environmental induction. -The cost of personal protective equipment (PPE) for all workers, as well as first aid kits, should be included in the project budgets.	-Environmental, health, and safety inductions are provided to all workers before they start work.	-Kunene Conservation Management	Pre-construction (refurbishment) works.

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
Conflicts	Community conflicts owing to nuisances caused by the project contractor Lack of communication between the Proponent and the community	-A meeting should be arranged with the Ehirovipuka Conservancy Management and Traditional Authority for any out-of-area project contractor who has been appointed. -If not already known, the Project Manager should be introduced to the community (particularly the Ehirovipuka Conservancy management and local traditional authority leadership), and their contact details provided to them.	-The Project Manager is fully aware of their responsibilities to fulfil the role of a public relations officer on the project -The meeting is arranged once the Contractor has been appointed	-Kunene Conservation Management -Contractor	Pre-construction (refurbishment) works and throughout the project phase.
Irresponsible use of water resources	Water wastage due to careless practices on-site Leaks from tanks and taps	-Water storage tanks/taps should also be regularly inspected for any leakages and repaired immediately. -Water should be used sparingly and encourage the re-use and recycling of water for certain activities such as washing of non-greasy (non-hydrocarbon contaminated) equipment and vehicles, as well as dust suppression. -Awareness for water conservation should be provided to project staff and visitors.	-All required water supply permits/licenses are obtained -Water is used sparingly and reused-	-Kunene Conservation Management -Contractor	Before and during construction
Biodiversity	Loss of Flora due to unauthorized removal of protected species	-The construction and establishment of the campsite and project structures should be clearly demarcated, and the workforce must be instructed to operate within these boundaries. -Any activity resulting in the chopping down of trees or the removal of vegetation without the required authorisation is strictly prohibited. Therefore, a permit for removing protected **trees should be obtained from MEFT's Kunene Region Forestry Office (in Opuwo) or by contacting the head office in Windhoek– see contact details in Table 3-1.** -All big tree species should be preserved and should not be removed unless necessary.	-The permits for removing protected tree species (where extremely necessary) are issued -Barricading tape (to indicate working areas) is in place -Biodiversity conservation awareness is raised among workers/personnel	-Project Manager/Base Camp Manager -Contractor	The permit to remove protected tree species should be obtained before removing such a tree. The rest of the measures should be implemented throughout this phase.
Biodiversity	Loss of Flora – protected species	-Avoid unnecessary removal and disturbance of site vegetation. -Vegetation found on the site, but not in the actual footprint, should not be disturbed; therefore, it should be avoided. -The illegal harvesting of wild plants is strictly prohibited.	-No complaints of unauthorised vegetation removal associated with project personnel.	-Project Manager/Base Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
	Planting of alien flora species in the area	-Any activity resulting in the chopping down of trees or the removal of vegetation without the required authorisation is strictly prohibited. Therefore, a permit for removing protected trees (as presented in photos under **Appendix 2**) should be **obtained from MEFT's Kunene Region**. -Avoid leaving equipment or machinery leaning on vegetation. -Additional access roads (if needed) should be created in a manner that disturbs minimal vegetation. -Environmental awareness on biodiversity preservation (both plants and even small animals encountered onsite) should be provided to the workers and the contractors during EMP induction. -No alien vegetation may be introduced to the site in the form of seeds or plants, for beautification or any other reason.	-No intentional disturbance and destruction of site vegetation -Barricading tape (to indicate working areas) -Biodiversity conservation awareness is raised among workers/personnel	-Contractor	
Archaeology and heritage	Accidental disturbance of archaeological or heritage objects	-If any other archaeological materials, human burials, or skeletal remains are uncovered during earthworks, the work in the immediate area should be halted, and the finds would need to be reported to the NHC, which may require inspection by an Archaeologist. The ECO should have the area fenced off and contact NHC (Tel: +264 61 244 375) and the National Forensic Laboratory (+264 61 240 461) immediately. -Avoid direct damage to archaeological or heritage sites that may be encountered during excavations. -All accidental discoveries shall be reported immediately to an archaeologist/heritage practitioner so that an investigation and evaluation of the finds can be made, and necessary actions can be taken. -The project contractor and its subcontractor should adhere to the provisions of Section 55 of the National Heritage Act in the event significant heritage and cultural features are discovered in the course of project activities.	-Preservation of all artefacts and objects that are discovered onsite -Salvage equipment -Flag tapes -GPS (site marking)	-Project Manager/Base Camp Manager -Contractor	As and when required

6.6.2 Operational and Maintenance: Management and mitigation measures for impacts from the Okomutati Base Camp and associated activities

The measures proposed for implementation to manage and mitigate the environmental and social impacts of the project activities during the operational and maintenance are provided in Table 6-6.

Table 6-6: Management and mitigation measures for the impacts from the Okomutati Base Camp and associated activities – Operations and Maintenance Phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
EMP implementation and training	Lack of EMP awareness and implications thereof	-EMP training should be provided to all workers on-site. -All site personnel should be aware of the necessary health, safety, and environmental considerations applicable to their respective work. -The implementation of this EMP should be monitored. The site should be inspected, and a compliance audit should be done throughout **the project activities (monthly) and biannually for overall EMP implementation.** -The EMP non-compliance penalty system should be implemented.	-Records of EMP compliance/monitoring conducted biannually -The ECC is renewed every 3 years -Records of EMP training conducted.	-Project Manager/Base Camp Manager -Contractor	Throughout the phase, and when deemed necessary
Conflict	Communities are dissatisfied with the activities Nuisances caused by Kunene Conservation activities	-Develop a means for lodging a complaint concerning the project activities, and provision of feedback to the complainant from Kunene Conservation stating how the issue is being addressed. -Report back on issues raised and how they were addressed from Kunene Conservation.	-There are records of minutes from the community engagement meetings.	-Kunene Conservation Management -Project Manager/Base Camp Manager	Throughout the phase
Compensation for land use (operating within a conservation area/conservancy)	Lack of consultation, clear communication, and clarity on the agreed compensation	-The land use consent should be issued to Kunene Conservation by the Ehirovipuka Conservancy. -Compensation should be done as agreed in the operational agreement between Kunene Conservation and the Ehirovipuka Conservancy management. -The landowners should be compensated fairly and according to the policies, and ensure harmony throughout the process.	-Kunene Conservation is committed to making payments to the conservancy as agreed -The Conservancy has issued a consent for land use, and conditions are adhered to.	-Kunene Conservation Management -Project Manager/Base Camp Manager	Throughout the project life cycle

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
Soils	Physical soil/land disturbance and loss of topsoil	-Stockpiled topsoil and excavated materials should be used to backfill the excavated and disturbed sites after completing work on the pits. -Soils that are not within the intended footprints of the project activities should be left undisturbed, and soil conservation implemented as far as possible. -Project vehicles/machinery should stick to the access routes provided and not unnecessarily create further tracks on-site and in the environment by driving everywhere, causing soil compaction and erosion. -The movement of vehicles to and across the site should be controlled. Construction materials required should be moved to where they are needed, using wheelbarrows (when possible) instead of vehicles to minimize soil impact.	-No proliferation of informal vehicle tracks created by project activities. -No new erosion gullies. -No signs of soil compaction -No disturbance to unmarked areas on-site.	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
Soil and water resources	Soil and water pollution from garbage, concrete, sewage, chemicals, fuels, oils, or any other objectionable or undesirable material	-Accidental spills must be cleaned immediately to avoid the pollution of the wetland and groundwater, since the soil around the site is highly permeable. -Hazardous waste should be disposed of in the prescribed manner to prevent contamination of soils. -In case of accidental spills, the contaminated soil must be suitably disposed of in a container for hazardous waste -If fuel should be stored at the camp, fuel tanks must be properly bunded. The volume of the bounded area must be sufficient to hold 1.5 times the capacity of the storage tanks. The floor of the bunded area must be impermeable, and the sides high enough to achieve 1.5 times the holding capacity. -Drip trays should be available for all fuel-consuming equipment. The drip trays should be cleaned every morning, and the spillage should be handled as hazardous waste.	Inspection daily, reporting of spills or hazardous events, and regular cleaning up	-Project Manager/Base Camp Manager	Throughout the phase
Water consumption management	Irresponsible use of water resources: Water wastage due to careless practices	-A groundwater abstraction and use license should be applied for the OkBC borehole and obtained from the DWA: MAFWLR. **This is because the OkBC borehole does not seem to have an abstraction and use license, upon which a WW national borehole identification number would have been assigned to it.**	-Daily inspections and condition reports -The groundwater abstraction and use license is applied for from the MAFWLR, and there is	-Project Manager/Base Camp Manager -Contractor	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
	Leaks from tanks and taps	-Kunene Conservation should adhere to any licence requirements of the applicable water abstraction & use and wastewater legislation. -Educate the workforce on sustainable and effective use of water, e.g., clean equipment in containers. -Water should be used sparingly. It is the project coordinator's responsibility to ensure that water conservation is strictly enforced. -Water tanks/taps breakages must be fixed immediately. The water tank or taps must have water meters and be accessible to visual inspection. All faulty and leaking taps and pipes shall be immediately repaired.	adherence to the license conditions -Water conservation awareness to all personnel		
Biodiversity	Loss of Flora – protected species	-Avoid unnecessary removal and disturbance of site vegetation. -Vegetation found on the site, but not in the actual footprint, should not be disturbed; therefore, it should be avoided. -The illegal harvesting of wild plants is strictly prohibited. -Any activity resulting in the chopping down of trees or the removal of vegetation without the required authorisation is strictly prohibited. Therefore, a permit for removing protected trees should be **obtained from MEFT's Kunene Region**. -Avoid leaving equipment or machinery leaning on vegetation. -Additional access roads (if needed) should be created in a manner that disturbs minimal vegetation. -Environmental awareness on biodiversity preservation (both plants and even small animals encountered onsite) should be provided to the workers and the contractors during EMP induction.	-No complaints of unauthorised vegetation removal associated with project personnel. -No intentional disturbance and destruction of site vegetation -Barricading tape (to indicate working areas) -Biodiversity conservation awareness is raised among workers/personnel	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
	Planting of alien flora species in the area	-No alien vegetation may be introduced to the site in the form of seeds or plants, for beautification or any other reason.			
	Impact on fauna: livestock and wild animals such as reptiles and birds.	-The killing, snaring, trapping, and stealing of community livestock is strictly prohibited. -Refrain from disturbing or killing small soil and animal species found on and around the site.	-No complaints of stolen and killed livestock by the project workers. -No reports of illegal hunting or trapping of wild	-Project Manager/Base Camp Manager -Contractor	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-It is advised to be on the lookout for wildlife crossing roads to avoid collisions. -Visible breeding sites for birds and animals occurring on and around the sites should not be destroyed or disturbed. -Refrain from removing or destroying the bird nests on trees. -Holes and trenches should be secured and backfilled or levelled upon completion of works to prevent animals from falling in. -The recommended speed of 30km/hr at sites and on access roads should be adhered to while looking out for animals and people in the community. -Incorporate Environmental awareness and biodiversity preservation into the employment contracts of all workers.	animals in the area associated with the project personnel -No intentional disturbance and destruction of habitats and faunal species		
	Illegal hunting (poaching)	-The Poaching (illegal hunting) or disturbance/harming of wildlife on-site and surrounding areas is strictly prohibited. -Vehicles should be driven at the maximum allowed speed of 30km/hr while on the premises to avoid wildlife-related accidents. -A No Tolerance to Poaching Policy should be developed and applied to all site personnel (workers) and project visitors. -Incorporate a No-tolerance rule for poaching in every employment contract and ensure that the workers understand the seriousness of this. -Avoid scavenging of waste by fauna. <u>Prevention:</u> -Educate all contracted and permanent employees on the value of biodiversity, and strict conditions prohibiting the harvesting and poaching of fauna and flora must be communicated to them. Include prohibitions or regulations on the collection of firewood. -Implement regular inspection of river courses for snares, traps, or any other illegal activities.	-There are no reported incidents of illegal hunting of wildlife linked to the project activities -Anti-poaching policy is enforced and included in relevant contracts (both for employees and contractors/services & goods suppliers to the project)	-Project Manager/Base Camp Manager -Contractor	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
Waste management	Project waste: Incorrect or solid waste Project waste blown by wind (e.g., plastic bags and material seals).	-All project waste should be stored in bins and should regularly be removed in black plastic refuse bags from the site for disposal at the Opuwo municipal solid waste disposal site. -Bottles, tins, and plastic should be transported to Windhoek for recycling when an empty vehicle travels there. Avoid the crumpling of waste or the formation of waste heaps on-site. -Empty plastics, wrapping waste, strapping, etc., should be secured in containers for general waste to prevent wind-blown waste.	-Regular inspection on site. -Waste is temporarily stored in designated and appropriate containers -No littering on-site and in the general environment	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
	Domestic waste from the site team: Increased general waste	-Waste should be separated according to cardboard/paper materials, plastic, bottles, and tins. -The various waste types should be disposed of at appropriate municipal and recycling facilities. -Appropriate containers should be placed on site for waste separation, and the workforce trained and sensitised accordingly. In other words, sufficient waste bins should be provided at the sites to prevent waste or rubbish from being thrown into the environment. -Only the general waste, which cannot be recycled, shall be disposed of at the nearest approved Town Council's waste disposal facility. -The workforce must be sensitised to dispose of waste responsibly and not to litter at the base camp or in the wider environment. -No waste should be left on-site or scattered within the site premises. -All domestic and general project waste produced daily should be contained on-site until such time that it is transported to designated waste sites. -No waste may be buried or burned on site or anywhere else. -A penalty system for the irresponsible disposal of waste onsite and anywhere in the area should be implemented.	-Daily inspection and clean up. -There are sufficient waste storage containers for different types of waste -No littering caused by project personnel -No visible litter around the project area -Provision of sufficient waste storage containers -Waste management awareness -Waste disposal permits for the municipality -Environmental, Health, and Safety Statements and Policy are in place	-Kunene Conservation Management -Contractor	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
	Hazardous waste: Accidental/negligent spillages from equipment working on site. Storage of hazardous materials.	-Spillages of any potentially toxic materials, whether by accident or through negligence, must be scooped up immediately into drums. -Contact Wesco Group https://www.wesco.com.na/page/waste-management and or Oiltech Namibia https://oiltech.com.na/ to salvage the spilled materials -Bitumen products waste, oil sludge, oily rags, contaminated spill clean-up materials, contaminated soils, and other hazardous materials waste must be kept off-site or in a dedicated separate container on-site. These containers must be locked and accessible only to the site foreman. Wesco Group or Oiltech should be approached to collect these wastes periodically or as needed	Daily inspection and clean up.	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
	Ablution waste (sewage): site team.	-Open defecation and urinating in public are strictly prohibited. Workers should be provided with appropriate toilets for the field. -Under no circumstances should the waste from project toilets be dumped in the veld without permission (a permit to discharge effluent into the environment). -Spillage or leakage is to be cleaned up and fixed immediately.	-Daily inspections and clean-up. -There are sufficient toilets at the camps for workers and visitors -No open defecation by project workers -There are sewage removal operators	-Project Manager/Base Camp Manager	Throughout the phase
Air quality	Dust generation: Dust proliferation due to soil's fine content, resulting in localized poor air quality and poor visibility.	-All project areas and soil stacks should be regularly wetted. -A reasonable amount of water should be used to suppress the dust, where necessary. -Vehicles should be driven at a speed of 30km/hr to avoid the generation of dust owing to high speeds.	-Visual monitoring for dust nuisance and safety -Records of how complaints or grievances have been addressed.	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
Noise	Noise from vehicles and project activities	-Noise from vehicles and equipment on sites should be reduced to acceptable levels. -Project activities such as excavation and transporting of materials should be done between 08:00 am and 5:00 pm to	-Daily monitoring -Records of how complaints or grievances have been addressed	-Project Manager/Base Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		prevent noise generated by equipment and movement of heavy vehicles. -When operating noise-generating machinery onsite, workers should be equipped with personal protective equipment (PPE) such as earplugs to reduce exposure to excessive noise.	-Workers operating machinery and noisy equipment are equipped with noisy PPE	-Contractor	
Vehicular traffic safety	Presence of heavy vehicles in the area	-Vehicle drivers and equipment operators should have valid and appropriate driving licenses or operating permits and adhere to the road safety rules. -Drivers should drive slowly (30km/hour or less) while on-site. -Vehicles should be in a roadworthy condition and serviced regularly to avoid accidents owing to mechanical faults. -Vehicle drivers should only make use of the designated site access roads provided and as agreed. -Vehicle drivers should not be allowed to operate vehicles while under the influence of alcohol. -Project vehicles should be parked within the boundary or demarcated areas for such purpose at sites. -Deliveries from and to the site should be done optimally during weekdays and between the hours of 8:00 and 5:00 pm.	-No complaints from members of the public regarding vehicular traffic issues related to the project activities. -All personnel operating the project vehicles and machinery are appropriately licensed and possess valid driving licenses. -Demarcated areas for parking, offloading, and loading zones on-site.	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
Occupational and local (community) health and safety associated with project activities	General health and safety for workers	-During induction, personnel should be provided with an awareness training of the risks of mishandling equipment and materials on site. -Appropriate and written warning signage should be placed on-site, where visible. -A fully furnished first aid kit should be placed at each working site to attend to minor injuries, while major injuries should be attended to at a nearby health centre (clinic or hospital). 1 or 3 site personnel should be trained on how to administer first aid. -Projected loads should be securely fastened to vehicles to avoid falling off and injuring people. -Heavy vehicles and equipment should be properly secured to prevent any harm or injury to both project personnel and locals. -When working on site, employees should be properly equipped with personal protective equipment (PPE) such as coveralls,	-A health and safety plan for the activities is compiled. -Availability of fully furnished first aid kits -Trained workers to administer first aid	-Project Manager/Base Camp Manager -Contractor	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		masks, gloves, safety boots, earplugs, safety glasses, and hard hats (helmets). -Personnel should not be allowed to consume alcohol or other intoxicants before and during working hours, as this may lead to mishandling of equipment, resulting in health and safety risks.			
	Community health and safety	-Project trenches should be backfilled after completion of construction-related activities. -Ensure that goods and projected loads are securely fastened to vehicles to avoid falling and injuring people along the roads. -Warning signage should be erected at dangerous site areas. -The site areas that are considered temporary risks should be equipped with "danger" or "cautionary" signs written in languages such as *Otjiherero* and English.	-Project trenches are backfilled -There are sufficient, clear, and appropriate warning signs near risk site areas	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
	Potential increase of prevalence of HIV and AIDS, as well as other sexually transmitted diseases (STDs) prevalence	-Engage workers in sexual health talks and training about the dangers of engaging in unprotected sexual relations, which result in contracting HIV/AIDS and other sexually transmitted infections. -Provision of condoms and sex education through the distribution of pamphlets and health training. These pamphlets can be obtained from the nearest local health facility. -Emphasize the continued recruitment of locals to avoid the influx of out-of-area people into the community for casual work that local people can carry out. Thus, reducing the creation of new sexual relations between local women and out-of-area men results in the potential local transmission of STDs and HIV/AIDS.	-No new infections recorded linked to project workers -Occupational health and safety personnel -Sex and Health Education/Awareness -Provision of condoms at the base camp	-Project Manager/Base Camp Manager -Contractor	Throughout the phase
Fire management	Accidental fire outbreaks	-Portable and serviced fire extinguishers should be available at the base camp. -No open fires should be created by project personnel on-site. -Make provision for smoking areas for crew members who smoke. This is to ensure that the cigarettes' fire is completely extinguished and disposed of in the allocated on-site bins.	-No veld fires recorded (due to the presence of project personnel) -Fire extinguishers (1 per vehicle) and a minimum of 2 extinguishers at the camp	-Project Manager/Base Camp Manager -Contractor	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Consider using gas or paraffin cookers to prepare food instead of open fires. The fire on cookers/stoves should be put out before leaving the camps. -Personnel and visitors alike must be sensitised about responsible fire protection measures and good housekeeping, such as the removal of flammable materials (e.g., rubbish, plastics, papers, clothing, dry vegetation, and hydrocarbon-soaked soil) near hazardous substances' containment and handling areas. In other words, these flammable materials should not be left or thrown near the areas. Regular inspections should be carried out to check for these materials at the site. -Make provision for smoking areas for crew members who smoke. This is to ensure that the cigarette's fire is completely extinguished and disposed of in the allocated bins in the smoking area. -Potential flammable areas and structures, such as fuel storage tanks, should be marked as such with visible signage. -Raise awareness among workers on the impact of careless handling of fires and flammable substances in the workplace.			

6.6.3 Operational and Maintenance: Management and mitigation measures for impacts stemming from the exclusive campsite activities

The measures proposed for implementation to manage and mitigate the environmental and social impacts of the operational and maintenance phase of the exclusive are provided in Table 6-7.

Table 6-7: Management and mitigation measures for the impacts from the exclusive campsite – Operations and Maintenance Phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
EMP implementation and training	Lack of EMP awareness and implications thereof	-EMP training should be provided to all workers on-site. -All site personnel should be aware of the necessary health, safety, and environmental considerations applicable to their respective work.	-Records of EMP compliance/monitoring conducted biannually	-Kunene Conservation Management	Throughout the phase, and when deemed necessary

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-The implementation of this EMP should be monitored. The site should be inspected, and a compliance audit should be done throughout **the project activities (monthly) and biannually for overall EMP implementation.** -The EMP non-compliance penalty system should be implemented.	-Records of EMP training conducted. -The Project/Base Camp Manager is fully aware of their responsibility of implementing and monitoring the EMP on-site		
Conflict	Communities are dissatisfied with the activities Nuisances caused by the Campsite activities	-Develop a means for lodging a complaint concerning the project activities, and provision of feedback to the complainant from Ehirovipuka Conservancy stating how the issue is being addressed. -Report back on issues raised and how they were addressed. -The exclusive campsite establishment program should be presented in ongoing meetings with the community and local traditional authority leadership.	-There are records of minutes from the community engagement meetings. -There is a community communication plan	-Camp Manager	Throughout the phase
Compensation for land use (operating within a conservation area/conservancy)	Lack of consultation, clear communication, and clarity on the agreed compensation	-The land use consent should be issued to Kunene Conservation by the Ehirovipuka Conservancy. -Compensation should be done as agreed in the operational agreement between Kunene Conservation and the Ehirovipuka Conservancy management. -The landowners should be compensated fairly and according to the policies, and ensure harmony throughout the process.	-Kunene Conservation is committed to making payments to the conservancy as agreed -The Conservancy has issued a consent for land use, and conditions are adhered to.	-Camp Manager	Throughout the project life cycle
Guest management	Management of tourists (guests) at the Camp	-Place information materials in each guest tent, in which tourists are informed about: -The importance of conserving water. -How to be energy-efficient. -The rules regarding the feeding of animals. -Appropriate pest control (e.g. swot a fly rather than spray insecticide). -Not placing foreign objects down the toilet. -Avoiding unguided walks or wandering around the Camp in the night (risk of dangerous wildlife roaming around the Camp).	-All recommended measures are implemented	-Camp Manager	Throughout the project life cycle

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		Therefore, for safety reasons, tourists/guests should stay in their rooms or a safe place on-site at night. -Respecting the rights of other guests (e.g., refraining from making a noise, playing radios, musical instruments, etc.).			
Guest management at the conservancy arranged game drives and self-drives	Management of tourists (guests) at the game drives with the campsite vehicles or self-drives	When tour guides see wild animals such as lions and elephants away from the roads, they might drive off the existing road tracks, leading to damage to the soil and grass. The following measures are recommended to manage the impacts related to off-road driving: -The Proponent should implement strict protocols and provide training to their guides on off-road driving to minimise the impact on off-road areas. -The tour guides should be instructed to limit the vehicle tracks to existing roads as far as possible. -The guide may only take guests to sensitive sites (e.g., ecologically, archaeologically, etc.) if arrangements have been made beforehand and if there is agreement on what the guests may see and do when at these sites. -The guide must maintain an appropriate level of control during the drive – specifically: *No littering allowed (always have a refuse bag in the vehicle). *No noise. *No throwing of objects at wildlife. *No throwing of burning objects off the vehicle (e.g., cigarette butts). While the campsite has no control over what people do when they are in their own vehicles, measures are put into place for implementation and encourage good behaviour by providing guidelines. These should be a set of 'dos and don'ts' that people can take with them on their drive. The guideline should strongly discourage: -Littering, harassing wildlife, and speeding.	-All recommended measures are implemented and continued improvements made as necessary	-Camp Manager	Throughout the project life cycle

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Off-road driving (off-road driving promotes wildlife criminal activities, such as creating additional roads for poachers' easy escape. -Excessive noise (e.g., hooting, revving the engine, etc. as this has an impact on rhino behaviour, i.e., stress. Similar to the recommendations made under the construction phase, the following should be carried through the operational phase to mitigate noise: *Movement of vehicles and machinery should be restricted to existing roads and tracks, and should be restricted to daylight hours only, to prevent unnecessary disturbance to plants and animals. -Throwing of burning objects off the vehicle (e.g., cigarette butts). -Going to the toilet in the veld (this is prohibited).			
Soil and water resources	Soil and water pollution from garbage, concrete, sewage, chemicals, fuels, oils, or any other objectionable or undesirable material	-Accidental spills must be cleaned immediately to avoid the pollution of the wetland and groundwater, since the soil around the site is highly permeable. -Hazardous waste should be disposed of in the prescribed manner to prevent contamination of soils. -In case of accidental spills, the contaminated soil must be suitably disposed of in a container for hazardous waste -If fuel should be stored at the camp, fuel tanks must be properly bunded. The volume of the bounded area must be sufficient to hold 1.5 times the capacity of the storage tanks. -Drip trays should be available for all fuel-consuming equipment. The drip trays should be cleaned every morning, and the spillage should be handled as hazardous waste.	Inspection daily, reporting, and regular cleaning up	-Camp Manager	Throughout the phase
Water consumption management	Irresponsible use of water resources Water wastage due to careless practices	-Adhere to any licence requirements of the applicable water abstraction & use and wastewater legislation. -Educate the workforce on sustainable and effective use of water, e.g., clean equipment in containers.	-Daily inspections and condition reports -Water conservation awareness to all personnel	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Water should be used sparingly. It is the project coordinator's responsibility to ensure that water conservation is strictly enforced. -Water tanks/taps breakages must be fixed immediately. The water tank or taps must have water meters and be accessible to visual inspection. All faulty and leaking taps and pipes shall be immediately repaired.			
	Leaks from tanks, taps, and usage of campsite showers	-Install low-flow shower heads. -Insert aerators in showers and taps – these add air to the water and reduce the amount of water that flows through. -Install minimal-water flushing devices in the toilets (e.g., dual-flush toilet systems). Do not install any automatic flushing devices anywhere. -Place a prominent notice in each room and in all staff quarters informing users about the importance of saving water. Specifically request guests to: *Take short rather than long showers *Turn taps off after washing *Use towels more than once before asking for them to be laundered *Do not wash their vehicles whilst at the campsite *Only flush the toilet when necessary -Water reuse/recycling methods should be implemented as far as practicable -Do not create any lawns or large gardens that need to be watered (a small vegetable garden using grey water (if possible) is permitted). -Wash vehicles with a bucket, not a hose. -Clean driveways and parking areas with a broom, not with water. -Ensure that all pipes are well-maintained and that leaks are repaired immediately. -Ensure that all taps are turned off after use.	-Daily inspections and condition reports -Water conservation awareness to all personnel	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Install water metres at places where consumption can be usefully monitored. Keep a register of water consumption (daily/weekly measurements) so that trends can be monitored. Use this information to gradually improve consumption levels. -Create incentive schemes for staff to reduce their water consumption.			
Energy consumption management	Over-utilisation of Energy resources	-Use as much renewable energy as possible and limit the use of fossil fuels in the generation of energy. This can be achieved by: *Using generators as little as possible. *Using solar energy systems and maintaining them well so that they remain efficient. -Where fires are used for creating ambience in the campsite, or for warmth (during winter), use wood that comes from bush encroaching species, if possible. Ensure that there are no significant negative environmental impacts associated with the supply of wood (e.g., over-exploitation of a certain non-encroaching species or cutting of protected species). -The site generator(s) should be automatically switched on once every week so that it is / they are not idle. <u>Lights:</u> -Install only power-saving bulbs (e.g., compact fluorescents or LEDs (light emitting diodes). LED lighting products produce light up to 90% more efficiently than incandescent light bulbs. -Use daylight switches on all outside lights that must be on at night (so that they switch off during the day). -Use movement-activated lights outside as much as possible. -Instruct staff to switch off lights and air-conditioning if guests do not do so when leaving their rooms.	-All recommended measures are implemented, and improvements are made as needed	-Camp Manager	Throughout the phase
Biodiversity	Loss of Flora – protected species	-Avoid unnecessary removal and disturbance of site vegetation. -Vegetation found on the site, but not in the actual footprint, should not be disturbed; therefore, it should be avoided. -The illegal harvesting of wild plants is strictly prohibited.	-No complaints of unauthorised vegetation removal associated with project personnel.	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
	Planting of alien flora species in the area	-Environmental awareness on biodiversity preservation (both plants and even small animals encountered onsite) should be provided to the workers and the contractors during EMP induction. -No alien vegetation may be introduced to the site in the form of seeds or plants, for beautification or any other reason.	-No intentional disturbance and destruction of site vegetation -Barricading tape (to indicate working areas) -Biodiversity conservation awareness is raised among workers/personnel		
	Impact on fauna: livestock and wild animals such as reptiles and birds.	-The killing, snaring, trapping, and stealing of livestock is strictly prohibited. -Refrain from disturbing or killing small soil and animal species found on and around the site. -It is advised to be on the lookout for wildlife crossing roads to avoid collisions. -Visible breeding sites for birds and animals occurring on and around the sites should not be destroyed or disturbed. -Refrain from removing or destroying the bird nests on trees. -Holes and trenches should be secured and backfilled or levelled upon completion of works to prevent animals from falling in. -The recommended speed of 30km/hr at sites and on access roads should be adhered to while looking out for animals and people in the community. -Incorporate Environmental awareness and biodiversity preservation into the employment contracts of all workers.	-No complaints of stolen and killed livestock by the project workers. -No reports of illegal hunting or trapping of wild animals in the area associated with the project personnel -No intentional disturbance and destruction of habitats and faunal species	-Camp Manager	Throughout the phase
	Illegal hunting (poaching)	-The Poaching (illegal hunting) or disturbance/harming of wildlife on-site and surrounding areas is strictly prohibited. -Vehicles should be driven at the maximum allowed speed of 30km/hr while on the premises to avoid wildlife-related accidents. -A No Tolerance to Poaching Policy should be developed and applied to all site personnel (workers) and project visitors.	-There are reported incidents of illegal hunting of wildlife linked to the project staff and or guests -Anti-poaching policy is enforced and included in relevant employment contracts	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Incorporate a No-tolerance rule for poaching in every employment contract and ensure that the workers understand the seriousness of this. -Avoid scavenging of waste by fauna. Prevention: -Educate all contracted and permanent employees on the value of biodiversity, and strict conditions prohibiting the harvesting and poaching of fauna and flora must be communicated to them. Include prohibitions or regulations on the collection of firewood. -Implement regular inspection of river courses for snares, traps, or any other illegal activities. -At least one or two members of the campsite staff should receive training on how to handle snakes. This will ensure that snakes can be safely removed from the site, when necessary, as opposed to being killed. -Consider implementing stringent anti-poaching measures. -Any suspected poaching activities should be reported to the nearest Police Station, and the conservancy management should work together with the nearest Police Station and/or anti-poaching unit in the area to combat this crime.	-Biodiversity conservation awareness is provided to all workers/employees		
Waste management	General project waste from the site team: Increased general waste	-All project waste should be stored in bins and should regularly be removed in black plastic refuse bags from the site for disposal at the Opuwo municipal solid waste disposal site. -Bottles, tins, and plastic should be transported to Windhoek for recycling when an empty vehicle travels there. Avoid the crumpling of waste or the formation of waste heaps on-site. -Empty plastics, wrapping waste, strapping, etc., should be secured in containers for general waste to prevent wind-blown waste. -Waste should be separated according to cardboard/paper materials, plastic, bottles, and tins. -The various waste types should be disposed of at appropriate municipal and recycling facilities.	-Regular inspection on site. -Waste is temporarily stored in designated and appropriate containers -No littering on-site and in the general environment -Daily inspection and clean up. -There are sufficient waste storage containers for different types of waste	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Appropriate containers should be placed on site for waste separation, and the workforce trained and sensitised accordingly. In other words, sufficient waste bins should be provided at the sites to prevent waste or rubbish from being thrown into the environment. -Only the general waste, which cannot be recycled, shall be disposed of at the nearest approved Town Council's waste disposal facility. -The workforce must be sensitised to dispose of waste responsibly and not to litter at the campsite or in the wider environment. -No waste should be left on-site or scattered within the site premises. -All domestic and general project waste produced daily should be contained on-site until such time that it is transported to designated waste sites. -No waste may be buried or burned on site or anywhere else. -A penalty system for the irresponsible disposal of waste onsite and anywhere in the area should be implemented.	-No littering caused by project personnel -No visible litter around the project area -Provision of sufficient waste storage containers -Waste management awareness -Waste disposal permits for the municipality -Environmental, Health, and Safety Statements and Policy are in place		
	Domestic waste (kitchen scraps, tins, bottles, plastics, paper, etc.)	Reduce the amount of waste that is generated by: -Buy supplies in large containers (e.g., cooking oil, tinned food, and cleaning materials) to avoid too many empty bottles, tins, etc. -Avoid purchases that are packaged excessively – e.g., rather buy 5 loose, unpackaged lettuces and put them in a cool box than buy 5 lettuces packaged individually in plastic and styrofoam. -Separate all organic waste (e.g., kitchen waste) and dump this in a designated compost heap on site. This should be an enclosed place where it cannot be dug out and scattered about by scavengers. -All recyclable waste (e.g., bottles, tins, plastic packaging, cardboard boxes, paper) should be neatly stored to optimise re-	-Daily inspections and condition reports -Waste is disposed of in designated waste containers -No littering on and around the site	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		use and recycling, or must be removed from the site at least once a week. -Any waste that is stored temporarily at the site must be secured to avoid it being blown into the surrounding areas, and to prevent it from being scavenged by local wild animals such as jackals, hyenas, etc. -Measures must be taken to prevent any waste from attracting scavengers (e.g., kitchen waste should not be left to rot in the open so that it generates smells which will attract animals).			
	Hazardous waste: Accidental/negligent disposal and storage of waste such as batteries, paints, solvents, thinners, and used or expired medical equipment	-Spillages of any potentially toxic materials, whether by accident or through negligence, must be scooped up immediately into drums. -These types of waste must be kept separate from other waste and should not be dumped in the general waste dump. -Hazardous waste should be collected and disposed of periodically at a hazardous waste treatment facility (e.g., Walvis Bay or Windhoek). -Contact Wesco Group https://www.wesco.com.na/page/waste-management and or Oiltech Namibia https://oiltech.com.na/ to salvage the spilled materials -Oily rags, contaminated spill clean-up materials, contaminated soils, and other hazardous materials waste must be kept off-site or in a dedicated, separate container on-site. These containers must be locked and accessible only to the site foreman. Wesco Group or Oiltech should be approached to collect these wastes periodically or as needed.	Daily inspection and clean up.	-Camp Manager	Throughout the phase
	Ablution waste (sewage): site team.	-Open defecation and urinating in public are strictly prohibited. Workers and tourists should be provided with appropriate toilets. -All toilets should drain into two- or three-chambered septic tanks, which are designed according to recognised standards (e.g., South African National Standards) and able to cope with high and low flow rates. The bacteria within a septic tank require a certain minimum flow to keep active.	-Daily inspections and clean-up. -There are sufficient toilets at the camps for workers and visitors -No open defecation by project workers	-Camp Manager	The wastewater discharge permit should be applied for before the operations of the campsite.

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Use appropriate, biodegradable toilet cleaners that do not kill the bacteria in the septic tank (various products are available on the market). -Under no circumstances should the waste from project toilets be dumped in the veld without permission (a permit to discharge effluent into the environment). -Spillage or leakage is to be cleaned up and fixed immediately. -Notices must be placed at each toilet to remind guests not to flush foreign objects down the toilet. -Each septic tank should have a grate trap at the inflow, and this should be cleaned regularly. -Drains from the kitchen must have an oil trap and a grate trap. The purpose of these is to trap oily waste, which can clog up or slow down decomposition in the septic tank, and to catch kitchen off-cuts such as scraps of meat, vegetables, etc. The traps must be cleaned daily, and the scraps must be thrown into the appropriate waste bin. -Adhere to any licence/permit requirements of the applicable water and wastewater legislation.	-There are sewage removal operators -All recommended measures are implemented, and improvements are made as needed.		Other measures apply throughout the phase.
Visual and aesthetics	Visual: Maintaining the sense of place	The Campsite Management must not cause the site to lose its sense of place by specifically avoiding: -Inappropriate furniture (plastic tables and chairs, etc.). -Disrepair or dilapidated infrastructure creates a very poor impression. Therefore, shabbiness – dirty linen, dust, dirt, poorly-dressed or unclean staff, untidiness, unemptied ashtrays, etc. -Noise: Avoid radios, TVs, hi-fis, noisy staff, “revving” vehicles, rattling air conditioners, motorcycles, quad bikes, etc. -Smells and odours– make sure that waste is properly managed so that people do not smell the rubbish bins. The drains and other areas should be kept clean so that they are not smelly. -Avoid installing or erecting too many signs, or any other objects that detract from the natural beauty of the area. Visitors to the area want a nature experience, with an uncluttered atmosphere.	-All recommended measures are implemented, and improvements are made as needed	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-Scrap: make sure there are no old vehicles or pieces of old equipment lying around. -Sterility: whilst it is important to keep the Campsite clean, do not sterilize it. -Too many people on-site: this will quickly destroy the sense of place. Guests/visitors would prefer a certain degree of privacy. Therefore, there should not be people loitering around at the Campsite, whether visiting staff or looking for work.			
Air quality	Dust generation results in localized poor air quality and poor visibility.	-Vehicles should be driven at a speed of 30km/hr to avoid the generation of dust owing to high speeds. -Vehicles should not be left idling when not in use. -The burning of waste is strictly prohibited.	-Visual monitoring for dust nuisance and safety -Records of how complaints or grievances have been addressed.	-Camp Manager	Throughout the phase
Noise	Noise from vehicles and project activities	-Noise from vehicles and equipment on sites should be reduced to acceptable levels. -The transportation of materials should be done between 08:00 am and 5:00 pm to prevent noise generated by the movement of heavy vehicles in the area.	-Daily monitoring -Records of how complaints or grievances have been addressed	-Camp Manager	Throughout the phase
Vehicular traffic safety	Presence of heavy vehicles in the area	-Vehicle drivers should have valid and appropriate driving licenses or operating permits and adhere to the road safety rules. -Drivers should drive slowly (30km/hour or less) while on-site. -Vehicles should be in a roadworthy condition and serviced regularly to avoid accidents owing to mechanical faults. -Vehicle drivers should only make use of the designated site access roads provided and as agreed. -Vehicle drivers should not be allowed to operate vehicles while under the influence of alcohol. -Project vehicles should be parked within the boundary or demarcated areas for such purpose at sites. -Deliveries from and to the site should be done optimally during weekdays and between the hours of 8:00 and 5:00 pm.	-No complaints from members of the public regarding vehicular traffic issues related to the project activities. -All personnel operating the project vehicles and machinery are appropriately licensed and possess valid driving licenses. -Demarcated areas for parking, offloading, and loading zones on-site.	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
Occupational and local (community) health and safety associated with project activities	General health and safety for workers	-During induction, personnel should be provided with an awareness training of the risks of mishandling equipment and materials on site. -Appropriate and written warning signage should be placed on-site, where visible. -A fully furnished first aid kit should be placed at the campsite to attend to minor injuries, while major injuries should be attended to at a nearby health centre (clinic or hospital). At least 2 site personnel should be trained on how to administer first aid. -Projected loads should be securely fastened to vehicles to avoid falling off and injuring people. -When undertaking certain site activities, such as maintenance, workers should be properly equipped with personal protective equipment (PPE) such as coveralls, masks, gloves, safety boots, earplugs, safety glasses, and hard hats (helmets). -Personnel should not be allowed to consume alcohol or other intoxicants before and during working hours.	-A comprehensive health and safety plan for the activities is compiled. -Availability of fully furnished first aid kits -Trained workers to administer first aid	-Project Manager	Throughout the phase
	Community health and safety	-Project trenches should be backfilled after completion of construction-related activities. -Ensure that goods and projected loads are securely fastened to vehicles to avoid falling and injuring people along the roads. -Warning signage should be erected at dangerous site areas. -The site areas that are considered temporary risks should be equipped with "danger" or "cautionary" signs written in languages such as *Otjiherero* and English.	-Project trenches are backfilled -There are sufficient, clear, and appropriate warning signs near risk site areas	-Project Manager	Throughout the phase
	Potential increase of prevalence of HIV and AIDS, as well as other sexually transmitted diseases (STDs)	-Engage workers in sexual health talks and training about the dangers of engaging in unprotected sexual relations, which result in contracting HIV/AIDS and other sexually transmitted infections. -Provision of condoms and sex education through the distribution of pamphlets and health training. These pamphlets can be obtained from the nearest local health facility. -Prioritize the recruitment of locals to avoid the influx of out-of-area people into the community for casual work that local people can carry out. Thus, reducing the creation of new sexual	-No new infections recorded linked to project workers -Occupational health and safety personnel -Sex and Health Education/Awareness	-Project Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
	prevalence	relations between local women and out-of-area men results in the potential local transmission of STDs and HIV/AIDS.	-Provision of condoms at the campsite		
Pest	Pest management	-The campsite will be in a conservation area; thus, it is expected that various species of wildlife will be attracted to the campsite, and some (e.g., birds, lizards) may even live in the campsite. Therefore, it is important that the right balance be maintained in ensuring the comfort and safety of staff and guests, while at the same time accepting that the presence of wildlife is inevitable and, in some cases, desirable. Specific management safeguards are: -Never feed wildlife (except birds, and then place food in hanging bird feeders. -Never leave food uncovered or in a place where it is accessible to wildlife. -Manage waste properly, so that it does not attract scavengers. -Try non-poisonous remedies or direct hitting for insect control before using insecticides. -Use traps for rodents and not poison. -Capture and remove dangerous snakes, rather than killing them. -Never kill useful animals, such as chameleons, lizards, bats, etc., which will help the campsite to control unwanted insects such as flies and mosquitoes. -Maintain high levels of cleanliness, especially in the kitchen. -Install fly gauze doors and fly screens over selected windows to reduce the number of flies and other insects entering buildings. -Switch off lights when they are no longer needed (lights attract insects). -Supply mosquito nets. -Do not have lawns or beds of exotic plants, as these often require intensive pest control.	-All recommended measures are implemented, and improvements are made as needed	-Camp Manager	Throughout the phase

Aspect	Impact	Management and Mitigation Measure(s)	Key Performance Indicator (KPI)	Implementation Responsibility	Timeline
		-At least one or two members of staff should receive training on how to handle snakes. This will ensure that snakes can be safely removed from the site, when necessary, as opposed to being killed			
Fire management	Accidental fire outbreaks	-Portable and serviced fire extinguishers should be available at the exclusive campsite. -Make provision for smoking areas for smokers. -Consider using gas or cookers to prepare food instead of open fires. The fire on cookers/stoves should be put out before leaving the camps. -Personnel and visitors alike must be sensitised about responsible fire protection measures and good housekeeping, such as the removal of flammable materials (rubbish, plastics, papers, clothing, dry vegetation, and hydrocarbon-soaked soil) near hazardous substances' containment and handling areas. -Make provision for smoking areas for crew members who smoke. This is to ensure that the cigarette's fire is completely extinguished and disposed of in the allocated bins. -Potential flammable areas and structures, such as fuel storage tanks, should be marked as such with visible signage. -Raise awareness among workers on the impact of careless handling of fires and flammable substances in the workplace.	-No veld fires recorded (due to the presence of project personnel) -Fire extinguishers (1 per vehicle) and a minimum of 2 extinguishers at the camp	-Camp Manager	Throughout the phase
Archaeology and heritage	Accidental disturbance of archaeological or heritage objects	-Avoid direct damage to archaeological or heritage sites that may be encountered on and around the Campsite and general Conservancy area. -All accidental discoveries shall be reported immediately to the NHC for an investigation and evaluation of the finds. The Base Camp Manager will advise on the necessary actions to be taken.	-Preservation of all artefacts and objects that are discovered onsite -Salvage equipment -Flag tapes -GPS (site marking)	-Project Manager	As and when required

6.7 Environmental Monitoring Actions

To ensure that the implementation of recommended environmental management measures is effective and produces the desired results (minimizing the "medium" and upholding the "low" significance ratings of impacts), certain key impacts will need to be monitored and reported. The ‘’Observation*, compliance status, and ‘’Recommended Action*’’ columns will be completed for every monitoring done on site. Monitoring reports are to be compiled by the Project Manager, audited by an Independent Environmental Consultant, and submitted to the DEAF for archiving on a bi-annual basis (every 6 months throughout the project operations) or as required by the Environmental Commissioner (as per the ECC conditions). The environmental components or features provided in the Table will be updated accordingly once the project commences.

7 RECOMMENDATIONS AND CONCLUSION

Based on the assessment of potential impacts by the environmental consultants, the project has some adverse (negative) impacts on the biological, physical, and social environment. However, to minimize the significance of these impacts while maximizing the benefits of the project activities, there should not be significant environmental degradation. It is for this reason that this EMP was developed to ensure sustainable land use for the Okomutati Base Camp operations and associated activities, thereby contributing to the local, regional, and national economic development and promoting prosperity.

7.1 Recommendations

To mitigate the adverse impacts that may emanate from the project activities, Kunene Conservation should follow the recommendations as follows:

7.1.1 Environment Management Plan Recommendations

To ensure a healthy and safe environment in the project site area and its environs, an environmental management plan must be implemented through monitoring. This involves the collection and analysis of relevant environmental data as well as periodic documentation and reporting.

- External Auditing: The key to a successful EMP is appropriate monitoring and review to ensure effective functioning of the EMP and to identify and implement corrective measures promptly. If discrepancies are identified, the problem must be investigated and attended to. All the results obtained during environmental monitoring must be documented for audit purposes.

  An audit of the environmental management actions undertaken is essential to ensure they are effective in operation, meet specified goals, and are performed in accordance with relevant regulations and standards. Audits should be conducted during the facility's operational phase to ensure adherence to the management measures in the EMP.

7.1.2 Conclusion

Considering the potential impacts of the project and its associated activities, the mitigation measures in this EMP are sufficient to manage them. Therefore, Serja Consultants recommends that the Environmental Commissioner approve the Okomutati Base Camp operations and associated activities and issue an ECC, subject to the Proponent ensuring complete compliance with the developed EMP.

8 LIST OF REFERENCES

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APPENDIX 1: CHANCE FINDS PROCEDURE (AFTER KINAHAN, 2020)

Areas of project activities are subject to heritage survey and assessment at the planning stage. These surveys are based on surface indications alone, and it is therefore possible that sites or items of heritage significance will be found during development (operations and decommissioning) works. The procedure set out here covers the reporting and management of such finds.

Scope: The "*chance finds*" procedure covers the actions to be taken from the discovery of a heritage site or item to its investigation and assessment by a trained archaeologist or other appropriately qualified person.

Compliance: The "chance finds" procedure is intended to ensure compliance with relevant provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): "*a person who discovers any archaeological …. object ……must as soon as practicable report the discovery to the Council*". The procedure of reporting set out below must be observed so that heritage reported to the NHC is correctly identified in the field.

The Project Manager/Supervisor must report the findings to the following competent authorities:

- **National Heritage Council of Namibia: Head Office: +264 61 244 375**

  Technical Office +264 61 301 903
- **National Museum (+264 61 276 800)**
- **National Forensic Laboratory (+264 61 240 461)**

Responsibility:

Operator:	To exercise due caution if archaeological remains are found
Foreman:	To secure the site and advise management promptly
Superintendent:	To determine safe working boundaries and request an inspection
Archaeologist:	To inspect, identify, advise management, and recover remains

Procedure:

<u>Action by a person identifying archaeological or heritage material</u>

a) If operating machinery or equipment, stop work

b) Identify the site with a flag tape

c) Determine the GPS position if possible

d) Report findings to the foreman

Action by the foreman

a) Report findings, site location, and actions taken to the superintendent

b) Cease any works in the immediate vicinity

Action by the superintendent

a) Visit the site and determine whether work can proceed without damage to findings

b) Determine and mark the exclusion boundary

c) Site location and details to be added to the project GIS for field confirmation by an archaeologist

Action by an Archaeologist

a) Inspect the site and confirm the addition to the project GIS

b) Advise NHC and request written permission to remove findings from the work area

c) Recovery, packaging, and labelling of findings for transfer to the National Museum

In the event of discovering human remains

a) Actions as above

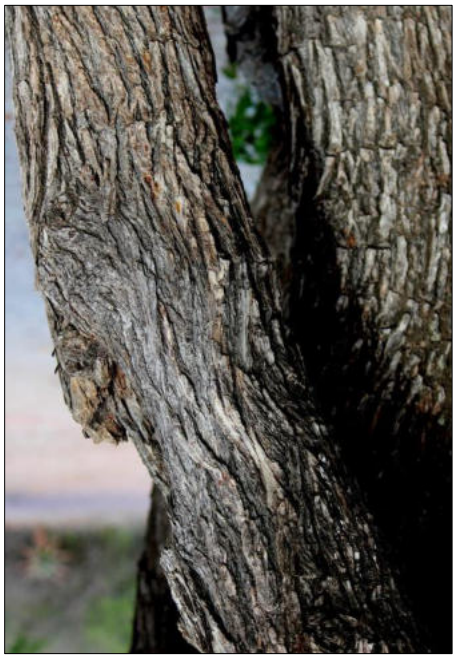
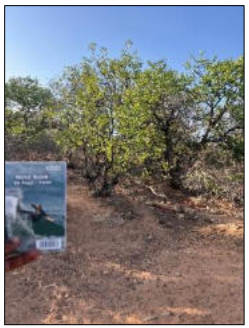
b) Field inspection by an archaeologist to confirm that the remains are human

c) Advise and liaise with NHC and Police

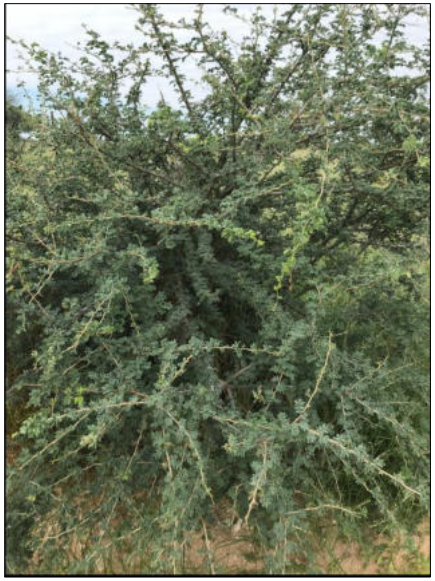
d) Recovery of remains and removal to the National Museum or the National Forensic Laboratory, as directed.

APPENDIX 2: PHOTOS OF SOME IDENTIFIED PROTECTED TREE SPECIES FOUND WITHIN THE PROJECT SITE AND SURROUNDINGS (FOR WHICH THE TREE REMOVAL PERMIT IS REQUIRED FROM THE MEFT'S FORESTRY DIRECTORATE BEFORE REMOVING SUCH SPECIES)

Mopane (*Colophospermum mopane*): in the photos are the tree leaves, seeds, and trunk

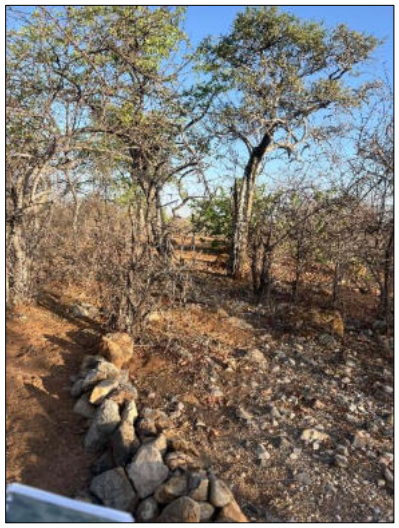



Black thorn (*Senegalia mellifera*): in the photos are the tree seeds/flowers and leaves.

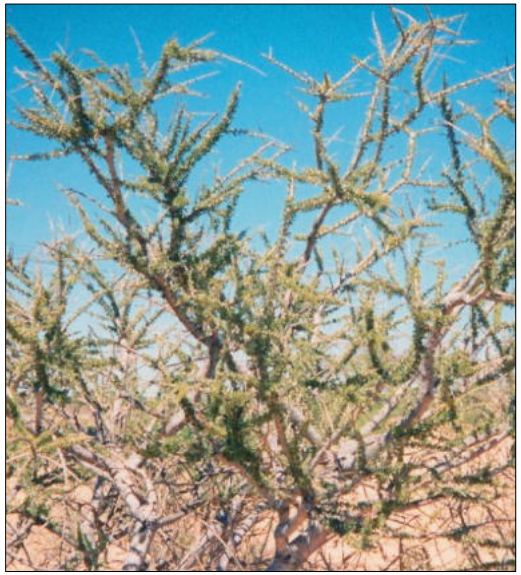
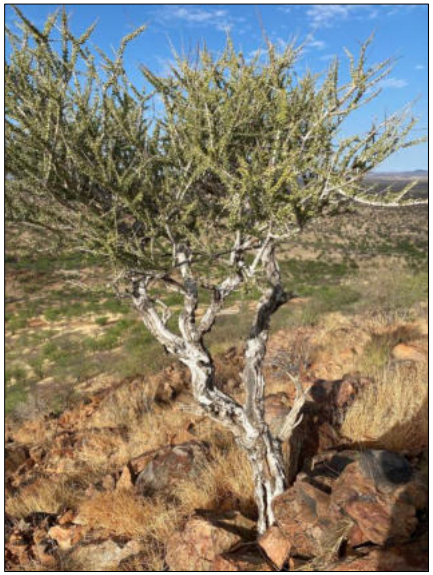


Namaqua corkwood *(Commiphora capensis):* in the photos are the tree leaves, seeds, and trunks.

Leadwood (*Combretum imberbe*): in the photos are the young trees (from far), leaves, and trunk.



Stink Shepherd's tree (*Boscia albitrunca*): in the photos are leaves, stem, and leaves.

Appendix 3: Consent Letters issued by the Ehirovipuka Conservancy and Vita Royal House Traditional Authority, as well as the date-stamped receipt of the written notice to the Kunene Regional Council

EHI-ROVIPUKA CONSERVANCY
P.O.Box 192 Kamanjab, Namibia. Tell: (+264 65 276200).

Enquiry: Amon Kapi
Email Address:

Cell No: +264 81 670 3394
amonkapi@gmail.com

08 May 2026

The Management and or Directors
Kunene Conservation
P. O. Box 5691 Windhoek, Namibia

Re: Consent for the Existing Operations of the Okomutati Base Camp and associated activities in Ehirovipuka Conservancy, Kunene Region, Namibia, ECC Application No. APP-007411

Dear Sir/Madam

On behalf of **Ehirovipuka Conservancy Management**, I hereby give consent for the continued operations and associated activities of the Okomutati Basecamp located in the Ehirovipuka Conservancy in the Kunene Region, as per our agreement of operations signed on the 19th of April 2026.

In addition to the above, on behalf of the Conservancy and the local community, I request that project activities be carried out in an environmentally, socially, and sustainably friendly manner. Furthermore, the Kunene Conservation Management should continue to prioritize the employment of local community members, where possible, and to ensure that they adhere to the agreements and land use conditions provided in our operational agreements within the Conservancy. It is also important that we maintain engagement and transparency on key aspects of the Conservancy, particularly biodiversity conservation, to promote local, regional, and national economic development and prosperity.

Thank you for your cooperation.

Yours in Community Conservation,

Amo Kapi
Chairperson
Ehi-Rovipuka Conservancy
Mobile No. +264 670 3394

Ehi-Rovipuka Conservacy/
Community Forest
2026 -05- 08
P.O.BOX 192 Kamanjab
Cell no: 0814347386
ehirovipuka.conservancy 2001@gmail.com

CamScanner

VITA ROYAL HOUSE TRADITIONAL AUTHORITY
Kunene Region
VITA ROYAL HOUSE
•P O Box 261 • Phone: 065 - 685 848 • OPUWO

Enqui: Tjijahura Cell: +264 81 383 5444

08 May 2026

The Management and or Directors
Kunene Conservation
P. O. Box 5691 Windhoek, Namibia

Re: Consent for the Existing Operations of the Okomutati Base Camp and associated activities in Ehirovipuka Conservancy, Kunene Region, Namibia, ECC Application No. APP-007411

Dear Sir/Madam

On behalf of the Senior Councillor Tjijahura, Under Vita Royal House Traditional Authority, I hereby give consent for the continued operations and associated activities of the Okomutati Basecamp located in the Ehirovipuka Conservancy in the Kunene Region.

In addition to the above, on behalf of the Traditional Authority and the local community, we request that project activities be carried out in an environmentally, socially, and sustainably friendly manner. Furthermore, the Kunene Conservation Management should continue to prioritize the employment of the local community, where possible, and provide opportunities for the procurement of available local services and goods. The Traditional Authority (TA) should be continuously engaged for any matters that may arise and require the TA's attention and assistance to ensure continued cooperation and contribution to the local and regional, as well as national economic development.

Thank you for your cooperation.

Yours sincerely,

ABIUD KATIVA
ADVISE TO COUNCIL
OTJIVERO.OKAT...
2026
P O BOX 192
KAMANJAB

PP. Kativa

Tjombamba Tjijahura Senior Councilor
Vita Royal House Traditional Authority
Kunene Region
Mobile No. +264 81 383 5444

CamScanner

SERJA HGE CONSULTANTS
CC/2020/0010007

+264 81 407 5536
info@serjaconsultants.com
P.O. Box 27318, Windhoek
Namibia

Date: 08 May 2026

The Office of the Chief Regional Officer

Kunene Regional Council

Private Bag 502, Opuwo, Namibia

Attention: Mr. George Kamseb

Dear Sir

Re: Notice of the Application for Environmental Clearance Certificate (ECC) for the Existing Operational activities of the Okomutati Base Camp in Ehirovipuka Conservancy, Kunene Region, Namibia– ECC Application No. APP-007411

Serja Hydrogeo-Environmental Consultants cc (*Serja HGE Consultants*) has been appointed by the Kunene Conservation (*the project Proponent*) to apply for the Environmental Clearance Certificate (ECC) of the Existing operational Okomutati Base Camp in Ehirovipuka Conservancy, Opuwo Rural Constituency of the Kunene Region. **Please refer to the attached Background Information Document (BID) for the Base Camp locality and further project information appended to this letter.**

Please note that the establishment and subsequent operations of hospitality facilities (such as hotels, lodges, and camps) are listed in the 2012 Environmental Impact Assessment (EIA) Regulations of the Environmental Management Act (EMA) No. 7 of 2007 as an activity for which an ECC from the Environmental Commissioner is required. The project activities are listed under "Listed Activity 6: Tourism Development Activities - *the construction of resorts, lodges, hotels, or other tourism and hospitality facilities*". The Kunene Conservation Base Camp's ECC application, which has been verified by the Ministry of Environment, Forestry, and Tourism (MEFT), will be considered upon evaluation and approval of an Environmental Management Plan (EMP).

KUNENE REGIONAL COUNCIL
PRIVATE BAG 502, OPUWO
Shilongo
2026 -05- 11
TEL: 065-273950
FAX: 065-273077
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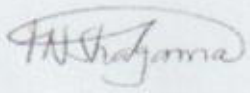
It is against this background that Serja HGE Consultants hereby notifies the Office of the Chief Regional Officer that an ECC application has been launched with the MEFT (assigned ECC Number APP-007411). The Environmental Management Plan, with listed potential impacts, impacts' management, and mitigation measures, will be compiled and submitted to the Office of the Environmental Commissioner alongside other required documents for consideration of the project ECC.

Should you or the Kunene Regional Council have comments on the ECC Application, please send these to us **in writing to us before or on Friday, the 29th of May 2026. After the 29th of May 2026, all comments or inputs will be submitted directly to the office of the Environmental Commissioner at the MEFT.**

Yours sincerely,



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Ms. Fredrika Shagama: Principal Environmental Assessment Practitioner & Hydrogeologist

Serja Hydrogeo-Environmental Consultants CC

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