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REPORT:

FINAL ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN – SANCTUARY SOSSUSVLEI LODGE, HARDAP REGION, NAMIBIA

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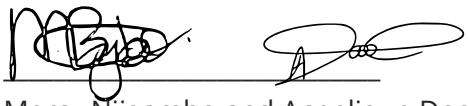

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ABBREVIATIONS

Abbreviation	Description
>	greater than
CC	close corporation
DEAF	Department of Environmental Affairs and Forestry
DWA	Department of Water Affairs
ECB	Electricity Control Board
Erf	A piece of land or plot within a residential, commercial area or mixed-use area that is formally registered and surveyed. Each plot is assigned a unique number which distinguishes it from other properties for the purpose of town planning, land administration, ownership registration and the assessment of property rates and taxes.
ECC	Environmental Compliance Consultancy (Pty) Ltd
e.g.	for example
EMA	Environmental Management Act, No. 7 of 2007
ESIA	environmental and social impact assessment
ESMP	environmental and social management plan
GIS	geographic information system
GPS	global positioning system
HSE	health, safety and environment
i.e.	that is
L	litre
LPG	liquefied petroleum gas
Ltd.	limited
m^2	square metres
mg/L	milligrams per litre
MIME	Ministry of Industries, Mines and Energy
MLIREC	Ministry of Labour, Industrial Relations and Employment Creation
MSDS	material safety data sheet
MAFWLR	Ministry of Agriculture, Fisheries, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
m^3	cubic metre
NHC	National Heritage Council
NTB	Namibia Tourism Board
PPE	personal protective equipment
Pty	proprietary
PV	photovoltaic

Abbreviation	Description
Q4	quarter four
RA	Roads Authority
WRMA	Water Resources Management Act, 2013 (Act No. 11 of 2013)

1 INTRODUCTION

1.1 PROJECT BACKGROUND

Environmental Compliance Consultancy (Pty) Ltd (ECC) has been engaged by Neuhof Reserve (Pty) Ltd (hereafter referred to as "the Proponent") to develop a comprehensive environmental and social management plan (ESMP) and apply for the environmental clearance certificate for the proposed construction and operation of the high end Sanctuary Sossusvlei Lodge in the Namib Desert, Hardap Region , Namibia (Figure 1 and Figure 2). The project is located within the private reserve of the Namib Tsaris Conservancy and will be operated by A&K Sanctuary Namibia, a luxury hospitality and conservation focused tourism operator.

1.2 PROJECT SCOPE OF WORK

The Proponent proposes to construct and operate a high-end Sanctuary Sossusvlei Lodge in the Namib Desert, Hardap Region, Namibia.

The construction phase will involve the development of a new greenfield luxury lodge and associated infrastructure within the project area. Activities will include site establishment, vegetation clearing where required, earthworks and foundation preparation, construction of fifteen (15) luxury guest accommodation units, a wellness centre, gym, conference facilities, swimming pools, lookout points, staff facilities and associated supporting infrastructure. Construction will further include the installation of water supply, an on-site wastewater treatment plant and related pipework, power and telecommunication services (including radio communication towers), lightning conductors, internal access roads, parking areas, landscaping and all ancillary work necessary to commission the lodge into operation. No game fence is planned. The only fence on the property is the existing fence along the main road (C19), which will remain in place. An airfield may be constructed in future, in which case a fence will be erected around the airstrip and borrow pits may be required for construction material.

The key operational activities will comprise the day-to-day management and operation of the luxury tourism lodge and its associated facilities. Activities will include the provision of accommodation, hospitality, wellness and recreational services to guests, operation and maintenance of all buildings, utilities and infrastructure, housekeeping and facility management, landscaping, a small kitchen garden at the back of house (no agricultural activities are intended), waste and wastewater management, water and energy supply, staff accommodation and administration, as well as routine maintenance to ensure the safe, efficient and environmentally responsible operation of the lodge.

1.3 PRELIMINARY PROJECT PLANNING HIGHLIGHTS

1.3.1 ESIA SCREENING EXERCISE

ECC conducted a preliminary screening exercise to assess the potential environmental and social impacts likely associated with the proposed Project. The screening considered the nature, scale and location of the proposed Project, the characteristics of the receiving environment, and the listed activities triggered under the Environmental Management Act, 2007. The screening exercise identified that the Project has the potential to result in a range of environmental and social impacts associated primarily with site preparation, vegetation clearing, construction activities, water abstraction, waste generation, hazardous substance storage, increased traffic, visual impacts and disturbance to biodiversity. However, these impacts are anticipated to be site-specific, largely confined to the development footprint, and capable of being effectively avoided, minimised or mitigated through the implementation of appropriate environmental and social management measures. ECC has determined that a full environmental and social impact assessment (ESIA) is not warranted at this stage. A groundwater exploration and development study was completed for the Project (Namib Hydrosearch CC, 2025), and this ESMP relies on its findings for water supply, abstraction and water quality management. To this effect, a scoping plus impact assessment study has been conducted to support the environmental clearance certificate application.

This environmental and social management plan (ESMP) has been developed to provide a comprehensive framework which outlines the best environmental practices, practical mitigation measures and monitoring protocols to be implemented throughout the Project phases. The primary objective is to preserve the receiving environment and its ecological functions. Through proactive management, the ESMP also seeks to minimise the potential environmental impacts and ensure that any impacts arising as a result of the operational activities are effectively controlled and mitigated. In addition to environmental protection, the ESMP takes into consideration the local social receptors to ensure the proposed Project activities do not severely impact their livelihoods.

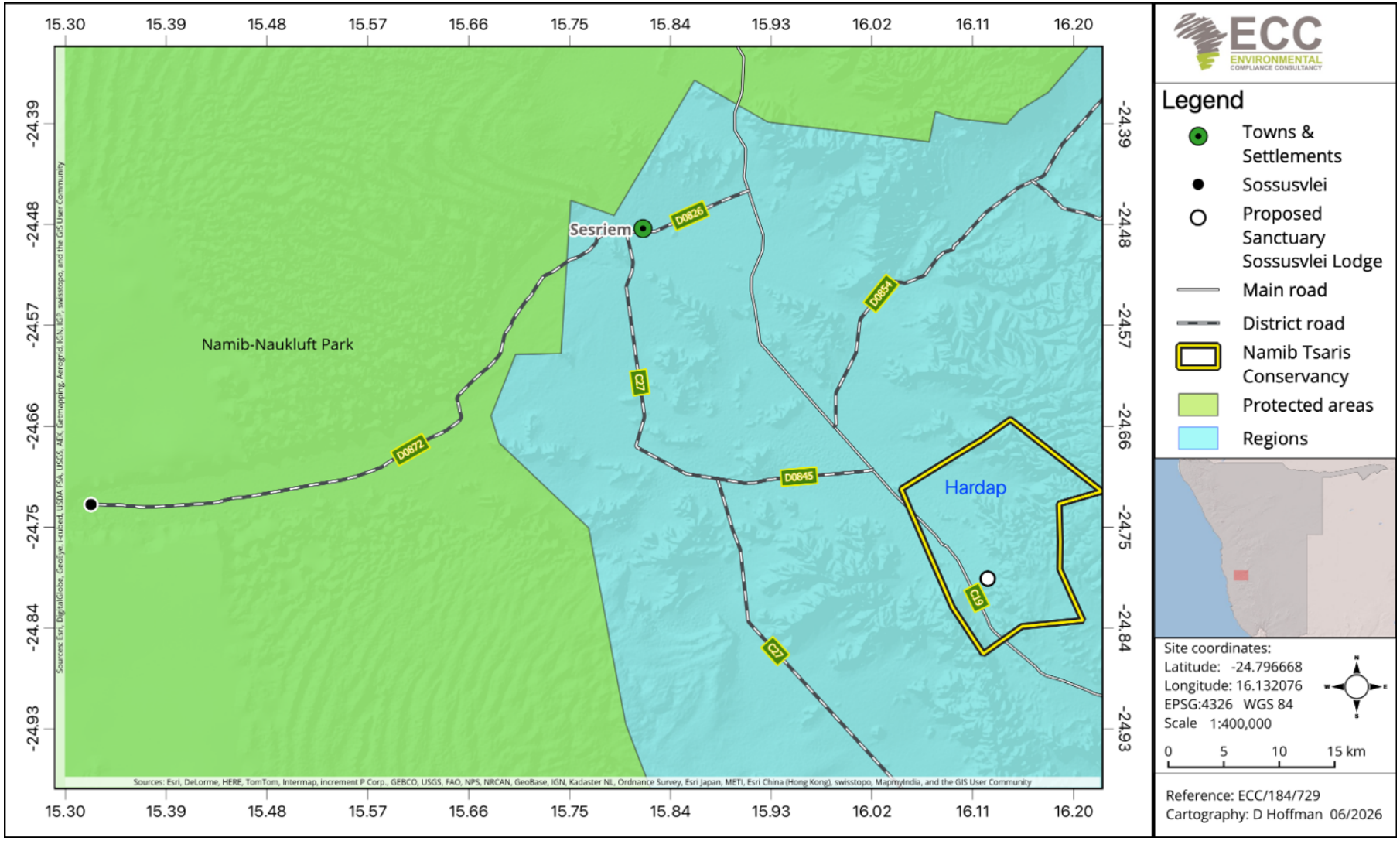

Figure 1 – Locality map of the Project site

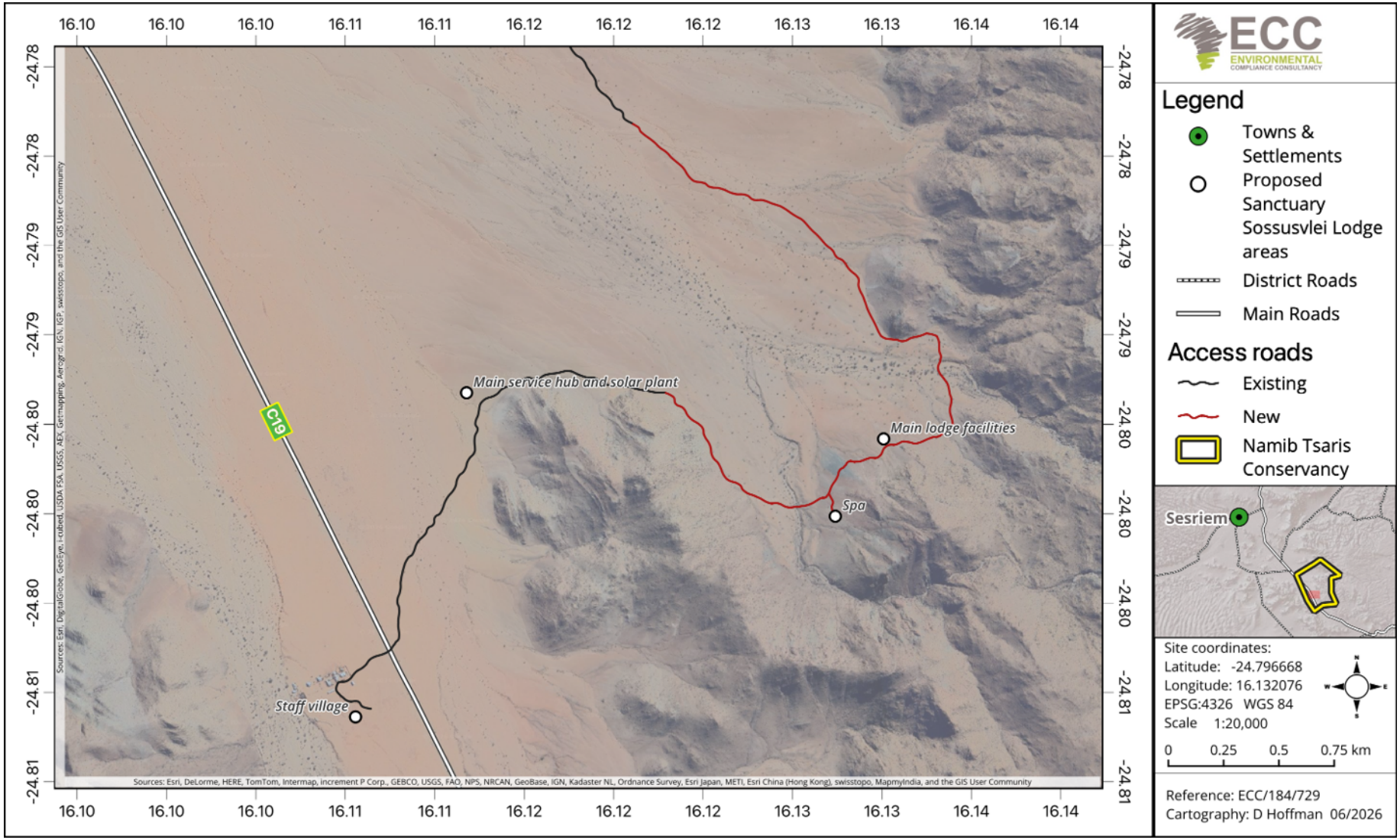

Figure 2 – Zoomed in locality map of the Project site

1.3.2 WATER SUPPLY

The Lodge will be supplied with groundwater from seven production boreholes drilled in 2025 and recommended in the groundwater exploration and development study (Namib Hydrosearch CC, 2025). The recommended maximum rates, at 10 hours of pumping per day, are WW208124 (50 m³/day), WW208125 (40 m³/day), WW208127 (9 m³/day), WW208128 (18 m³/day), WW208129 (25 m³/day), WW208131 (110 m³/day) and WW208132 (18 m³/day), a combined 270 m³/day. Boreholes WW208126, WW208130 and WW208287 are kept for monitoring.
The study estimates peak demand at 57 m³/day during construction (47 m³/day for the Project plus approximately 10 m³/day existing farm domestic and stock use) and 52 m³/day during operation.

The aquifers are fractured rock with little storage and erratic recharge. Pumping must therefore stay within the recommended rates, which are to be reassessed every year from monitoring data. Fluoride exceeds the drinking water standard applied under the Water Resources Management Act, 2013 (Act No. 11 of 2013) in nine of the fourteen boreholes sampled, and nitrate exceeds it in three. WW208129 (Schulz at Base) contains 28 mg/L nitrate as N against an acceptable limit of 11 mg/L. It lies 1.2 km downstream of the Schulz lodge, and the study attributes the nitrate to wastewater disposal. WW208131 (Hebron Fault 2) is not fit for drinking (fluoride 6.9 mg/L, sulphate 338 mg/L). Drinking water will need treatment for fluoride and nitrate.
Any new borehole requires a drilling permit from DWA and must be sited away from the inselbergs and river zones where protected and endemic plants were recorded.

1.4 ENVIRONMENTAL REGULATORY REQUIREMENTS

The construction and operation of the Sanctuary Sossusvlei Lodge constitutes a listed activity under the Environmental Management Act, No. 7 of 2007 (EMA) and its 2012 Regulations, and therefore cannot be undertaken without obtaining an environmental clearance certificate, issued by the Department of Environmental Affairs and Forestry (DEAF) within the Ministry of Environment, Forestry and Tourism (MEFT). In addition to this, the Proponent is required to obtain all other applicable permits, licences and approvals required for the construction and operation of the proposed lodge. These include, but are not limited to, a groundwater abstraction licence for the seven production boreholes recommended in the groundwater study (Namib Hydrosearch CC, 2025), with a drilling permit required only for any future borehole, a wastewater treatment, reuse and discharge licence in terms of the Water Resources Management Act, 2013 (Act No. 11 of 2013), and a consumer installation certificate for the storage and dispensing of diesel associated with the proposed 5,000 L bulk fuel storage facility in accordance with the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990) and the Petroleum Products Regulations, 2000. Registration with the Namibia Tourism Board (NTB), a liquor licence, a health certificate for the food premises, Roads Authority (RA) approval for the C19 access, approved building plans, an Electricity Control Board (ECB) licence or exemption for the solar photovoltaic (PV) system and a certificate of conformity for the liquefied petroleum gas (LPG) installation are also required (Table 3). Where applicable, permits relating to vegetation clearance and protected plant species will also

be obtained from MEFT, with Forest Act permits issued by the Directorate of Forestry, prior to the commencement of construction activities.

This ESMP has been prepared in terms of the requirements of the EMA and its 2012 Regulations.

1.5 Purpose of this report

This ESMP provides a logical framework, mitigation measures, management strategies and monitoring requirements for the Project and its associated construction, operational and decommissioning activities. This ensures that the potential environmental impacts and social issues are curbed and minimised as far as practically possible and that statutory and other legal obligations are adhered to and fulfilled. Outlined in the ESMP are the protocols, procedures and roles and responsibilities to ensure the management arrangements are effectively and appropriately implemented.

This ESMP is a live document and shall be reviewed at predetermined intervals, and or updated when or if the scope of work alters, when information is added or when unforeseen environmental and social impacts have been identified. All Project staff members and appointed contractors and their subcontractors will be legally required to comply with the requirements set out in this ESMP, once approved by the MEFT.

1.6 Management of this ESMP

The Proponent will hold the environmental clearance certificate for the Project and will be responsible for the implementation and management of this ESMP. The implementation and management of this ESMP and thus the monitoring of compliance, will be undertaken through daily duties and activities, as well as monthly inspections. All Project personnel throughout all the Project phases are expected to comply with the requirements stipulated in this ESMP.
The management and mitigation measures in this ESMP are implemented by the Proponent and, during construction, by the appointed contractors and subcontractors, as set out in the Responsibility column of each table. The Proponent appoints an HSE representative or environmental control officer (ECO) to brief contractors, inspect the site, check records and confirm that the measures are effective. ECC's role is that of the independent environmental assessment practitioner. ECC can be appointed to provide ECO, monitoring or permitting support under a separate scope, should the Proponent require it.

1.7 Limitations, uncertainties and assumptions related to this ESMP

Where there is any conflict between the provisions of this ESMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, Project approval conditions, permits, standards, guidelines and relevant laws), the contract should be amended, and statutory requirements are to take precedence.

The information presented in this ESMP is based on the scope of work, compiled in consultation with the Proponent. However, when the design, operation method changes or expansion works are proposed, this ESMP will need to be updated, and additional assessment may be required.

1.8 Environmental assessment practitioner (EAP)

This report has been prepared by Environmental Compliance Consultancy (Pty) Ltd (ECC) (Reg. No. 2022/0593) on behalf of the Proponent. Authored by ECC employees with no material interest in the report's outcome, ECC maintains independence from the Proponent and has no financial interest in the Project apart from fair remuneration for professional fees. Payment of fees is not contingent on the report's results or any government decision. ECC members or employees are not, and do not intend to be, employed by the Proponent, nor do they hold any shareholding in the Project. Personal views expressed by the writer may not reflect ECC or its client's views. The environmental report's information is based on the best available data and professional judgment at the time of writing. However, please note that environmental conditions can change rapidly, and the accuracy, completeness, or currency of the information cannot be guaranteed.

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2 ENVIRONMENTAL MANAGEMENT FRAMEWORK

2.1 OBJECTIVES AND TARGETS

The proposed Sanctuary Sossusvlei Lodge is located within the remote Namib Desert, in the private reserve of the Namib Tsaris Conservancy, an area characterised by arid desert landscapes, sparse vegetation and high conservation and tourism value. The project has therefore been planned to minimise disturbance to the surrounding biophysical and social environment through the implementation of appropriate environmental and social management measures. To achieve this, specific environmental and social objectives and targets have been established to guide Project activities throughout the construction and operational phases. These objectives and targets are intended to avoid, minimise and mitigate potential adverse impacts, promote legal compliance, protect sensitive environmental receptors, and ensure the sustainable development and operation of the proposed lodge.

The overall environmental and social objectives for the Project are as follows:

- Protect the surrounding desert environment and conserve the ecological integrity of the Namib Tsaris Conservancy throughout the Project lifecycle.
- Manage waste effectively and minimise the potential for environmental pollution.
- Promote the efficient and sustainable use of natural resources, including water and energy.
- Prevent, control and manage spills and leaks of fuels, oils, chemicals and other hazardous substances to minimise contamination of soil and groundwater.
- Minimise disturbance to vegetation, wildlife, natural habitats and the visual character of the surrounding landscape.
- Maintain effective communication with stakeholders and address complaints through an established grievance procedure.
- Implement environmental and social management measures in accordance with the commitments contained in the ESMP and applicable legal requirements.
- Comply with applicable legislation, permit conditions, licences and recognised environmental, health and safety standards throughout the construction and operational phases of the Project.

2.2 ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES

The Proponent shall be responsible for:

- Ensuring that all Project staff members, appointed contractors, subcontractors and guests comply with the procedures set out in this ESMP;
- Ensuring that all personnel receive adequate supervision and instruction to effectively implement the requirements stipulated in this ESMP;

- Ensuring that any person allocated specific environmental responsibilities is formally notified of their appointment and confirms that their responsibilities are clearly understood;
- Monitoring and evaluating the implementation of the ESMP to ensure continuous improvement and compliance throughout the Project's lifespan;
- Keeping records of environmental incidents, corrective actions and induction activities for audit and reporting purposes;
- Promoting a culture of environmental awareness and accountability among all staff, contractors and visitors through ongoing communication and engagement; and
- Upholding the Project's reputation by ensuring timely reporting of environmental incidents to the relevant regulatory authorities.

Table 1 outlines the key roles and responsibilities assigned to the Project team members tasked with executing Project activities in compliance with the ESMP requirements.

Table 1 - Project team roles and responsibilities

Role	Responsibilities and duties
Proponent	- Responsible for the overall management and implementation of this ESMP; - Ensure site specific environmental policies are drafted/updated and communicated to all Project personnel; - Responsible for providing the resources required to effectively run operations and comply with the ESMP; and - Appoint all Project team members that are required to ensure effective running of operations.
Operations manager or appointed representative	- Responsible for overseeing and supervising the day-to-day operations of the facility to ensure compliance with this ESMP: - Take over the assigned responsibilities of the health, safety and environmental (HSE) representative during operations; - Ensure all personnel are aware of the commitments made in the ESMP and statutory licence and permit conditions approved for the Project; - Responsible for the overall management and revision of this ESMP. The frequency of review and updates shall be determined based on any material changes to the Project scope or other relevant developments; - Ensure adequate resources are made available for personnel to effectively implement commitments made in this ESMP; - Provisioning of environmental awareness/management training and inductions for all employees; - Ensure that best environmental practices are implemented throughout the Project lifecycle;

Role	Responsibilities and duties
	- Receiving, recording and responding to community complaints; - Conduct the required compliance inspections and/or audits to ensure compliance with the ESMP and conditions of the approved environmental clearance certificate; and - Report any non-compliance or accidents to stakeholders and regulatory authorities (e.g. MEFT, Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR), Ministry of Labour Industrial Relations and Employment Creation (MLIREC) and National Heritage Council (NHC)).
HSE appointed representative (construction phase only)	- Responsible for conducting regular site inspections to identify environmental, health and safety and ensure that mitigation measures are effectively implemented; - Ensure all contractors, subcontractors and visitors comply with site-specific HSE procedures, permit conditions and relevant legal requirements; - Ensure that appropriate personal protective equipment (PPE) is available, used correctly and maintained by all construction personnel; - Record, investigate and report all environmental incidents, spills, injuries, near misses and non-conformances, and recommend corrective and preventive actions; - Maintain HSE records, inspection reports, incident registers and other documentation required to demonstrate compliance with the ESMP and applicable legislation; - Liaise with the Proponent, Operations Manager, contractors and relevant regulatory authorities regarding HSE matters where required; and - Stop or recommend the suspension of any construction activity that poses an immediate risk to human health, safety or the environment until appropriate corrective measures have been implemented.
Project employees, maintenance team, contractors and subcontractors	To comply with this ESMP throughout the Project lifecycle, in addition to: - Demonstrating an understanding of the ESMP, including its content and requirements; - Attending briefings and training sessions on specific environmental matters;

Role	Responsibilities and duties
	- Report any construction or operational activities that deviate from the ESMP; and - Timely implement corrective or remedial actions as directed by the Proponent or Operations manager.

2.3 CONTRACTORS AND SUBCONTRACTORS

Contractors and their subcontractors contracted by the Proponent for construction work, any mechanical repairs or maintenance work must be compliant with this ESMP and shall be responsible for the following:

- Undertake activities in accordance with this ESMP, as well as relevant policies, procedures, management plans, method statements, licences and contract obligations;
- Implement effective environmental and safety management measures;
- Adopt environmental best practices to ensure the preservation of the receiving environment and minimise potential environmental impacts to the greatest extent possible;
- Report environmental issues, including actual or potential environmental incidents and aspects to the Proponent and Operations manager;
- Cooperate fully with environmental inspections, internal and external auditors and monitoring activities conducted by the Proponent, Operations manager or regulatory authorities;
- Ensure that employees under their employment are made aware of, and comply with the requirements of this ESMP; and
- Ensure that appropriate corrective or remedial actions are implemented to address all environmental aspects and incidents. Lessons learnt should always be documented for future reference and continuous improvement.

2.4 WORKFORCE COMPETENCY

Any personnel employed by the Proponent shall be competent to perform tasks that have the potential to cause an environmental or social impact. In this instance, competence is defined in terms of appropriate vocational training, guest service and prior work experience.

The Proponent shall comply with the Republic of Namibia's Regulations for Labour, Health and Safety and any subsequent amendments to these Regulations. The following conditions, amongst others must be complied with:

- All Project personnel shall be provided with the necessary uniforms and appropriate personal protective equipment (PPE) (e.g. safety boots);
- Should foreign workers be hired, the Proponent shall ensure that they have valid work permits at all times;

- Occupational health and safety protocols are to be enhanced throughout the Project lifecycle; and
- All Project personnel shall undergo an induction course covering occupational safety procedures and site-specific risks before commencing work.

2.5 EMPLOYMENT

The recruitment approach of the Project workforce shall comply with the following criteria:

- Ensure that local people have access to information regarding job opportunities;
- The number of job opportunities shall be made known together with the associated skills and required qualifications;
- The maximum expected duration of the job, whether temporary or permanent, shall be indicated;
- Foreign workers with no proof of permanent legal residence and work permit shall not be hired; and
- All employees hired must be issued valid employment contracts specifying their position, assigned duties and hourly remuneration (in accordance with the wage standard bracket stipulated in the Wage Order Setting the National Minimum Wage for Employees (Government Notice 218 of 2024).

3 COMMUNICATION AND AWARENESS

To ensure potential environmental impacts are minimised, it is important that Project personnel are appropriately informed and briefed on how to properly implement the ESMP. It is also important that regular communication is maintained with stakeholders and regulatory authorities, where required (i.e. NTB, MEFT, and MAFWLR). This section outlines the framework for communication related to the implementation of the commitments that are specified in this ESMP.

3.1 INTERNAL COMMUNICATION

The Operations manager shall communicate site-wide environmental issues to the Project team during construction, operations and decommissioning phases through the following means (as and when required):

- Site induction;
- Site notices
- WhatsApp group (or preferred social communication mobile application tool);
- Daily, weekly and monthly briefings;
- Instructions on incident response procedure; and
- Briefing on key social and environmental issues.

This ESMP shall be distributed to the Project team (including contractors and their subcontractors) to ensure that the environmental requirements are adequately communicated. The key activities and environmentally and socially sensitive operations must be highlighted clearly to workers and contractors, in English and their local language, where required.

Effective communication must be maintained and should include procedures for receiving, logging and resolution of complaints, the non-conformances with this ESMP observed and remediation/corrective actions required.

3.1.1 TRAINING AND ENVIRONMENTAL AWARENESS

All Project personnel must be competent to perform tasks to avoid potential negative environmental impacts. Competence is defined in terms of appropriate education, training and work experience. When it has been determined that certain skills are lacking, refresher courses must be offered to the workforce.

3.2 EXTERNAL COMMUNICATION

The public shall be duly informed about the Project. A Project notice board must be erected at the Project site prior to the commencement of the construction phase.

The Operations manager and the Proponent shall represent the Project and shall liaise with external regulatory authorities (e.g. NTB, MEFT, NHC and MAFWLR). This will ensure good

working relations with the stakeholders and compliance with all relevant environmental regulations and the approved licences, certificate and permits for the Project.

3.1.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

An emergency is any abnormal event, which demands immediate attention. It is any unplanned event, which results in the temporary loss of management control at site, but where functional resources can manage the response. An emergency response plan document will be put in place that manages the response in relation to emergencies including environmental emergencies.

Table 2 provides a list of numbers to be contacted in case of an emergency.

Table 2 - Emergency contact details

Town	Ambulance	Police	Fire brigade
Maltahöhe	+264 63 293 025	+264 63 293 005	+264 63 293 048

All wildlife crimes must be promptly investigated and reported to MEFT.

The procedures for reporting of environmental and occupational incidents are discussed in section 4.2 Reporting.

3.1.3 COMPLAINT HANDLING AND RECORDING

Any complaints received verbally by any personnel on the Project site shall be recorded by the receiver including:

- The name of the complainant;
- The contact details of the complainant;
- Date and time the complainant was received; and
- The nature of the complaint.

The information shall be provided to the Operations manager who is overall responsible for managing and responding to complaints. The Operations manager must address the complaints by following these measures:

- Record the complaint in the complaint register; and
- Provide a written response to the complainant of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons why are to be recorded in the register.

The Project team shall be informed about the complaints register, its location and the person responsible, to refer the public who wish to lodge a complaint. The complaints register shall be kept for the duration of the Project and must be available for government or public review, upon request.

4 REPORTING, COMPLIANCE AND ENFORCEMENT

4.1 ENVIRONMENTAL PERFORMANCE MANAGEMENT

This section outlines the overall monitoring commitments required for implementation during the construction, operational and decommissioning phases of the Project. It details procedures to ensure routine inspections and audits are conducted to ensure that the Project activities are aligned and remain compliant with this ESMP.

4.1.1 CONSTRUCTION PHASE: ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING

A copy of this ESMP will be onsite throughout the construction phase and will be available upon request. Contractors and subcontractors must be issued with a copy of this ESMP. It is the responsibility of the Proponent and Operations manager to ensure this ESMP is complied with throughout the construction phase. Daily and weekly inspections will be undertaken by the Operations manager or appointed representative. Any environmental concern or occupational health and safety incurred must be reported to the Proponent and the regulatory authorities and actioned as soon as reasonably practicable.

4.1.2 OPERATIONAL PHASE: ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING

An environmental inspection and compliance monitoring programme shall be implemented throughout the operational phase to ensure the effective implementation of this ESMP and continual compliance with applicable legislative requirements and permit conditions. Routine inspections shall be undertaken on a scheduled basis to assess the condition and performance of the Project's infrastructure and environmental management measures. These inspections shall include, where applicable, water supply infrastructure, wastewater treatment systems, waste storage areas, fuel storage facilities, storm water controls, landscaping, access roads and other operational facilities to ensure that any deficiencies, spills, leaks or equipment failures are identified and addressed promptly.

The operations manager or appointed representative shall conduct regular inspections of all operational areas to verify compliance with this ESMP and identify any signs of environmental degradation, equipment malfunction or non-compliance. Any non-conformance shall be documented in an inspection register, including a description of the non-conformance, the underlying cause, the responsible person, the potential or actual environmental consequence, the corrective action implemented, and any follow-up actions required to prevent recurrence. The effectiveness of corrective action shall be verified during subsequent inspections to support continual improvement of the Project's environmental and social performance.

4.1.3 DECOMMISSIONING PHASE: ENVIRONMENTAL INSPECTIONS AND COMPLIANCE MONITORING

All rehabilitation and decommissioning activities shall be subject to environmental inspections and compliance monitoring to ensure that the potential for residual environmental impacts is minimised to the greatest extent practicable. The site shall be restored to a condition comparable to its pre-disturbance state or prepared in accordance with the approved future land use (e.g. commercial or mixed-use development).

Inspections shall be conducted by the Operations manager or the appointed representative on a scheduled or ad hoc basis throughout the decommissioning phase. All inspections findings shall be documented, and any non-compliance must be addressed within defined timeframes to ensure full environmental compliance prior to site closure.

4.2 REPORTING

All environmental incidents, non-compliances, complaints, accidents, equipment failures and other events with the potential to result in adverse environmental or social impacts shall be reported immediately to the Operations Manager or appointed project representative throughout the Project lifecycle. All incidents shall be investigated, recorded and appropriate corrective and representative actions implemented.

For large-scale spills (i.e., > 200 L) and other significant environmental incidents, the fire service should be notified as required and the MEFT office should be informed of the incidents (telephone +264 61 284 2111). If the spillage is of a fuel source (i.e. petrol/diesel), MIME must be notified by completing form PP/11 (telephone: +264 61 284 8111). If significant environmental spills (hydrocarbons or domestic effluent) occur close or in a water source (both surface and underground sources), the Department of Water Affairs (DWA) is to be notified. All correspondence with DWA must be done by the Operations manager no later than 48 hours after the incident has occurred.

For the clean-up of smaller spills, the relevant material safety data sheet (MSDS) should be consulted to determine the appropriate clean-up procedure. Basic spill response training will be provided as part of the site environmental induction. Spill response equipment, including relevant MSDS copies, will be provided in areas where potentially environmentally hazardous chemicals are used.

Occupational incidents and accidents incurred on-site should be reported to the authorities (i.e. Occupational Safety & Health Department) at MLIREC, by using form F.5.

In case of archaeological objects or heritage artefacts discovered on-site, the chance find procedure (Appendix B) must be followed and the NHC must be informed by the Proponent or the Operations manager.

All correspondence and communication with local and regulatory authorities should be undertaken by the Proponent or the Operations manager.

4.3 ENVIRONMENTAL CERTIFICATES, LICENCES AND PERMITS

Table 3 outlines the licences and certificates that are required for the Project.

Table 3 - Licence, certificate, permit and authorisation required for the Project

Licence or certificate	Relevant authority	Related activity requiring regulatory authorisation	Act/Regulation/policy
Environmental clearance certificate	DEAF	Required to undertake the listed activities associated with the proposed Sanctuary Sossusvlei Lodge.	EMA and the 2012 Regulations
NHC consent	NHC	NHC consent for the management and preservation of heritage objects, if discovered within the Project's footprint.	National Heritage Act, No. 27 of 2004
Groundwater abstraction licence (drilling permit for any future borehole)	DWA	Required for the abstraction of groundwater from the seven production boreholes recommended in the groundwater study (Namib Hydrosearch CC, 2025) (WW208124, WW208125, WW208127, WW208128, WW208129, WW208131 and WW208132) within the recommended rates. A drilling permit is only required for any future borehole.	Water Resources Management Act, 2013 (Act No. 11 of 2013)
Wastewater treatment, disposal and/or reuse authorisation	DWA	Required for the treatment of sewage and greywater, the discharge of treated effluent to the French drain, the disposal of swimming pool backwash water, the reuse of treated wastewater and the disposal of brine from any fluoride or nitrate treatment unit.	Water Resources Management Act, 2013 (Act No. 11 of 2013)
Protected plant removal permit (where applicable)	MEFT; Directorate of Forestry for Forest Act permits	Required should any protected plant species require removal or relocation during site preparation or construction.	Nature Conservation Ordinance, 1975 (Ordinance No. 4 of 1975), Forest Act, 2001 (Act No. 12 of 2001)

Licence or certificate	Relevant authority	Related activity requiring regulatory authorisation	Act/Regulation/policy
Consumer installation certificate	MIME	Required for the installation and operation of the proposed 5 000 L diesel installation, where applicable.	Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990) and its Regulations
Registration as an accommodation establishment	NTB	Required before the Lodge accepts paying guests.	Namibia Tourism Board Act, 2000 (Act No. 21 of 2000)
Liquor licence	Hardap regional liquor licensing committee	Required for the sale of liquor to guests.	Liquor Act, 1998 (Act No. 6 of 1998)
Generation licence or exemption	ECB	Required for the solar PV system and backup generators. Generation of less than 500 kVA exclusively for own consumption is exempt from licensing	Electricity Act, 2007 (Act No. 4 of 2007)

4.4 NON-COMPLIANCE

Where it has been identified that activities are not compliant with this ESMP, the Operations manager must ensure that corrective actions are implemented to the extent that the activities return to being compliant as soon as possible. In instances where the requirements of the ESMP are not upheld, a non-conformance and corrective action notice will be produced. The notice will be generated during the routine inspections across all service/work areas, and the Operations manager will conduct follow ups to determine whether the corrective actions are implemented as planned and instructed.

A non-compliance event / situation is considered if:

- There is evidence of contravention of this ESMP and associated indicators or objectives;
- Project staff fail to comply with corrective actions or other instructions issued to them by the Proponent, Operations manager or qualified authority; or
- There is evidence of negligence in recording, investigating and responding to community complaints through the established reporting channels and grievance resolution mechanisms.

Depending on severity, work will be stopped in the event of a non-compliance, until corrective action(s) has been completed. The non-compliance will be closed out once the Operations Manager has inspected the corrective action and confirmed that the issue has been satisfactorily resolved.

4.4.1 DISCIPLINARY ACTIONS

This ESMP is a legally binding document. Non-compliance with its provisions may result in disciplinary and/or legal action(s) against the responsible party or parties. These actions may include, but not limited to the following:

- Disciplinary action against Project personnel in accordance with the Proponent's internal policies and procedures;
- Implementation of corrective actions and additional monitoring to address identified non-compliances.
- Suspension of specific construction or operational activities until compliance has been restored.
- Enforcement action by the relevant regulatory authorities, including the suspension or withdrawal of environmental approvals or other statutory permits, where warranted under application legislation.

5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

5.1 ENVIRONMENTAL PERFORMANCE MANAGEMENT

This section provides the overall management plans of potential impacts of the Project during the construction, operations and decommissioning phases. These plans provide mitigation and monitoring commitments, as well as the roles responsible for execution. The Operations manager will use the construction and operational management plan to undertake daily, weekly and monthly inspections to ensure Project activities remain compliant with this ESMP during these phases, routine maintenance and ad hoc work, as required. This ESMP has been developed to provide guidance to the Proponent, Operations manager, HSE appointed representative, personnel, appointed contractors and subcontractors throughout all phases of the Project. This includes the following:

- **Planning phase:** detailed planning and design of the proposed Sanctuary Sossusvlei Lodge, and its associated infrastructure, including the layout of guest accommodation units, guest amenities, staff facilities, internal access roads, utility services, water supply, wastewater treatment systems and other supporting infrastructure. Emphasis shall be placed on incorporating environmentally sensitive design principles and best available practices to minimise disturbance to the surrounding environment, optimise resource efficiency and ensure compliance with applicable legislative and environmental requirements;
- **Construction phase:** the construction of the proposed lodge and associated infrastructure, including site establishment, vegetation clearing where required, earthworks, construction of guest accommodation units, the main lodge and guest facilities, staff accommodation, installation of water supply, wastewater treatment, electrical and communication infrastructure, internal access roads, parking areas and landscaping. All activities shall be undertaken in accordance with industry best practice, with particular emphasis on biodiversity protection, waste management, erosion and sediment control, dust suppression, noise management and the prevention of pollution;
- **Operational phase**: the day-to-day operation and maintenance of the luxury tourism facility, including accommodation and hospitality services, operation of guest amenities, maintenance of buildings and infrastructure, water abstraction and distribution, wastewater treatment, solid waste management, energy management, fuel storage for emergency power generation, landscaping, environmental monitoring and routine maintenance to ensure the efficient, safe and environmentally responsible operation of the Project.
- **Decommissioning phase (future phase):** The planned cessation of Project activities, including the decommissioning and removal of infrastructure, buildings, utilities and ancillary facilities, management and disposal of waste in accordance with applicable legal requirements, rehabilitation of disturbed areas where appropriate, and implementation of measures to ensure the site is left in a safe, stable and environmentally acceptable condition or prepared for an alternative approved land use.

5.1.1 PLANNING PHASE

This phase involves procuring all necessary Project materials, tools and equipment in preparation for the commencement of the construction phase. Key materials such as cement, sand and glass will be procured from the local registered retail stores. Contractors will be appointed to oversee the procurement process to ensure all Project components are acquired on schedule, and that the water supply, wastewater and power approvals listed in Table 3 are obtained prior to the commencement of the construction phase. The Proponent is responsible for ensuring that the development does not significantly alter or detract the visual landscape and the area's sense of place. The specific requirements required during the planning phase are discussed in Table 4.

Table 4 - Environmental aspects, management and mitigation measures for the planning phase

Aspect	Management and mitigation measures	Monitoring requirement	Responsibility
Job creation, skills development and business opportunities	- The Proponent, contractors and subcontractors shall prioritise local employees, particularly drawing from the pool of unemployed youth, previously disadvantaged and vulnerable groups in Sesriem and/or Solitaire for unskilled and semi-skilled labour; - Efforts should be made to enhance and support skills development and capacity building, wherever possible: and - Goods, materials, equipment and consumables shall be sourced from local and regional suppliers to stimulate the local economy and promote inclusive growth.	- Project planning phase	- Proponent - Contractors - Subcontractors
Aesthetic and visual appeal	- Project planning and detailed design should incorporate environmentally sensitive design principles to ensure that tall infrastructure is visually compatible with, and minimises intrusion into, the surrounding Namib desert landscape: - The use of earth colours (paints) on structures which are in harmony with the natural environment are strongly recommended; - Building heights, architectural design, external finishes and lighting should be carefully considered to minimise visual impacts and maintain the natural sense of place; - Temporary waste storage areas and other service infrastructure must be appropriately planned, located and screened to minimise visual impacts and potential environmental pollution; - Avoid any neon or non-earthy toned signage that detract from the sense of place.	- Project planning phase	- Proponent

Aspect	Management and mitigation measures	Monitoring requirement	Responsibility
Fire management	- Develop site-specific fire management and emergency response procedures; - Identify, establish and clearly communicate appropriate emergency evacuation procedures and designated assembly points for employees, contractors and guests; - Ensure that appropriate firefighting equipment, including suitable fire extinguishers and other equipment as required, is available at strategic locations throughout the facility and is regularly inspected and maintained; - Ensure that personnel receive appropriate fire prevention, firefighting and emergency response training; and - Ensure that current emergency contact details and emergency response procedures are readily available on-site and communicated to relevant Project personnel.	- Project lifespan	- Proponent
Water management	- Infrastructure standards and designs must be in accordance with the minimum engineering guidelines and DWA guideline to ensure that the development is sustainable; - Borehole abstraction and wastewater treatment/disposal (modular system with French drain) to be designed and operated per DWA-issued licences; - Erosion control measures to be implemented where vegetation clearing occurs near drainage lines; - Water-efficient systems/recycling options to be investigated and prioritised during the design phase, where feasible;	- Project lifespan	- Proponent

Aspect	Management and mitigation measures	Monitoring requirement	Responsibility
	- Abstraction to remain within the recommended rates for the seven production boreholes (Namib Hydrosearch CC, 2025) and the conditions of the DWA abstraction licence; - Drinking water to be treated for fluoride and nitrate before supply, and borehole WW208131 not to be used for drinking water; - The lodge French drain to be sited downgradient of the production boreholes and away from them; - The nitrate source (wastewater disposal) at the Schulz lodge and staff area, upstream of production borehole WW208129, to be investigated and removed; and - Any new borehole to be drilled under a DWA drilling permit and sited away from the inselbergs and river zones where protected and endemic plants were recorded.		
Energy consumption efficiency	- Energy-efficient appliances, lighting and equipment shall be prioritised during the design, construction and operation of the Project to minimise unnecessary energy consumption; - Opportunities to incorporate renewable or alternative energy sources should be considered, where technically and economically feasible, to reduce reliance on conventional energy sources and promote sustainable energy use; and - Energy consumption should be monitored during operation to identify opportunities for improved efficiency and reduced consumption.	- Project planning phase	- Proponent - Operations manager

Aspect	Management and mitigation measures	Monitoring requirement	Responsibility
Solid waste management	- Tender documents must include provision for pollution control, material substitution and waste recycling to ensure contractors and subcontractors implement effective waste management practices; - Designated temporary waste storage areas to be established, with waste separated at source (general, recyclable, hazardous); - Hazardous/hydrocarbon waste stored in labelled, sealed containers in designated containment areas; and - Waste management plan in place, waste collected and disposed by licensed contractor at an approved facility.	- Project planning phase	- Proponent
Procurement, transport and storage of materials	- All materials required for construction, namely steel, bricks, cement, sand, roofing materials, bitumen, underground fuel storage tanks, generators, piping systems etc. must be sourced from registered suppliers; - Vehicles that transport materials to site must be road worthy; - All drivers that transport materials must have valid drivers' licences and must always adhere to traffic rules and regulations; - Loads on vehicles must be properly secured to avoid them from falling off the vehicles; - The materials used during construction, for example cement and bricks must be stored at a central laydown or storage area for the site to be neat and orderly; - A designated area for concrete batching and disposal of excess effluent must be established;	- Project planning phase	- Proponent - Contractors - Subcontractors

Aspect	Management and mitigation measures	Monitoring requirement	Responsibility
	- Fuel, paints, solvents and chemicals storage, handling and usage to be planned, taking the ESMP requirements into consideration; and - The construction team shall source sand from permitted sources outside the Project area, as sand mining is strictly prohibited.		
Project secondary licences/permits/ certificates	- Ensure that all the secondary licences, permits and certificates (listed in Table 3) are obtained prior to Project implementation.	- Project planning phase	- Proponent
Site security	- Ensure that all security personnel assigned with security duties of the Project site are sourced from a registered security company.	- Project planning phase	- Proponent

5.1.2 CONSTRUCTION PHASE

The construction phase will involve Project-related construction activities, which, with the implementation of the prescribed mitigation measures, are expected to result in low environmental impacts. During this phase, land will be cleared for the construction of the lodge's internal access roads and parking areas, borehole water supply infrastructure, wastewater treatment and disposal infrastructure, solar PV and backup power generation systems, solid waste and fuel storage facilities, and the guest accommodation units, lodge facilities and staff accommodation. A road crossing of the C19 will also be developed where required.

The proposed development footprint covers approximately 18,500 square metres (m²), and targeted mitigation measures will be undertaken to minimise impacts on the receiving environment. Responsibility for environmental compliance during the construction phase rests with the Proponent, Project manager, contractors and subcontractors. The contractors will be accountable for all on-site construction activities.

The Proponent must ensure that the contractors and their subcontractors are fully informed of the ESMP requirements and that these are strictly enforced throughout the construction phase. The Project manager is responsible for conducting site inspections at least once a month to ensure that all mitigation and management measures are being properly implemented and adhered to. Upon completion of construction activities, the Project manager must conduct a final site inspection and, if satisfied that the Project has been executed in accordance with the ESMP, issue the contractors with a letter of completion which confirms compliance and satisfactory Project outcomes.

Construction activities can be associated with accidents and spillages from vehicles, heavy machinery, fuel storage and generators that generate excessive noise or heat, which may lead to stakeholder concerns or negative perception, particularly given the sense of place and wilderness character of the surrounding reserve and conservancy. The mitigation measures that must be implemented to minimise or prevent environmental damage, pollution or community nuisances are discussed in Table 5.

Table 5 - Environmental and social aspects, impacts, mitigation and monitoring measures for the construction phase

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
Site access control, induction and awareness	- Unauthorized access to the construction site and environmental incidents resulting from personnel being unaware of site requirements	- Clearly demarcate and secure the construction site using fencing, barriers and warning signage; - Restrict access to authorised personnel only; - Maintain a site access register for all employees, contractors, subcontractors and visitors; - All personnel and visitors must undergo a site-specific HSE and environmental induction before entering the worksite; - Conduct regular toolbox talks and environmental awareness sessions throughout the construction phase; and - Ensure all visitors are accompanied by authorised personnel.	- Daily - Weekly - Monthly	- Proponent - HSE appointed representative - Contractors - Subcontractors
Noise	- Community severance and disruption of social interactions.	- Provide advance notice to the neighbours and noise sensitive receptors (NSR) prior to the commencement of construction activities. The construction schedule may be communicated through direct engagement, or other appropriate engagement platform deemed suitable; - Erect a Project noticeboard at the site boundary to inform the residents and motorists about the Project and the appointed contractors and subcontractors involved;	- Daily - Weekly - Monthly	- Proponent - Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		- Conduct pre-start checks on equipment and machinery; - Nighttime work is strictly prohibited (i.e. construction activities must only be conducted between dawn and dusk); - Avoid work on Sundays and public holidays; - Avoid unnecessary idling of equipment and machineries; - Ensure the best available technology with low sound power is sourced, where possible; and - A complaints register must be kept. Complaints received must be addressed as per complaint handling procedures developed for the Project.		
Visual	- Disruption of the visual landscape and diminished sense of place.	- Maintain good housekeeping throughout the construction phase; - Store construction materials in an orderly manner and within designated storage yards/areas; - Apply water spraying during excavation activities to reduce dust generation; - Use downward-directed temporary lighting to reduce glare at night (avoid installation of flood lights); - Equipment and machinery should only be retained onsite for the duration of the construction phase.	- Daily - Weekly - Monthly	- Proponent - Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
Occupational health and safety	- Potential for injuries or fatalities to be sustained onsite and to the local community.	- The Proponent shall ensure that occupational health and safety requirements are incorporated into the bidding and tendering processes to guarantee that all contractors and subcontractors comply with these standards; - Contractors and subcontractors should comply with all safety requirements outlined in the contracts signed with the Proponent; - Only contractor employees with specialised skills should be assigned tasks associated with injury risks; - Construction activities should only be conducted between dawn and dusk; - The consumption of alcoholic beverages and drugs is strictly prohibited onsite. Anyone found to be under the influence of alcohol/drugs must be disciplined; - Contractors and subcontractors must ensure that their workforce is equipped with appropriate PPE (e.g. work overalls, hard hats, gloves and steel-capped safety boots); - Conduct regular toolbox talks, especially with unskilled or semi-skilled employees; - The Proponent or appointed representative must conduct regular site inspections to monitor compliance with safety standards (e.g. ensuring that	- Daily - Weekly - Monthly	- Proponent - HSE appointed representative - Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		tools are securely stored and that PPE is properly worn by the workforce); - Ensure contractor workforce is competent and received the necessary training to execute their specific tasks, for example: lock out and tag out, lifting operations/use of cranes, working at heights; - The required HSE signage to be in place during construction activities; - Conduct pre-start job safety analysis and risk assessments before each activity takes place; - No standing under loads during lifting operations, listen to the instructions of the rigger, operator and/or supervisor overseeing the task/activity; and - An emergency response plan must be in place accounting for the site's remoteness and distance to the nearest facilities, including clear evacuation procedures and communication protocols; and - Maintain records of all injury statistics, track corrective actions and record lessons learnt to improve safety practices onsite.		
Air quality	- Dust generation.	- Ensure all land clearing activities are limited to the defined Project footprint to avoid unnecessary environmental disturbances;	- Daily - Monthly	- Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		- Implement dust suppression measures (e.g. water spraying) on exposed soil surfaces and access roads during construction, particularly during windy conditions; - Designate a cement handling and concrete batching zone; - Take necessary measures to cover and secure cement bags to minimise windblown dust and material loss; and - Project vehicles must be confined to existing roadways.		
Soil	- Potential for soil, surface water and groundwater contamination.	- Ensure that diesel storage tanks for the backup generator(s) are installed as per manufacturer specifications, and that a consumer installation certificate is obtained in terms of the Petroleum Products and Energy Act, 1990 (Act No. 13 of 1990) and its Regulations; - The Proponent shall ensure the installation of appropriately designed, corrosion-resistant, double-walled, self-bunded diesel storage tanks with leak detection mechanisms to prevent and monitor potential leaks;	- Daily - Weekly - Monthly	- Proponent - Contractor - Subcontractor

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		- Fuel bowsers (if kept onsite) must be equipped with drip trays during each refuelling event to prevent spills and proper containment; - All fuel and chemical containers shall be stored on an impervious base, bunded and capable of containing at least 110% of the total capacity of the storage container; - All fuel and chemical storage containers must be placed on stable/level ground to prevent them from tipping over or spillage; - All Project vehicles, machinery and equipment to be serviced as required to reduce the risk of spillage; - Major servicing of equipment should be conducted off-site; - Fully stacked spill kits are to be kept onsite throughout the construction phase; - Hazardous and hydrocarbon substances are to be stored upright at all times and handled, transported and stored as per MSDS requirements; and - MSDSs are to be kept for each chemical or hydrocarbon used onsite. These must be accessible to all personnel.		

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		The following measures are to be implemented in response to a spill: - Spills are to be stopped at source as soon as possible; - Spilt material is to be contained to the smallest area possible using a combination of absorbent materials, earthen bunds or containment methods; - Spilt material is to be recovered as soon as possible using appropriate equipment. In most cases, it will be necessary to excavate the underlying soil until clean soil is encountered; - Recovered contaminated soil must be disposed of at an appropriate disposal facility; - The Proponent is to be informed of any major spill event (> 200 L spill). A written incident report must be submitted to the Proponent outlining the cause, extent and corrective actions implemented; and - Large spills must be reported immediately to MEFT. If hydrocarbon and petroleum spills of > 200 L occur, MIME must be informed.		
Water consumption	- Potential water wastage.	- Water must be used sparingly during the construction phase; - Water supply infrastructure must be developed in accordance with the DWA-issued borehole abstraction and water use license;	- Daily - Weekly - Monthly	- Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		- No stagnant /pooling water; - Water leakages or pipe bursts should be reported and fixed as soon as possible; - Water bowsers and reservoirs used for temporary storage of water must be covered to reduce water loss through evaporation; - Construction water demand is estimated at 47 m^3/day, plus approximately 10 m^3/day existing farm domestic and stock use (Namib Hydrosearch CC, 2025), and abstraction must remain within the recommended borehole rates; - Flow meters must be installed on the construction water supply and readings recorded daily; and - Borehole water levels must be monitored by the Proponent, through the appointed contractor or hydrogeologist, during construction, and any unexpected decline must be reported to DWA.		
Domestic and construction waste management	- Litter and visual nuisance. - Pollution.	- Ensure consistent and effective housekeeping is maintained onsite throughout the construction phase; - Litter generated during construction activities such as cement bags and scrap metal must be collected and stored directly in waste receptors/skips; - Food waste must be securely stored in sealable waste bins to deter scavengers;	- Daily - Weekly - Monthly	- Proponent - Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		- All construction waste (either combustible or non-combustible) temporary stored onsite must be stored securely in waste drums that have lids and disposed of offsite at an appropriate waste disposal site; - No construction waste may be burnt or buried onsite; - No paints, solvents, thinners, diesel, petroleum products or any other harmful substance may be poured onto the ground; - Ensure designated smoking areas and ash trays; - Used oil and contaminated material must be removed off site by the contractor for disposal at a licensed hazardous waste facility, or through a registered hazardous waste handler appointed by the contractor; - Empty containers, oil filters (if used) and hazardous/hydrocarbon waste should be removed from site and disposed of at a suitable registered hazardous waste facility; - Waste transfer and safe disposal records must be kept by the contractor and checked by the HSE representative during routine site inspections; and - Routine site inspections must include checks for illegal waste disposal, meaning the burying, burning or dumping of waste anywhere other than the		

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		designated waste storage areas, or disposal at an unlicensed site.		
Wastewater (effluent) management	- Odours and health risks.	- Only temporary installed chemical/portable toilets are to be used by the construction workforce; - No employee may relieve himself or herself in the surrounding environment or work area; - Ablution facilities must be cleaned regularly to maintain hygiene and prevent health risks; and - Effluent from portable toilets must be collected and disposed of by licensed contractor at an approved facility, or via the onsite wastewater treatment system once operational licensed under WRMA.	- Daily - Weekly - Monthly	- Proponent - Contractors - Subcontractors
Concrete batching	- Cement contaminated runoff. - Sedimentation and erosion.	- Concrete mixing and batching shall only occur within designated impermeable areas away from drainage pathways; - Wash water from concrete equipment shall not be discharged onto bare soil or into drainage lines; - Cement, aggregates and other construction materials shall be stored under cover or protected from rainfall and wind; and - All spills of concrete, cement slurry or other hazardous materials shall be cleaned up immediately.	- Daily. - After rainfall events - Weekly	- Proponent - HSE appointed representative - Contractors - Subcontractors
Flora	- Potential introduction and	The project site is characterised by sparse desert vegetation. Limited vegetation clearing will be required	- Daily - Weekly	- Proponent - Contractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
	spread of alien or invasive species. - Disturbance or loss of vegetation and sensitive desert habitats.	within the development footprint to accommodate lodge infrastructure, internal access roads, parking areas and associated services. Where protected or controlled plant species are affected, the necessary permits must be obtained prior to clearing. The following precautionary measures will be implemented: - Construction activities will be confined to the designated development areas to prevent unnecessary disturbance to the surrounding environment; - Conduct a thorough weed and seed inspection on all equipment, tools, machinery and delivered materials to prevent the potential introduction and spread of alien or invasive plant species (see template form in Appendix A); - Clearly demarcate one (1) access road to ensure minimal disturbance to vegetation; - No veld fire or controlled burns are permitted at any time; - Herbicides should not be used onsite; and - A suitably qualified botanist appointed by the Proponent must complete a pre-construction survey of protected and endemic plants in the footprint, and	- Monthly	- Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		the required MEFT permits must be obtained before any protected species are cleared.		
Stormwater management	- Stormwater pollution.	- Stormwater shall be diverted away from excavations, fuel storage areas and concrete batching areas where practicable; and - Stormwater control measures shall be inspected after rainfall events and repaired where necessary.	- After rainfall events - Weekly	- Proponent - Contractors - Subcontractors
Socio-economic	- Temporary disturbance existing reserve operations, guests, staff and residents - Local employment and procurement opportunities. - Community grievances.	- Maintain regular communication with affected stakeholders regarding construction activities; - Prioritise local employment where reasonably practicable; - Procure goods and services from local suppliers where feasible; - Implement and maintain a grievance mechanism and complaints register; - Ensure construction traffic complies with approved traffic management measures; and - Minimise disruption to neighbouring properties and public access.	- Weekly - Monthly	- Proponent - HSE Appointed Representative - Contractors - Subcontractors
Resource consumption	- Excessive consumption	- Materials shall be ordered accurately to minimise wastage;	- Daily - Weekly - Monthly	- Proponent - Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
	of natural resources. - Unnecessary depletion of resources.	- Water shall be used efficiently and leaks repaired immediately; - Machinery and equipment shall be switched off when not in use to minimise fuel consumption and emissions; - Construction materials shall be stored appropriately to minimise damage and wastage; and - Electricity and water consumption shall be monitored where applicable		
Wildlife management	- Potential impacts on wildlife movement, behaviour and habitat use. - Potential encounters with wildlife.	- Animals encountered onsite have the right of way; - Feeding of wildlife encountered onsite is strictly prohibited; - Construction activities and vehicle movement to be confined to the designated development of footprint and access roads to minimise disturbance to fauna movement and habitat use; - The unauthorised use of surveillance equipment (e.g. drones) is strictly prohibited; - The construction team must maintain a high level of housekeeping to prevent odours, vermin, pests, and to minimise the attraction of snakes and scorpions to the work area;	- Daily - Weekly - Monthly	- Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		- Construction personnel must be made aware, through site induction, of protected, endemic or sensitive fauna species that may occur within the reserve and conservancy, and report any sightings or incidents accordingly; and - No game fence will be erected. The only fence on the property is the existing fence along the C19, which will remain in place. A fence will only be erected around an airstrip, should one be added in future.		
Historical, archaeological and cultural heritage	- Potential damage to archaeological, cultural heritage or palaeontological resources.	Should contractors discover any surface or subsurface archaeological/palaeontological scatter or site be discovered within the Project area throughout the construction phase, these features must be reported immediately and preserved by following these measures: - No surface scatters or artefacts shall be collected, or damaged in any way; - The chance find procedure (Appendix B) must be adopted and followed; and - The HSE representative or ECO must brief all earthworks and clearing personnel on the chance find procedure at induction, before work commences.	- The duration of the construction phase	- Proponent - Contractors - Subcontractors
Security (overnight guarding of	- Theft of construction materials and	- Given the site's remote location, appropriate accommodation arrangements for construction	- Daily	- Proponent - Contractors - Subcontractors

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
the Project site)	other related security concerns.	workforce must be established and approved by the Proponent. - If a security guard is required, he/she must be sourced from a formal registered security company; and - No visitors are allowed without prior approval from the Proponent.		- Security personnel
Rehabilitation	- Unrehabilitated disturbed areas and long-term environmental degradation	- Disturbance shall be limited to the approved Project footprint; - All temporary infrastructure, construction materials, waste and equipment shall be removed following completion of construction activities; - Final rehabilitation shall be undertaken in accordance with the requirements of this ESMP; and - A final environmental inspection shall be conducted before contractor demobilisation.	- Daily - Weekly	- Proponent - Contractors - Subcontractors
Post construction environmental restoration	- Visual nuisance and unrehabilitated disturbed areas.	- Following the completion of construction activities, a final site inspection must be conducted across all work areas to verify that all partially disturbed areas have been restored in accordance with the requirements outlined in this ESMP; and - Contractors and subcontractors must be issued compliance certificates upon successful completion of	- Once-off. Final site approval exercise post-construction activities	- Proponent

Aspect	Potential impacts	Management and mitigation measures	Monitoring requirement	Responsibility
		work, provided ESMP requirements are satisfactory met.		

5.1.3 OPERATIONAL PHASE

This section outlines the management, mitigation and monitoring measures to be implemented during the daily operation and management of the Sanctuary Sossusvlei Lodge and its associated activities.

All operational activities should be guided by the following principles:

- To manage lodge operations and activities in ways that minimise disturbance to the surrounding natural environment, including soil and water resources;
- To promote and enforce environmentally responsible practices among the operational staff and guests;
- To prioritise the protection of natural and human environments by integrating sustainable practices into all aspects of the Project's operations;
- To comply with industry environmental standards and best practices regarding water, waste, energy and hazardous substance management across all lodge operations; and
- To actively collaborate with regulatory authorities and stakeholders by maintaining transparent communication and ensuring full compliance with conditions of all Project-approved permits, certificates and licences.

The Operations manager, operational staff and guests shall be responsible for ensuring effective implementation of the measures outlined in this section. The specific environmental management measures and monitoring requirements required for implementation during the operational phase are discussed in Table 6.

Table 6 - Environmental and social aspects, impacts, mitigation and monitoring measures for the operational phase

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
Job creation and acquisition of work experience	- Income generation and improved standard of living.	- Ensure that all operational staff members are recruited through the establishment recruitment procedures, giving preference to local labour, disadvantaged and vulnerable groups; and - Ensure all employees are issued formal employment contracts.	- HR policy	- Proponent - Operations manager
Environmental awareness	- Environmental grievances and misconduct due to lack of awareness.	- Keep environmental policies and guidelines on file; - Ensure the approved ESMP is revised as required to align with the provisions outlined in the environmental policies, regulations and their amendments thereof; - Ensure staff are regularly inducted (trained) on environmental matters to ensure they understand the requirements of the approved ESMP; and - Ensure roles and responsibilities of various staff members are clearly defined in their employment contracts.	- Ad hoc	- Operations manager - Operational staff
Domestic waste management	- Littering, visual nuisance, odours and health risks. - Pollution.	- Maintain good housekeeping across all operational areas; - Provide waste bins across various areas of the lodge to ensure proper waste management by the operational staff and guests; - Once emptied, food waste bins must be cleaned, dried and returned to their designated areas; - Ensure collaboration with a licenced waste management contractor to ensure waste is regularly disposed of at the licenced waste disposal site; and	- Daily - Weekly - Monthly	- Operations manager - Operational staff

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
		- Fat trap for the kitchen must be emptied when full and disposed of at the designated area and removed to a registered hazardous waste landfill site.		
Diesel storage and handling (backup generator)	- Potential leakage from the diesel storage tank. - Soil and groundwater contamination. - Fire and explosion hazards.	- Develop an inspection schedule of the double-walled, self-bunded diesel storage tank to ensure leaks are timely detected; - Conduct daily monitoring of diesel tank levels and associated piping; - All fuel delivery activities must be supervised by trained personnel; - Maintain tanks in accordance with MIME petroleum storage requirements; - Tank filling points must be located within bunded containment areas; - Ensure an emergency and fire response procedure is developed, and regular testing/drills are conducted; - No smoking on site; - Display all appropriate HSE signage; and - Regularly inspect automatic shut-off valves and fuel transfer equipment.	- Daily - Weekly - Monthly - Annually	- Operations manager - Operational staff
Spill prevention and	- Fuel and chemical spills - environmental pollution	- Spill kits shall be available at the diesel storage area, chemical storage areas and workshop/maintenance areas; - Employees shall receive spill response training; - All spills shall be contained and cleaned immediately;	- Daily inspections - Monthly inspections	- Operations Manager - HSE Representative

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
emergency response	- Fire hazards - Health and safety risks.	- Spill response procedures shall be displayed at strategic locations; - Major spills shall be reported to the relevant authorities in accordance with legislative requirements; and - Spill response equipment shall be inspected and replenished regularly.		- Employees
Stormwater management	- Potential contamination of surface water by hydrocarbons. - Flooding of paved areas and operational areas during heavy rainfall events.	- Maintain impermeable concrete surfaces in the diesel storage and vehicle maintenance areas; - Prevent fuel or oil from entering stormwater drains; - Regular maintenance on trenches; and - Regular cleaning of paved surfaces and trenches. - Keep all stormwater drainage systems free of litter, sediment and debris; - Ensure spill kits are readily available near stormwater inlets to contain spills before contaminants enter the drainage system; and - During heavy rainfall or flood events, suspend fuel deliveries and any non-essential activities that may increase the risk of pollution where it is safe and practical to do so.	- Monthly - Inspections after major rainfall events	- Operational staff
Gas cylinders storage and refilling	- Fire and explosion. - Gas leaks.	- Full and empty cylinders shall be stored separately; - Cylinders shall be protected from direct sunlight, impact and ignition sources;	- Daily - Weekly - Monthly	- Operations Manager - HSE Representative

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
	- Injury to employees and guests. - Damage to infrastructure.	- Damaged or leaking cylinders shall be isolated immediately and returned to the supplier; - No smoking or open flames shall be permitted within the designated gas storage area; - Appropriate fire extinguishers shall be available and maintained; and - Only authorised personnel shall handle gas cylinders.		- - Employees
Groundwater abstraction and water quality	- Depletion of the fractured rock aquifers, which have little storage and erratic recharge. - Health risks from fluoride and nitrate in untreated drinking water.	- Abstract only from the seven production boreholes and within their recommended rates and the DWA licence conditions (Namib Hydrosearch CC, 2025); - Measure water levels weekly in the production boreholes and in monitoring boreholes WW208126, WW208130 and WW208287, after overnight recovery from pumping; - Record flow meter readings on each production borehole; - Operate rainfall stations at Magistraat, northern Inkruip and Schulz; - Appoint a registered hydrogeologist to reassess the pumping rates every year from the monitoring data; - Sample the production boreholes every year in the rainy season (December to January) for microbiological analysis and full chemistry; - Treat drinking water for fluoride and nitrate to the drinking water standards under the Water Resources Management Act, 2013 (Act No. 11 of 2013), quoting	- Weekly (water levels and flow meters) - Annually (pumping rate reassessment) - Annually, December to January (water quality) - Data reviewed in each bi-annual report	- Operations manager

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
		nitrate as N against 11 mg/L, and do not use WW208131 for drinking water; and - Make staff aware that the groundwater supply is limited and that water must be conserved.		
Greywater management – laundry and housekeeping operations	- Contaminated wastewater with oils and detergents.	- Use biodegradable detergents; - Ensure greywater drainage systems are fully functional to prevent accumulation of stagnant greywater; and - Prevent discharge of greywater into natural drainage systems.	- Daily - Weekly - Monthly	- Operations manager
Wastewater management – ablution facilities	- Sewer overflow and contamination.	- Maintain plumbing systems to prevent leaks; - Daily cleaning and reporting of issues with checklist; and - Good housekeeping.	- Monthly	- Operational staff
General waste management (food waste and packaging)	- Litter and improper disposal.	- Provide labelled waste bins and segregated waste; and - Waste must be disposed at licenced waste disposal facilities.	- Daily - Weekly	- Operations manager - Operational staff
Hazardous and hydrocarbon waste (oil filters and contaminated materials)	- Soil contamination.	- Store hazardous and hydrocarbon waste in sealed containers and dispose through licenced waste contractors at a licenced waste disposal site; and - Used oil to be removed through registered companies with the appropriate permits in place.	- Weekly - Monthly	- Operations manager

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
Occupational health and safety	- Fire hazards and chemical exposure. - Workplace injuries.	- Provide PPE to operational staff; - Maintain firefighting equipment and conduct emergency response training; - Ensure appropriate safety signage is in place to inform personnel and guests of hazards, such as prohibiting the use of mobile phones in the vicinity of the diesel storage area; - Ensure that occupational health incidents and safety hazards are recorded and reported to the regulatory authorities; and - Maintain first aid kits onsite.	- Monthly	- Operations manager - Operational staff
Security, parking and public safety	- Theft and vandalism - Loitering - Harassment of guests or employees - Public safety risks - Vehicle collisions within the parking and arrival areas	- CCTV cameras shall be installed and maintained in strategic locations; - Adequate lighting shall be provided throughout the facility; - Security personnel shall monitor the premises where required; - Loitering shall not be permitted on the premises, and individuals causing disturbances shall be requested to leave; - Where necessary, assistance shall be sought from the Namibian Police or local authorities; - Employees shall be trained to manage security incidents safely without unnecessary confrontation;	- Daily - Weekly - Monthly	- Operations Manager - HSE Representative - Security Personnel - Employees

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
		- Emergency contact numbers shall be displayed prominently; - Speed limits and directional signage shall be enforced within the facility; and - Pedestrian walkways shall be clearly marked where applicable.		
Traffic flow	- Safety risks for guests and vehicles.	- Erect appropriate road signage, speed control measures and other traffic control measures (as approved in consultation with the Roads Authority (RA)); and - Scheduling of fuel deliveries during off-peak traffic periods.	- Once off	- Operations manager
Maintenance of backup power and diesel storage infrastructure	- Fuel leaks from the diesel storage tank, piping and the backup generator - Soil and groundwater contamination - Fire and explosion hazards	- Develop and implement a preventative maintenance programme for the diesel storage tank, piping, backup generator and associated infrastructure; - Conduct routine inspections for leaks, corrosion, cracks and mechanical defects; - Maintain and calibrate leak detection systems; - Inspect emergency shut-off valves regularly to ensure they are fully operational; - Repair or replace damaged equipment immediately upon identification; and - Maintain records of inspections, maintenance activities, repairs and testing.	- Daily visual inspections. - Monthly inspections.	- Operations Manager. - HSE Representative. - Maintenance personnel

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
Staff training and competency	- Unsafe work practices - Increased risk of incidents and accidents - Poor emergency response - Environmental pollution resulting from improper handling of fuels and chemicals	- All employees shall receive induction training before commencing work; - Refresher training shall be provided periodically; - Employees shall receive training on fuel handling, hazardous chemicals, spill response, fire prevention, first aid, emergency response, guest safety and waste management; and - Training records shall be maintained and reviewed periodically.	- Annually	- Operations Manager - HSE Representative
Pest, vermin and scavenger management	- Attraction of rodents, birds, insects and other scavengers. - Health and hygiene risks. - Damage to infrastructure. - Nuisance to guests and	- Maintain a high standard of housekeeping throughout the facility; - Waste bins shall be covered, leak-proof and emptied regularly to prevent the attraction of pests and scavengers; - Food waste shall not be allowed to accumulate on the premises; - Waste storage areas shall be cleaned regularly; - Pest infestations shall be monitored and managed using environmentally responsible pest control methods; and	- Daily housekeeping inspections - Weekly - Monthly	- Operations Manager. - HSE Representative. - Operational staff.

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
	neighbouring properties.	- Employees shall report any evidence of pest infestations immediately.		
Vegetation management	- Overgrown vegetation creating fire hazards. - Attraction of snakes, rodents and other pests. - Poor visual appearance	- Vegetation shall be maintained regularly to ensure a neat and safe environment; - Grass and shrubs shall be trimmed to maintain visibility around the backup generator area, entrances, exits and parking areas; - Invasive alien plant species shall be removed where identified; and - Herbicides shall only be used where necessary and in accordance with the manufacturer's instructions.	- Monthly	- Operations Manager - Maintenance personnel.
Operational wastewater management	- Contamination of stormwater - Soil and groundwater pollution - Blockage of drainage systems.	- Wastewater generated from routine cleaning of paved areas, vehicles and other operational activities shall be directed to the approved drainage system and shall not discharge directly into the stormwater network; - Oil-water separators shall be inspected, maintained and cleaned regularly; - Detergents and cleaning agents shall be biodegradable where reasonably practicable; - Wastewater shall not be allowed to pond or flow beyond the site boundary; and - Drainage systems shall be inspected regularly for blockages or signs of contamination.	- Weekly - Monthly	- Operations Manager. - HSE Representative. - Operational staff.

Aspect	Potential impact	Management and mitigation measures	Monitoring requirement	Responsibility
Operational phase				
Lighting (day and night operations)	- Disturbance to neighbouring properties - Reduced visibility if lighting is inadequate - Increased security risks. - Attraction of insects	- Provide sufficient lighting to ensure the safety of employees, guests and vehicles during hours of darkness; - Lighting shall be directed downward and shielded where practicable to minimise light spill onto adjacent properties and public roads; - Burnt-out or damaged lights shall be replaced promptly; - Lighting around the backup generator area, entrances, exits and parking areas shall be maintained in good working order; and - Lighting should not interfere with motorists' visibility or create glare.	- Weekly - Monthly - Night-time inspections	- Operations Manager. - HSE Representative. - Maintenance personnel.

5.1.4 DECOMMISSIONING PHASE

The decommissioning phase follows the operational phase and involves the safe closure and removal of lodge infrastructure once the facility is no longer required. This section provides a site-specific plan developed to ensure that appropriate environmental management practices are implemented during the decommissioning and closure phase of the Project.

The decommissioning phase:

- Provide effective and implementable site-specific procedures and mitigation measures to monitor and manage environmental impacts throughout the decommissioning phase of the Project. These measures aim to minimise the likelihood and extent of post-decommissioning environmental impacts, particularly those associated with contamination of soils and water resources;
- Ensure safe decommissioning and removal of the backup diesel generator, diesel storage tank, piping, separators and associated infrastructure in accordance with applicable petroleum handling regulations;
- Establish a long-term management plan for the Project site to ensure its safe transition to a suitable future land use;
- Aims to eliminate the long-term liability issues and reduce the likely occurrence of irreversible impacts post site closure; and
- Provide a platform for the Proponent to engage/collaborate with local communities, stakeholders and regulatory authorities in the planning and implementation of decommissioning activities, including the disposal of waste, building remnants and post-closure care requirements.

Prior to the implementation of any decommissioning or closure measure, a thorough assessment of potential alternative land uses for the site must be conducted, particularly in consultation and collaboration with selected stakeholders. This will ensure that opportunities for sustainable land use and appropriate ecological restoration measures are fully considered and effectively integrated into the overall site closure strategy. It is anticipated that a reputable contractor will be engaged for the decommissioning program.

Where required, environmental investigations such as soil sampling and groundwater assessments will be conducted following the removal of the diesel storage tank and associated infrastructure to determine whether hydrocarbon contamination has occurred and whether remediation measures are required.

The decommission phase or site closure is yet to be determined. However, should this be required or determined for any reason, the following general conditions outlined in Table 7 shall be followed and implemented, as best practice measures.

Table 7 - Rehabilitation plan for the Project

Aspect	Management measures required	Monitoring requirements	Responsibility
Tools and equipment	– All fuel containers must be removed, and any hydrocarbon stains within Project areas must be promptly and thoroughly cleaned up and disposed of at a registered hazardous waste landfill site; and – Ensure all hand and power tools are cleared from site prior to site closure.	– Conduct visual inspections of all operational areas to ensure removal of tools, containers and equipment. – Inspect storage areas for hydrocarbon stains or spills. – Verify that contaminated cleaning materials are properly collected and disposed of through approved waste management procedures. – Record findings in the site closure inspection.	– Contractor
Wastewater management systems	- All drainage systems, wastewater pipes and components must be disconnected, dismantled and safely disposed offsite at an approved waste disposal facility or wastewater treatment works; and - Ensure all wastewater is properly drained (i.e. no pooling shall remain on-site upon closure).	– Conduct inspections during the dismantling process to ensure all drainage pipes, separators and wastewater infrastructure are properly removed. – Inspect the site to verify that no wastewater pooling following system removal.	– Contractor – Operations manager
Hazardous and hydrocarbon waste management	- Hazardous and hydrocarbon waste including contaminated soil, absorbent materials, oil filters and fuel residues must be stored in sealed containers. - Hazardous waste materials must be disposed of at a licenced hazardous waste disposal site.	– Inspection of hazardous and hydrocarbon waste storage containers. – Verification of hazardous and hydrocarbon waste disposal certificates.	– Contractor – Operations manager

Aspect	Management measures required	Monitoring requirements	Responsibility
Building remnants, scrap metals etc.	- All infrastructure must be demolished to ensure there will be no free-standing structures; and - Building remnants should be disposed offsite at a registered waste disposal site.	– Disposal certificates.	– Operations manager – Contractor
Site rehabilitation	- Disturbed areas must be rehabilitated by levelling the ground and stabilising exposed soils; - Where necessary, vegetation should be re-established to restore the ecological integrity and aesthetic value of the site; and - Rehabilitated areas must be monitored after closure by a rehabilitation specialist appointed by the Proponent, and re-treated where vegetation fails to establish.	– Monitoring of soil stability and vegetation establishment where applicable.	– Project manager – Contractor
Site closure	- Conduct a final site inspection with the representatives of the relevant regulatory authorities to verify satisfaction with decommissioning outcomes; and - Ensure that all environmental and safety requirements have been fulfilled prior to closure approval.	– Final environmental inspection and closure audit. – Verification that all decommissioning measures have been completed.	– Proponent – Operations manager – Regulatory representative
Future land use	- Collaborate with relevant stakeholders and authorities to determine suitable future land use for the site; and - Ensure that the site is safe and environmentally stable for any future development or land use.	– Review of rehabilitation outcomes and site condition prior to future land approval.	– Proponent – Regulatory representative

6 PROPERTY TRANSFER, LEASE OR SALE

In the event that lodge operations cease due to a transfer of ownership or lease of the property, the incoming owner is required to comply fully with all conditions outlined in this ESMP. At this stage, should infrastructure be removed, it is recommended that the Proponent implement a comprehensive rehabilitation plan to restore the site to its natural and ecological state, as far as reasonably practicable. This will prevent further environmental degradation and prepare the land for its next intended use.

7 IMPLEMENTATION OF THE ESMP

This ESMP:

A. Has been prepared pursuant to the contract with the Proponent;
B. Has been prepared on the basis of information provided to ECC up to July 2026;
C. Is for the sole use by the Proponent, lodge employees, contractors and subcontractors during the planning, construction, operational and decommissioning phases;
D. Must not be used by any person other than (1) the Proponent (2) contractors and subcontractors; and
E. Must not be copied without the prior written permission of ECC.

8 REFERENCES

Namib Hydrosearch CC and Bockmühl, F. (2025). *Groundwater exploration and development on Farm Neuhof, Hardap Region*. Final report, Project NHN268, October 2025. Prepared for Neuhof Reserve (Pty) Ltd and Abercrombie and Kent Namibia (Pty) Ltd. Windhoek: Namib Hydrosearch CC.

APPENDIX A – WEED AND SEED INSPECTION FORM

APPENDIX B - CHANCE FIND PROCEDURE

This section covers the procedures, reporting and management requirements to be followed should sites or items of archaeological or heritage significance be discovered, encountered or unearthed within the operational areas of the proposed Sanctuary Sossusvlei Lodge.

Scope: The "chance finds" procedure covers the actions to be taken from the moment a heritage resource or archaeological object is discovered during construction, operation, maintenance or decommissioning activities, until the site has been investigated and assessed by a qualified archaeologist or other appropriately qualified person.

Compliance: The "chance finds" procedure is intended to ensure compliance with relevant provisions of the National Heritage Act, No. 27 of 2004, especially Section 55 (4) which states that: *"A person who discovers any archaeological or palœontological object or meteorite must as soon as practicable report the discovery to the Council"*.

The procedure of reporting set out below must be observed so that heritage remains reported to NHC are correctly identified in the field.

Responsibilities:
Contractors/employees – must exercise due caution during any excavation, maintenance or decommissioning activities. Should any archaeological artefacts, fossils, human remains or heritage objects be discovered, work in the immediate area must cease immediately and the finding must be reported to the Project supervisor.
Operations manager – responsible for securing the discovery site, preventing further disturbance, and notifying the Proponent as soon as possible. The Operations manager must ensure that no further work occurs in the affected area until clearance is granted.
Proponent – responsible for establishing a temporary exclusion zone around the discovery site, determining safe working boundaries and formally notifying the relevant authorities and request for inspection.
Archaeologist – Upon request, the appointed archaeologist will inspect the site, identify the significance of the discovered materials, provide guidance on appropriate management actions and, where necessary, recover or document the remains.

Table 8 provides the environmental aspects and impacts, mitigation and monitoring measures for archaeological and heritage aspects.

Table 8 - Archaeological and heritage aspects

Responsibility:	- The Proponent, Project manager, Project employees, contractors and subcontractors
Potential issues or impacts:	– Impact on heritage features.
Aspects	**Management /mitigation measures**

Potential to unearth heritage objects or resources.	- All personnel and contractors working at the Project site should be aware of the general duty to report any archaeological or palaeontological find to the NHC as soon as practicable, in terms of section 55(4) of the National Heritage Act, No. 27 of 2004. Should a heritage site or archaeological site be uncovered or discovered particularly during the construction phase, a chance find procedure should be applied in the order they appear below: - If operating machinery or equipment, immediately stop work; - Demarcate the site with danger tape; - Determine global positioning system (GPS) position if possible; - Report findings to the Project supervisor; - Report findings, site location and action taken to the Proponent; - Cease any works in the immediate vicinity; - Visit the site and consult any potentially affected community to determine whether work can proceed without damage to the findings; - Determine and demarcate the exclusion boundary; - Site location and details to be added to the Project's geographic information system (GIS) for field confirmation by an archaeologist; - Inspect the site and confirm addition to the Project GIS; - Advise the NHC and request written permission to remove findings from work area; and - Recover, package and label findings for transfer to the National Museum.
	Should human remains be found, the following actions must be followed: - Apply the chance find procedure as described above; - Schedule a field inspection with an archaeologist to confirm that the remains are human; - Advise and liaise with the NHC and Police; and - Remains will be recovered and removed to either the National Museum or the National Forensic Laboratory.