SKORPIO ALTERNATIVE FUELS NAMIBIA (PTY) LTD

SEAWEED AQUACULTURE PILOT PROJECT

Environmental and Social Management Plan Report for the Proposed Construction and Operation of a Seaweed Aquaculture Pilot Project and its Associated Infrastructure (Ponds, Water Supply Pipelines, Solar pv, 2x Wind Turbines and a Production Facility)

Wlotzkasbaken Settlement, Erongo Region, Namibia

August 2025

TABLE OF CONTENTS

LIST OF TABLES

1 INTRODUCTION

1.1 Purpose of the Report

The Environmental and Social Management Plan (ESMP) will be implemented during construction and operation. ESMP implementation is a cyclical process that converts mitigation measures into actions and through cyclical monitoring, auditing, review and corrective action, ensure conformance with stated ESMP aims and objectives.

The ESMP detail actions to ensure compliance with regulatory bodies and that environmental performance is verified through information on impacts as they occur.

1.2 Introduction to the Proposed Activities

SKORPIoN ALTERNATIVE FUELS NAMIBIA (hereinafter referred to as SKORPIoN) intends to construct and operate a 20-hectare (ha) Seaweed Aquaculture Farm Pilot Project, situated along the Namibian coastline in Wlozkasbaken Settlement between Swakopmund and Henties Bay, in proximity to the existing Erongo Desalination Plant and NamPower substation and conveniently near the Walvis Bay Port.

Five (5) separate ECC Applications are submitted to MEFT; DEA, in accordance with the proposed Project activities outlined below:

1. Two Bulk Water Supply Pipelines.
2. Land-Based Seaweed Aquaculture Ponds.
3. 2 MWp Solar Photovoltaic (PV) Plant.
4. 2x Four (4) MWp Wind Turbines.
5. Green Hydrogen and Biofuels Production Facility.

The objectives of the proposed Pilot Project include the following:

- Sustainable cultivation and harvesting of seaweed.
- Local Employment.
- Significant investment in the project area.
- Training and research opportunities.
- Demonstration of seaweed aquaculture farming applications.

SKORPIoN is an innovative sub-commercial pilot initiative aimed at transforming the production of biofuels. This pioneering endeavor is a collaboration between SKORPIo Alternative Fuels Namibia (Pty) Ltd and SeaH4 (Pty) Ltd.

I.N.K Enviro Consultants cc (hereinafter referred to as I.N.K), an independent firm of environmental consultants, has been appointed to undertake the Environmental and Social Impact Assessment process for this project.

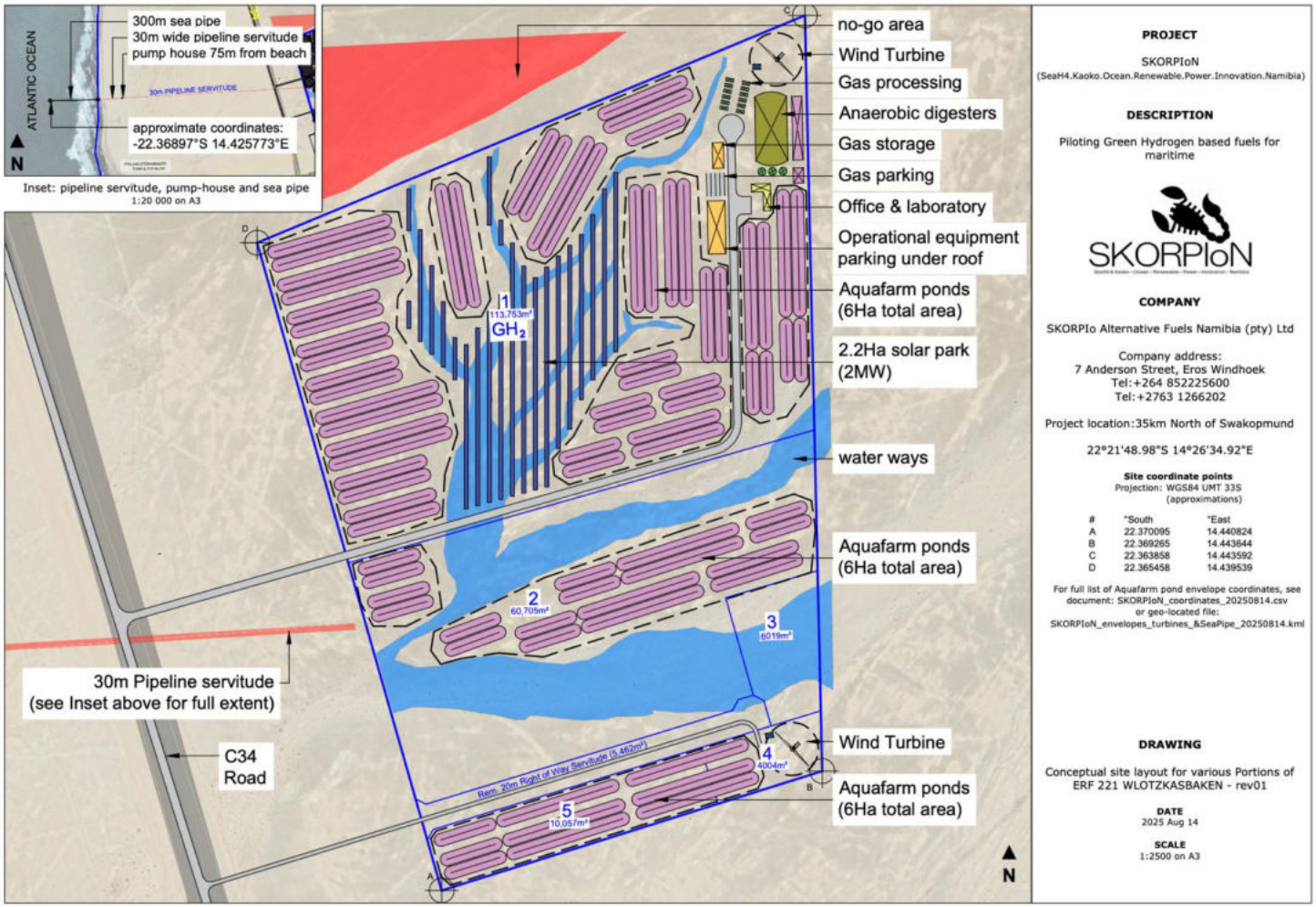

Figure 1: Site Layout Map

2 IDENTIFICATION OF APPLICABLE ENVIRONMENTAL GUIDELINES

2.1 Introduction

The Republic of Namibia has five tiers of law and several policies relevant to environmental assessment and protection, which include:

- The Constitution.
- Statutory law.
- Common law.
- Customary law.
- International law.

As the main source of legislation, the Constitution of the Republic of Namibia (1990) makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws intended to protect the natural environment and mitigate against adverse environmental impacts.

The management and regulation of the activities in the Namibian ocean fall within the jurisdiction of the Ministry of Fisheries and Marine resources. The environmental regulations are guided and implemented by the DEA within the MEFT.

In the context of the proposed project activities, there are several laws and policies currently applicable.

The Marine resources Act 27 of 2000 provides for the conservation of the marine ecosystem, the responsible utilization, conservation, protection, promotion of marine resources in a sustainable manner and for the control of marine resources for these purposes. The Minister of Fisheries is empowered to make regulations under section 61 on a broad number of topics including “regulating or prohibiting the discharge in the sea or discarding on the seashore and land of specified substances or materials, or substances or materials not complying with specified requirements or having specified properties”

The EIA Policy (1995) is enforced through the Environmental Management Act, 7 of 2007 and the EIA Regulations of 6 January 2012 (EIA Regulations). In terms of this legal framework certain identified activities may not commence without an environmental clearance issued by MEFT.

2.2 Applicable Authorities

2.2.1 Ministry of Environment, Forestry and Tourism

The mission of the Ministry of Environment, Forestry and Tourism is to promote biodiversity conservation in the Namibian environment through the sustainable utilization of natural resources and tourism development for the maximum social and economic benefit of its citizens. MEFT develops, administers and enforces environmental legislation and policy.

The MEFT's Department of Environmental Affairs ("DEA") is mandated to give effect to Article 95L of the Constitution by promoting environmental sustainability. The Environmental Commissioner serves as head of the DEA. The DEA is responsible for, inter alia, the administration of the EIA process undertaken in terms of the Environmental Management Act, 2007 and the EIA Regulations 2012. The DEA will be responsible for issuing a decision on the application for an ECC, based on the recommendations from MAFWLR. If approved, the DEA will issue an Environmental Clearance Certificate.

2.2.2 Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR)

This Ministry is responsible for the management and development of fisheries and aquaculture in Namibia. The Ministry is comprised of four directorates; two of which include the Directorate of Resource Management and Directorate of Operations and Surveillance. The Directorate of Resource Management is responsible for scientific research and providing advice on the state of commercially important marine fish stocks and recommending catch quotas. It is also responsible for managing and regulating species fish size limits, dates of closed fishing seasons, declaring areas closed to fishing and determining fishing gear use.

The Directorate of Operations and Surveillance is responsible for monitoring, controlling and surveillance of fishing-related activities both at sea and onshore.

The MAFWLR is a key stakeholder in the project and the ESIA process due to the proposed installation of the water supply pipelines on Namibian waters. The construction of the ponds have the potential to have both negative and positive impact on the marine ecology and the fishing industry.

2.2.3 Ministry of Industries, Mines and Energy

The Ministry of Mines and Energy was constitutionally established to take custody of the diverse geological, mineral and energy resources, and to ensure their contribution to the country's socioeconomic development. To formulate policies and legislations that effectively regulate activities in mining and energy sectors; generate knowledge and information on resources and provide services to stimulate investment for sustainable economic development and benefit to all Namibians.

2.3 The Integrated Coastal Management Bill

Once enacted, the Integrated Coastal Management Bill (2014) aims to establish a system of integrated coastal management in Namibia in order to promote the conservation of the coastal environment, maintaining the natural attributes of the coastal landscapes and seascapes, and ensuring the sustainable development and use of the natural resources within the coastal zone that is also socially, economically and ecologically justifiable.

2.4 Coastal Strategic Environmental Assessments

Two Namibian coastal Strategic Environmental Assessments (SEAs) were undertaken between 2006 and 2008, i.e. one for the northern regions of Kunene and Erongo and another for the southern regions of Karas and Hardap. These draw on international experience and were undertaken at a time of mounting production sector pressures within Namibia. Being an initiative of the Namibian Government through MEFT, the two SEAs seek to inform political and technical decision makers at local, regional and national levels.

The 2008 “SEA for the coastal areas of the Erongo and Kunene Regions” compiled by the Namibian Coast Conservation & Management Project (NACOMA) is aimed at ensuring informed decisions on issues related to biodiversity conservation, land use planning and socio-economic development planning in the Kunene and Erongo coastal regions.

2.5 Relevant Namibian Gudelines and Policies

Namibia’s policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies are used in providing support to legal interpretation or guidance for civil servants and other stakeholders in the implementation of government objectives.

2.5.1 The Namibia Vision 2030

The principles that underpin Vision 2030, a policy framework for Namibia's long-term national development, comprise the following:

- Good governance
- Partnership
- Capacity enhancement
- Comparative advantage
- Sustainable development
- Economic growth
- National sovereignty and human integrity
- Environment
- Peace and security

Vision 2030 states that natural environments are disappearing quickly. Consequently, the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets. Vision 2030 emphasises the importance of promoting healthy living which includes that most Namibians are provided with safe drinking water. The importance of developing wealth, livelihood, and the economy is also emphasized by Vision 2030. This includes infrastructure provision like transport, communication, water, and electricity.

2.6 Other Relevant Local Policies and Legislation

Below (Table 5) is a list of other applicable local policies and legislation for the proposed project.

Table 1: List of local policies and legislation

Local Legislation, and adopted Policies, Protocols and Agreements	Summary	Environmental principles
Pollution Control and Waste Management Bill	This Act promote sustainable development; to provide for the establishment of a body corporate to be known as the Pollution Control and Waste Management	The environmental principle specific to this Bill is pollution control.

	Agency; to prevent and regulate the discharge of pollutants to the air, water and land; to make provision for the establishment of an appropriate framework for integrated pollution prevention and control; to regulate noise, dust and odor pollution; to establish a 'system of waste planning and management; and to enable Namibia to comply with its obligations under international law in this regard.	
Namibia Ports Authority Act 2 of 1994	To provide for the establishment of the Namibia Ports Authority to undertake the management control of ports and lighthouse in Namibia and the provision of facilities and services related thereto.	To manage and exercise control over the operation of ports and lighthouse and other navigational aids in Namibia and its territorial waters.
Aquaculture Act 18 of 2002	This Act regulate and control aquaculture activities; to provide for the sustainable development of aquaculture resources; and to provide for related matters.	Environmental principles of this act are to promote sustainable aquaculture, management, protection and conservation of marine and onshore aquatic ecosystems.
Urban and Regional Planning Act no. 5 of 2018	This Act consolidate the laws relating to urban and regional planning; to provide for a legal framework for spatial planning in Namibia; to provide for principles and standards of spatial planning.	Environmental principles specific to this act are harmonization and streamlining of spatial planning in order to avoid land use conflicts, delays in decision making and to minimize negative environmental impacts.
Atmospheric Pollution Prevention Ordinance 11 of 1976	To provide for the prevention of the pollution of the atmosphere	To prevent atmospheric pollution and minimize environmental impacts associated with it.
Public and Environmental Health Act 1 of 2015	To provide a framework for a structured uniform public and environmental health system in Namibia.	Principles of this act includes protecting individuals and communities from public health risks, encourage

		community participation to create a healthy environment; and provide for early detection of diseases and public health risks.
National Climate Change Policy	This policy identifies technology development and transfer to be a key issue for which strategies and action plans should be developed.	Promote and encourage new and clean technologies to be developed to reduce greenhouse gas emissions.
Convention on Biological Diversity (CBD)	Namibia ratified the Convention on Biological Diversity in 1992. As a party to the CBD, the Namibian government is obliged to develop a national strategy for the conservation of biodiversity.	Environmental principles of this are to establish a system of protected areas and integrate biodiversity considerations into development planning.
Convention to Combat Desertification (UNCCD)	Namibia ratified the UN Convention to Combat Desertification in 1995. This convention addresses the socio-economic and biophysical drivers of land degradation and desertification.	Objectives are to adopt integrated strategies that improve land productivity, rehabilitate degraded areas, and ensure sustainable management of land and water resources, with a focus on improving community livelihoods.

2.7 Relevant International Standards

2.7.1 The EIB's Statement of Environmental and Social Principles and Standards (EIB, 2009)

The European Investment Bank (EIB) adopted an Environmental Statement in 1996 to underline its commitment to protecting and improving the natural and built environment according to EU policy (EIB, 209). The statement focuses on, a) the principles on which the EIB approach to environmental and social issues are based and b) the environmental and social performance standards that ensure compliance with Bank requirements. The principles and standards are

derived from EU policy and law and supplemented by other examples of international good practice. The EIB requires that all the projects it is financing are acceptable in environmental and social terms by applying appropriate safeguards to all its operations.

2.7.2 The EIB's Environmental and Social Handbook (EIB, 2013)

The EIB Environmental and Social Handbook provides an operational translation of the policies and principles contained in the 2009 EIB Statement of Environmental and Social Principles and Standards (see above). Principles include the Environmental and Social Impact Assessment process of identifying predicting, evaluating a project's positive and negative environmental and social impact on the biophysical and human environment as well as identifying ways of avoiding, minimizing, mitigating and compensating, including offsetting in the case of the environment and remedying in the case of social impacts, by applying the mitigation hierarchy. This process includes consultation with direct and indirect stakeholders and the elaboration of an environmental and social management plan detailing the implementation of the mitigation measures.

2.7.3 World Bank Environmental and Social Framework

The W orld Bank's Environmental and Social Framework (ESF) enables the World Bank and Borrowers to better manage environmental and social risks of projects and to improve development outcomes. The ESF offers broad and systematic coverage of environmental and social risks. It makes important advances in areas such as transparency, non-discrimination, public participation, and accountability - including expanded roles for grievance mechanisms. It brings the World Bank's environmental and social protections into closer harmony with those of other development institutions.

The ESF consists of:

- The World Bank's Vision for Sustainable Development.
- The World Bank's Environmental and Social Policy for Investment Project Financing (IPF) which sets out the requirements that apply to the Bank.
- The 10 Environmental and Social Standards (ESS), which set out the requirements that apply to Borrowers.
- Bank Directive: Environmental and Social Directive for Investment Project Financing

- Bank Directive on Addressing Risks and Impacts on Disadvantaged or Vulnerable Individuals or Groups.

2.7.4 World Bank's Pollution Prevention and Abatement Handbook (PPAH)

The Pollution Prevention and Abatement Handbook (PPAH) promotes the concepts of sustainable development by focusing attention on the benefits, both environmental and economic, of pollution prevention, including cleaner production and good management techniques. In many cases, the guidelines provide numerical targets for reducing pollution, as well as maximum emissions levels that are normally achievable through a combination of cleaner production and end-of-pipe treatment. The guidelines are designed to protect human health, reduce mass loading to the environment, draw on commercially proven technologies, be cost effective, follow current regulatory trends and promote good industrial practices, which offer greater productivity and increased energy efficiency.

2.7.5 Applicable International Finance Corporation (IFC) Performance Standards

IFC's Environmental and Social Performance Standards define IFC clients' responsibilities for managing their environmental and social risks. The Performance Standards provide guidance on how to identify sustainability risks and impacts and are designed to help avoid, mitigate, and manage them as a way of doing business in a more sustainable way.

The following are the performance standards that are applicable to the construction and operation of the project and are used as the basis of investigation for the ESMP:

Table 2: Applicable Performance Standards

IFC Performance Standard	Description	Applicable	Not Applicable
1. Environmental and Social Management System	An environmental and social management system (ESMS) helps companies integrate plans and standards into their core operations—so they can anticipate environmental and social risks posed by their business activities and avoid, minimize, and compensate for such impacts as necessary. A good management system provides for consultation with stakeholders and a means for complaints from	☑	☐

IFC Performance Standard	Description	Applicable	Not Applicable
	workers and local communities to be addressed.		
2. Labour and Working Conditions	It asks that companies treat their workers fairly, provide safe and healthy working conditions, avoid the use of child or forced labor, and identify risks in their primary supply chain.	☑	☐
3. Pollution Prevention and Control	It guides companies to integrate practices and technologies that promote energy efficiency, use resources—including energy and water—sustainably, and reduce greenhouse gas emissions.	☑	☐
4. Occupational Health and Safety, Public Health and Security	It helps companies adopt responsible practices to reduce such risks including through emergency preparedness and response, security force management, and design safety measures.	☑	☐
5. Land Acquisition and Involuntary Resettlement	It advises companies to avoid involuntary resettlement wherever possible and to minimize its impact on those displaced through mitigation measures such as fair compensation and improvements to and living conditions. Active community engagement throughout the process is essential.	☐	☑
6. Biodiversity and Ecosystems	It recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and managing living natural resources adequately are fundamental to sustainable development.	☑	☐
7. Rights and Interests of Indigenous People	It seeks to ensure that business activities minimize negative impacts, foster respect for human rights, dignity and culture of indigenous populations, and promote development benefits in culturally appropriate ways. Informed consultation and participation with IPs throughout the project process is a core requirement and may include Free, Prior and Informed Consent under certain circumstances.	☑	☐

IFC Performance Standard	Description	Applicable	Not Applicable
8. Cultural Heritage	Cultural heritage encompasses properties and sites of archaeological, historical, cultural, artistic, and religious significance. It also refers to unique environmental features and cultural knowledge, as well as intangible forms of culture embodying traditional lifestyles that should be preserved for current and future generations. PS8 aims to guide companies in protecting cultural heritage from adverse impacts of project activities and supporting its preservation. It also promotes the equitable sharing of benefits from the use of cultural heritage.	☑	☐

2.8 International Conventions and Agreements

Below (Table 7) is a list of applicable international conventions and agreements for the proposed project.

Table 3: International conventions and agreements

Legislation	Summary	Environmental principles
Stockholm Convention on Persistent Organic Pollution (2001)	Is a global treaty to protect human health and the environment from chemicals that remain intact in the environment for longer periods.	To protect human health and the environment from persistent organic pollutants; especially those used in marine paints.
Vienna Convention for the protection of ozone layer (1985)	This Convention is aimed to promote cooperation among nations by exchanging information on the effects of human activities on the ozone layer.	To take control actions to protect the ozone layer.
Montreal protocol (1997)	Is a global agreement to protect the earth's ozone layer by phasing out the chemicals that depletes it.	Control substances and chemicals production that are depleting the ozone layer.

UN Framework on climate change (1992)	This framework was introduced to stabilize greenhouse gas concentrations at a level that would prevent dangerous anthropogenic interference with the climate system.	Countries should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects.
Kyoto protocol (1997)	It is also designed to assist countries in adapting to the adverse of climate change. It facilitates the development and deployment of technologies that can help increase resilience to the impacts of climate change.	Reduce GHG emission at least by 18%.
Basel Convention (1992)	To protect human health and the environment against the adverse effects of hazardous wastes.	Reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes
Conventions on Wetland of International Importance (1971)	Conserving wetlands (swamps, marshes, lakes, mudflats, peat bogs and other bodies of water whether natural or artificial, permanent or temporary).	This convention establishes a management framework aimed at conserving the wetland and ensuring its wise use. The Walvis Bay is recognized under this convention.
Paris Agreement (2015)	Is a legally binding international treaty on climate change.	To limit global warming to preferably 1.5 degrees Celsius, compared to pre-industrial levels.
Internal Convention on Biological Diversity	Among others, this Convention aims at conservation of biological diversity and promote sustainable development of biological components.	Conservation of biological diversity, sustainable use and equitable sharing of utilization of biodiversity, ecosystem assessment and monitoring and mitigation of adverse environmental impacts.

2.8.1 Applicable Listed Activities

The EIA Regulations promulgated in terms of the Environmental Management Act, identify certain activities which could have a substantially detrimental effect on the environment. These listed activities require environmental clearance from MEFT prior to commencing. The following listed activities (Table 8) identified in the regulations apply to the proposed project:

Table 4: Listed activities triggered by the proposed Project.

Listed activities
The construction of facilities for – The generation of electricity. Hazardous Substance treatment, handling and storage. The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substance Ordinance, 1974.abstraction of ground or surface water for industrial or commercial purposes.
Water Resource Development - The abstraction of ground or surface water for industrial or commercial purposes.
Infrastructure - The construction of facilities for - oil, water, gas and petrochemical and other bulk supply pipelines.

3 EMP ADMINISTRATION

Copies of the EMP shall be kept at the site office and will be distributed to all senior contract personnel. All senior personnel shall be required to familiarize themselves with the contents of this document.

4 ROLES AND RESPONSIBILITIES

The implementation of the EMP requires the involvement of several stakeholders, each fulfilling a different but vital role to ensure sound environmental management during each phase.

4.1 SHEQ Manager

The SHEQ Manager will delegate powers to the Operations Manager and Supervisors who will be required to execute the responsibilities, in compliance with relevant legislation and the ESMP.

Any on-site decision regarding environmental management is ultimately shared between the SHEQ Manager, and Operations Manager, having the following responsibilities in terms of the implementation of this ESMP:

- Assisting in finding environmentally responsible solutions to problems with input from Supervisors and relevant personnel where necessary.
- Taking appropriate action where the mitigations/recommendations are not followed.
- Monitoring the undertaking of environmental awareness training for all new personnel coming onto site.

4.2 Operations Manager/Supervisors

The Operations Manager and/or Supervisors will be competent persons (SHE Reps) appointed by SKORPIoN or its subsidiaries to implement the on-site environmental management of this ESMP. The Operations Manager and/or Supervisor shall be on site daily and their duties will include the following:

- Maintaining open and direct lines of communication with the SHEQ Department regarding environmental matters.
- Daily site inspections of all areas regarding compliance with the ESMP.
- Daily monitoring and verifying adherence to the ESMP monitoring and verifying that environmental impacts are kept to a minimum.
- Assisting the SHEQ Department in finding environmentally responsible solutions to problems.

5 ENVIRONMENTAL MONITORING AND AUDITING

Auditing should be conducted bi-annually by an Independent Environmental Consultant. Benefits derived from the audit process may include:

- Identification of environmental risk.
- Development or improvement of the environmental management system.
- Avoidance of financial loss.

- Avoidance of legal sanctions.
- Increase in staff awareness.
- Identify potential cost savings.
- Improve dealings with employees, environmental groups, the community, regulators, media, shareholders, or insurance & finance institutions.
- Establish a history of environmentally responsible operational activities, e.g., through environmental incident reports, environmental monitoring and recording, and reporting to committees or authorities.
- Commonly, the audit of a site will cover all management procedures, operational activities and systems, and environmental issues. The environmental audit will be compiled objectively and conducted by independent entity.

5.1 Monitoring

The following monitoring will take place:

Table 5: Environmental Monitoring

Environmental impacts	Monitoring
Disturbance of Sensitive Biodiversity and Lichen Fields on site.	Areas where lichen fields are large should be avoided and where not possible lichens should be relocated to non-disturbed areas.
Disturbance to cetacean movements due to underwater noise generation during potential blasting operations to set the seabed for laying of pipeline as rock outcrops become disturbed.	Since this may not be avoided or prevented, the proponent should implement a monitoring program to assess disturbance of cetacean movements.
Introduction of artificial hard substratum due to installation of pipelines.	Monitor accumulation of marine fauna on hard substratum including invertebrates.
Physical damage to the seabed and alteration of sediment structure	Monitoring.
Disturbance of spawning and migratory route for Silver kob	Monitoring.
Seismic sounds from activities	Monitoring.
Disturbance of zooplankton communities due to sediment resuspension	Monitoring.

6 ENVIRONMENTAL AWARENESS

SKORPIoN shall ensure that the ESMP is distributed to all relevant personnel. It is the responsibilities of the Operations Manager and Supervisors to ensure that the workers comply to the ESMP measures during operations.

As a minimum, the Operations Managers and Supervisors, along with the SHEQ Coordinator should:

- Explain the importance of complying with the ESMP.
- Discussion of the potential environmental impacts of operational activities.
- The benefits of improved personal performance.
- Employees' roles and responsibilities including emergency preparedness.
- Explanation of the mitigation measures that must be implemented when carrying out their activities.
- Explanation of the specifics of this ESMP and its specification (no-go areas, etc.)
- Explanation of the management structure of individuals responsible for matters pertaining to the ESMP.
- The Operations Manager and Supervisors shall keep records of all environmental training sessions, including names, dates and the information presented.

7 PUBLIC PARTICIPATION AND STAKEHOLDER ENGAGEMENT

An ongoing process of public participation shall be maintained during operations to ensure the continued involvement of interested and affected parties (I&APs) in a meaningful way. The issues that may arise from the public shall be recorded and presented to the environmental consultant during the bi-annual compliance auditing.

7.1 Identification of Stakeholder Groups

A stakeholder for the proposed project is defined as a person, group or organisation that has direct or indirect stake in a Project/organization because it can affect or be affected by the Project or its Proponents' actions, objectives and policies. Stakeholders vary in terms of degree of interest, influence and control they have over the Project or the proponent.

During the environmental and social impact assessment consultations process, various activities as part of the development of the public consultation program were conducted

to determine the relevant stakeholders. From the field-consultations, key stakeholders groups were identified and categorised them as Primary and Secondary stakeholders, based on the nature and extent of impact of project and influence of stakeholders on the project.

7.2 Stakeholder Mapping and Analysis

Stakeholder mapping is a process of examining the relative influence that different individuals and groups have over a project as well as the influence of the project over them. The purpose of a stakeholder mapping is to:

- Identify each stakeholder group.
- Understand each group's specific issues, concern and expectations from the project.
- Measure their influence on the project.

Apart from categorization, stakeholders have also been classified in accordance with the level of influence they have over the Project as well as their priority to the Project proponent in terms of importance. The influence and priority have both been primarily rates as:

- **High Influence/Priority:** Which implies a high degree of influence of the stakeholder on the Project in terms of participation and decision making or a high priority for the Project proponent to engage that stakeholder.
- **Medium Influence/Priority**: Which implies a moderate level of influence and participation of the stakeholder in the Project as well as a priority level for the Project proponent to engage the stakeholder who are neither highly critical nor are insignificant in terms of influence.
- **Low Influence/Priority**: Which implies a low degree of influence of the stakeholder on the Project in terms of participation and decision making or a low priority for the Project proponent to engage.

Table 6: Stakeholder Significance and Engagement Required

Magnitude of Influence / Impact	Urgency / Likelihood of Influence on / by Stakeholder		
	Low	Medium	High
Negligible	Negligible	Negligible	Negligible
Small	Negligible	Minor	Moderate
Medium	Minor	Moderate	Urgent
Large	Moderate	Urgent	Urgent

Table 6 provides brief profiles of the various stakeholder groups in the project as discussed in the previous sub section along with their roles in the project and their degree of influence.

Stakeholder Group	Role in Project	Degree of Influence
Wlotzkasbaken Community	Community nearest to the project.	
Government Ministries and Parastatals	The ESIA is conducted as per the regulations enforced by the relevant Ministries.	
NGOs	Organisations that engage in policy influencing and promoting positive social change	
Private and others	Private individuals, organisations with an interest in the project	

7.3 Stakeholder Engagement Strategy

The Stakeholder Engagement Plan (SEP) shall be informed by a set of principles defining its core values underpinning interactions with identified stakeholders. Common principles based on international best practice.

Commitment is demonstrated when the need to understand, engage and identify the community is recognized and acted upon early in the process; Integrity occurs when engagement is conducted in a manner that fosters mutual respect and trust; Respect is

created when the rights, cultural beliefs, values and interests of stakeholders and affected communities are recognized; Transparency is demonstrated when community concerns are responded in a timely, open and effective manner; Inclusiveness is achieved when broad participation is encouraged and supported by appropriate participation opportunities; Trust is achieved through open and meaningful dialogue that respects and upholds beliefs, values and opinions.

The SEP is an overarching guidance that will need to be implemented throughout the project lifecycle, based on the experience gathered on the effectiveness of the existing methods of engagement and the implementation strategies. The engagement strategy proposed are informed by mapping of relevant stakeholder groups identified on the basis of the review of project activities and feedback received through extensive field consultations undertaken as part of the study.

7.4 Engagement and Disclosure Methods

The Social and Community Supervisor shall be responsible for maintenance of the records of along with the members that engage with stakeholders during construction and operations phase, along with addition of addition of any new categories identified.

7.5 Grievance Redress Mechanism (GRM)

A grievance would usually mean some form of concern by a stakeholder which needs to be redressed to continue smooth implementation of the project. The GRM to uphold the Project's development outcomes as well as its social and environmental performance is designed to address concerns and complaints promptly and transparently with no direct or indirect retaliation on the aggrieved party. Grievances raised by stakeholders will need to be managed through an accountable and transparent process, at no cost.

The GRM will work within the existing national legal and accountability framework and will provide an additional opportunity to stakeholders and interested parties to resolve their project specific grievances. Therefore, a Grievance Redress Committee (GRC) should be established to address this need.

7.6 Grievance Handling Procedure

Any grievance reported will be brought to the notice of the proponent. The proponent should share prepare a Grievance form and make it available on their website, to the community. Grievance should then be submitted to the proponent via email or hardcopy

submissions to the proponent as per the address indicated on the form. Once the Grievances are validated, the proponent is required to provide swift communication that would be agreed between them and the Grieving Party. The GRM table and process flow is indicated below:

Table 7: GRM Steps

Step	Description	Timeline	Responsible Party
1. Submission	Grievance is submitted via various channels (phone, email, suggestion box, etc.)	Immediate	Community Liaison Officer / Focal Point
2. Acknowledgment	Confirmation of receipt is sent to the complainant (verbal or written)	Within 24 hours	Project Manager/GESI committee
3. Screening & Categorization	Grievance is reviewed, categorized (e.g., urgent, GBV-related), and logged	Within 5 working days	GESI committee
4. Investigation	Confidential and impartial investigation is conducted	Within 10 working days	GESI committee / Sector Specialist
5. Resolution & Response	Resolution is proposed and communicated to the complainant	Within 15 working days	Project Manager
6. Appeal (if needed)	Complainant may appeal if unsatisfied with the resolution	Within 10 working days of response	GESI committee
7. Closure	Grievance is marked as resolved and documented	Ongoing	Project Manager
8. Monitoring & Reporting	Trends and resolution rates are analyzed and reported regularly	Quarterly	Project Manager

The GRM is further summarized in a process flow diagram:

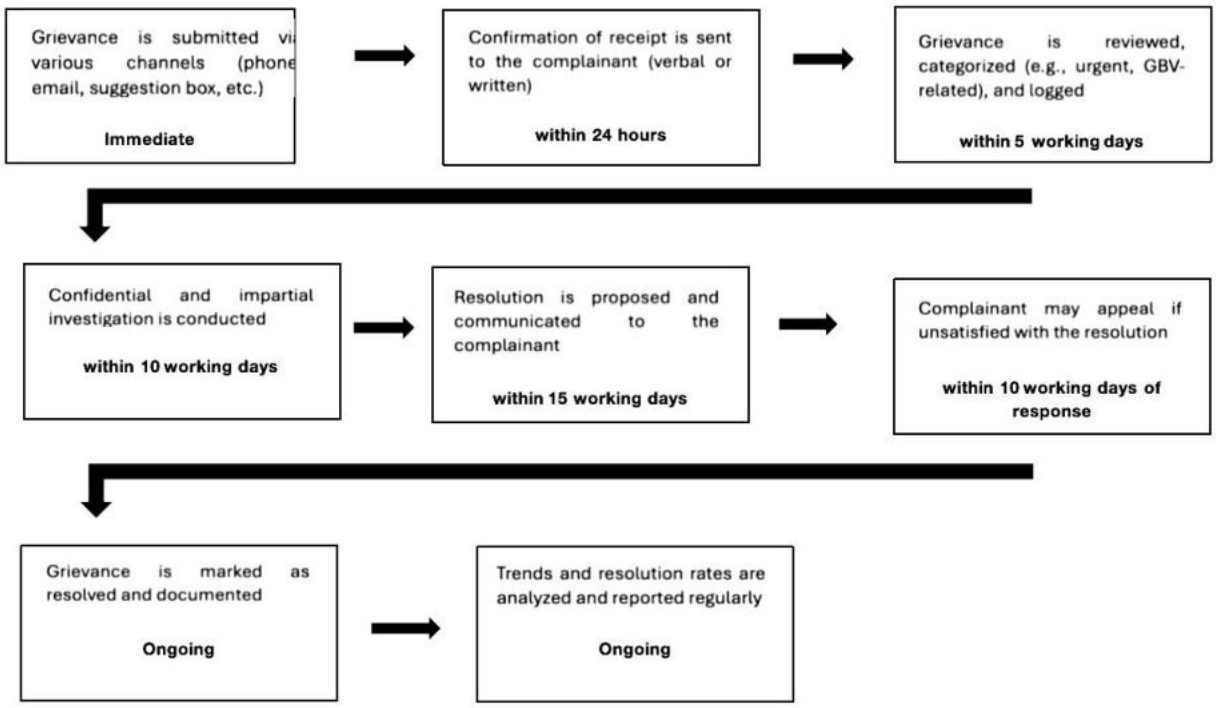

Figure 2: GRM Process Flow

8 As Low As Reasonably Possible (ALARP) Principle

For a risk to be ALARP, it must be possible to demonstrate that the cost involved in reducing the risk further would be grossly disproportionate to the benefit gained. The ALARP principle arises from the fact that infinite time, effort and money could be spent in the attempt of reducing a risk to zero; not the fact that reducing the risk in half would require a finite time, effort and money. It should not be understood as simply a quantitative measure of benefit against detriment. It is more a best common practice of judgement of the balance of risk and societal benefit.

9 ENVIRONMENTAL ACTION PLANS

The management measures proposed to mitigate the potential impacts relating to the construction and operation phase are detailed in the action plans below.

9.1 Action plans to achieve objectives and goals

Table 8: Action Plan – MANAGEMENT AND MONITORING

Objective: To ensure that the provisions of the ESMP are implemented during construction and operation.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Implementation	Reporting Frequency	Responsible parties	Project Phase
• SKORPIoN shall ensure that all aspects of ESMP are implemented during construction and operation. • The environmental consultant shall conduct bi-annual site inspection and make provision for reporting on every aspect of the ESMP. As a general approach, the monitoring procedures will comprise the following: • A formal procedure. • Appropriately calibrated equipment – regular inspections and calibration of equipment will be undertaken in line with the manufacturer's requirements. • Where samples require analysis, they will be preserved according to laboratory specifications. • Where practical, an accredited, commercial laboratory will undertake sample analyses.	Training of workers on monitoring procedures	Limit potential impacts linked to Groundwater, Surface Water, Fauna, Avifauna, Flora, Air and Noise Pollution.	Groundwater, Surface Water, Fauna, Avifauna, Flora, Air Quality and Noise Impacts Anticipated During Operations	Monthly, Bi-Annually and Annually	SHEQ Manager, General and Operations Manager	Operations

Management and mitigation measures	Action plan					
• Parameters to be monitored can be identified in consultation with a specialist in the field and/or the relevant authority. • If necessary, following the initial monitoring results, certain parameters may be removed from the monitoring programme in consultation with a specialist and where appropriate the relevant authority. • Monitoring data will be stored in a structured database. • Data will be interpreted and reports on trends in the data will be compiled on a quarterly basis; and • Both the data and the reports will be kept on record for the life of facility. • Monitoring of bird and other species mortality should be conducted on a daily basis and appropriate measures such as redesigning should be developed to ensure that fauna mortalities are kept as low as possible.						

Table 9: Action Plan – Communication and Stakeholder Consultation

Objective:

- To ensure that all stakeholders are adequately informed throughout operations and that there is effective communication.
- Identification of the stakeholder groups in the project location and analysis of their profiles, interests, issues/impacts and concerns relevant to the project.
- Identification of specific measures to allow meaningful engagement with different stakeholder groups identified in a manner that is transparent and accessible and using culturally appropriate communication methods with a specific focus on the stakeholders with high influence/impact.

- Facilitate adequate and timely dissemination of information to the stakeholder groups in a culturally appropriate manner.
- Provide systems for prior disclosure/dissemination of information and consultation including seeking inputs from affected persons, incorporation of inputs, as applicable, providing feedback to affected persons/groups on whether and how the input has been incorporated; and
- Providing a mechanism for documentation of the activities undertaken and the reporting and monitoring of the same.

Management and mitigation measures	Action plan					
	Capacity Building Required	**Output**	**Indicator for Monitoring**	**Reporting Frequency**	**Responsible parties**	**Project Phase**
• SKORPIoN shall take responsibility for the implementation for all provisions of this ESMP and to liaise between community and the authorities. **Initiate an efficient Grievance Mechanism to allow potentially affected individuals to voice their concerns on the project:** • Receive, review, consider and resolve grievances related to the social and environmental aspects of the project. • Entertain grievances of indirectly affected persons and/or persons affected during project implementation. • Resolve grievances within a period of two weeks at the GRC level and communication of the resolution to the aggrieved party. • Sharing of documents, ideas pertaining to development activities.	Increase Public Knowledge and Awareness	Enhanced Stakeholder and Community Participation	# of Complaints and Grievances Filed	Monthly, Bi-Annually and Annually	SHEQ Manager, General Manager and Operations Manager	Construction and Operation

Table 10: **Action Plan – Chemical Product/Handling and Storage**

Objective:

To minimise exposure and spillages as a result of handling and storage

The risk of fires or explosions during handling and storage of the chemicals is very low as long as the containers/tanks are in an undamaged state, have not been exposed due to damage to the containers/tanks by to excessive UV-radiation (sun) and the shelf life of the chemical is not expired. The flammable chemicals will only ignite if the containers have been damaged and there are sparks or heat created (mechanical or electrical) in the vicinity of the chemicals.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• An oil spill contigency plan should be in place prior chemical handling and storage operations • Apply a monitoring regime and if ammonia in the aquafarm outflow is too high, then the digestate needs to be scrubbed. • Properly designed discharge systems can help to dilute digestate and minimize its impact. • Regular housekeeping and safety inspections/audits to be conducted by management personnel to ensure continuous compliance with safe operating procedures and safety standards. • "Firewatch" staff will be identified and trained. • Full building Inspections will be carried out by Safety Reps as part of a monthly program. Daily walk-rounds must be carried out to identify any potential issues	• Awareness, knowledge and education • First Aid and Fire Fighting management	Improved workers and public health and safety. Effective Implementation of health and safety Management Strategies	• OHS plan prepared and implemented • # of safety incidents • # of GM grievances filed	Weekly	SHEQ Manager	Operations

Management and mitigation measures	Action plan					
• The chemicals shall only be stored in original containers/tanks being undamaged and sealed. • Containers etc. must be handled carefully and stored accordingly to the manufacturer's specifications. • Damaged containers/tanks, etc. shall be sealed/repaired immediately. • Chemicals must be correctly handled & repaired to avoid contamination of the road and other third parties' facilities. • A Standard Operating Procedure (SOP) must be developed for container handling. • The storage of hazardous substances indoors will be carried out in well ventilated, cool and dry. • Storage shall be carried out in facilities with appropriate bunding, specifically relating to the liquids. • Employees must receive initial training prior to commencing work with hazardous substances and be adequately supervised until they are trained and found competent. • Provide annually rigorous re-fresher safety training to employees to ensure that they remain familiar with the dangers associated with the various hazardous chemicals. In-house training program being developed for employees. • SKORPIoN to undertake an audit of operations to ensure that proper controls are in place. • SKORPIoN to ensure that there is segregation of incompatible materials. • SKORPIoN to ensure an offsite emergency plan is generated						

Management and mitigation measures	Action plan					
with relevant emergency responders. • SKORPIoN to ensure an onsite emergency plan is generated. • No foodstuffs will be stored within the facilities where chemicals are stored.						

Table 11: **Action Plan – Waste Management**

Objective:

-To avoid contribution to potential surface and groundwater pollution.

-To ensure that sound waste management practices are adhered to during operations.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• Regular monitoring of effluent discharges and its impact on marine life is essential to assess the effectiveness of mitigation measures and make necessary adjustments. • Regular training for staff members on spill response and containment procedures • Conduct routine inspections of equipment • Establish emergency response plans • Ensure suitable receptacles with lids for waste disposal is available on site at all times. • If rubbish containers are used, ensure these can	• Awareness, education and control through effective waste management strategies	Effective Implementation of Waste Management Strategies	• OHS plan prepared and implemented • # of safety incidents • # of GM grievances filed	Weekly	SHEQ Manager and Contractors	Construction and Operation

be sealed from strong wind • Regular environmental awareness should include potential risks associated with hydrocarbons. • Soil contaminated with hydrocarbons shall be excavated and transported for disposal at the nearest disposal facility (Walvis Bay Hazardous Disposal Facility). • Adequate separate containers for hazardous and general waste must be provided on site. • The workforce must be sensitized to dispose of waste in a responsible manner and not to litter. • Oils and lubricants are prevented from spilling using drip trays or other suitable containers. • Accidental spills must be cleaned immediately.						

Table 12: **Action Plan – Traffic Management**

Objective:

The objective of the management measure is to appropriately manage traffic impacts relating to the C34 road users arising from the pipeline installation intersecting the road:

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase

Measures relating to the C34 road users arising from the pipeline installation intersecting the road: • Signage must be implemented to warn motorists of construction activities. • Ensure that an Emergency Response Plan is in place, in event of an accident. • The Contractor shall prepare a strategy to ensure the disruption to traffic is minimized to acceptable levels. • The strategy should include a schedule of work including when and how road crossings (construction at existing intersections) will be made. • The Contractor shall also liaise with the Traffic Authorities for their approval in this regard. • Proper traffic and safety warning signs must be placed at the construction site to the satisfaction of the Engineer and the Roads Authority.	• Awareness, education and control through effective traffic management strategies	Effective Implementation of Traffic Management Strategies	• OHS plan prepared and implemented • # of safety incidents • # of GM grievances filed	Weekly	SHEQ Manager and Contractors	Construction and Operation

Table 13: **Action Plan – Soils**

Objective:

- The objective of the management measures is to minimize hydrocarbon leaks and chemical spills occur this could result in contamination of the site.

- To avoid or minimise the compaction of soil as far as practical.

- To avoid or minimise the loss of the natural functioning of the soil as growth medium.

- To avoid soil contamination through prevention and mitigation of fuel and oil spills.

Management and mitigation measures	Action plan					
	Capacity Building Required	**Output**	**Indicator for Monitoring**	**Reporting Frequency**	**Responsible parties**	**Project Phase**
• All machinery and vehicles will be adequately maintained so as to prevent leaks and spills. • Should any leaks, hydrocarbon and chemcial spills occur, these will be contained and cleaned up immediately and disposed of at the Walvis Bay Hazardous waste facility. • Carefully manage the storage and handling of hydrocarbons and other hazardous materials. • Ensure that surface runoff is controlled and impacts on water resources are prevented. • Spill kits will be readily available (i.e. in vehicles or close to transfer positions).	• Awareness, education and control through effective soil management strategies	Minimized soil related impacts and pollution Effective Implementation of soil Management Strategies	• OHS plan prepared and implemented • # of safety incidents • # of complaints on spillage from machinery by workers • # of trucks' spillage through complaints and/or visual counts	Monthly during Construction Period	SHEQ Manager and Contractors	Construction

Table 14: Action Plan – Surface Water and Groundwater

Objective:

To minimize impacts on groundwater and surface water.

To prevent pollution of groundwater and surface water runoff and related health impacts on third parties from pollutants at the project activities, i.e. hydrocarbons, discharged brine from water.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• Development of a monitoring network is recommended in order to quantify aquifer parameters and potential inflows. • The location of the project activities should be constructed where it does not interfere with drainage lines. • The production facility should be lined to prevent seepage into the subsurface and downstream rivers. • Routine water quality monitoring of any discharge from the site, and any treated water used for supplying potable requirements, will be required to demonstrate compliance with the relevant water quality standards. • Compliance with the Water Resources Management Act, 2013 (Act No. 11 of 2013), particularly regarding permitting, abstraction and discharge requirements; and • Design for avoiding spillages into the environment (i.e. proper bunding, etc.) and to ensure that if a spillage occurs effective management and	• Awareness, education and control through effective water management strategies	Minimized water related impacts and pollution	• Spill or leakage of chemicals • Results of Lab Tests	Monthly, Bi-Annually and Annually	SHEQ Manager and Contractors	Construction and Operation

mitigation measures are implemented to clean-up the spill. • Pollution will be prevented through basic infrastructure design and through maintenance of equipment. • Ensure suitable receptacles with lids for waste disposal is available on site at all times. • If rubbish containers are used, ensure these can be sealed from strong wind • Regular environmental awareness should include potential risks associated with hydrocarbons. • Soil contaminated with hydrocarbons shall be excavated and and transported for disposal at the nearest disposal facility (Walvis Bay Hazardous Disposal Facility). • Adequate separate containers for hazardous and general waste must be provided on site. • The workforce must be sensitized to dispose of waste in a responsible manner and not to litter. • Chemicals are prevented from spilling using drip trays or other suitable containers. • Accidental spills must be cleaned immediately.						

Table 15: Action Plan –Noise and Air Quality

Objective:

- To prevent an unacceptable increase in disturbing noise and limit nuisance noise at sensitive receptors as far as practically possible.

- The main objective of the proposed air quality management measures for the project is to ensure that operations result in ambient air concentrations that are within the relevant ambient air quality limits

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• Application of dust suppression methods. • Following of good design philosophies for vibrating structures that are known to be noisy. • Development of a mechanism to monitor noise levels, record and respond to complaints and mitigate impacts. • Acoustic barriers are proven to be effective in reducing environmental noise impacts. • An on-going noise monitoring programme should be carried out during operations and allow for community feedback. • SKORPIoN must consider The use of sound-absorbing materials and structures, particularly in the nacelle where mechanical noise is generated, to reduce sound emissions.	• Awareness, education and control through effective air and noise management strategies	Minimized noise and air quality impacts Effective Implementation of Noise and Air Management Strategies	• # of complaints on dust emissions and noise pollution • % of use of dust masks by workers • - # of trucks	Monthly, Bi-Annually and Annually	SHEQ Manager and Contractors	Construction and Operation

• The turbine's rotational speed (curtailing) must be lowered during low wind conditions to reduce noise output						

Table 16: Action Plan – Social and Economic

Objective:

- To maximise economic benefits to electrical consumers while maximising benefits to the local economy.

- To maximise job creation and skills development during construction, operations and through the supply chain.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• Liaise with the Erongo Regional Council to form a significant part of the project hiring policy to give preference to Project Affected People (PAP) through recruitment and training. • Local people particularly youth, women, and previously disadvantage community members be preferentially selected • Begin local selection and provide technical training as soon as possible to enable local people to compete for the lower skilled jobs and upskill themselves. • SKORPIoN and all contractors shall encourage the use of small and medium sized enterprises in supplying goods and services to the Project. • SKORPIoN will ensure its human resources policy is implemented which targets and encourages women for training and recruitment and supports female employees to perform well	• Awareness, education and control through effective social and economic management strategies	Minimized socio-economic risks Effective Implementation of Socio-Economic Management Strategies	• # of Marginalized communities assessed	Monthly, Bi-Annually and Annually	SHEQ Manager and Contractors	Construction and Operation

in the workplace. • Workforce will not be permitted to construct residential dwellings on site. All workforce should commute from the nearby towns on a daily basis during construction and operations. • Promote continuous learning programmes to diversify and upgrade skills of employees and ensure that skills gained on the job are documented and accredited wherever possible. • Ensure contractors have a comprehensive HIV, AIDS, TB and general hygiene workplace policy and wellness programme which will detail HIV prevention measures in the workplace such as condoms and enable easy access to AIDS treatment, care and support for employees. • Develop a relevant Corporate Social Responsibility Programme. • Support partnerships that encourage a sense of community and those combat social ills, e.g. multi-purpose community & skills development centres; sports tournaments, social clubs, youth clubs, activities that promote women's empowerment and gender equality and community policing.						

Table 17: Action Plan - Biodiversity and Marine Ecology

Objectives: To prevent the distruction and distrubance of both biodiversity and the marine ecology as far as practically possible.

Management and mitigation measures	Action plan					
	Capacity Building Required	**Output**	**Indicator for Monitoring**	**Reporting Frequency**	**Responsible parties**	**Project Phase**
• Any work within a buffer zone of 30m to channel courses may only occur under heightened care not to disturb flora or fauna and the natural flow of water. • High-impact construction should be limited during key migratory and breeding periods: - October to April: Migratory bird season, May to August: Local breeding period. Project calendars should be informed by avian ecological data. • During roosting period, the 200–500 m buffer zone needs to be maintained around nesting and roosting sites. Infrastructure placement should ensure connectivity between important bird habitats. • Management will implement a zero tolerance policy concerning the killing or collecting of any	• Awareness, education and control through effective Biodiversity and Marine Ecology management strategies	Minimized biodiversity impacts Effective Implementation of Biodiversity and Marine Ecology Management Strategies	• # of Marginalized communities assessed	Monthly, Bi-Annually and Annually	SHEQ Manager and Contractors	Construction and Operation

plants or animals. This applies to people directly employed by Namibia Berries as well as any contractors working on their behalf. Develop a policy that limits independent movements of all workers into the veld that could create suspicion of poaching. Strictly prevent poaching, harvesting or possession of any such wildlife resources without an appropriate permit. • Areas where Lichens are densely distributed should be avoided. • No development will occur on established ecological no-go areas and exclusion zones for densely distributed lichen fields. • Management will implement a zero-tolerance policy concerning the killing or collecting of any plants. This applies to people directly employed by SKORPIoN as well as any contractors working on their behalf. Develop a policy that limits independent movements of all workers into the veld. Strictly prevent poaching, harvesting or possession of any such wildlife resources without an appropriate permit. • Keep destruction of Lichens and Hummock species to a minimum. Strictly control vehicle and machinery movement in the area where lichens and individual plants occur.						

• Map lichen-dominated areas in more detail, use to guide planning of infrastructure positions. • Backfill excavated areas continuously. • Do not clear areas that are not within the infrastructure footprint • Maintain track discipline – i.e. slow speeds (e.g. 40km/h) and no off-road driving throughout the area. • Ongoing awareness to contractors and SKORPIoN Employees (i.e. Regular toolbox talks) should be promoted about the value of biodiversity and the negative impacts of disturbance, especially to lichens and hummocks, as well as the negative impacts of illegal collecting of plants. • Monitor the clearing of vegetation prior to construction to ensure that the requirements stipulated in the EMP are adhered to. • Monitor management adherence to waste management requirement frequently. • Monitor quantities of waste material production, dust and wastewater. • An on-going bird monitoring programme should be carried out during operations. • The rotational motion of turbines causes an						

effect known as motion smear (or motion blur) that can make the blades appear transparent to birds. Painting a single blade in black has been proposed as a suitable measure to reduce motion smear and risk of collisions. • Implement bird flight diverters and visual deterrence measures such as the use of reflective markings to increase visibility of the turbines and reroute flight paths of birds. The use of sensory cues, such as auditory, visual and acoustic deterrents, activated to scare or frighten birds and prevent them from coming closer to the wind turbines. • SKORPIoN should slow or stop the rotating of the turbines during high risk (migratory) periods, thereby reducing collision risks. • Evaluate the effectiveness and validity of applying anti-reflective coatings to solar panels reduces the collision risks and making them less attractive to birds who may mistake them for water bodies. • Evaluate the effectiveness and validity of installing deterrent devices that emit high-frequency sounds that are unpleasant to birds, causing them to avoid the area. • The solar installation activities should be						

carefully monitored to avoid any removal or disturbance of fauna and flora. • Land clearing and high impact construction is not permitted along the drainage course. • SKORPIoN should implement regular infrastructure maintenance to prevent corrosion. • Only the solar pv infrastructure, that is above the ground is permitted for construction along the drainage course. No other infrastructure is permitted. • SKORPIoN should have an appropriate waste management strategy to prevent waste accumulation along the drainage course. • SKORPIoN ought to engage and liaise with the Ministry of Agriculture, Fisheries, Water and Land Reform (MAFWLR)prior to the commencement of installation activities to ensure that these undertakings do not coincide with critical periods during the spawning season. In addition, MAFWLR should also be consulted during operations to ensure that pipeline maintenance and other pipeline related activities do not coincide with critical periods during the spawning season.						

Table 18: Action Plan –Capacity Building

Objective:

- Enhance quality of awareness programmes
- Enhance the capacity to develop effective new policies
- Support the development of a culture of information based decision making
- Ensure effective preparation for international conventions
- Strengthen multi-stakeholder engagement
- Strengthen and promote high performance of organizations

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• Develop a communication strategy • Develop a Code of Conduct for public awareness • Develop awareness building materials • Propose recommendations to synchronize existing legislation, regulations and policies • Develop a protocol for public participation and engagement in policy and regulation development • Develop codes of conduct for public information dissemination and awareness raising on new		Manage capacity building effectively	• Individual skills, organizational performance, and the enabling environment	Bi-annually and Annually	General Manager and Operations Manager	Operations

policies and regulations • Conduct training programmes on methods of public policy development with special attention to cost benefit analysis and social impact assessment. • Undertake a comprehensive review of mandates to determine overlaps, conflicts and gaps • Propose recommendations to improve the institutional mandates and responsibilities • Hire expertise to develop a performance monitoring and evaluation system • Develop methodology for monitoring, observation and reporting • Develop standards and procedures for data and report management • Conduct training courses on office management skills • Conduct training courses on strategic planning						

Table 19: Action Plan - Visual and Sense of Place

Objective:

To minimize visual impacts to residents and other 3rd parties as practically as possible.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• Continuously monitor visual impacts and adjust mitigation strategies as needed to ensure their effectiveness • Engage with communities early in the planning process to understand their visual concerns and incorporate their feedback into mitigation strategies. • Use colors that blend with the background environment. • Liaise with Namibian Civil Aviation Authority (NCAA) prior to erecting the wind turbines to ensure that requirements are met. • Install safety features as required by aviation authority, such as lighting.	• Awareness, education and control through effective visual impact management strategies	Minimized visual and sense of place impacts Effective Implementation of visual and sense of place Management Strategies	• Individual skills, organizational performance, and the enabling environment	Bi-annually and Annually	General Manager and Operations Manager	Operations

Table 20: Action Plan –Archaeology Management Plan

Objective:

To ensure that the correct actions are taken to preserve or document chance archaeological finds.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• On-site personnel (s) and contractor crews must be sensitized to exercise and recognize “chance finds heritage” in the course of their work. • If any archaeological material or human burials are uncovered during the course of development activities, then work in the immediate area should be halted, the find would need to be reported to the heritage authorities and may require inspection by an archaeologist. • If there is a possibility of encountering or unearthing of archaeological materials then it is better to change the layout design so as to avoid the destruction that can occur. • All ground works should be monitored and where any stratigraphic profiles in context with archaeological material are exposed, these should be recorded, photographed and coordinates taken. • The footprint impact of the proposed development activities should be kept to minimal to limit the possibility of encountering chance finds within the project boundaries. • The Proponent and Contractors should adhere to the provisions of Section 55 of the National Heritage Act	• Awareness, education and control through effective heritage impact management strategies	Manage heritage chance finds	• Individual skills, organizational performance, and the enabling environment	Bi-annually and Annually	General Manager and Operations Manager	Operations

in event significant heritage and culture features are discovered in the course of developmental works.						

Table 21: Action Plan - Rehabilitation

Objective:

To rehabilitation the site office, work sites servitude areas, tracks and other areas disturbed during construction as close to their original a state as reasonably possible.

Management and mitigation measures	Action plan					
	Capacity Building Required	Output	Indicator for Monitoring	Reporting Frequency	Responsible parties	Project Phase
• All construction sites should be photographed (1) before commencement, (2) after completion and (3) after rehabilitation of the activities. • All bunding areas, equipment, waste, ablution, temporary structures, stockpiles must be removed and areas to be rehabilitated. • All disturbed areas shall be reshaped to theoretical contours; as close as possible to the natural conditions before construction commenced, including, detours, and temporary access routes. • All cuttings must be shaped with a slope to provide a natural appearance, without having to destroy significant vegetation on top of the slope.	• Awareness, education and control through effective rehabilitation strategies	Manage rehabilitation and re-instatement of the land	• Individual skills, organizational performance, and the enabling environment	Bi-annually and Annually	General Manager and Operations Manager	Operations

• Existing borrow pits need also be rehabilitated during rehabilitation phase.						