Environmental and Social Management Plan (ESMP) for Offshore Drilling Activities in Namibia in PEL 82

Final ESMP Report

PREPARED FOR

CHEVRON NAMIBIA EXPLORATION LIMITED II

IN COLLABORATION WITH

DATE
5 December 2025

REFERENCE
0775081

DOCUMENT DETAILS

DOCUMENT TITLE	**Environmental and Social Management Plan (ESMP) for Offshore Drilling Activities in Namibia in PEL 82**
DOCUMENT SUBTITLE	Final ESMP Report
PROJECT NUMBER	0775081
DATE	5 December 2025
VERSION (delete field if unneeded)	01
AUTHOR	ERM South Africa
CLIENT NAME	Chevron Namibia Exploration Limited II

DOCUMENT HISTORY

				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
Version	01	ERM and Urban Dynamics	Vicky Louw and Joane Foucher	Stephanie Gopaul	5 Dec 2025	Final ESMP report

SIGNATURE PAGE

Environmental and Social Management Plan (ESMP) for Offshore Drilling Activities in Namibia in PEL 82

Final ESMP Report

0775081

Stephanie Gopaul
Partner

ERM Southern Africa (Pty) Ltd.
Suite S005
Westway Office Park
Westville
Durban Kwazulu-Natal, 3610

South Africa

T +27 31 265 0033

CONTENTS

LIST OF TABLES

LIST OF FIGURES

1. INTRODUCTION

1.1 BACKGROUND AND CONTEXT TO THE PROJECT

Chevron Namibia Exploration Limited II (CNEL) is considering initiating an offshore hydrocarbon exploration program within Petroleum Exploration License (PEL) 82, encompassing Blocks 2112B and 2212A in the Walvis Basin, Namibia (Figure 1-1) (i.e. potential project). PEL 82 is located approximately 163 km north-west of Walvis Bay, with water depths ranging from 200 m to 2,500 m. CNEL holds the Exploration License for both blocks which spans over an area of approximately 11,400 km².CNEL's contact details are provided in Table 1-1 below.

TABLE 1-1 CONTACT DETAILS OF LICENSE HOLDER

Item	Details
Name	Chevron Namibia Exploration II Limited
Business Registration Number	202201967
Correspondence Address	PO Box 3516, Windhoek, Namibia
Responsible Person	Beatrice Bienvenu
Position	Country Manager

The first exploration well may be drilled in 2026/2027 in the Gemsbok Prospect, located within Block 2112B (coordinates: LAT: 21° 44' 48.15" S, LONG: 12° 27' 13.74" E), in water depths ranging from 900 m to 1,500 m. Based on the results of this well, it may be followed by an appraisal well. Additional drilling campaigns of up to 3 to 4 wells could potentially start from late 2027 to 2028 over a 3 to 5-year period for a total of up to 10 wells (exploration or appraisal).

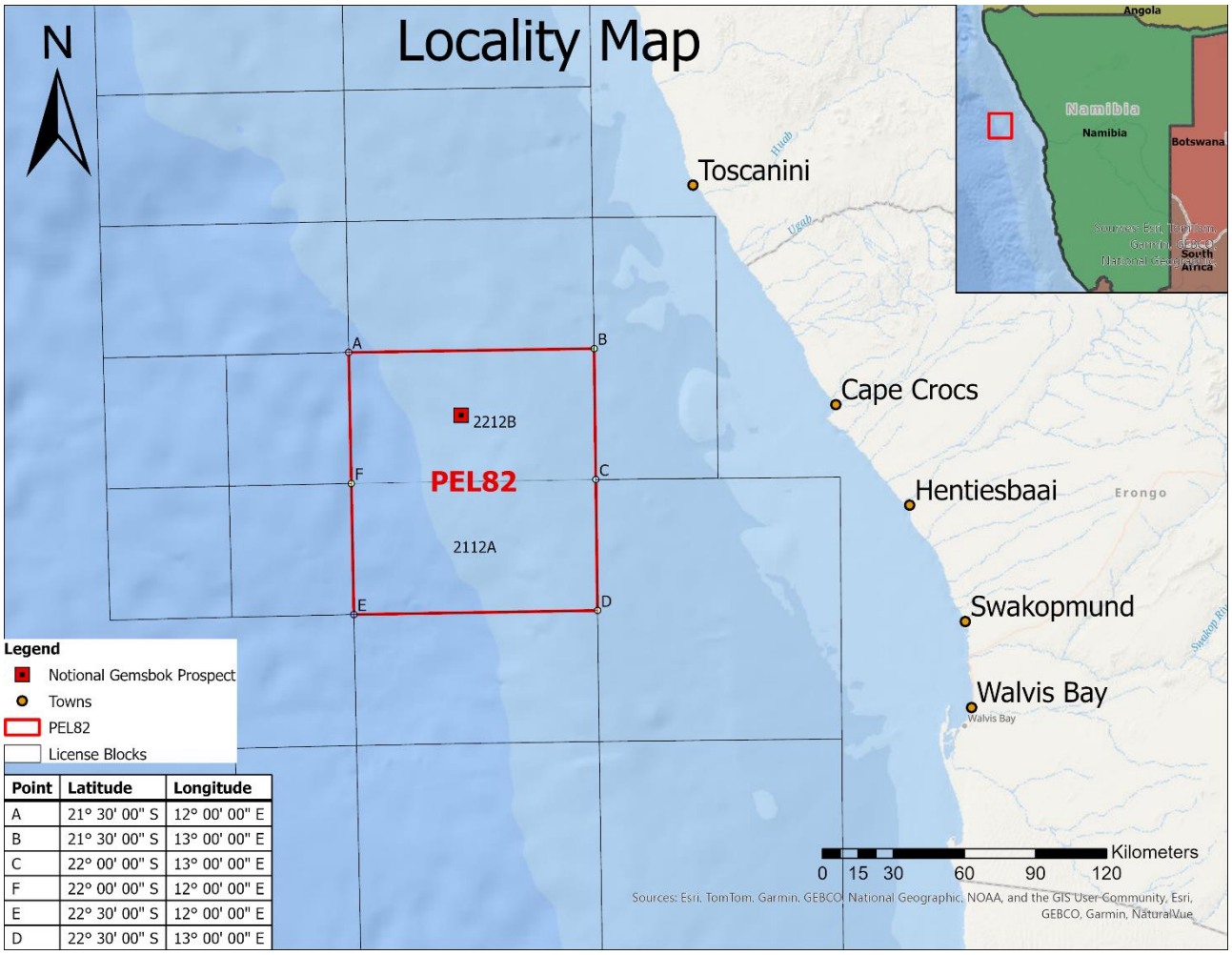
Exploration or appraisal wells, require a maximum of 90 days to complete, including mobilisation, drilling operations, well testing for an appraisal well and demobilisation.

To date, the following exploration activities have taken place in PEL 82:

- Initial seismic surveys: Over 3,500 km² of 2D seismic data and 9,500 km² of 3D seismic data were acquired in 2013.
- Previous drilling: Two wells, Murombe-1 and Wingat-1, were drilled by Galp Energia in 2013.
- Subsequent 3D seismic survey program of 5,000 km² acquired in 2018.

CNEL has appointed Environmental Resource Management Southern Africa (ERM) as the independent Environmental Assessment Practitioner (EAP) to undertake a Scoping and Environmental Impact Assessment (EIA) process for the potential exploration activities in compliance with the EIA Regulations of 2012 promulgated under the Environmental Management Act, No. 7 of 2007 and international environmental standards and guidelines and (hereafter collectively referred to as "Environmental and Social Impact Assessment" or "ESIA" process).

FIGURE 1-1 LOCALITY MAP



Point	Latitude	Longitude
A	21° 30' 00" S	12° 00' 00" E
B	21° 30' 00" S	13° 00' 00" E
C	22° 00' 00" S	13° 00' 00" E
F	22° 00' 00" S	12° 00' 00" E
E	22° 30' 00" S	12° 00' 00" E
D	22° 30' 00" S	13° 00' 00" E

Source: Chevron, 2025

1.2 PURPOSE OF THE REPORT

This report shall be read in conjunction of the Final Environmental and Social Impact Assessment (ESIA) report for offshore drilling activities in Namibia, in PEL 82. It is an extract of the Environmental and Social Management Plan section of the ESIA report, detailing how the mitigation measures identified during the ESIA process will be incorporated into the project design and subsequently implemented throughout the duration of the project.

All significant changes made to the draft ESIA report are clearly indicated using underlining and a distinct font (Arial) to differentiate them from the rest of the text.

2. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

This section presents the ESMP for the potential project, detailing how the mitigation measures identified in the ESIA report will be incorporated into the project design and subsequently implemented throughout the duration of the project.

The ESMP identifies actions required, assigns responsibilities and sets target dates for completion. The plan will be incorporated into the overall environmental and social management of the project. The plan will act as a "live" document to track progress through to completion of the potential project The plan also provides a mechanism for monitoring the environmental performance of the contractor and where required instigating further remedial action as required.

2.1 SCOPE AND OBJECTIVES

The ESMP for the potential project serves as a practical tool to ensure that all environmental and social commitments identified in the impact assessment chapters are effectively implemented throughout the project phases of the drilling campaign. Its main objectives are to:

- Provide a structured mechanism to ensure full compliance with Namibian environmental legislation, CNEL's HSE policies, international standards and recognized best practices in the offshore oil and gas industry.
- Translate the mitigation and management measures identified in the ESIA into actionable steps during the mobilisation, exploration and demobilisation phases of the project.
- Establish a framework to identify and manage any unexpected environmental or social impacts that may arise during the project phases.
- Evaluate the effectiveness of implemented mitigation measures and adapt them as necessary. This includes modifying existing measures or introducing new ones to ensure continuous improvement and risk reduction.
- Set up monitoring and record-keeping systems to gather additional environmental and social data during the project execution. This helps validate the ESIA findings and supports transparent reporting and decision-making.

The ESMP also plays a strategic role in supporting the long-term success and sustainability of the exploration drilling project. Its broader objectives include:

- Ensuring that health, safety, environmental and social (HSES) considerations are embedded in the project's risk management and business planning processes.
- Coordinating and optimizing environmental, health and social activities across all phases of the project to enhance efficiency, reduce duplication and add value.
- Encouraging all employees and contractors to uphold the highest standards of environmental protection and safety performance through training, accountability and leadership.
- Providing a consistent framework for planning, implementation, auditing and continuous improvement of environmental and social performance.
- project leadership to identify, prioritize and address key environmental and social issues proactively throughout the project lifecycle.

2.2 OVERVIEW OF THE ACTIVITY BEING CONSIDERED

CNEL is considering offshore exploration well drilling in Petroleum Exploration License Area 82 (PEL 82), covering Blocks 2112B and 2212A, located 72 to 300 km offshore in the Walvis Basin in water depths of 200 to 2,500 m (Figure 1-1). Activities may include up to 5 exploration wells, 5 appraisal wells, Vertical Seismic Profiling (VSP), well testing, plugging and abandonment. The first well on the Gemsbok Prospect may be drilled in the 2026/2027 timeframe. These activities are part of a broader effort to understand whether there are commercially viable oil and gas resources in the area.

2.3 SUMMARY OF THE POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

2.3.1 ACTIVITIES EXCLUDED FROM THE ASSESSMENT

The following activities were excluded from the assessment due to their potential negligible environmental or social effects impact:

- Air quality effects from vessels and exploration.
- Disturbance to marine fauna and seabirds from offshore artificial lighting.
- Seawater contamination and marine fauna impacts from drillship operations, support vessel discharges and well testing.
- Increased hard seabed surfaces from wellhead placement, residual cement discharge and abandoned wellheads.
- Disturbance of seabed geology from drilling.
- Health, safety and community concerns regarding interactions between foreign/migrant workers and local residents.
- Noise from helicopters affecting communities.
- Visual impact of the drillship.
- Traffic and transportation impacts from offshore and onshore operations, including supply movements and crew changes.
- Cultural Heritage impacts from offshore operations.
- Effects on tourism and recreation from support vessel and helicopter operations.
- Increase in onshore non-hazardous and hazardous waste disposal.
- Fresh water use for drinking by crew on all vessels.
- Pressure on local utilities and infrastructure from disposal of waste onshore.
- Potential introduction of invasive species via ballast water from international supply vessels.

2.3.2 SUMMARY OF POTENTIAL IMPACTS FROM PLANNED ACTIVITIES

Table 2-1 below presents a consolidated summary of the environmental and social impacts for the planned activities from the potential project.

TABLE 2-1 CONSOLIDATED SUMMARY OF THE POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS FOR PLANNED ACTIVITIES

Potential Impact	Activities	Initial Significance	Residual Significance
Climate Change	• Vessel / drill unit air emissions (Mobilisation, Operation, Decommissioning) • Operation of helicopters Mobilisation, Operation, Decommissioning) • Emergency flaring of gas and liquid hydrocarbons (Operation) if conducted.	Minor	Minor
Smothering and disturbance of benthic fauna on unconsolidated sediment	• Seabed disturbance from drilling (Operation) • Discharge of drill cuttings and mud and residual cement to the seabed (Operation) • Discharge of treated drill cuttings from the drill unit (Operation) • Sediment dislodging from ROV operation (Operation) • Discharge of residual cement to seabed (Demobilisation)	Moderate to Incidental	Minor to Incidental
Smothering and disturbance of benthic fauna on hard substrate	• Same as above	Minor to Incidental	Incidental
Bioaccumulation, toxicity and hypoxic effects on benthic fauna	• Discharge of drill cuttings and mud • Discharge of treated drill cuttings from the drilling unit	Moderate to Minor	Incidental
Bioaccumulation, toxicity and hypoxic effects on pelagic fauna	• Same as above	Incidental	Incidental
Potential behavioural disturbance of marine fauna	• Underwater noise from manoeuvring (Mobilisation, Operation, Decommissioning) • Underwater noise from dynamic positioning (Operation) • Underwater noise from drilling (Operation) • VSP impulsive underwater noise (Operation), if VSP is conducted • Helicopter atmospheric and underwater noise (Operation)	Minor	Incidental
Potential injury of marine fauna	• Underwater noise from vessel and drilling operations (Mobilisation, Operation, Decommissioning) • VSP impulsive underwater noise (Operation)	Minor	Incidental
Changes in catch due to behavioural change in fish due to noise	• Underwater noise from manoeuvring (Mobilisation, Operation, Decommissioning) • Underwater noise from dynamic positioning (Operation) • Underwater noise from drilling (Operation) • VSP impulsive underwater noise (Operation), if VSP is conducted	Minor	Incidental

Potential Impact	Activities	Initial Significance	Residual Significance
	• Helicopter atmospheric and underwater noise (Operation)		
Changes in catch due to drilling discharges	• Discharge of drill cuttings and mud and residual cement to the seabed (Operation) • Discharge of treated drill cuttings from the drill unit (Operation)	Minor	Minor
Displacement of fishing vessels and navigation	• Implementation of safety exclusion zone (Operation)	Minor	Minor
Marine traffic	• Increased vessel presence (Mobilisation, Operation, Decommissioning)	Minor	Incidental
Employment	• Direct and indirect job creation (Mobilisation, Operation, Decommissioning)	Minor Positive	Minor Positive
Local economy	• Spending in Walvis Bay, procurement (Mobilisation, Operation, Decommissioning)	Minor Positive	Minor Positive
Macro-economy	• Taxes, fees to government (Mobilisation, Operation, Decommissioning)	Minor Positive	Minor Positive

2.3.3 SUMMARY OF POTENTIAL IMPACTS FROM UNPLANNED EVENTS

Table 2-2 below presents a consolidated summary of the potential environmental and social impacts for the unplanned activities from the potential project.

TABLE 2-2 CONSOLIDATED SUMMARY OF THE POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS FOR UNPLANNED ACTIVITIES

Impact Category	Activities	Initial Significance	Residual Significance
Fisheries & marine fauna	• Well loss of containment (Operation)	Catastrophic	Severe (ALARP)
Commercial fishing	• Well loss of containment (Operation)	Severe to Moderate	Moderate to Minor (ALARP)
Communities	• Well loss of containment (Operation)	Severe to Moderate	Moderate to Minor (ALARP)
Health & safety	• Vessel collision (Mobilisation, Operation, Decommissioning)	Severe	Moderate (ALARP)
Health & safety	• Helicopter incidents	Minor	Minor (ALARP)

2.3.4 SUMMARY OF POTENTIAL CUMULATIVE IMPACTS

Table 2-3 below presents a consolidated summary of potential cumulative impacts from the potential project.

TABLE 2-3 CONSOLIDATED SUMMARY OF POTENTIAL CUMULATIVE IMPACTS

Impact Category	Significance Level
Atmospheric emissions	Incidental
Waste and effluent discharge	Incidental
Marine ecology	Incidental

Impact Category	Significance Level
Commercial fisheries	Minor
Economy and employment	Minor
Shipping and navigation	Incidental

2.4 SUPPORTING DOCUMENTATION / ACTIONS

This Section lists the plans / documents / Actions that will be prepared prior to the start of any activities for this project, in accordance with Chevron's Operational Excellence Management System.

2.4.1 WELL DRILLING DESIGN

CNEL will complete the well drilling design in line with relevant policies and standards, covering location, depth, architecture, fluids, treatment, abandonment plans and logistics. All details will be compiled into a Permit to Drill notification, submitted to MIME at least 30 days before mobilisation.

2.4.2 CONTRACTOR HSE PLAN

The Contractor HSE Plan will present the HSE requirements that applies to the specified project and will be developed in accordance with Chevron's Operational Excellence Management System. It describes the operational details, equipment used and considerations related to environmental, socio-economic and health factors, as well as the organisational structure supporting the project (such as objectives, resources, documentation, risk management and control). This document also includes procedures for managing air emissions, discharges to the sea, waste, spills and associated log books. All personnel and sub-contractors must adhere to this plan while working on the project.

2.4.3 CONTRACTOR PROJECT HSE PLAN

The drilling contractor will develop a Contractor Project HSE Plan detailing the management of all health and safety risks, major incident controls and conformance with Namibian regulations, including the provision of a rig safety case.

Additionally, the drilling contractor will prepare an HSE-MS Bridging Document in collaboration with their sub-contractors. This document will establish key procedures to ensure effective integration of the various companies' HSE management systems involved in project execution, both at the worksite and throughout the supply chain.

2.4.4 CONTRACTOR KICK-OFF MEETING AND CREW AWARENESS

The Contractor Kick-Off Meeting aims to introduce the team, review the project background, identify key environmental and social sensitivities, discuss risk mitigation and establish efficient work methods. Before operations begin, an on-board representative or contractor will conduct HSE awareness training for all project personnel, covering the HSE system, emergency procedures, spill management and project-specific requirements. Contractors are responsible for providing this HSE information to new staff and suppliers after the initial session.

2.4.5 COMMITMENTS REGISTER SECTION

Section 2.12 details the specific management commitments that will be implemented during all project phases (planning, mobilisation, operation and demobilisation) to prevent, minimise or manage significant potential negative impacts and optimise and maximise any potential benefits of the project.

2.4.6 PLANS AND PROCEDURES

This ESMP will form part of an overall Operational Excellence Management System (OEMS) which will be prepared before the start of the exploration campaign. It will include the documents listed below and will include all of the project controls and mitigation measures detailed in the Commitments Register (refer to Section 2.12).

2.4.6.1 EMERGENCY MANAGEMENT PLAN

The objective of an Emergency Management Plan (EMP) is to be prepared to respond to accidental and emergency situations in a manner appropriate to the operational risks and to prevent their potential negative consequences. The ERP will apply to each stage of the project lifecycle (mobilisation, drilling and demobilisation) and commensurate with the potential risks and impacts identified in the ESIA Report.

2.4.6.2 OIL SPILL CONTINGENCY PLAN

Project specific Oil Spill Contingency Plan (OSCP) will be developed with support from Oil Spill Response Limited (OSRL) for CNEL's potential Exploration Program in PEL 82. This plan would instruct employees as to the correct response procedures for any unlikely oil spill that may occur during the exploration drilling operation. This plan of intervention, providing contacts lists and mobilization procedures will be drafted prior to the commencement of drilling activities.

The oil spill contingency plan should include or address, but not be limited to, the following:

- Alert procedure.
- Initial / immediate actions.
- Oil Spill Response Options / Strategies.
- Roles and responsibilities (including Emergency Directory).
- Response Actions.
- Response termination condition.
- Oil Spill Modelling Report.
- Oil Spill Risk Assessment (environmental sensitivities and priorities for protection).
- Oil Spill Response Equipment Inventory.
- Response technical guidelines and limitations.
- Response equipment and maintenance / Inspection plan.
- Drills and training.

2.4.6.3 SHIPBOARD OIL POLLUTION EMERGENCY PLAN (SOPEP)

Before mobilisation to site, the drilling contractor's SOPEP and procedures to be implemented in the event of an accidental spill of oil (or other polluting substances) at sea will be submitted for approval to MIME.

This plan will require:

- The implementation of measures to immediately stop the spill (sealing the leak, repairing leaking tanks, etc.).
- Recovery of spilled fluids.
- The notification of the Namibian authorities concerning the spill.
- The implementation of external response measures in the event of a large spill.
- Immediate reporting of any oil or chemical spills in water to the Port Control Walvis Bay and the Maritime Rescue Centre and regular updates to be sent during pollution clean-up operations.

The SOPEP will include procedures in line with international good practice for the accidental release of chemicals and fuels during exploration activities. The plan will include the following:

- Definition of roles and responsibilities.
- Identification of potential sources of accidental pollution (storage, use, etc.).
- Definition of design standards adopted to ensure the integrity and reliability of the equipment.
- Description of the security systems in place to prevent pollution.
- Inspection reports for the proper maintenance of safety equipment and systems.
- Procedures for handling chemicals and fuels to reduce the risk of accidental pollution (refer to **Section 2.4.6.6**) for the Hazardous Substances Management Plan.
- An action plan with instructions for the oil pollution prevention team. This is a list of duties the crew members will fulfil in case of a spill.

2.4.6.4 SOURCE CONTROL CONTINGENCY PLAN (SCCP)

The SCCP outlines well control procedures and details the response plan and intervention strategy for well control incidents, aiming to ensure prompt and effective action. Since blow-out scenarios and interventions can vary, a general contingency document cannot address every possibility. Instead, the SCCP provides structured guidelines with examples and triggers for rapid response; it is an internal document.

2.4.6.5 STAKEHOLDER ENGAGEMENT PLAN

Objectives

The Stakeholder Engagement Plan, prepared by ERM provides the framework to allow effective engagement with external stakeholders and details the planning for information disclosure and stakeholder engagements. It supports the right stakeholders to be notified in a timely manner about the project activities with information that is accurate and clear. The plan includes a Grievance Mechanism for stakeholders to engage with the project about their concerns and expectations and provides a process for CNEL to receive, document and address comments received. This mechanism aligns with the CNEL Grievance Mechanism Procedure (2025).

The main objectives of the SEP are as follows:

- Identify all those affected by or who can affect the project to strive to include them in the engagement process.
- Understand the views of stakeholders and make sure that they adequately understand the positive and negative impacts of the potential project.
- Inform stakeholders throughout the ESIA process, including local benefits and partner opportunities.
- Build relationships and trust through supporting open dialogue and engagement with stakeholders. Establish transparency in activities being undertaking and build trust with stakeholders.
- Engage with all stakeholders, including vulnerable and marginalised groups, by having an inclusive approach to consultation and participation. This may include the use of differential measures to maximise effective participation of vulnerable stakeholders.
- Manage expectations and concerns by providing a mechanism for stakeholders to engage with the project about their concerns and expectations and provide a mechanism for receiving, documenting and addressing comments received.

An engagement plan covers the ESIA phase, pre-mobilisation phase, mobilisation, drilling and testing phase and demobilisation phases. The plan includes engagement activities to be undertaken to inform stakeholders of project activities and updates, if needed, collect feedback and manage expectations around recruitment and procurement.

Stakeholder Database

A stakeholder database has been developed. This has been based on extensive stakeholder identification. Once identified, stakeholders were mapped to determine the engagement approach to be used with each group/category. The database will be maintained regularly with updated information as the project progresses and engagements take place.

Engagement tools and resources

The SEP includes descriptions of the information dissemination tools that can be used during the implementation of the plan. Communicating information and engaging with stakeholders in a manner that is accessible is key to the success of an engagement programme. Various communication methods will be used to facilitate engagement during the project. The level and purpose of engagement will determine the methods and channels.

Project stakeholders' literacy levels and education levels may vary and careful consideration will be given to the target audience when preparing engagement materials. Engagement methods include one-on-one meeting, public meetings, focus groups, letters, emails, website updates, media updates etc.

Disclosure

A public information and disclosure programme will be implemented to ensure stakeholders are informed of exploration activities. Sufficient information will be provided for stakeholders to become aware and understand the components of the exploration to be able to make informed comments and representations. Through the disclosure, relevant information or documentation will be broadly available to stakeholders, including people with limited access to technology, education, or resources. The SEP includes special measures for vulnerable groups

who may face difficulties in accessing project information. At minimum disclosure methods will include:

- Placing hardcopies of relevant documents at public venues at beneficiary communities.
- Placing hardcopies of relevant documents at municipal offices.
- Main documents will be prepared in English (as the official language).
- Translation of key documents to local indigenous languages where required.
- Meetings and focus groups with stakeholders, as required.
- Monitoring of and engaging with other vessels.

The drilling unit will be equipped with appropriate radar and communications to ensure that other vessels adhere to the safe operational limits. Other vessels (e.g., fishing, transport, etc.) will be alerted about the drilling operation.

Any fishing vessels at a radar range of 24 nm from the drilling unit will be notified via radio regarding the safety requirements around the vessel / drilling unit.

Grievances are complaints or comments (or questions/suggestions) concerning the way in which a project is being implemented.

Grievances can encompass minor concerns as well as serious or long-term issues. They might be felt and expressed by a variety of parties including individuals, groups, communities, entities, or other parties affected or interested in the social or environmental impacts of the project. It is essential to have a robust and credible mechanism to systematically handle and resolve any complaints that might arise in order that they do not escalate and present a risk to operations or the reputation of the company (nationally or internationally). If well-handled, an effective GM can help foster positive relationships and build trust with stakeholders.

CNEL has established a grievance mechanism procedure (2025) to define the process for managing stakeholder concerns and complaints in alignment with the Chevron Operational Excellence Stakeholder Engagement and Issues Management Process and the Chevron Human Rights Policy. CNEL's existing 2025 grievance mechanism will be applicable to the project.
Waste, Emissions and Discharge Management Plan

Objectives

The Waste and Discharge Management Plan establishes procedures for the storage, collection, management and disposal of waste, including air emissions, liquid and solid waste (hazardous and non-hazardous wastes). Certain waste will be treated and disposed of offshore, while other waste will be transported ashore. The plan will, therefore, describe the procedures to be followed to ensure the treatment, transfer and/or disposal of waste both offshore and onshore.

Compliance with International Conventions

The drilling unit and all project vessels will have equipment, systems and protocols in place for prevention of pollution by oil, sewage and garbage in accordance with the MARPOL convention. MARPOL 73/78 was developed by the IMO with an objective to minimise pollution of the oceans and seas, including dumping, oil and air pollution.

Specific MARPOL requirements are included in the detailed Environmental and Social Mitigation Management Commitment Register (refer to **Section 2.12)**.

Waste Management General Principles

Waste management during the drilling campaign will be planned in accordance with the waste prevention and management principles described in Table 2-4.

TABLE 2-4 WASTE PREVENTION AND MANAGEMENT PRINCIPLES

Principle	Implementation Measures
Waste Minimisation	• Choose equipment and supplies that produce minimal waste and packaging • Select materials that generate the least hazardous waste
Storage Security	• Store waste based on its type and risk classification following hygiene and safety rules • Define storage areas on the drilling unit, vessels and logistics base • Store compatible waste together and hazardous waste separately with retention and ventilation if flammable • Control access to storage areas and keep them clean and orderly
Waste Hierarchy	• Avoid generating waste • Minimise waste • Reuse non-hazardous waste • Recycle • Treat or incinerate onboard if permitted • Dispose of waste according to regulations and best practices
Recording and Monitoring	• Maintain a register of waste types and quantities to ensure traceability and identify avoidable waste • Track waste sent ashore including disposal methods and service providers • Keep transfer and disposal certificates for verification
Staff Training	• Train personnel on waste management procedures • Environmental protection and impact prevention • Reuse and recycling practices • Safe handling of hazardous waste • Recordkeeping and traceability

Management of Discharge and Emissions

The plan also addresses discharges and emissions related to project activities. Procedures will comply with national regulations and international best practices and will include:

- Identification and characterisation of discharges and emissions
- Definition of treatment objectives both qualitative and quantitative
- Assignment of responsibilities for measurement, recording and reporting
- Specification of tools and methods for monitoring
- Description of equipment and procedures used to treat discharges and emissions within defined limits.

Monitoring Requirements

Monitoring requirements are presented in **Section 2.7.1.**

2.4.6.6 HAZARDOUS SUBSTANCES MANAGEMENT PLAN

A Hazardous Substances Management Plan will be developed by the drilling contractor to detail the measures to minimise potential pollution. The plan will be applied to all phases of the Project and will include all hazardous products used during the project including drilling fluids and cement used during well drilling. The Hazardous Substances Management Plan is based on the principles of life cycle assessment. A standard plan will include:

- Inventory of chemical products (identification, classification, quantification and method of delivery).
- Product properties (dangerousness, toxicity, health and safety recommendations) based on product safety sheets (Safety data sheets, eco-toxicological data).
- Evaluation of the use of alternative products.
- Storage and handling procedures including personal protective equipment for personnel.
- Emergency procedures.
- Evaluation of recycling possibilities.
- Disposal procedures for unused products (return to the supplier for example).

2.4.6.7 PREVENTIVE MAINTENANCE PLAN

A Preventive Maintenance Plan will be available on board the drilling unit and all project vessels in order to minimise the risk of mechanical failure likely to lead to reduced efficiency (e.g. sewage treatment plan, incinerator, macerator/grinder, oil/water separator etc.) and other unplanned events (e.g. oil leaks or diesel spills). Control and maintenance procedures will be implemented at regular intervals by the various service providers.

This plan will provide for the implementation of leak detection and maintenance programmes for:

- Valves, flanges, fittings, seals, hydraulic systems, hoses etc.
- All diesel motors and generators receive adequate maintenance to minimise soot and unburnt diesel released to the atmosphere
- Waste treatment facilities, e.g. sewage treatment plan, incinerator, macerator/grinder etc.

This plan will also detail the procedure to follow if certain facilities (e.g. oil/water separator) are not available due to maintenance or overload.

This plan will also ensure that all equipment (e.g. wellheads, BOPs etc.) that has been used in other regions is thoroughly cleaned prior to deployment.

2.4.6.8 BALLAST WATER MANAGEMENT PLAN

Ballast water discharge will follow the requirements of the IMO 2004 International Convention for the Control and Management of Ships' Ballast Water. All ships engaged in international traffic are required to manage their ballast water to a certain standard according to a ship-specific Ballast Water Management Plan. This plan deals with the ballast water management system on each of the project vessels including how it operates and procedures for monitoring and reporting including ballast log book.

2.4.6.9 CORRECTIVE ACTION PLAN

Events (incidents or accidents) will undergo a root cause analysis while non-compliances identified during audit findings (refer to **Section 2.7.2**) will be investigated to identify underlying causes to non-compliance situations and then rectified. Management actions will be taken to correct the underlying causes behind the audit findings and improvements will be made before another audit is conducted. This audit process allows for problems to be corrected, compliance to be improved and prevention of the same findings during subsequent audits.

Where corrective actions are deemed necessary specific measures will be developed with designated responsibility and timing and implemented. In this way continuous improvement in performance will be achieved. Corrective actions will be captured in a Corrective Action Plan which will document the actions to correct an issue, problem, non-compliance or underperformance. It is essentially a plan to improve performance and/or reduce potential risk.

2.5 ROLES AND RESPONSIBILITIES

The project will have dedicated, competent personnel that will manage and oversee the HSE aspects over the project lifecycle. CNEL, as operator of PEL 82, will retain the primary responsibility for meeting environmental and social commitments throughout the project life span. The key HSE management roles and responsibilities supported by a project-specific organogram will be defined by the drilling contractor and validated by the operator prior to the commencement of any exploration activities.

2.5.1 CNEL

CNEL will be responsible for the overall implementation of the ESMP and meeting the environmental and social commitments. CNEL will have the following key responsibilities:

- Develop the drilling design for the Tender Document(s), which will include this ESMP.
- Select the preferred contractor(s) and ensure that the ESMP forms part of the contract for all contractors.
- Ensure the contractors implement the ESMP and any additional approval conditions contained in the ECC issued by MEFT.
- Ensure that environmental audits are undertaken to measure compliance with the agreed environmental performance objectives.
- Ensure that environmental monitoring and reporting are undertaken by all contractors.
- Engage with MIME, MEFT and relevant stakeholders when necessary at key stages of the project.
- Coordinate with contractors to ensure that key stakeholders are timely informed about the project activities and that concerns and questions are responded to and grievances are managed properly, in alignment with the Grievance Mechanism.
- When considered necessary, appoint a representative onboard the drilling unit to ensure compliance with the various commitments and supervise contractor coordination, especially with MMO and PAM personnel, if needed. Note: MMOs and PAM personnel would only be used if VSP is conducted.

2.5.2 DRILLING CONTRACTOR

The drilling contractor appointed by CNEL shall have overall responsibility for the specified exploration activities and the management of any sub-contractors. All obligations endorsed by CNEL shall apply to the contractors and any sub-contractors. CNEL shall inform the contractors of these obligations in the appointment contract.

- Be responsible for and convey the requirements of the ESMP to all staff and any sub-contractors including MMOs, PAM operators and other subcontractors such as support vessels, helicopter, emergency support and catering.

- Ensure that sufficient resources are deployed in order to efficiently implement this ESMP.
- Ensure that personnel with responsibilities are adequately trained and experienced and are supported with essential resources.
- Ensure that all staff are given an environmental and social induction and that further training is undertaken at crew changes.
- Conduct monitoring, auditing and implement corrective actions as per the requirements of the ESMP.
- Be responsible for ensuring the health and safety of all personnel on the drilling unit and project vessels.

2.5.3 MARINE MAMMAL OBSERVERS (MMOS)

Should VSP activities be undertaken, MMOs must have the following qualifications and experience:

- Experience in seabird, turtle, large pelagic fish and marine mammal identification and observation techniques.
- Certification from the Joint Nature Conservation Committee (JNCC) or an equivalent body.
- The lead MMO should have appropriate training or certification and relevant seafaring experience.
- Safety certificate such as BOSIET or equivalent.
- Medical certificate such as OGUK, ENG1 or equivalent.
- The MMO shall have the following responsibilities during VSP operations:
- Provide effective regular briefings to crew members and establish clear lines of communication and procedures for onboard operations.
- Record airgun activities including sound levels, soft-start procedures and pre-firing regimes.
- Observe and record responses of marine fauna to VSP operations including penguins, large pelagic fish, turtles and cetaceans. Record species identification, position, distance and bearing from the drilling unit, swimming speed and direction and any changes in behaviour.
- Record any attraction of predatory seabirds, large pelagic fish or cetaceans and incidents of feeding behaviour among hydrophone streamers.
- Record meteorological conditions at the beginning and end of the observation period and whenever weather conditions change significantly.
- Request the delay of start-up or temporary termination of VSP operations as appropriate and maintain a log of all termination decisions.
- Use a recording spreadsheet such as JNCC 2017 to document all observations and decisions.
- Prepare a close-out report summarising MMO findings with the records database appended.

2.5.4 PASSIVE ACOUSTIC MONITORING (PAM) OPERATORS

Should VSP activities be undertaken, PAM operators will be utilised and must have the following qualifications and experience:

- Experience in marine mammal detection and identification techniques.
- Experience in appropriate deployment of PAM equipment.
- Certification from JNCC or an equivalent body.
- The lead PAM operator should have appropriate training certificate and relevant seafaring experience.
- Safety certificate such as BOSIET or equivalent.
- Medical certificate such as OGUK, ENG1 or equivalent.
- The PAM operator will have the following responsibilities during VSP operations:
- Provide effective regular briefings to crew members and establish clear lines of communication and procedures for onboard operations.
- Ensure that the PAM hydrophone cable is optimally placed, deployed, tested and repaired or replaced when necessary for acoustic detections of marine mammals.
- Record all airgun activities including timeline log, sound levels, soft-start procedures and pre-firing regimes.
- Confirm that there is no marine mammal activity within 500 meters of the airgun array prior to commencing soft-start procedures.
- Record species identification, position, distance and bearing from the vessel and acoustic source where possible.
- Record general environmental conditions.
- Request the delay of start-up and temporary shut-down of VSP operations as appropriate.

2.6 TRAINING, AWARENESS AND COMPETENCY

CNEL and the contractor will implement environmental awareness and training and ensure the competency of staff with responsibilities in terms of the ESMP.

CNEL will, at the Kick-Off meeting, highlight the contractor's responsibility in terms of identifying, planning, monitoring and recording the training needs of personnel whose work may have a significant adverse impact upon safety, the environment and in the community. Employees at all levels will be made aware of the potential impacts of their activities and the roles and responsibilities in achieving conformance with the ESMP and internal policy and procedures.

The personnel with responsibilities in specific HSE practices will be adequately trained to ensure effective implementation of the work instructions and procedures for which they have responsibilities. This training will include awareness and competency with respect to the following:

- General awareness relating to exploration activities including environmental and social impacts that could potentially arise from project activities.
- Legal requirements in relation to safety and environmental performance.
- Necessity of conforming to the requirements of the Environmental Authorisation and ESMP including reporting requirements such as incident reporting.
- Activity-specific training such as waste management practices and grievance management.
- Roles and responsibilities to achieve compliance including change management and emergency response.

- Training will take cognisance of the level of education, designation and language preferences of the personnel.

The appointed contractor and any sub-contractors will also be required to institute training programmes for its personnel. The contractor will be responsible for site HSE awareness training for personnel working on the project and for identification of any additional training requirements to maintain required competency levels.

The contractor training programme will be subject to approval by the operator and it will be audited to ensure that:

- Training programmes are adequate and all personnel requiring training have been trained
- Competency is being verified.

2.7 COMPLIANCE VERIFICATION AND CORRECTIVE ACTIONS

Monitoring and auditing will be undertaken to confirm adequate implementation of the ESMP as well as the effectiveness of mitigation measures in avoiding or minimising impacts. CNEL's and contractor's HSE staff will implement a formal tracking procedure for investigating cause and identifying corrective actions in response to accidents, HSE and/or social non-compliances. Corrective actions include those intended to improve performance, non-compliances and non-conformances.

2.7.1 MONITORING

Monitoring will be conducted to ensure compliance with regulatory requirements and the performance objectives specified in the ESMP as well as to evaluate the effectiveness of operational controls and mitigation measures. Monitoring will include but not be limited to those criteria listed in Table 2-5 which will be reviewed and updated to incorporate any additional aspects that may need to be monitored.

The main objectives of the monitoring programme include:

- Gathering, recording and analysing data required for regulatory and ESMP purposes.
- Verifying the predictions and conclusions made in the ESIA Report.
- Identifying changes in the physical, biological and social environment.
- Producing information to evaluate environmental performance specified in the ESMP.
- Producing information about emergencies that require an immediate response.
- Obtaining information on the potential environmental and social impacts of exploration activities.
- Using monitoring results as a source of information and as grounds for decision making regarding the design of new mitigation measures.
- Describing whether and to what extent discharges from exploration activities have had impacts on the marine environment.

As a general approach CNEL will ensure that all monitoring programmes comprise the following:

- A formal procedure.
- Use of appropriately calibrated equipment.
- The date, time and monitoring point of each sample is to be recorded.

- Where samples require analysis these will be preserved according to laboratory specifications.
- Accredited laboratories will be used to undertake sample analyses and/or internal laboratory results will periodically be checked by independent and accredited laboratories.
- Analysis where relevant must be carried out in accordance with methods prescribed by the Namibian National Standards in terms of the Standards Act 2005 (No. 18 of 2005) or similar.
- Monitoring data will be stored in an appropriate database.
- Data will be interpreted and reports on trends in the data will be compiled on a regular basis.
- Both the data and the reports will be kept on record for the duration of operations.

Monitoring will include but not limited to the following:

TABLE 2-5 MONITORING REQUIREMENTS

Aspect	Criteria to be monitored Timing / Frequency	Timing / Frequency
Sensitive seabed structures and sediments quality	• Hard substrate and rocky outcrops • Type and quantity of benthic fauna • Granulometry, hydrocarbons, metals and heavy metals	Prior to drilling and once during campaign
Ballast water prior to arrival on location	• Volume discharged, treatment and location (compliance with International Convention for the Control and Management of Ships' Ballast Water and Sediments	Before/during first de-ballasting in country
Drilling fluids	• Volume on board • Volume used • Volume discharged • Toxicity, barite contamination, Organic Phase Drilling Fluid concentration (NADF), chloride concentration (WBM-brine) • Update MSDS of chemicals and products on board of vessels	Daily during drilling operations
Cement	• Volume used and excess of cement discharged overboard/at sea bottom during riserless operations • Monitor (using ROV) cement returns and if significant discharges are observed on the seafloor terminate cement pumping, as far as possible. • Monitor (using ROV) hole wash out to reduce discharge of fluids, as far as possible. Conducting pre-drilling ROV surveys to ensure wells are placed away from known sensitive or vulnerable hardground habitats, aiming to select level areas for spudding and wellhead installation.	During cementing operations
Chemicals and hazardous materials	• Cement chemicals and additives • Volume stored • Volume consumed • Monitoring requirements: • Test drill cuttings daily for retained oil content to ensure specified discharge standards are	Daily during drilling operations

Aspect	Criteria to be monitored Timing / Frequency	Timing / Frequency
	maintained (average residual oil on cuttings <6.9%) at the end of the well. • Test barite for heavy impurities prior to mixing barite on location. • Test any other discharged fluids for visible oil contamination (static sheen). • Where practical, monitor sediment deposition and hydrocarbon concentrations. • Monitor (using ROV) cement returns and if significant discharges are observed on the seafloor terminate cement pumping, as far as possible. • Monitor (using ROV) hole wash out to reduce discharge of fluids, as far as possible.	
Drill cuttings	• Volume discharged • Oil content in drill cuttings	Daily during drilling operations
Deck drainage /machinery space /bilge water	• Correct operation of oil separating/filtering equipment and oil content meter (compliance with MARPOL 73/78 standards, Annex I Regulation for the Prevention of Pollution by Oil)	Prior to drilling and once during campaign
Sewage discharge	• Correct operation of sewage treatment system (compliance with MARPOL 73/78 standards, Annex IV (Regulation for Prevention of Sewage from ships)	At start and once during campaign
Galley waste	• Type and volume discharged • Correct operation for discharge (compliance with MARPOL 73/78 standards, Annex V Regulation for Prevention of Pollution by Garbage from ships)	Daily during drilling operations
General waste	• Type and volume of waste generated • Type and volume transferred for onshore waste disposal facility • Compliance with waste Management Plan	Daily during drilling operations
Hazardous waste	• Volume of waste generated • Volume transferred for onshore disposal • Compliance with Waste Management Plan	Daily during drilling operations
Fuel usage	• Type and volume on board • Volume consumed	Daily during drilling operations
Accidental oil and chemical spills	• Type • Volume • Compliance with Shipboard Oil Spill Emergency Plan	Daily during drilling operations
Radioactive sources	• Correct containment and storage on board and during transportation	At start and once during campaign
Vertical Seismic Profiling (if applicable)	• Marine mammals observations and final report • Application of JNCC best practice	During pre-watch period and continuous during VSP

Aspect	Criteria to be monitored Timing / Frequency	Timing / Frequency
Well (flow) testing (if required)	• Volumes of hydrocarbon fluids	Daily during well testing operations
Dropped objects	• Establish a hazards database listing: the type of gear left on the seabed date of abandonment/loss location; and where applicable, the dates of retrieval	Daily during drilling operations
Disruption/ interference to fishing/shipping	• Interactions with other vessels (via radio) • Number of grievances/incidents logged	Daily during drilling operations
Fauna interaction	• Bird and sea fauna incidents of injury/death • Stray land birds resting on drillship	Daily during drilling operations

2.7.2 AUDITING

Contractors will be required to conduct routine HSE inspections (internal and independent audits) to monitor compliance and implementation of conditions stipulated in this ESMP. The results of the inspection and monitoring activities will be reported to the operator (CNEL).

Beyond the routine inspection and monitoring activities conducted by the contractors, formal audits will be carried out internally by CNEL's onboard HSE representatives to determine the level of compliance with the ESMP and its own HSE standards and policies. The audit data will include the contractor's monitoring and inspection records.

The audit will include amongst other things, checking:

- Completeness of HSE documentation, including planning documents and inspection records.
- Conformance with monitoring requirements.
- Efficacy of activities to address any non-conformance with monitoring requirements.
- Training activities and record keeping.

Findings will be documented in audit reports, which will be submitted to the relevant Manager for action and follow-up.

2.7.3 CORRECTIVE ACTIONS

CNEL and its contractors' HSE personnel will implement a structured procedure for tracking non-compliance and corrective actions, ensuring thorough investigation of root causes and appropriate identification of corrective measures in response to accidents, HSE concerns, or social non-compliances.

Audit findings will be systematically monitored until they are resolved. Management will address the underlying causes identified during audits and implement necessary improvements prior to subsequent reviews. This approach facilitates timely correction of issues, enhances compliance and reduces the likelihood of recurring findings in future audits.

When corrective actions are required, detailed measures will be defined and documented in a Corrective Action Plan, specifying responsibilities and timelines for implementation. This systematic approach supports ongoing performance improvement.

HSE personnel from CNEL and its contractors will maintain comprehensive records of all corrective actions and oversee modifications to environmental or social protection protocols and training programs, thereby preventing recurrence of non-conformances and non-compliances.

2.8 IMPLEMENTATION OF THE ESMP

The development and implementation of the ESMP is an ongoing process that is iterative in nature. This document must thus be seen as a 'living' document and amendments may need to be implemented during the project. Typical changes that can affect the ESMP include:

- A material project design change that occurs after the ESMP has been compiled and approved.
- Changes in the feasibility/availability of specific mitigation measures.
- Personnel changes and/or planning on the project.
- Equipment failure during the survey or drilling.

This document is the first version of the ESMP. Certain aspects of this document may be expanded/made more specific during the detailed design stage to ensure, firstly, that it includes all conditions of approval and, secondly, that it addresses all potential impacts related to the detailed design. It may also need to be amended if audit findings indicate:

- Insufficient mitigation of potential environmental impacts associated with the undertaking of the activity; or
- Insufficient levels of compliance with the ECC or ESMP.

2.9 COMMUNICATION

CNEL and its contractors are responsible for securely filing all records pertaining to the implementation of this ESMP, including inspection and audit reports, incident reports, monitoring records and other relevant documentation. These records must be stored in a secure location where they can be readily accessed.

2.9.1 STAKEHOLDER ENGAGEMENT

Open liaison channels must be established between CNEL local government authorities, contractors, subcontractors and adjacent land-users such that any queries, complaints or suggestions can be dealt with timeously and by the appropriate person(s).

CNEL will implement a Grievance Mechanism (GM) to address the concerns of affected parties about the project's environmental and social performance.

The project's grievance procedures will be accessible to any affected community member or aggrieved party. These procedures has been customized to include input from affected parties when applicable and in compliance with the law.

A grievance and complaints register will be used and maintained to record any complaints or comments. As a minimum, the following information should be recorded:

- Time, date and nature of enquiry or complaint.
- The means by which the enquiry or complaints was made.
- Personal details of the person / party lodging the enquiry or complaint (subject to privacy/anonymity considerations).
- Actions taken to investigate and time and date to close-out the complaint as well as complainant feedback.

Any actions that cannot be managed immediately should be assigned to the appropriate personnel and managed according to the grievance procedure. The action will only until it is closed off by the CNEL Project Manager one a satisfactory resolution has been agreed upon by all parties concerned.

2.9.2 AUTHORITY COMMUNICATION

A notification document with well drilling details must be submitted to MIME and MEFT at least 30 days prior to mobilisation.

CNEL will submit an ESMP close-out compliance report to the Competent Authority (MIME) within 90 days of the end of each drilling campaign (**Section 2.10.4**).

2.10 DOCUMENT CONTROL AND REPORTING

2.10.1 DOCUMENTATION

CNEL will manage HSE documents (such as licenses, approvals, plans, procedures, checklists, forms, audits and reports) using a formal process for document control. This procedure covers communication methods, electronic filing, document tracking and version control. Contractors will create and maintain their own HSE document systems and describe them in their HSE plans.

2.10.2 INCIDENT REPORTING

After any HSE incident, CNEL investigates and reports on the events, root causes and corrective actions taken. Incidents that exceed local regulations are reported to MIME and MEFT.

2.10.3 AUDIT REPORTS

Audit findings (**refer to Section 2.7.2**) will be documented in audit reports, which will be submitted to the relevant Manager for action and follow-up.

2.10.4 ESMP CLOSE-OUT COMPLIANCE REPORT

CNEL will submit an ESMP close-out compliance report to MIME within 90 days after each drilling campaign, detailing mitigation measures and compliance with ESMP performance objectives.

2.11 INCIDENT MANAGEMENT AND MITIGATION

Table 2-6 outlines the requirements for incident management and mitigation.

TABLE 2-6 ROLES AND RESPONSIBILITIES

Designation	Roles and Responsibility
Reporting of Environmental Incidents	• Any environmental incident should be reported immediately to the CNEL HSE Manager and in accordance with CNEL procedures. • Immediate correspondence should be taken with the relevant staff members to determine mitigation and close-out requirements. • All significant incidents should be reported to the relevant authority(s) as per the legal requirements.
Contents of Environmental Incident Records	Environmental incident reporting and recording must include the following information: • Time, date and nature of the incident. • Response and investigation undertaken. • Actions taken and by whom.
Continual Improvement	• Corrective and preventative action requests should be forwarded to the responsible person so that corrective action can be taken. Open non-conformances must only be closed on verification by the HSE Manager that the corrective action has been implemented effectively to meet the ESMP requirements. • The cause of all incidents should be investigated to determine root cause and to ensure that corrective action is able to be implemented to ensure that there is no repeat of the incident. • If required following an incident, a review of the efficacy of the ESMP should be undertaken by CNEL to identify possible areas of improvement or updating or amendment required within the ESMP.

2.12 ENVIRONMENTAL AND SOCIAL MITIGATION MEASURES

This section details the specific management commitments to be implemented to prevent, minimise or manage potential significant negative impacts and optimise and maximise any potential benefits of the project. These commitments are presented for the three project phases: mobilisation, operation (including planning, drilling activities and well plugging and abandonment) and demobilisation.

This ESMP Commitments Register (Table 2-7 for planned events and Table 2-8 for unplanned events) is structured in the following manner so that the mitigation measures have a clear and logical context within which they are designed, implemented, monitored and evaluated:

- Aspect and Potential impact;
- Mitigation /Management Action;
- Responsibility; and
- Timing.

TABLE 2-7 ESMP COMMITMENTS REGISTER FOR PLANNED EVENTS

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
Air emissions Use of drilling and supply vessels during all phases	All	• Comply with MARPOL 73/78 Annex VI regulations regarding the reduction of SOx, NOx, ODS, VOC and emissions from shipboard incineration. • All diesel motors and generators will undergo routine inspections and receive adequate maintenance to minimise soot and unburnt diesel released to the atmosphere. • Leak detection and repair programmes will be implemented for valves, flanges, fittings, seals, etc. • Use of a low sulphur fuel for project vessels, if available. • Prohibition of waste incineration within port limits. • Regular maintenance of engines to optimise performance and reduce emissions. • Implementation of leak detection and repair programmes.	Drilling contractor	Throughout vessel operations and drilling campaign
Ecosystem disturbance Disposal of cuttings to the seafloor and overboard, disposal of excess cement potentially leading to seawater and sediment quality degradation /contamination and impacts on marine fauna	Operation	**Pre-Operation** • Conduct careful design of pre-drilling site surveys to collect sufficient information on seabed habitats, including mapping of sensitive and potentially vulnerable habitats within 500 m of a proposed well site., aiming to select level areas for spudding and well head installation. • If sensitive habitats (such as hard grounds), sensitive species (e.g., cold-water corals, sponges), or significant structural features are detected, adjust the well position to beyond 500 m, or implement technologies, procedures and monitoring to	Drilling contractor	Throughout drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		reduce risks and assess potential damage. **Operation** • Establish clear operational procedures for ROVs to avoid seabed contact. • Limit the area physically affected by infrastructure to the minimum required. • Use WBM where possible or switch to low-toxicity Group III NADF with offshore treatment to reduce oil content in cuttings (<6.9%) before discharge. • Discharge risered cuttings through a caisson at depths >10 m to limit surface dispersion. • Careful selection of drilling fluid additives taking into account their concentration, toxicity, bioavailability and bioaccumulation potential; Use only, PLONOR (Pose Little Or No Risk) chemicals, low-toxicity, low bioaccumulation potential and partially biodegradable additives are used, where practicable. Maintain a full register of Safety Data Sheets (SDSs) for all chemical used, as well as a precise log file of their use and discharge. • Monitor sediment deposition and hydrocarbon concentrations where practical. • Employ high-efficiency solids control equipment to reduce liquid content in cuttings and maximize mud reuse. • Optimize reuse and recycling of WBM and NADF across wells and sections. • Regularly maintain onboard solids control systems. • Limit excess cement slurry during riserless drilling. • Ship unused cement onboard to shore for reuse, storage, or disposal. • Use NADFs for risered sections and maintain solids control systems to prevent improper discharge.		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		• If NADFs are used for drilling the risered sections, conduct regular maintenance of the onboard solids control package and avoid inappropriate discharge of NADF cuttings. • Minimise fluid discharge wherever possible. **Post- Operation** • Conduct post-drilling ROV surveys to locate and recover dropped equipment or excess cement. • Register and distribute the location of abandoned wellheads via "Notice to Mariners" and "Notice to Fishers". **Monitoring** • Test drill cuttings daily for retained oil content to check specified discharge standards are maintained (average residual oil on cuttings <6.9%) at the end of the well. • Test barite for heavy impurities prior to mixing barite on location. • Test any other discharged fluids for visible oil contamination (static sheen). • Where practical, monitor sediment deposition and hydrocarbon concentrations. • Monitor cement returns with an ROV and stop cement pumping if significant discharges are detected on the seafloor. • Monitor (using ROV) hole wash out to reduce discharge of fluids, as far as possible.		
Ecosystem Flaring activities during well testing potentially leading to disturbance to marine fauna	Operation	**Well Testing** • Design well test programmes to minimise flaring duration. • Schedule well testing during daylight hours where feasible. • Use high-efficiency burners to optimize hydrocarbon combustion and minimise emissions and drop-out. • Continuously monitor flare performance for malfunctions or drop-out.	Drilling contractor	During well testing and logging

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
Ecosystem disturbance Drillship and vessels lighting potentially leading to disturbance to marine fauna	All	• Lighting on the support vessels and drill rig, should be reduced to a minimum compatible with safe operations whenever and wherever possible. • Light sources should, if possible and consistent with safe working practices, be positioned in places where emissions to the surrounding environment can be minimised • Optimise well test programme to reduce flaring as much as possible during the test. • Commence with well testing during daylight hours, as far as possible. • Monitor flare (continuous) for any malfunctioning, etc. (including any drop-out).	Drilling contractor	Throughout vessel operations and drilling campaign
Ecosystem disturbance Drillship and vessels noise due to dynamic positioning and moving, noise from drilling activities potentially leading to disturbance to marine fauna	All	• Limit vessel transit speeds to ≤12 knots (22 km/h) between the drilling area and port and ≤10 knots (18 km/h) within 25 km of the coastline. • Implement a maintenance plan to check all diesel motors and generators receive adequate maintenance to minimise noise emissions.	Drilling contractor	Throughout vessel operations and drilling campaign
Ecosystem disturbance Helicopter Noise potentially leading to disturbance of marine fauna	All	• Avoid flying over sensitive areas near Walvis Bay, including Namib-Skeleton Coast National Park and Ramsar sites like the Walvis Bay Wetlands and Sandwich Harbour. These zones are essential for conserving birds, turtles, fish and marine mammals, some of which are threatened. Low-altitude flights can disturb breeding colonies, causing nest abandonment and higher predation risks. Key habitats like Walvis Bay Wetlands and Bird Island guano platform may overlap with flight paths but are distant from airport zones. • Altitude Restrictions:	Helicopter contractor	Throughout helicopter operations and drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		○ Avoid low-altitude coastal flights (<762 m or 2,500 ft and within 1 nm of shore). ○ Keep altitude above 1,000 m over the Walvis Bay coastline, which includes protected areas like Namib-Skeleton Coast National Park and Ramsar sites such as the Walvis Bay Wetlands and Sandwich Harbour. These regions support diverse bird and wildlife species, some at risk or endangered. Low-altitude flights can disrupt breeding colonies, increasing predation risks. Important Bird Areas near the airport include Walvis Bay Wetlands and Bird Island guano platform, which may intersect helicopter routes though are not close to main flight zones. ○ Exceptions: take-off/landing, medical emergencies and Diaz Point (approach only from the north). • Adhere to all aviation regulations. • Brief pilots on ecological risks of low-level coastal flights and flying over marine mammals.		
Ecosystem disturbance Drillship and vessels noise due to Vertical Seismic Profiling potentially leading to disturbance to marine fauna	Operation	**MMO and PAM Deployment** • Appoint a minimum of two dedicated Marine Mammal Observer (MMO), with a recognised MMO training course, on board for marine fauna observation (360 degrees around drilling unit), distance estimation and reporting. One MMO should also have Passive Acoustic Monitoring (PAM) training should a risk assessment, undertaken ahead of the VSP operation, indicate that the PAM equipment can be safely deployed considering the metocean conditions (specifically current). • Check drilling unit vessel is fitted with PAM technology	Drilling contractor	Throughout VSP operations

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		(one or more hydrophones), which detects animals through their vocalisations, should it be possible to safely deploy PAM equipment. **Pre-start Protocols for Airgun Testing and Profiling** • VSP profiling should, as far as possible, only commence during daylight hours with good visibility. However, if this is not possible due to prolonged periods of poor visibility (e.g. thick fog) or unforeseen technical issue which results in a night-time start, refer to "periods of low visibility" below. • Undertake a 1-hr (as water depths > 200 m) pre-shoot visual and possible acoustic scan (prior to soft-starts / airgun tests) within the 500 m radius mitigation zone in order to confirm there are no cetaceans, turtles, penguins and shoaling large pelagic fish activity close to the source. **Soft-Start Procedures** • Implement a "soft-start" procedure of a minimum of 20 minutes' duration when initiating the acoustic source (except if testing a single airgun on lowest power). This requires that the sound source be ramped from low to full power rather than initiated at full power, thus allowing a flight response by marine fauna to outside the zone of injury or avoidance. • Delay "soft-starts" if cetaceans, turtles and shoaling large pelagic fish are observed / detected within the mitigation zone during the pre-shoot visual / acoustic scan. A "soft-start" should not begin until 20 minutes after		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		cetaceans depart the mitigation zone or 20 minutes after they are last seen or acoustically detected by PAM in the mitigation zone. In the case of penguins, shoaling large pelagic fish and turtles, delay the "soft-start" until animals move outside the 500 m mitigation zone. **Operational Monitoring** • Maintain visual and possibly acoustic observations within the 500 m mitigation zone continuously during VSP operation to identify if there are any cetaceans present. • Keep VSP operations under 250 pulses to remain within the 500 m exclusion zone for cetaceans. **Shut-Down Protocols** • Shut down the acoustic source if cetaceans, penguins, shoaling large pelagic fish or turtles are sighted within 500 m mitigation zone until such time as the mitigation zone is clear of cetaceans for 20 minutes or in the case of penguins, shoaling large pelagic fish or turtles, the animals move outside the 500 m mitigation zone before the soft-start procedure and production may commence. **Breaks in Airgun Firing** • Breaks of less than 20 minutes: ○ There is no requirement for a soft-start and firing can recommence at the same power level as at prior to the break (or lower), provided that continuous monitoring was ongoing during the silent period and no cetaceans, penguins, shoaling large pelagic fish or turtles were detected in the mitigation		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		zone during the breakdown period. ○ If cetaceans are detected in the mitigation zone during the breakdown period, there must be a minimum of a 20-minute delay from the time of the last detection within the mitigation zone and a soft-start must then be undertaken. In the case of penguins, shoaling large pelagic fish or turtles, the animals move outside the 500 m mitigation zone within the 20 minute period. • Breaks of longer than 20 minutes: ○ If it takes longer than 20 minutes to restart the airguns, a full pre-watch and soft-start process should be carried out before the survey re-commences. If an MMO/PAM operator has been monitoring during the breakdown period, this time can contribute to the 60-minute pre-watch time. **Low Visibility Procedures** • If low visibility or technical issues necessitate a nighttime start, apply the low visibility protocols. • During periods of low visibility (where the mitigation zone cannot be clearly viewed out to 500m), including night-time, the VSP source is only used if PAM technology is in place to detect vocalisations (subject to a risk assessment indicating that the PAM equipment can be safely deployed considering the metocean conditions) or: • There have not been three or more occasions where cetaceans, penguins, shoaling large pelagic fish or turtles have been sighted within the 500 m mitigation zone during the preceding 24-hour period; and • A two-hour period of continual observation of the mitigation zone was undertaken (during a period of good visibility)		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		prior to the period of low visibility and no cetaceans, penguins, shoaling large pelagic fish or turtles were sighted within the 500 m mitigation zone.		
Ecosystem disturbance Wastewater discharge potentially leading to seawater quality degradation /contamination and impacts on marine fauna	All	**Pre-Operation** • Implement an awareness programme that addresses reduced water usage and waste generation at the various sites, shore-based and marine. • Develop and implement a Waste Management Plan to guide segregation, storage, handling and disposal of non-hazardous and hazardous waste. • Develop and implement a Hazardous Substances Management Plan to manage safe handling and containment of hazardous materials. • Implement a Ballast Water Management Plan to prevent the introduction of invasive species and protect marine ecosystems. **Operation** • Compliance of project vessels with MARPOL 73/78 Annex I Regulations for the Prevention of Pollution by Oil. Including, Annex IV Regulations for the Prevention of Pollution by Sewage from Ships, Annex V prevention of pollution by garbage from Ships. • Continue execution of the Waste Management Plan and Hazardous Substances Management Plan throughout the drilling campaign. • Maintain and monitor ballast water systems as per the Ballast Water Management Plan. • Prohibit operational discharges when transiting through the MPAs and EBSAs during transit to and from the drill site. • Use drip trays to collect run-off from equipment that is not	Drilling contractor	Throughout vessel operations and drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		contained within a bunded area and route contents to the closed drainage system. • Implement leak detection and repair programmes for valves, flanges, fittings, seals, etc. • Use a low-toxicity biodegradable detergent for the cleaning of the deck and any spillages.		
Waste Management Potential increase in non-hazardous and hazardous waste disposal	All	**Pre-Operation** • Develop and implement a Waste Management Plan to guide segregation, storage, handling and disposal of non-hazardous and hazardous waste. • Develop and implement a Hazardous Substances Management Plan to manage safe handling and containment of hazardous materials. **Operation** • Compliance of project vessels with MARPOL 73/78 Annex I Regulations for the Prevention of Pollution by Oil. Including, Annex IV Regulations for the Prevention of Pollution by Sewage from Ships, Annex V prevention of pollution by garbage from Ships.	Drilling contractor	Throughout vessel operations and drilling campaign
Community and Stakeholders Riser / BOP structure removal, MODU presence at site, drilling discharges, underwater noise potentially leading to disturbance to fishing and navigation	All	***Pre-Operation*** • Distribute a Notice to Mariners to key stakeholders prior to the well-drilling operations 3 weeks prior to operations and on completion of the campaign. Stakeholders include the relevant fishing industry associations: Confederation of Namibian Fishing Association, Large Pelagic and Hake Longlining Association of Namibia. Other key stakeholders: Directorate of Maritime Affairs, SANHO, Namibian Ports Authority and the MFMR Monitoring, Control and Surveillance Unit in Walvis Bay (Vessel Monitoring System). • Request, in writing, SANHO to broadcast a navigational warning via Navigational Telex	Drilling contractor	Throughout vessel operations and drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		(Navtext) and navigational warnings twice daily on Channel 16 VHF. • Implement a grievance mechanism that allows stakeholders to register specific grievances related to operations; by ensuring they are informed about the process and that resources are mobilised to manage the resolution of all grievances, in accordance with the Grievance Management procedure. • Conduct careful design of pre-drilling site surveys to collect sufficient information on seabed habitats, including mapping of sensitive and potentially vulnerable habitats within 500 m of a proposed well site. • If sensitive habitats (such as hard grounds), sensitive species (e.g., cold-water corals, sponges), or significant structural features are detected, adjust the well position to beyond 500 m, or implement technologies, procedures and monitoring to reduce risks and assess potential damage. • Careful selection of drilling fluid additives taking into account their concentration, toxicity, bioavailability and bioaccumulation potential; Use only, PLONOR (Pose Little Or No Risk) chemicals, low-toxicity, low bioaccumulation potential and partially biodegradable additives are used, where practicable. Maintain a full register of Safety Data Sheets (SDSs) for all chemical used, as well as a precise log file of their use and discharge. **Operation** • Manage the lighting on the drilling unit and support vessels so it is sufficiently illuminated to be visible to fishing vessels and compatible with safe operations. • Notify fishing vessels at a radar range <24 Nm from the drillship via radio regarding		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		the safety requirements around the drillship. If possible, transmit/broadcast the virtual safety navigational zone surrounding the rig on the AIS system, so nearby vessels will see not only the vessel location but also the restricted zone surrounding the vessel on their AIS displays. • Implement a grievance mechanism that allows stakeholders to register specific grievances related to operations; by ensuring they are informed about the process and that resources are mobilised to manage the resolution of all grievances, in accordance with the Grievance Management procedure. • If NADFs are used for drilling the risered sections, conduct regular maintenance of the onboard solids control package and avoid inappropriate discharge of NADF cuttings. **Monitoring** • Test drill cuttings daily for retained oil content to check specified discharge standards are maintained (average residual oil on cuttings <6.9%) at the end of the well. • Test barite for heavy impurities prior to mixing barite on location. • Test any other discharged fluids for visible oil contamination (static sheen). • Where practical, monitor sediment deposition and hydrocarbon concentrations. • Monitor cement returns with an ROV and stop cement pumping if significant discharges are detected on the seafloor. • Monitor (using ROV) hole wash out to reduce discharge of fluids, as far as possible. **VSP** Soft start procedures: • Gun test followed by full VSP logging phase: acoustic		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		source must be initiated at the lowest power setting, with gradual ramp-up of the acoustic source over a 20-minute period until the full operating power level is reached. • For single gun tests prior to VSP logging phase: If a gun test will be less than 20-minutes in duration, a soft start procedure of equal time duration must be followed (e.g. a 10-min gun test should be preceded with a 10-min soft start only). Operating procedures: • Whilst the VSP acoustic source is operating, both during soft start procedures and survey operations, the acoustic source must be shut down if mass mortality of fish species is sighted. **Abandonment** • Abandoned well location must be surveyed and accurately charted. If indicated, fit wellheads (in water depth less than 800 m) with an over-trawlable structure to minimise the risk of damage to demersal trawl gear, as well as potential damage to the wellheads. • Removal of wellheads: Consultation with the trawling industry should wellheads coincide with trawling grounds		
Stakeholders GHG emissions during the drilling program potentially leading to global climate change	All	• Use of low sulphur fuel (ISO 8217) in accordance with MARPOL Annex VI. • Prohibition of waste incineration within port limits. • Regular maintenance of engines to optimise performance and reduce emissions. • Implementation of leak detection and repair programmes.	Drilling contractor	Throughout vessel operations and drilling campaign
Stakeholders Number of marine vessels Increase potentially	All	• Ongoing engagement, as guided by the SEP with the Namibian Ports Authority to establish vessel routing	CNEL	Throughout vessel operations and drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
leading to marine traffic disturbance		optimisation and docking arrangements that minimises potential impact on other marine users. • Use the SEP to promote collaboration with fishing associations and cooperatives, recreation users and other commercial marine users to identify areas of optimisation. This would include promoting the use of the external grievance mechanism for stakeholder to raise concerns regarding vessel traffic. • Utilisation of monitoring systems data provided by the Ports Authority to track vessel traffic, including smaller boats used by artisanal fishers, in order to identify issues and potential improvements required in routing. • Manage the lighting on the drilling unit and support vessels to make sure that it is sufficiently illuminated to be visible to fishing vessels and compatible with safe operations.		
Stakeholders Drilling program potentially leading to direct / indirect employment	All	• The SEP should include requirements for ongoing engagement with local communities, business associations, NGOs and other relevant stakeholder categories regarding potential employment and procurement opportunities for local people and businesses. This engagement should include information sharing on job application processes, skills requirements and tendering processes. • The external grievance mechanism within the SEP should be clearly communicated to these stakeholders to allow them to submit a grievance relating the employment and procurement if necessary and the grievances will be processed accordingly. • Where possible, certain jobs as well as the provision of certain good and services	CNEL	Throughout drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		should be reserved for local employees and local suppliers. This may include various unskilled and semi-skilled positions as well as the procurement of transport services, food, security services etc.		
Stakeholders Drilling program potentially leading to positive impacts to the local economy	All	• Ongoing engagement with local business associations, communities and local authorities should include the sharing of local procurement opportunities including the requirements for contracting with CNEL and/or the project. This engagement should focus on managing expectations given the limited contractor and supply chain opportunities. • Opportunities to tender should be advertised widely within the project AoI to make sure awareness is raised amongst potential local contractors and suppliers. • The project should implement Chevron's internal local content requirements to maximise this benefit. These local content requirements should be clearly communicated to stakeholders.	CNEL	Throughout drilling campaign
Cultural Heritage Drillship/MODU presence offshore including wellhead and riser	All	Implementation of chance-find Procedure if archaeological material is encountered during the drilling operations.	Drilling Contractor	Throughout drilling campaign

TABLE 2-8 ESMP COMMITMENTS REGISTER FOR UNPLANNED EVENTS

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
Ecosystem disturbance Alien invasive species	All	• All ships that carry ballast water must de- and re-ballast in adherence with the International Maritime Organization (IMO) guidelines and standards governing discharge of ballast waters at sea. • Implement a Ballast Water Management Plan to prevent the introduction of invasive species and protect marine ecosystems.	Drilling contractor	Throughout vessel operations
Ecosystem disturbance Vessel collision with marine fauna	All	• Keep a constant watch from all vessels (Vessel Captain and crew) for cetaceans and turtles in the path of the vessel. Alter course and avoid animals when necessary. • vessel transit speed between the Area of Interest and port is a maximum of 12 kts (22 km/h), except within 25 km of the coast where it is reduced further to 10 knots (18 km/h) as well as when sensitive marine fauna are present in the vicinity. • Report any collisions with large whales to	Drilling contractor	Throughout vessel operations

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		the International Whaling Commission (IWC) database, which has been shown to be a valuable tool for identifying the species most affected, vessels involved in collisions and correlations between vessel speed and collision risk (Jensen & Silber 2003). • If a seabird impacts the vessel but is unharmed: • Place in a dark container (e.g., cardboard box) for release during daylight. • For injured seabirds: • Follow protocols outlined by wildlife response specialists.		
Ecosystem disturbance Loss of equipment disturbance of seabed and potential temporary disturbance of benthic fauna	All	• Check containers are sealed / covered during transport and loads are lifted using the correct lifting procedure and within the maximum lifting capacity of crane system. • Minimise the lifting path between vessels. • Maintain an inventory of all equipment and undertake frequent checks that items and stored and secured safely	Drilling contractor	Throughout vessel operations

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		on board each vessel. • Undertake a post drilling ROV survey to scan seafloor for any dropped equipment and other removable features around the well site. In the event that equipment is lost, assess safety and metocean conditions before performing any retrieval operations. • Notify SAN Hydrographer of any hazards left on the seabed or floating in the water column, with the dates of abandonment/loss and locations and request that they send out a Notice to Mariners with this information.		
Ecosystem disturbance Small Spills		• Information about installation operations will be shared with vessel operators through national communication channels, including notices and radio navigation warnings. • Check personnel are adequately trained in both accident prevention and immediate response and resources are		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		available on each vessel. • Develop an Oiled Wildlife Contingency Plan (OWCP) in collaboration with specialist wildlife response organisations with experience in oiled wildlife response. The OWCP should be integrated into the site-specific OSPC and include detailed protocols on the collection, handling and transport of oiled marine fauna. • Obtain permission from MFMR to use low toxicity dispersants should these be required; Use cautiously. • As far as possible and whenever the sea state permits, attempt to control and contain the spill at sea with suitable recovery techniques to reduce the spatial and temporal impact of the spill • Check adequate resources are provided to collect and transport oiled birds to a cleaning station. Capturing and transportation of oiled or injured seabirds must		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		be undertaken according to specific protocols as outlined in the OWCP. • Don't allow offshore bunkering in the following circumstances: • Wind force and sea state conditions of ≥6 on the Beaufort Wind Scale; • During any workboat or mobilisation boat operations; • During helicopter operations; • During the transfer of in-sea equipment; and • At night or times of low visibility.		
Ecosystem Disturbance Well loss of containment event potentially leading to disturbance of fisheries and marine fauna	Operation	• If modelling and intervention planning indicates that the well-specific response strategy and plans cannot reduce the response times to less than the time it would take oil to disperse, additional proactive measures must be committed to. For example: • Implement measures to reduce surface response times (e.g. pre-mobilise a portion of the	CNEL / Drilling contractor	Throughout drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		dispersant stock on the support vessels, contract additional response vessels and aircrafts, minimise the time it takes to install the subsea dispersant injection (SSDI) kit by ensuring there is a kit on standby, improve dispersant spray capability, etc.). • Deploy and/or pre-mobilise shoreline response equipment (e.g. response trailers, shoreline flushing equipment, shoreline skimmers, storage tanks, shoreline booms, skirt booms, shore sealing booms, etc.) to key localities for the full duration of drilling operation phase to proactively protect sensitive coastal habitats and areas • Include wildlife response in collaboration with specialist wildlife response organisations with experience in oiled wildlife response as part of the OSCP. • Schedule joint oil spill exercises including the operator and		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		local departments / organisations to test the Tier 1, 2 & 3 responses. • Check contract arrangements and service agreements are in place to implement the SCCP, e.g. capping stack, SSDI kit, surface response equipment (e.g. booms, dispersant spraying system, skimmers, etc.), dispersants, response vessels, etc. • Use low toxicity dispersants that rapidly dilute to concentrations below most acute toxicity thresholds. Dispersants should be used cautiously and only with the permission of MFMR. • Contracted support vessels will be equipped for dispersant spraying and can be used for mechanical dispersion (using the propellers of the ship and/or firefighting equipment). It should have at least 5 m^3 of dispersant onboard for initial response. • As far as possible and whenever the		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		sea state permits, attempt to control and contain the spill at sea with suitable recovery techniques to reduce the spatial and temporal impact of the spill • In the event of a spill, use drifter buoys and satellite-borne Synthetic Aperture Radar-based (SAR) oil pollution monitoring to track the behaviour and size of the spill and optimise available response resources • Submit all forms of financial insurance and assurances to MIME to manage all damages and compensation requirements in the event of an unplanned pollution event.		
Stakeholders Well loss of containment event potentially leading to disturbance of commercial fishing	Exploration phase	• Develop well-specific Source Control Contingency Plans (SCCP), including oil wildlife response actions, aligned with the National OSCP (Oil Spill Contingency Plan). Tailor plans to local oceanographic and meteorological conditions, environmental receptors and spill response resources.	CNEL / Drilling contractor	Throughout drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		• Assess onshore and offshore response resources (equipment and personnel), their location (local/international) and mobilization timeframes. • Select response strategies that minimise mobilisation time, using the best combination of local and international. • Develop intervention plans for sensitive areas and integrate these into the response strategy. • Tailor plans to local oceanographic and meteorological conditions, environmental receptors and spill response resources. • Conduct well-specific oil spill modelling using site- and time-specific data. If response time cannot prevent shoreline oiling, commit to additional proactive measures including: • Pre-mobilising dispersant stock on support vessels. • Contracting additional response vessels and aircraft. • Ensuring SSDI kit is on standby and rapidly deployable. • Improving dispersant spray capability. • Schedule joint oil spill exercises to test		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		Tier 1 and 3 responses. Maintain a support vessel within proximity of the drilling unit, equipped for: • Dispersant spraying. • Mechanical dispersion (via propellers or firefighting equipment). • Carrying at least 4 m^3 of dispersant onboard. • Control and contain spills at sea using recovery techniques, when sea state permits. • Use drifter buoys and SAR-based satellite monitoring to track spill behaviour and optimise response. • Establish a functional grievance mechanism: • Inform stakeholders of the process. • Mobilise resources for grievance resolution. • Follow the Grievance Management Procedure. Check contract arrangements and service agreements are in place for: • Capping stack (e.g. in Saldanha Bay and international locations).		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		• SSDI kit and surface response equipment. • Dispersants and response vessels. • Use low-toxicity dispersants that dilute rapidly and only with MFMR approval.		
Community Vessels collisions, helicopter incidents potentially leading to community health and safety issues	All	• Information about installation operations will be shared with vessel operators through national communication channels, including notices and radio navigation warnings. • Offshore training drills will assess the response readiness of all staff and equipment for a fuel or chemical spill event. • Appropriate contracts will be established to facilitate a response to a release, as is routine for all marine vessel activities. • Follow all flight safety protocols and coordinate with local emergency services. • Communicate flight schedules and routes in advance to the community. • Monitor and report incidents publicly.	CNEL, Drilling contractor	Throughout vessel operations and drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		• Confirm helicopter airworthiness via a competent authority prior to hiring. • Check pilots are trained on similar aircraft. • Coordinate with air traffic control and the drillship. • Restrict helicopter operations at night or during bad weather. • Provide basic rescue and survival training for all helicopter passengers. • Check personnel are adequately trained in both accident prevention and immediate response and resources are available on each vessel. • Use low toxicity dispersants cautiously and only with the approval of MFMR. • As far as possible and whenever the sea state permits, attempt to control and contain the spill at sea with suitable recovery techniques to reduce the spatial and temporal impact of the spill. • Check adequate resources are provided to collect and transport oiled		

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
		birds to a cleaning station as per specific protocols for capturing oiled and injured seabirds as outlined in the Wildlife Response Plan (to be created as part of the OSCP) and coordinated with SANCCOB (Contact Us - SANCCOB). • Check offshore bunkering is not undertaken in the following circumstances: ◦ Wind force and sea state conditions of ≥6 on the Beaufort Wind Scale; ◦ During any workboat or mobilisation boat operations; ◦ During helicopter operations; ◦ During the transfer of in-sea equipment; and ◦ At night or times of low visibility. • Provide basic rescue and survival training for all helicopter passengers.		
Stakeholders Loss of equipment to sea potential	All	• Ensuring that loads are lifted using the correct lifting procedure and within	CNEL, Drilling contractor	Throughout vessel operations and drilling campaign

Aspect and Potential impact	Project Phase	Mitigation /Management Action	Responsibility	Timing
impact on commercial fishing		the maximum lifting capacity of the crane system. • Minimise the lifting path between vessels. • Undertake frequent checks to make sure items and equipment are stored and secured safely on board each vessel. • Retrieval of lost objects / equipment, where practicable, after assessing the safety and metocean conditions. Establish a hazards database listing the type of gear left on the seabed and / or in the area with the dates of abandonment / loss and locations and, where applicable, the dates of retrieval. • Notify SANHO of any hazards left on the seabed or floating in the water column and request that they send out a Notice to Mariners with this information.		

ERM HAS OVER 140 OFFICES ACROSS THE FOLLOWING COUNTRIES AND TERRITORIES WORLDWIDE

Argentina
Australia
Belgium
Brazil
Canada
China
Colombia
Denmark
France
Germany
Hong Kong
India
Indonesia
Ireland
Italy
Japan
Kazakhstan
Kenya
Malaysia
Mexico
Mozambique
Netherlands
New Zealand
Panama
Peru
Poland
Portugal
Romania
Singapore
South Africa
South Korea
Spain
Switzerland
Taiwan
Thailand
UAE
UK
US
Vietnam

ERM Southern Africa (Pty) Ltd.

Suite S005

Westway Office Park

Westville

Durban Kwazulu-Natal, 3610

South Africa

www.erm.com