



**PROPOSED LIQUID MUD PLANT FOR
SERVICES PÉTROLIERS SCHLUMBERGER (SLB)
IN THE PORT OF WALVIS BAY**

ENVIRONMENTAL MANAGEMENT PLAN

**PREPARED FOR:
SERVICES PÉTROLIERS SCHLUMBERGER (SLB)**

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ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED LMP OF SLB IN THE PORT OF WALVIS BAY

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ACRONYMS AND ABBREVIATIONS

Below a list of acronyms and abbreviations used in this report.

Acronyms / Abbreviations	Definition
DEA	Department of Environmental Affairs
EAP	Environmental Assessment Practitioner
EAPAN	Environmental Assessment Professionals Association of Namibia
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
MEFT	Ministry of Environment, Forestry and Tourism
MMP	Management and Mitigation Plan

ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED LMP OF SLB IN THE PORT OF WALVIS BAY

1 INTRODUCTION

1.1 BACKGROUND AND PROJECT OVERVIEW

Also known as Schlumberger Limited, SLB is a multinational company that provides technology, services, and solutions to the global oil and gas industry. In 2022 it was both the world's largest offshore drilling company and the world's largest offshore drilling contractor by revenue. Activities include oilfield exploration and production, well construction, reservoir characterization, drilling, production, and processing as well as various support services for maintaining, repairing, and enhancing the productivity of existing wells. In 2020 the company operated in over 120 countries and employed ~99,000 people of 172 nationalities worldwide.

SLB approached Namport in 2022 and asked for permission to make use of the Port of Walvis Bay as the Namibian base to operate from. Namport granted permission to SLB to lease an area at Berth 8, including an existing Namport rubbhall warehouse.

Berth 8 is situated in the southern part of the Port of Walvis Bay, close to the recent elongation towards the new container terminal (see Figure 1). SLB's lease at Berth 8 is surrounded by existing facilities and infrastructure of Namport, rented by various tenants (see Figure 2).

Currently the existing leased area of SLB includes the Namport rubbhall warehouse to store consumables, a dry mixing plant and a Brine Plant, a parking area, and the open storage areas of the former loading zone of Berth 8. SLB intends to construct and operate a LMP adjacent to the existing Brine Plant (see Figure 2).

Like the Brine Plant, a mobile bunding system of concrete blocks will be used to form the wall-like boundaries of the LMP. No excavations or digging of foundations are intended. Inside these "walls" heavy-duty plastic matting will be laid on the floor. A rubber membrane will be placed on the entire inside part, tucked-in over the top of the "walls", to establish a leak-free and pool-like containment – identical to the Brine Plant. A series of five storage tanks will be placed inside the containment area, and like the Brine Plant, the top and bottom tanks will be secured together with twist locks. Interconnected with pipes, the tanks will also be connected to a mixing tank, diesel pumps and a hopper – all within the containment area.

The proposed LMP will cover a surface area of 402 m² (17.5 x 23 m) and will be 5.4 m high – identical with the Brine Plant



FIGURE 1: LOCATION OF SLB’S LEASE AT BERTH 8 IN THE PORT OF WALVIS BAY

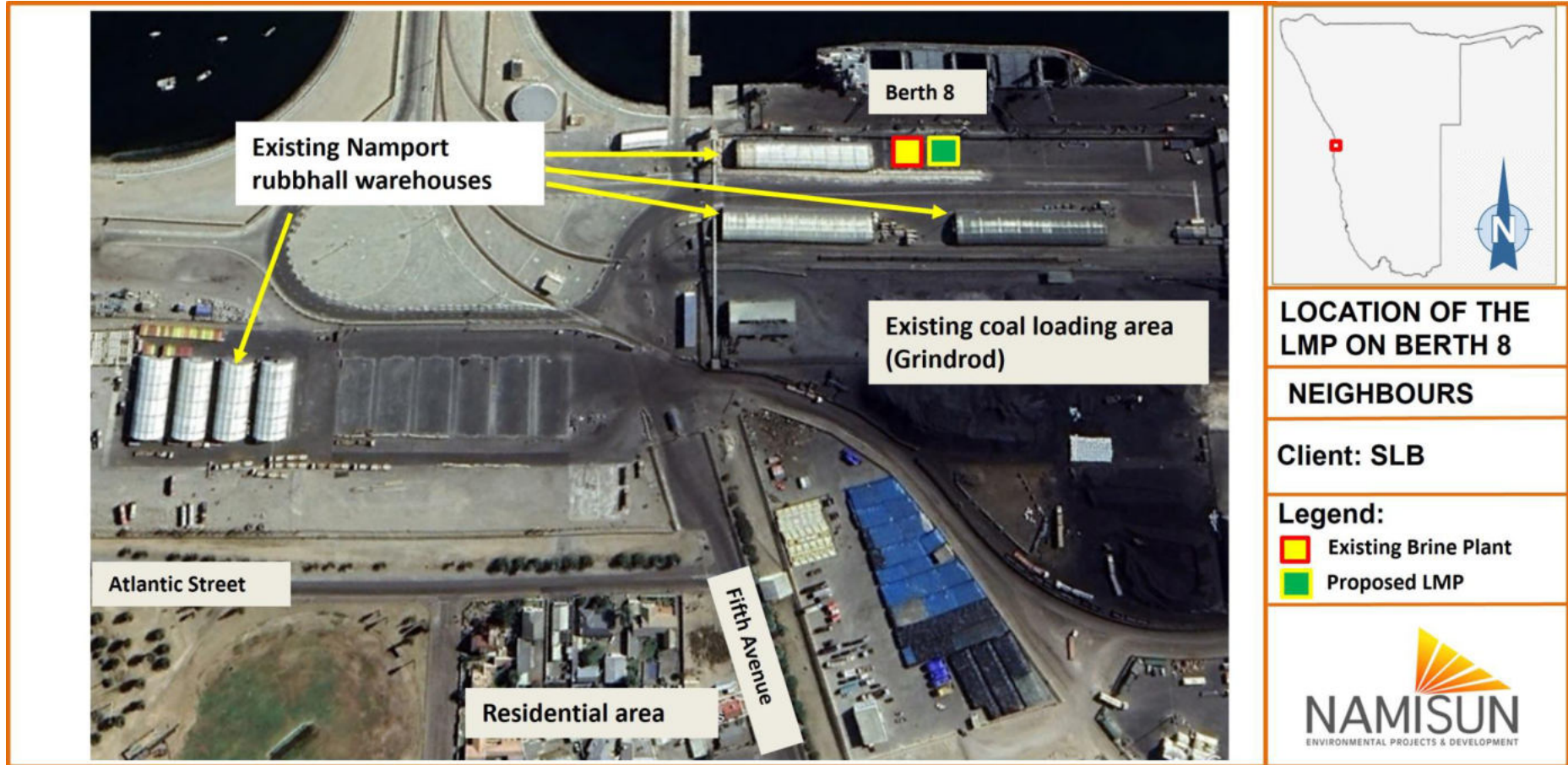


FIGURE 2: LOCATION OF THE PROPOSED LMP AT BERTH 8 IN THE PORT OF WALVIS BAY

All components of the LMP will be delivered and offloaded onsite. Only a small laydown area, within the lease of SLB, is required. All construction (installation) activities are planned to take place onsite. Associated activities include welding and metal works, use of scaffolding, rigging, piping and painting.

Construction activities will only commence when all required compliances are in place (including an ECC from the MEFT) and when the final approval is given by Namport in the form of a construction permit. If all materials are available, the installation of the entire plant will take three to four months.

Water and power supply during constructions as well as operations will be provided from the existing facilities of SLB. No extension of the existing water reticulation network to the LMP is foreseen.

Only the existing access points of SLB will be used during construction as well as operations. The access road of Namport between the main road and the quay side, which also separates the rubbish hall from the Brine Plant, will be left unaltered and unobstructed. It is not foreseen that the current number of vehicles in use will increase because of the LMP.

Refuelling of construction vehicles and equipment onsite from a mobile diesel bowser is possible during the construction phase. Small amounts of diesel (<20 litres) will be kept for use by the pumps. The storage of the diesel, as well as the pumps, will be stationed within the containment area. No refuelling of vehicles will take place onsite during operations.

No hazardous substances will be stored or handled onsite during construction. No other commodities or any hazardous substance other than the small amounts of diesel, the components of the final product, and the final product itself (the oil-based drilling compound) will be stored onsite during operations.

Some non-hazardous waste (e.g. construction remains) and domestic waste (such as plastic bags, tins, bottles, paper, and packaging waste) will be generated during construction. Only non-hazardous and domestic waste (mainly empty containers and packaging waste, i.e. plastic bags, tins, bottles, and paper) will be generated.

All waste generated during both the construction and operational phase will be contained and removed for disposal as per the existing (specialized) arrangements for waste handling and disposal of SLB, aligned to the Waste Management Plan of Namport for the Port of Walvis Bay.

The existing temporary (mobile) ablution facilities will be used during construction as well as during operations. No permanent ablution facilities are considered. The existing emergency

washdown stations for workers within the leased site of SLB will remain in their positions and be used in cases of emergency.

Currently eleven employees are in service of SLB at the Port of Walvis Bay. Employees of SLB will construct the LMP. Welders (not more than six) from an appointed contractor will be used for the fabrication of the pipework. The workforce will be increased to 22 when the LMP is added to the current operations of SLB. SLB intends to have at least 70% of all positions filled by Namibians eventually.

1.2 AIM OF THIS DOCUMENT

Namisun Environmental Projects and Development (Namisun) has been appointed by SLB as the independent Environmental Assessment Practitioner to undertake and manage the Environmental Impact Assessment (EIA) process for the proposed LMP and the associated activities and to compose an Environmental Management Plan (EMP).

The aim of the EMP is to detail the actions required to effectively implement management and mitigation measures. These actions are required to minimise negative impacts and enhance positive impacts associated with the proposed LMP of SLB. The EMP documents a series of individual management plans which are designed to meet legal requirements, aligned to the existing EMP for the Port of Walvis Bay, and avoid or minimise the impacts associated with the construction and operation of the LMP.

The EMP also gives the environmental commitments, which will be implemented by SLB.

1.3 KEEPING THE EMP UP TO DATE

It is the intention that this EMP should be seen as a “living document” which will be amended during the operation (where relevant) as new information (e.g.: environmental data), policies, authority guidelines, technologies and as the activities might change, or new ones be introduced.

SLB will conduct periodic reviews of the EMP, should circumstances change.

Should further listed activity(s) as defined in the EIA-regulations associated with the Environmental Management Act, No. 7 of 2007 be triggered because of future modifications / changes, this EMP will be required to be updated through another EIA process as stipulated in the Act and its regulations.

1.4 DETAILS OF THE PERSONS WHO PREPARED THIS EMP

Namisun (a Namibia-based, independent environmental consultancy firm) was appointed by SLB to undertake and manage the EIA process and environmental clearance applications. Namisun also compiled this EMP.

Dr Pierré Smit, the project manager, holds a PhD in Landscape Ecology and has more than twenty-eight years of experience in environmental management, managing environmental assessment, the implementation of EMPs and Environmental Management Systems (EMSs) in Namibia.

Werner Petrick, the project reviewer, has more than twenty-four years of relevant experience in conducting / managing EIAs, compiling EMPs and implementing EMPs and EMSs. Werner has a B. Eng (Civil) degree and a master's degree in environmental management and is certified as lead environmental assessment practitioner (EAP) and reviewer under the Environmental Assessment Professionals Association of Namibia (EAPAN).

2 SCOPE OF THE EMP

The components of the EMP, in accordance with the requirements stipulated in the EIA-regulations, are presented in Table 1.

TABLE 1: CONTENT OF THE EMP

EIA REGULATION REQUIREMENT	REFERENCE IN THE EMP
Details of the persons who prepared the EMP and the expertise of those persons to prepare an environmental management plan.	Section 1.4
Project overview	Section 1.1
Overall environmental objectives	Chapter 5
Information on any proposed management or mitigation measures to address the environmental impacts that have been identified in a report contemplated by these regulations, including environmental impacts or objectives in respect of – i. Planning and design. ii. Construction activities. iii. Operation or undertaking of the activity. iv. Rehabilitation of the environment. v. Closure, where relevant.	Chapters 6 and 7
A description of the aspects of the activity that are covered by the EMP.	Section 4.1
An identification of the persons to be responsible for the implementation of the mitigation measures.	Section 6.1
Where appropriate, time frames within which the measures contemplated in the EMP must be implemented.	Chapter 7
Proposed mechanisms for monitoring compliance with the EMP and reporting on it.	Section 6.2 – 6.4

3 LEGAL REQUIREMENTS

A summary of the applicable legislation can be found in Section 3 in the main EIA Scoping (including an impact assessment) Report.

A summary of the relevant certificates and permits required by SLB is provided in this chapter.

3.1 ENVIRONMENTAL CLEARANCE CERTIFICATE

As stipulated in the EIA-regulations associated with the Environmental Management Act, No.7 of 2007, an Environmental Clearance Certificate (ECC) needs to be obtained from the Department of Environmental Affairs (DEA) within the Ministry of Environment, Forestry and Tourism (MEFT) prior to the commencement of the project. An EIA Scoping (including an impact assessment) Report and EMP are required as part of the application for clearance, and to support the decision-making process.

If approved, an ECC will be issued for the proposed project and the proponent will be held responsible for the implementation and management of the EMP. An ECC is valid for three years and may be renewed. Application for renewal must be lodged prior to the expiry date of the ECC.

3.2 OTHER PERMITS

Namport will issue an authorisation in the form of a construction permit – on condition that SLB complies with all legal requirements. This implies that an ECC must be in place.

No other specific environmental permits are foreseen for the proposed LMP.

4 ENVIRONMENTAL ASPECT AND IMPACT IDENTIFICATION

Understanding the biophysical and human environment in which the proposed project is located, is the first step to understanding the relevant impacts. The next and possibly more important step is to identify the environmental aspects that give rise to the impacts. For example, a single construction activity has more than one environmental aspect associated with it: namely, noise, dust generation and waste generation. All these aspects have the potential to cause impacts on the environment (or third parties) in a different way. Successful management will be gauged by how well SLB avoids, minimises, or mitigates all the impacts associated with each environmental aspect.

4.1 ENVIRONMENTAL ASPECTS AND IMPACTS

As part of the EIA processes for the proposed LMP, environmental aspects and potential environmental impacts associated with the activities and facilities were identified – see Table 7, 8 and 9 in Chapter 7 of the EIA Scoping (including an impact assessment) Report.

Table 2 in this document, the EMP, provides a summary of the environmental aspects that are associated with the proposed LMP and how they impact the biophysical and human environments, respectively.

TABLE 2: DESCRIPTION OF ENVIRONMENTAL ASPECTS AND POTENTIAL IMPACTS

Aspect	Potential Impact	Relevant MMP
Construction phase		
Soil	<ul style="list-style-type: none"> • Potential contamination from waste and accidental spills and leaks of hazardous substances 	Soil MMP (see Section 7.1) and Hazardous Substance MMP (see Section 7.3)
Surface water and groundwater	<ul style="list-style-type: none"> • Potential contamination of surface and or groundwater from waste and accidental spills and leaks of hazardous substances • Blocking of water flows, diversion of water and erosion 	Surface and Groundwater MMP (see Section 7.2), Hazardous Substance MMP (see Section 7.3) and Waste MMP (see Section 7.6)
Seawater	<ul style="list-style-type: none"> • Potential contamination from spills and leaks of hazardous substances and impacts to the marine environment. 	Hazardous Substance MMP (see Section 7.3)
Noise	<ul style="list-style-type: none"> • Increase of noise levels from construction activities causing disturbance to third parties (nearby receptors). 	Noise MMP (see Section 7.4)
Air quality	<ul style="list-style-type: none"> • Dust and airborne emissions from construction activities causing 	Dust MMP (see Section 7.5)

Aspect	Potential Impact	Relevant MMP
	impacts to air quality and causing nuisance impacts	
Traffic	<ul style="list-style-type: none"> Potential congestion 	Traffic MMP (see Section 7.8)
Waste	<ul style="list-style-type: none"> Pollution of soil and water General degradation and nuisance impacts 	Waste MMP (see Section 7.6 and Hazardous Substance MMP (see Section 7.3)
Socio-economic conditions	<ul style="list-style-type: none"> Job creation and skills development Investment and expenditure benefits to the local economy (spendable income, local procurement, and taxes) 	Socio-economic MMP (see Section 7.7)
Operational phase		
Traffic	<ul style="list-style-type: none"> Potential congestion 	Traffic MMP (see Section 7.8)
Noise	<ul style="list-style-type: none"> Increase of noise levels from operational activities (pumping, mixing and transferring). 	Noise MMP (see Section 7.4)
Air quality	<ul style="list-style-type: none"> Dust and airborne emissions causing nuisance impacts 	Dust MMP (see Section 7.5)
Waste	<ul style="list-style-type: none"> Pollution of soil and water General degradation and nuisance impacts 	Waste MMP (see Section 7.6) and Hazardous Substance MMP (see Section 7.3)
Incompatible commodities	<ul style="list-style-type: none"> Industrial accidents, injuries, fatalities Damage, loss (to third parties) 	Hazardous Substance MMP (see Section 7.3)
Soil	<ul style="list-style-type: none"> Potential contamination because of pollution from accidental spills and leaks of hazardous substances 	Soil MMP (see Section 7.1) and Hazardous Substance MMP (see Section 7.3)
Surface water and groundwater	<ul style="list-style-type: none"> Potential contamination of groundwater and surface water resulting from accidental spills and leaks of hazardous substances 	Surface and Groundwater MMP (see Section 7.2) and Hazardous Substance MMP (see Section 7.3)
Seawater	<ul style="list-style-type: none"> Potential contamination from spillages of hazardous substances and impacts to the marine environment. 	Hazardous Substance MMP (see Section 7.3)
Socio-economic conditions	<ul style="list-style-type: none"> Job creation and skills development Investment and expenditure benefits to the local economy (spendable income, local procurement, and taxes) 	Socio-economic MMP (see Section 7.7)

Aspect	Potential Impact	Relevant MMP
	<ul style="list-style-type: none"> Economic growth – complementary activities in the Port of Walvis Bay (positive impact). 	
Decommissioning phase		
Waste	<ul style="list-style-type: none"> Contamination of soil, water and seawater (impacting marine ecology) General degradation and nuisance impacts 	Waste MMP (see Section 7.6) and Hazardous Substance MMP (see Section 7.3)
Soil	<ul style="list-style-type: none"> Potential contamination because of pollution from accidental spills and leaks of hazardous substances 	Soil MMP (see Section 7.1) and Hazardous Substance MMP (see Section 7.3)
Surface water and groundwater	<ul style="list-style-type: none"> Potential contamination of groundwater and surface water resulting from accidental spills and leaks of hazardous substances 	Surface and Groundwater MMP (see Section 7.2) and Hazardous Substance MMP (see Section 7.3)
Seawater	<ul style="list-style-type: none"> Potential contamination from spillages of hazardous substances and impacts to the marine environment. 	Hazardous Substance MMP (see Section 7.3)

4.2 COMPLIANCE AND ALIGNMENT REQUIREMENTS

For the proposed new LMP SLB will comply with the existing EMP for the Port of Walvis Bay, which is managed by Namport. Accordingly, this EMP is aligned to the existing EMS of Namport. In this way a robust mechanism is provided for the implementation of the EMS and, most importantly, it will ensure that the environmental management function is always reviewed in a spirit of continual improvement.

Even though this EMP was prepared specifically for the proposed LMP, it will form the basis of the 'general' environmental management of SLB's site and all the associated procedures, work instructions, etc. will be developed taking cognizance of the relevant commitments in this EMP.

As part of environmental management, SLB will roll out the Management and Mitigation Plans (MMPs) in this EMP and develop work instructions / procedures to ensure the objectives provided in this EMP are achieved and commitments are implemented. Further responsibilities and target dates for implementing relevant commitments will therefore be included in the work instructions / procedures and other relevant documents.

5 OVERALL ENVIRONMENTAL OBJECTIVES

The following overall environmental objectives have been set for the proposed activities associated with the proposed LMP, to be implemented by SLB:

- Ensure compliance to this EMP, the existing EMP for the Port of Walvis Bay and other relevant conditions or approvals (ECC and other relevant permits) and all national legislation and standards for the protection of the environment.
- Keep key stakeholders informed about the project's activities, where relevant.
- Promote ongoing environmental awareness.
- Apply the precautionary principle throughout by enforcing responsibility – by supporting and training of all employees and service providers to ensure that all the employees and contractors adhere to the relevant management commitments.
- Incorporate the relevant requirements stipulated in this EMP into the designs and contracts as well as work instructions, procedures and other relevant documents.
- No unauthorized access is allowed. During construction:
 - Any person entering the construction site will only be allowed after formal induction.
 - Warning signs will be erected to warn third parties of dangers.
- Without infringing on the rights of workers, manage their movements and set rules for behaviour, with special emphasis placed on preventing transgression and punishment of transgressors.
- Pollution will be prevented through basic infrastructure design and through maintenance of equipment.
- Clean up in case of incidents, through appropriate measures.
- Ensure the legal and appropriate management and disposal of general and hazardous waste, through the implementation of a strategy for the minimisation, recycling (where possible), management, temporary storage and removal of waste.
- Develop, implement and manage monitoring systems as required to ensure good environmental performance and reporting.
- In the case of incidents, the Site Manager should be informed, and the necessary action taken (including the reporting of incidents to Namport and the implied authorities).

6 GENERAL MANAGEMENT REQUIREMENTS

The following sections list the general management requirements that are relevant to the activities of the proposed LMP.

6.1 PARTIES RESPONSIBLE FOR THE IMPLEMENTATION OF THE EMP

This section describes the roles and responsibilities for implementing the various management plans.

6.1.1 SITE MANAGER

The Site Manager of SLB shall ensure compliance to this EMP. The EMP will be part of the contract with all contractors working on the project.

It is also the duty of the Site Manager to ensure that appropriate environmental risk assessments are conducted and that an environmental risk management plan is developed and implemented, that an adequate protection and indemnity insurance cover for incidents exists, and that an Emergency Response Plan (including emergency response plans for firefighting) is developed and implemented in conjunction with Namport's Emergency Response Plan. The Site Manager is also responsible for the development and implementation of procedures and protocols required for emergencies, inclusive of firefighting and oil spill contingency plans, in conjunction with Namport.

6.1.2 CONSTRUCTION SUPERVISOR

The Construction Supervisor has overall responsibility for environmental management during the construction phase for ensuring this EMP is implemented. To assist the Construction Supervisor, it is recommended to appoint a dedicated person responsible for environmental management activities onsite who will be dedicated to managing and monitoring the environmental issues associated with the construction activities.

The Construction Supervisor must ensure that workers adhere to the conditions of the EMP, the ECC and other relevant permits.

Contract documents should consider the inclusion of penalties for non-conformance to the EMP, or to link the sign-off of the contract to a retainer clause.

The Construction Supervisor shall be responsible for responding to any actual environmental emergencies / incidences that occur, as specified in procedures and protocols.

The Construction Supervisor shall also ensure that sufficient financial and human resources are available to implement emergency procedures, and to take corrective action pro-actively when environmental risks are evident in advance.

The Construction Supervisor will be responsible for the following aspects related to compliance of this EMP:

- Regular inspections and auditing compliance to this EMP and any other relevant legal requirements e.g., permits and authorisations.
- Ensure that environmental awareness training is conducted during induction training and on an ad hoc basis thereafter.
- Ensure compliance to this EMP and permits and authorisations issued to SLB by relevant authorities.
- Submit required information to relevant authorities such as reporting on compliance with the EMP, permit and relevant authorisations.
- Liaise with the Site Manager on environmental management (where required).

6.1.3 ENVIRONMENTAL SPECIALIST

The Environmental Specialist will be responsible for assisting the Site Manager in all environmental issues, and specifically to ensure that the commitments as set out in this EMP are implemented.

In addition, the Environmental Specialist is responsible for ensuring that all persons involved during the construction as well as the operational phase comply with this EMP.

The Environmental Specialist will be responsible for the following aspects related to compliance of this EMP:

- Regular inspections and auditing compliance to this EMP and any other relevant legal requirements e.g.: permits and authorisations.
- Develop and implement an environmental awareness and training program and conduct environmental awareness training during induction training and on an ad hoc basis thereafter.
- Conduct scheduled monitoring as outlined in various sections in the EMP (see Section 6.3 and Chapter 7) as well as any compliance monitoring required by permit and authorisations issued by the relevant authorities, or in collaboration with Namport as implied.
- Ensure compliance to this EMP and permits and authorisations issued to SLB by relevant authorities. Ensure responsibilities and target dates are developed for each one of the commitments in this EMP.
- Ensure compliance with legislation by all employees and contractors through awareness training, and engagement with authorities, where relevant.
- Submit required information to relevant authorities such as reporting related to monitoring and about compliance with the EMP, permit and relevant authorisations.

- Liaise with the Construction Supervisor and Site Manager on environmental management (where required).
- Develop and implement an Emergency Response Plan. This plan needs to be developed in conjunction with Namport's Emergency Response Plan.
- Develop and implement a Waste Management Strategy to ensure that waste is minimized, segregated, recycled, collected, handled and stored, removed and disposed of correctly.
- The existing waste management and housekeeping practice of SLB must be applied site-wide, including the proposed LMP.

6.1.4 CONTRACTORS

All contractors, sub-contractors and their employees will be contractually required to comply with the relevant commitments in this EMP.

6.2 AUDITING COMPLIANCE WITH THE EMP

The commitments contained in this EMP will, once an ECC has been obtained, be SLB's contractual agreement with the Namibian authorities for sound environmental management. All employees, contractors and sub-contractors and any visitors to site will be expected to comply with the commitments contained herein.

The EMP is a legally binding document and non-compliance with it could result in disciplinary action, such as fines and penalties; legal action; monetary penalties; withdrawal of licences and permits; and or the suspension of work.

6.2.1 INTERNAL AUDITS AND INSPECTIONS

The Environmental Specialist will conduct internal management audits against the commitments in the EMP. These audits will be conducted every month. The audit findings will be documented for both record keeping purposes and for informing continual improvement.

The Environmental Specialist will conduct weekly site-wide inspections and daily inspections during construction.

6.2.2 EXTERNAL ENVIRONMENTAL PERFORMANCE ASSESSMENT

It is suggested that external performance assessments be conducted bi-annually and at the end of the construction phase by an independent qualified Environmental Practitioner.

6.3 MONITORING

An inspection program shall be established to check that standards and procedures as described in the EMP are implemented and complied with.

Incidents and non-conformances shall be recorded and addressed with appropriate corrective action.

A reporting system shall be maintained to ensure that all applicable statutory requirements are met.

Reporting of incidents and non-conformances shall include details such as the reason for incidents and non-conformance, responsible persons, consequences, the corrective action taken and the necessary follow-up activities. Incidents and non-conformances shall be reported to the Site Manager. The cause of incidents and non-conformances shall be investigated, and recommendations formulated to prevent recurrence.

Monitoring requirements include, but are not limited to:

General monitoring:

- Conduct audits and inspections as per Section 6.2. All non-compliances should be recorded and discussed at weekly site meetings and timeous remedial actions taken.
- Check for non-compliances (lack of good housekeeping, spills and leaks, incorrect storage of substances, etc.) during a general site-wide inspection weekly.
- Monitor the construction site daily. Record all non-compliances and initiate corrective measures.
- Constant monitoring and record keeping of clean-ups until the tasks are completed, approved and signed off by the Site Manager.

Waste Management:

- Monitor whether the provisions set out in this EMP concerning waste management is being applied as per instructions.
- Keep safe disposal certificates.

Dust and baseline noise monitoring:

- When complaints are received from affected third parties regarding noise and dust nuisance, abatement measures should be implemented. Communication with those that complained should be continued to determine whether the problem has been resolved.

Training and awareness:

- The Site Manager to request attendance registers be completed by all personnel attending induction training sessions.

6.4 REPORTING AND SUBMISSION OF INFORMATION

As a minimum, the following documents will be submitted to the relevant authorities on an ongoing basis:

- The bi-annual environmental report required by the DEA at the MEFT will be submitted every six months (specifically during the construction phase).

6.5 DEALING WITH ENVIRONMENTAL EMERGENCIES AND INCIDENTS

Potential environmental emergencies, during the construction of the LMP are identified by the Construction Supervisor based on legal and other requirements, aspects identified and risk rating and knowledge of the proposed project and associated activities.

Overall, SLB must ensure that an Emergency Response Plan, which includes an emergency response plan for firefighting and for hazardous substance spills and leaks, in conjunction with Namport's Emergency Response Plan is developed and implemented during operations. In addition, SLB must conduct appropriate environmental risk assessments; develop and implement an environmental risk management plan; and ensure that an adequate protection and indemnity insurance cover for incidents exists. Procedures and protocols for emergencies, inclusive of firefighting and hazardous substance spill and leak contingency plans, in conjunction with Namport must be developed and implemented (Namport, 2019).

Should an environmental emergency occur, the following procedure will be followed:

- The Site Manager must immediately be notified of the incident.
- Steps must immediately be taken to minimize the spread of pollution or other risks through remedial actions and clean-up according to an Emergency Response Plan, in conjunction with Namport's Emergency Response Plan.
- The Site Manager must report the incident to the respective authorities (depending on the nature of the incident).

7 MANAGEMENT AND MITIGATION PLANS

The MMPs described in this chapter are applicable to all the relevant activities and facilities of SLB.

Activities during the construction phase include, but are not restricted to the following:

- Use of the existing routing and access points by vehicles and equipment.
- Laydown of equipment and construction materials.
- General construction activities (welding, piping, metal works, rigging, painting, etc.).

Activities during the operational phase include, but are not restricted to the following:

- Use of the existing routing and access points by vehicles and equipment.
- Receiving.
- Mixing.
- Storing.
- Pumping.
- Transferring.

7.1 SOIL MMP

The entire site is compacted and sealed with a subsurface layer of reinforced concrete and interlock pavers on top. Although unlikely, the contamination of soil can occur as the result of pollution during all phases of the project.

The overall objective of the Soil MMP is:

- To prevent or limit the unacceptable disturbance / damage, loss or pollution of soil.

Overarching management measures include:

- Restrict the laydown of construction materials and construction activities to a pre-approved area. The area used should be constrained as far as possible.
- In all areas where there is storage of hazardous substances, there will be containment of spillages on impermeable floors and bunded trays that can contain 110% of the volume of the hazardous substances.
- The use of chemicals should be controlled. Used oils, fuel, paints, grease and solvents should be stored in drums or other suitable containers, which must be labelled, sealed and removed from the site to an appropriate disposal site or recycling facility.
- Implement containment and clean-up measures for hazardous substance spills and leaks.
- A register shall be kept on all hazardous substances and be always available for inspection.
- All refuelling and any maintenance of vehicles will take place on impermeable surfaces, preferably not onsite.
- Spill trays must be provided if refuelling of vehicles are done onsite. Areas shall be monitored for spills and leaks and must be contained, cleaned and rehabilitated immediately.
- Spill kits will be readily available onsite. Employees and or contractors will be shown to use the spill kits to enable containment and remediation of pollution incidents.
- All vehicles and machines must be maintained properly to ensure that oil leaks and spills are kept at a minimum.

TABLE 3: SOIL MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION, OPERATIONAL AND DECOMMISSIONING PHASE			
1	Soil	<ul style="list-style-type: none"> • Potential contamination from waste and accidental spills and leaks of hazardous substances 	<ul style="list-style-type: none"> • Limit the disturbance of the compacted areas (currently covered by a subsurface layer of reinforced concrete with interlock pavers on top) to only the area earmarked for the proposed LMP. • Maintain and apply the existing waste management and housekeeping practice of SLB site-wide (including the proposed LMP). • Appropriate measures to prevent leaks and spills of hazardous substances must be implemented. In case leaks and spills occur, it must be contained and clean-up promptly. • Educate workers on the use of containment and clean-up measures to contain and remediate pollution incidents because of leaks and spills of hydrocarbons, effluent or other forms of hazardous waste. • During decommissioning, stockpile contaminated demolished material for removal to the hazardous waste site.

7.2 SURFACE AND GROUNDWATER MMP

No drainage line is present onsite. In addition, the entire site is compacted and sealed with a subsurface layer of reinforced concrete and interlock pavers on top. Although unlikely, the contamination of surface or groundwater can occur as the result of pollution.

The overall objective of the Surface and Groundwater MMP is:

- To prevent or limit the unacceptable contamination of surface and groundwater through activities that may cause pollution.

Overarching management measures include:

- Restrict the laydown of construction materials and construction activities to a pre-approved area. The area used should be constrained as far as possible.
- In all areas where there is storage of hazardous substances, there will be containment of spillages on impermeable floors and bunded trays that can contain 110% of the volume of the hazardous substances.
- The use of chemicals should be controlled. Used oils, fuel, paints, grease and solvents should be stored in drums or other suitable containers, which must be labelled, sealed and removed from the site to an appropriate disposal site or recycling facility.
- Implement containment and clean-up measures for hazardous substance spills and leaks.
- A register shall be kept on all hazardous substances and be always available for inspection.
- All refuelling and any maintenance of vehicles will take place on impermeable surfaces, preferably not onsite.
- Spill trays must be provided if refuelling or maintenance of construction vehicles are done onsite. Areas shall be monitored for spills and any spills shall be contained, cleaned and rehabilitated immediately.
- Spill kits will be readily available onsite. Employees and or contractors will be shown to use the spill kits to enable containment and remediation of pollution incidents.
- All vehicles and machines must be maintained properly to ensure that oil spillages are kept at a minimum.

TABLE 4: SURFACE AND GROUNDWATER MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION, OPERATIONAL AND DECOMMISSIONING PHASE			
1	Surface and groundwater	<ul style="list-style-type: none"> • Potential contamination of groundwater and surface water from waste and accidental spills and leaks of hazardous substances • Disturbances and interference with flow patterns can enhance damming, diverting or water erosion 	<ul style="list-style-type: none"> • Maintain and apply the existing waste management and housekeeping practice of SLB site-wide (including the proposed LMP). • Educate workers on the use of containment and clean-up measures to contain and remediate pollution incidents because of leaks and spills of hydrocarbons, effluent or other forms of hazardous waste • Appropriate measures to prevent leaks and spills of hazardous substances must be implemented. In case leaks and spills occur, it must be contained and clean-up promptly. • Provide appropriate toilet and ablution facilities during the construction phase to prevent any illegal discharge of effluent or sewage.

7.3 HAZARDOUS SUBSTANCE MMP

The entire site is compacted and sealed with a subsurface layer of reinforced concrete and interlock pavers on top. When in production, the LMP will receive and mix wet constituents to produce an oil-based drilling compound. After being mixed, the final product will be pumped into the storage tanks and kept until the transfer per certified rubber hoses onto a supply vessel could be done. All activities will take within a closed system of pipes and tanks, inside the containment area, which minimizes the potential of accidental leaks and spills.

One of the components of the drilling compound is EDC 170 SE, a high purity oil, which will make up 64% of the mix. Calcium Chloride (CaCl_2) is a water-based brine which represents 36% in volume of the mix. Rheguard, an emulsifier and viscosifier is a combination of base oil and CaCl_2 brine, which represents less than 1% of the final product. The components of the final product are described in more detail in Section 4.3.3 of the Scoping (including impact assessment) report.

No other commodities or any hazardous substance other than the small amounts of diesel, the components of the final product, and the final product itself (the oil-based drilling compound) will be stored onsite during operations. No other constituent will be handled in the proposed LMP – as implied per MSDS. For this reason, it is unlikely that strong acids and oxidizing agents, both incompatible materials, will encounter the materials handled by the LMP.

A maximum total of 315 m³ of the final product can be stored at a single time (considering the planned set-up of 5 interconnected tanks). Due to the limited reach of the pipes, transferring is restricted to the quay of Berth 8.

As a precautionary measure, this management plan makes provision for the management of unlikely releases of hazardous substances onsite.

The overall objective of the Hazardous Substance MMP is:

- To prevent or limit the unacceptable contamination of soil, surface and groundwater and seawater (which can have an impact on marine ecology) through activities related to hazardous substances that may cause pollution.

Overarching management measures include:

- Restrict the laydown of construction materials and construction activities to a pre-approved area. The area used should be constrained as far as possible.
- In all areas where there is storage of hazardous substances, there will be containment of spillages on impermeable floors and bunded trays that can contain 110% of the volume of the hazardous substances.
- The use of chemicals should be controlled.

- Hazardous waste should be stored in drums or other suitable containers, which must be labelled, sealed and removed from the site to an appropriate disposal site.
- Implement containment and clean-up measures for hazardous substance spills and leaks.
- A register shall be kept on all hazardous substances and be always available for inspection.
- All refuelling and any maintenance of vehicles will take place on impermeable surfaces, preferably not onsite.
- Spill trays must be provided if refuelling or maintenance of construction vehicles are done onsite. Areas shall be monitored for spills and leaks and must be contained, cleaned and rehabilitated immediately.
- Spill kits will be readily available onsite. Employees and or contractors will be shown to use the spill kits to enable containment and remediation of pollution incidents.
- All vehicles and machines must be maintained properly to ensure that oil spillages are kept at a minimum.

In addition, the EMP for the port area (Namport, 2019) stipulates that:

- Hazardous waste and contaminated water and soil must be disposed of at an appropriately classified facility or by approved contractors.
- Hazardous waste disposal certificates must be kept on file.
- Any fuel spillage of more than 200 litre must be reported to the Ministry of Mines and Energy.
- Emergency Response Plans and spill contingency plans must be in place and include all fuels, chemicals or hazardous substances being handled. Tenants must submit copies of these documents to Namport.
- Training in the use of spill containment equipment is paramount.
- Any mineral ore, hydrocarbon spills or any other hazardous substance spill on the quay area must be cleaned and disposed of to prevent it from entering the ocean either by wind or water runoff.

TABLE 5: HAZARDOUS SUBSTANCE MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION, OPERATIONAL AND DECOMMISSIONING PHASE			
1	Soil, surface and groundwater, seawater ((and marine ecology)	<ul style="list-style-type: none"> Potential contamination from accidental spills and leaks of hazardous substances 	<ul style="list-style-type: none"> Removal and disposal of hazardous waste must be done according to existing protocols which are aligned to Namport's practice. This includes record keeping of disposal certificates, which must contain information about the type of waste, volume as well as disposal method / facility. Hazardous waste will be contained and disposed of at a licenced hazardous waste disposal facility (Walvis Bay) by an approved contractor. For the disposal of empty containers and contaminated products the MSDS of the respective items must be consulted and handled accordingly. Maintain and apply the existing waste management and housekeeping practice of SLB site-wide (including the proposed LMP). Develop and implement an Emergency Response Plan. This plan needs to be developed in conjunction with Namport's Emergency Response Plan. In the unlikely event of a leak or spill in seawater, the necessary emergency procedures and protocols, in conjunction with Namport's Emergency Response Plan must be followed. Incidents of spills must be reported to Namport (and in the case of a hydrocarbon spill larger than 200 litre to the Ministry of Mines and Energy). Details such as date and duration of spill, the product spilled, volume of spill, and remedial actions taken and a copy of documentation in which the spill was reported to the authorities must be provided. Appropriate measures to prevent leaks and spills of hydrocarbons must be implemented. In case leaks and spills occur, it must be contained and clean-up promptly. Educate workers on the use of containment and clean-up measures to contain and remediate pollution incidents because of leaks and spills of hydrocarbons, effluent or other forms of hazardous waste.

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
			<ul style="list-style-type: none">• During decommissioning, stockpile contaminated demolished material for removal to the hazardous waste site.

7.4 NOISE MMP

Although temporary, of a short duration and localized, construction activities may generate noise and lead to the disturbance of nearby receptors (third parties).

As part of the industrial area of Walvis Bay, the port area functions 24/7 and noise is generated continuously – by a wide range of sources (see Section 6.1.5 in the Scoping (including an impact assessment) Report). As expected, the ambient noise levels emanating from the port area are indicative of an industrial environment and are in excess of the typical rating levels for an industrial district – as proven in previous studies (SLR, 2013; SLR, 2015). The continuous increase of activities in the port area will thus contribute to the cumulative impacts of noise (Namport, 2019) and the proposed LMP as an additional activity of the port area and will contribute to the cumulative impacts of noise of the port area.

The overall objective(s) of the Noise MMP is:

- To limit excessive noise pollution.

The EMP for the port area (Namport, 2019) states the following arrangements to prevent excessive noise:

- Follow the Labour Act Regulations, specifically the Noise Regulations (Regulation 197), and / or WHO guidelines on maximum noise levels (Guidelines for Community Noise, 1999), to prevent hearing impairment for workers onsite and a nuisance to third parties (e.g. nearby residential areas / neighbours, receptors, etc.).
- Minimize or prevent noise producing activities and plan to restrict these to daytime as far as practically possible. In short, limit construction work to daylight hours.
- All machinery must be regularly serviced to ensure minimal noise production.
- The use of low frequency white noise or flashing lights should be considered instead of audible high frequency warning signals for moving forklifts or trucks.

To mitigate noise, the EMP for the port area (Namport, 2019) recommends the following interventions:

- Erect temporary or permanent noise barriers / sound baffles should the need arise.
- Place noise producing equipment, e.g. compressors, in such a way that noise is directed away from receptors and / or are attenuated.
- Where possible, use infrastructure to act as noise barriers to sensitive environments.
- Hearing protectors as standard PPE for workers in situations with elevated noise levels.

In addition to the above-mentioned recommendations, SLB will ensure that all drivers adhere to the speed limit of Namport, while travelling inside the port area.

SLB will also introduce monitoring and control measures if excessive noise is generated. It will be wise to conduct a once-off noise monitoring campaign in close proximity to the sources of noise under the management of SLB and to liaise with Namport to obtain their site-wide noise monitoring results for comparison. In the event that the actual measurements of SLB exceed the predictions of the Namport results and model, engagement with Namport is necessary to develop and implement additional noise mitigation measures for the SLB sources.

The EMP for the port area (Namport, 2019) also recommends that:

- A complaints register regarding noise must be maintained.
- All information about noise-related complaints and actions taken to address complaints and to prevent future occurrences must be documented and included in the bi-annual report of Namport.

TABLE 6: NOISE MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION OPERATIONAL AND DECOMMISSIONING PHASE			
1	Noise	<ul style="list-style-type: none"> • Disturbance to nearby receptors (third parties). 	<ul style="list-style-type: none"> • During construction, limit work to daylight hours. • Construction equipment must be operated in such a way that noise is minimized, for example no unnecessary engine revving. • As far as possible, minimize or prevent noise producing activities and plan to restrict these to daytime. • Place noise producing equipment, e.g., compressors, in such a way that noise is directed away from receptors and / or are attenuated. • The use of low frequency white noise or flashing lights should be considered instead of audible high frequency warning signals for moving forklifts or trucks • A complaints register should be kept for any noise-related issues and mitigation steps taken to address complaints where necessary. • Document and investigate all registered complaints and address the concerns about noise promptly. Document the actions taken. • Create communication channels to ensure prior notice to the nearby receptor(s) if work is to take place close to them. Information shared must include the following: <ul style="list-style-type: none"> ○ Proposed working times. ○ How long the planned activity will take place. ○ What is being done. ○ Contact details of the Constructions Supervisor and Environmental Specialist • Ensure that vehicles and equipment are well-maintained and fitted with the correct noise abatement measures. Exhaust silencers must be considered where relevant. • Equipment and machinery in intermittent use must be shut down when not in use.

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
			<ul style="list-style-type: none">• All routes should be kept clean and maintained in a good state of repair to avoid unwanted rattle and body-slap from vehicles.• All drivers must adhere to the speed limit of Namport, while travelling inside the port area.• Erect temporary or permanent noise barriers / sound baffles should the need arise. Where possible, use infrastructure to act as noise barriers to sensitive environments.• Provide hearing protectors as standard PPE for workers in situations with elevated noise levels.

7.5 DUST MMP

Dispersal of dust is closely coupled by wind and conditions can be aggravated during periods of strong wind along the coast, like eastwind. Furthermore, it has been stated in previous studies that ambient air quality at the coast is likely to exceed the PM₁₀ daily limit more than 3 days in a year, although the annual average is likely to be within the acceptable limit (MME, 2019; Airshed, 2022 referenced in Namisun, 2022). Hereof loading and unloading activities, ship maintenance activities and release of marine aerosols are the most obvious (see Section 6.1.4 in the Scoping (including an impact assessment) Report for more details).

Dust can pose health risks to workers and third parties, may cause a nuisance impact on nearby receptors and deteriorate seawater quality, which in turn can have consequences on the marine ecology and the mariculture industry (Namport, 2019). The continuous increase of activities in the port area will contribute to the cumulative impacts of dust.

Construction activities will create dust and emissions, but it is restricted to the construction phase, is of a small scale and short duration, and limited to daylight hours, which means that the potential impacts are not expected to be significant or contribute to the cumulative impacts significantly. As a closed (and wet) system of operation, it is unlikely that dust will be generated during operational activities.

The overall objective(s) of the Dust MMP is:

- To prevent unacceptable dust-related impacts.

The EMP for the port area (Namport, 2019) does not specify any dust-specific arrangements for LMP operations. However, it contains generic recommendations such as:

- Implement adequate dust suppression methods where applicable to limit or prevent the formation of windblown dust.
- Any loading / offloading activities must cease if dust becomes airborne. Loading / offloading can continue after mitigation measures to reduce dust generation / transport have been implemented, or when wind speeds decrease.
- All staff working in dust producing environments must wear dust masks and related PPE.
- A complaints register should be kept for any air quality related issues and mitigation steps taken to address complaints where necessary.
- Any complaints received regarding dust or other air quality impacts should be recorded with notes on action taken.

The number of vehicles, equipment and staff members allowed in the LMP will be restricted at all times:

The EMP for the port area (Namport, 2019) does not specify any dust-specific monitoring of activities per site in the port area. Instead, it generically recommends that:

- Real time wind direction and velocity must be monitored, and air quality monitoring should be initiated.
- Dust (air quality) monitoring must be conducted to determine the extent and source of dust pollution.
- All information and reporting must be included in the bi-annual report of Namport.

Accordingly, SLB will introduce monitoring and control measures if excessive dust is generated – in collaboration with Namport. Monitoring and reporting (including wind monitoring) will be done according to Namport’s monitoring protocols.

TABLE 7: DUST MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION AND OPERATIONAL PHASE			
1	Dust	<ul style="list-style-type: none"> • Dust from construction activities causing impacts to air quality, resulting in potential health and nuisance impacts to nearby receptors (third parties). 	<ul style="list-style-type: none"> • Implement dust suppression methods as far as possible. <ul style="list-style-type: none"> ○ All staff working in dust producing environments must wear dust masks and related PPE. ○ Cease activities if dust becomes airborne. Continue with activities after mitigation measures to reduce dust generation have been implemented, or when wind speeds decrease ○ All drivers must adhere to the speed limit of Namport, while travelling inside the port area. • Apply pragmatic management measures such as the visual monitoring of dust and disallowing employees to work in extreme wind conditions. • A complaints register should be kept for any dust-related issues and mitigation steps taken to address complaints where necessary. • Document and investigate all registered complaints and address the concerns about dust promptly. Document the actions taken. • Create communication channels to ensure prior notice to the nearby receptor(s) if work is to take place close to them. Information shared must include the following: <ul style="list-style-type: none"> ○ Proposed working times. ○ How long the planned activity will take place. ○ What is being done. ○ Contact details of the Constructions Supervisor and Environmental Specialist

7.6 WASTE MMP

Potential impacts resulting from improper waste management (general as well as hazardous waste) is possible and have the potential to cause an impact on soil and water and create general degradation and nuisance impacts.

Namport follows an in-house operating procedure for waste management, which is outsourced to the Walvis Bay Municipality. General and hazardous waste is removed by the municipality and sorted at the landfill site or hazardous waste site as necessary (Namport, 2019).

The overall objective(s) of the Waste MMP is:

- To ensure proper storage, recycling, reuse, removal, transport, and disposal of waste.

The EMP for the port area (Namport, 2019) states the desired outcome as:

- To reduce the amount of waste produced and to prevent pollution and littering.

Furthermore, the EMP for the port area recommends that:

- Waste reduction measures should be implemented and all waste that can be re-used / recycled must be kept separate.
- Ensure adequate waste storage facilities (bins, drums and / or bags) are available and that these are clearly labelled to allow for segregation of wastes into different classes.
- Education of personnel is paramount to create awareness for the proper handling and disposal of waste.
- Ensure waste cannot be blown away by wind.
- Prevent scavenging (human and non-human) at waste storage sites.
- Waste in the port area, in the harbour water, and on the coastline within port limits must be regularly removed and disposed of.
- No waste streams may be directed into the ocean without a disposal permit and then only under conditions imposed by the permit.
- Liaison with the municipality or private contractors regarding handling of different waste streams.
- Waste should be disposed of regularly and at appropriately classified disposal facilities. This includes hazardous material (empty chemical containers, contaminated rugs, paper, water and soil) that are collected by authorised and licenced waste collection and handling contractors.
- Dispose of contaminated products and empty containers must be according to their specified requirements as stipulated in their respective MSDSs.
- Wastewater and sewage must be disposed of according to their relevant permit requirements.

The EMP for the port area (Namport, 2019) also recommends that:

- A complaints register regarding waste must be maintained.
- All information about waste-related complaints and actions taken to address complaints and to prevent future occurrences must be documented and included in the bi-annual report of Namport.

TABLE 8: WASTE MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION, OPERATIONAL AND DECOMMISSIONING PHASE			
1	Waste	<ul style="list-style-type: none"> • Pollution of soil and water, and seawater (with impacts on marine ecology) • General degradation and nuisance impacts 	<ul style="list-style-type: none"> • Maintain and apply the existing waste management and housekeeping practice of SLB site-wide (including the proposed LMP). • Designated, suitable receptacles (with lids to prevent borne litter and scavenging), clearly marked for different waste types for disposal will be used at appropriate locations onsite. • All waste items will be separated at source, collected in the correct receptable, and contained for removal. • A complaints register should be kept for any waste-related issues and mitigation steps taken to address complaints where necessary. • Document and investigate all registered complaints and address the concerns about waste promptly. Document the actions taken. • Employees and contractors will be trained on the importance of correct waste separation and collection, regular removal, correct disposal, as well as waste minimisation and recycling (where practical). • Implement a zero-tolerance policy with regards to waste-related transgressions. <ul style="list-style-type: none"> ○ No person will be allowed to discard waste except in a designated receptable for this purpose. ○ Wastewater, effluent or sewage will be discharged according to their relevant permit requirements. • Hazardous waste will be contained and disposed of at a licenced hazardous waste disposal facility (Walvis Bay). • For the disposal of empty containers and contaminated products the MSDS of the respective items must be consulted and handled accordingly. • Removal and disposal of hazardous waste must be done according to existing protocols which are aligned to Namport's practice. This includes

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
			<p>record keeping of disposal certificates, which must contain information about the type of waste, volume as well as disposal method/facility.</p> <ul style="list-style-type: none">• During decommissioning, stockpile contaminated demolished material for removal to the hazardous waste site.

7.7 SOCIO-ECONOMIC MMP

The proposed LMP will introduce facilities and activities with socio-economic consequences. Although the benefits because of job creation (not more than ten people will be employed by the contractor during construction and six employees will be newly appointed by SLB) are small, the indirect benefits are diverse and meaningful – skills development, spendable income, local procurement, taxes, and more export volumes.

The overall objective(s) of the Socio-economic MMP is:

- To enhance and optimize positive socio-economic impacts (benefits) and to minimize possible negative socio-economic impacts.

TABLE 9: SOCIO-ECONOMIC MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION AND OPERATIONAL PHASE			
1	Employment, local procurement, economic growth	<ul style="list-style-type: none"> • Job creation and skills development • Spendable income, local procurement, and taxes • Complementary activities in the Port of Walvis Bay 	<ul style="list-style-type: none"> • Establish human resources policies for the recruitment of qualified, competent Namibians. • Set a skill development program and strategy for staff to maximize the use of the local labour force. • Promote continuous learning programs. • Ensure skills upgrading and the upkeep of staff records for future employment of the staff. • Establish procurement policies to support local, regional and Namibian supply of services and goods. • Support the local economy with staff residing in Walvis Bay and getting daily supplies from local businesses. • Support community initiatives of which staff are members of.

7.8 TRAFFIC MMP

The Port of Walvis Bay functions 24/7 and overland traffic towards and out of the port increases continuously. The operations of the proposed LMP will cumulatively contribute to this increase of traffic. This EMP focuses only on the potential impacts inside the port area.

Namport is in the process of developing a new traffic flow arrangement for the Port of Walvis Bay, with planned new entrance and exit points, flow lines and truck staging lots. It is expected that the proposed new traffic flow arrangement will alleviate and improve the potential situation of traffic congestions in the port area.

It is unlikely that the proposed construction or operational activities of SLB will increase traffic to and from and inside the Port of Walvis Bay significantly.

The overall objective(s) of the Traffic MMP is:

- To minimize traffic congestions in the port area of Walvis Bay.

TABLE 10: TRAFFIC MMP

No	ISSUE (ASPECT)	POTENTIAL IMPACTS	MANAGEMENT AND MITIGATION MEASURES, COMMITMENTS
CONSTRUCTION AND OPERATIONAL PHASE			
1	Traffic	<ul style="list-style-type: none"> Potential congestion in the port area 	<ul style="list-style-type: none"> During construction, limit work to daylight hours. Restrict all vehicle and equipment movements to approved routes. Routes should be clearly indicated (and demarcated where necessary), together with designated turning points and construction laydown areas. All drivers must adhere to the speed limit of Namport, while travelling inside the port area. Proper care must be taken at railway crossings. The correct signage and procedures must be put in place before operational activities commence. Ensure implementation of a detailed safety code of conduct for transport contractors and monitor closely, with penalties enforced if necessary. Develop and implement an Emergency Response Plan. This plan needs to be developed in conjunction with Namport’s Emergency Response Plan. Document and investigate all registered complaints and address the concerns promptly. Create communication channels to ensure prior notice to the nearby receptor(s) if work is to take place close to them. Information shared must include the following: <ul style="list-style-type: none"> Proposed working times. How long the planned activity will take place. What is being done. Contact details of the Constructions Supervisor and Environmental Specialist

8 REFERENCES

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