

ENVIRONMENTAL MANAGEMENT PLAN

PROPOSED MARINE FUEL BUNKERING OPERATIONS OF EMONO FUEL SUPPLIES IN WALVIS BAY, ERONGO REGION



January 2026

Prepared:

By:



FIN Hydro Environmental Technologies

For:

Emono Fuel Supplies Cc

TABLE OF CONTENTS

TABLE OF CONTENTS	1
1 INTRODUCTION AND BACKGROUND	4
2 LEGISLATIVE FRAMEWORK	6
3 LOCALITY	8
4 STRUCTURES FOR ENVIRONMENTAL MANAGEMENT	9
4.1 ROLES OF THE PROPONENT	9
4.2 ROLES OF THE CONTRACTOR	10
4.3 ROLES OF THE ENVIRONMENTAL CONTROL OFFICER (ECO).....	11
5 IMPLEMENTATION AND MONITORING	11
5.1 SITE ESTABLISHMENT	11
5.2 SOLID WASTE MANAGEMENT	12
5.3 PREVENTION OF SOIL, SURFACE-AND GROUNDWATER POLLUTION.....	12
5.4 COMPLIANCE MONITORING	12
5.4.1 ENVIRONMENTAL MONITORING.....	12
5.4.2 EMP ADMINISTRATION.....	12
5.4.3 EMP AMENDMENTS.....	12
5.4.4 NON-COMPLIANCE.....	12
5.4.5 SITE MANAGEMENT	13
5.4.6 FUEL TRANSPORT ROUTES AND WORK SITES.....	13
5.5 CONTINUOUS IMPROVEMENT	13
6 ENVIRONMENTAL MANAGEMENT MEASURES	14
6.1 MARINE TRAFFIC SAFETY	14
6.2 MARINE TRAFFIC SAFETY	14
6.3 AIR QUALITY	15
6.4 NOISE POLLUTION.....	15
6.5 HEALTH AND SAFETY	16
6.6 SURFACE WATER CONTAMINATION	17

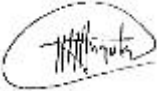
6.7	WASTE GENERATION	17
6.8	ECOLOGICAL IMPACTS	18
7	CONCLUSION	18

APPENDICES

Appendix A Confirmation of screening notice

Appendix B Curriculum Vitae

DOCUMENT INFORMATION:

DOCUMENT TITLE:	Proposed Marine Fuel Bunkering Operations of Emono Fuel Supplies in Walvis Bay, Erongo Region
PROPONENT:	Emono Fuel Supplies CC P.O. Box 70009, Windhoek Tel: +264 (81) 285 6816 Email: shikongoml@gmail.com
CONSULTANT:	FIN Hydro Environmental Technologies P.O. Box 23656 Windhoek Tel: +264 (81) 275 9400 Email: fin.environtech@gmail.com
AUTHOR:	Mr. Wilbard Angula Environmental Practitioner BA (Hon.) Geography & Environmental Studies University of Namibia
ISSUE DATE:	January 2026
SIGNATURE:	

1| INTRODUCTION AND BACKGROUND

Emono Fuel Supplies CC (hereafter referred to as the proponent) intends to provide marine fuel bunkering services in Walvis Bay, Erongo Region. The proposed Bunkering operations will be conducted via truck-to-ship (TTS) transfers at designated locations at the harbour.

An Environmental Management Plan (EMP) is required for fuel bunkering (ship refuelling) to minimize the significant risks of marine pollution, manage fire hazards, and ensure compliance with international and local environmental regulations. As bunkering involves transferring large quantities of volatile, hazardous, and polluting materials often in sensitive marine environments, a structured approach is mandatory to prevent environmental damage and protect personnel. This EMP serves as a managing tool for the proposed Emono Fuel Supplies' bunkering operations at Walvis Bay. The management plan is developed to outline measures to be implemented in order to minimise adverse environmental degradation associated with this development.

In accordance with the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), FIN Hydro Environmental Technologies was designated to carry out the tasks required to facilitate an environmental clearance certificate (ECC) application for the proposed fuel bunkering operations with the Environmental Commissioner.

According to the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), the project in question is subject to the following activities, which are detailed in Table 1:

Table 1: Below are activities listed in the EIA Regulations that are relevant to the project

Activity Name and No(s):	Description of relevant Activity
Activity 8.9 Water Resource Developments	The construction and other activities within a catchment area. <u>Relevance to project:</u> The project entails fuel bunkering activities that will be undertaken within the Atlantic Ocean catchment area.
Activity 9.1 Hazardous Substance Treatment, Handling and Storage	The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974. <u>Relevance to project:</u>

	The project entails the handling of hazardous substances.
Activity 9.2 Hazardous Substance Treatment, Handling and Storage	Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste. <u>Relevance to project:</u> The project requires a fuel license from MME and an environmental clearance certificate from MEFT.
Activity 9.3 Hazardous Substance Treatment, Handling and Storage	The bulk transportation of dangerous goods using pipeline, funiculars or conveyors with a throughout capacity of 50 tons or 50 cubic meters or more per day. <u>Relevance to project:</u> The project entails the handling of hazardous substances.
Activity 9.4 Hazardous Substance Treatment, Handling and Storage	The storage and handling of a dangerous goods, including petrol, diesel, liquid petroleum gas or paraffin, in containers with a combined capacity of more than 30 cubic meters at any one location. <u>Relevance to project:</u> The project entails the handling of hazardous substances.

2| LEGISLATIVE FRAMEWORK

The Namibian Constitution has a section on principles of state policy. These principles cannot be enforced by the courts in the same way as other sections of the Constitution. But they are intended to guide the Government in making laws which can be enforced.

The Constitution clearly indicates that the state shall actively promote and maintain the welfare of the people by adopting policies aimed at management of ecosystems, essential ecological processes and biological diversity of Namibia for the benefit of all Namibians, both present and future.

i. ENVIRONMENTAL MANAGEMENT ACT NO.7 OF 2007

This Act provides a list of projects requiring an Environmental assessment. It aims to promote the sustainable management of the environment and the use of natural resources and to provide for a process of assessment and control of activities which may have significant effects on the environment; and to provide for incidental matters.

The Act defines the term “environment” as an interconnected system of natural and human-made elements such as land, water and air; all living organisms and matter arising from nature, cultural, historical, artistic, economic and social heritage and values.

The Environmental Management Act has three main purposes:

- (a) to make sure that people consider the impact of activities on the environment carefully and in good time.
- (b) to make sure that all interested or affected people have a chance to participate in environmental assessments.
- (c) to make sure that the findings of environmental assessments are considered before any decisions are made about activities which might affect the environment.

ii. THE WATER ACT (ACT NO 54 OF 1956)

The Water Act No. 54 of 1956 as amended, aims to provide management of the national water resources to achieve sustainable use of water for the benefit of all water users.

The Act broadly controls the use and conservation of water for domestic, agricultural, urban and industrial purposes; to control, in certain respects, the use of sea water; to control certain activities on or in water in certain areas; and to control activities which may alter the natural occurrence of certain types of Atmospheric Precipitation.

iii. WATER RESOURCES MANAGEMENT ACT (NO.11 OF 2013)

The Water Act 54 of 1956 will be superseded by this new Water Resources Management Act 2013. The latter has been brought into force on 29 August 2023 by GN 268 2023 (GG 8187) Regulations relating to appeals to Water Tribunal in GN 270 (GG 8188). An overlapping period of 18 months is established to enable the phasing in of the new Act whilst the former is phased out.

This Act provides for the management and conservation of all water resources of Namibia including the whole or any part of a watercourse or an aquifer, the sea and meteoric water. The objects of this Act are to ensure that the water resources of Namibia are managed, developed, used, conserved and protected in a manner consistent with, or conducive to, the fundamental principles set out in section 3.

iv. ENVIRONMENTAL ASSESSMENT POLICY OF NAMIBIA (1995)

Environmental Assessments (EA's) seek to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process, and that the term ENVIRONMENT (in the context of IEM and EA's) is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.

All listed policies, programmes and projects, whether initiated by the government or private sector, should be subjected to the established EA procedures.

Apart from the requirements of the Environmental Assessment Policy, the following sustainability principles need to be taken into consideration, particularly to achieve proper waste management and pollution control:

- Cradle to Grave Responsibility
- Precautionary Principle
- The Polluter Pays Principle
- Public Participation and Access to Information

v. PETROLEUM PRODUCTS AND ENERGY ACT OF NAMIBIA (ACT NO. 13 OF 1990)

The Act makes provision for impact assessment for new proposed fuel retail facilities and petroleum products known to have detrimental effects on the environment.

vi. DRAFT POLLUTION CONTROL AND WASTE MANAGEMENT BILL (GUIDELINE ONLY)

Parts 2, 7 and 8 of the bill apply to the proposed operations of the Emono Fuel Supplies.

Part 2 stipulates that no person shall discharge or cause to be discharged any pollutant to the air from a process except under and in accordance with the provisions of an air pollution licence issued under section 23. It further provides for procedures to be followed in licence application, fees to be paid and required terms of conditions for air pollution licences.

Part 7 states that any person who sells, stores, transports or uses any hazardous substances or products containing hazardous substances shall notify the competent authority, in accordance with sub-section (2), of the presence and quantity of those substances.

Part 8 calls for emergency preparedness by the person handling hazardous substances, through emergency response plans.

vii. ATMOSPHERIC POLLUTION PREVENTION ORDINANCE OF NAMIBIA NO. 11 OF 1976

The Ordinance prohibits anyone from carrying on a scheduled process without a registration certificate in a controlled area. A certificate must be issued if it can be demonstrated that the best practical means are being adopted for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process. Best practice would be to notify the line Ministry about emissions but it is not a legal requirement.

viii. HAZARDOUS SUBSTANCES ORDINANCE NO. 14 OF 1974

The Ordinance applies to the manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings.

3| LOCALITY

The project site (22.936987°S; 14.508895°E) is situated on Erf 4662, Ben Amathila Avenue, in the fishing harbor of Walvis Bay. See Figure 1.

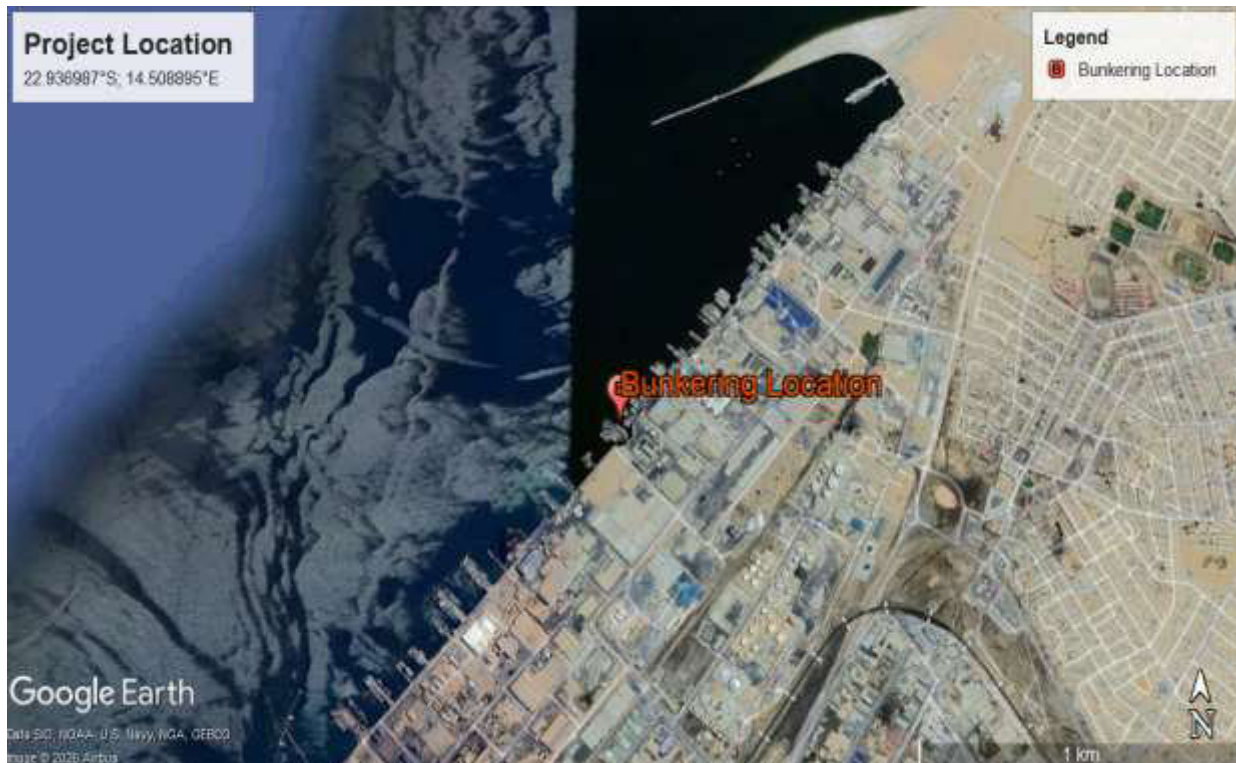


Figure 1. Project locality map



Figure 2. Layout map of site

4| STRUCTURES FOR ENVIRONMENTAL MANAGEMENT

During the operational phase, environmental management will be the responsibility of the proponent (including suppliers), contractors and/or its representatives. For the purposes of this report:

1. The Proponent (and its employees, staff) and suppliers are responsible for the project operations.
2. The Contractors (and its subcontractors) are responsible for the maintenance of the project.

Management shall provide resources essential to the implementation and control of the EMP including: human resources, technology, and financial resources. The general roles and responsibilities of various parties during maintenance and operations of the site are outlined below.

4.1 ROLES OF THE PROPONENT

Emono Fuel Supplies CC, through a representative will ensure that the proponents' responsibilities are executed in compliance with the relevant legislations. The proponent will have the following responsibilities in terms of the implementation of this EMP:

- Be fully knowledgeable with the contents of the EMP;
- Review and authorize updates to the EMP.
- Ensure resource allocation for implementation of the EMP requirements.
- Ensure that environmental requirements are integrated into project plans, work method statements, tender and contract documents.
- Ensure necessary support to all staff, suppliers and contractors for implementation of the EMP.

- Undertake environmental system reviews, site inspections, audits and other verification activities to assure that the EMP implementation is at an optimal level.
- Participate in environmental performance verification activities to verify the level of compliance with the EMP in delivering the legal and environmental obligations.
- Assess the efficacy of the EMP and identify possible areas of improvement or amendment required within the EMP.
- Undertake daily, weekly and monthly inspections of the work area(s);
- Ensuring that a register of all the transgressions issued by the proponent is kept in the site office;
- Ensuring that a register of all public complaints is maintained; and
- Report and record any environmental incidents caused by the Contractor or due to the Contractor's activities;
- Obtain required corrective action within specified time frames and close out of environmental incidents.
- Participate in incident investigations (as required).
- Initiate external audits (as required).

4.2 ROLES OF THE CONTRACTOR

The contractor shall ensure that all project maintenance staff, its sub-contractors and suppliers are familiar with, understand and adhere to the EMP. Failure by any employee of the Contractor, Sub-contractor, Suppliers etc. to show adequate consideration to the environmental aspects of this contract shall be considered sufficient cause for the proponent to have the employee removed from the project. The proponent will also order the removal of equipment from the site that is causing continual environmental damage (e.g. leaking oil and diesel). Such measures will not replace any legal proceedings the Client may institute against the Contractor.

The proponent shall order the contractor to suspend part or all of the works if the contractor and/or any sub-contractor, suppliers, etc., fail to comply with both the EMP and the construction procedures supplied by the Contractor. The suspension will be enforced until such time as the offending procedure or equipment is corrected and/or if required remedial measures are put in place.

By virtue of the environmental obligations delegated to the Contractor through the Contract Document, all staff (including subcontractors and staff), suppliers, and service providers appointed for the project would be responsible for:

- Be fully knowledgeable with the contents of the EMP;
- Ensuring adherence to and implementation of the EMP;
- Ensuring adherence by providing adequate staff and provisions to meet the requirements of the EMP;

- Ensuring that Method Statements are submitted to the proponent for approval before any work is undertaken, and monitor compliance with the EMP and approved Environmental Method Statements;
- Ensuring that any instructions issued by the proponent are adhered to;

4.3 ROLES OF THE ENVIRONMENTAL CONTROL OFFICER (ECO)

An independent Environmental Control Officer (ECO) must be appointed for the proposed operations. The ECO must be appointed by Emono Fuel Supplies CC to monitor and review the on-site environmental management and implementation of this EMP. The ECO will ensure that the EMP is strictly followed, providing unbiased monitoring and auditing of the project's operations.

The duties of the ECO:

- Ensure that all activities on site are undertaken in accordance with the EMP;
- Undertake compliance audits against the EMP and conditions of the Environmental Authorisation (where required).
- Provide support and advice to the proponent, contractor and all subcontractors in the implementation of environmental management procedures and corrective actions.
- Report significant incidents internally and externally as required by law and the conditions of authorisation.
- Ensure that monitoring programs, which assess the performance of the EMP, are implemented.
- Assist in the investigation of incidents and non-conformances and confirm that corrective and preventive action is taken and is effective.
- Assess the efficacy of the EMP and identify possible areas of improvement or amendment required within the EMP.
- Facilitate the amendment of the EMP in conjunction with the proponent (as required).
- Provide environmental training for key project personnel (in communication with proponent).
- Prepare audit reports (and submit reports to the relevant authority as required).

5| IMPLEMENTATION AND MONITORING

5.1 SITE ESTABLISHMENT

The 'site' here refers to all areas in use during operations and project maintenance (i.e. bunkering locations, fuel transportation routes, etc.). Prior to any such activities, where necessary the approved site shall be demarcated (where necessary) for such activities. The contractor shall maintain the demarcation line and ensure that materials and/or equipment used for the project do not move outside the site and environs, or

pose a threat to people. The proponent and contractor shall both ensure that all his plant, labour and materials remain within the boundaries of the project operation.

5.2 SOLID WASTE MANAGEMENT

Emono Fuel Supplies CC / Contractor shall institute a waste control and removal system for the operations. Contractors shall not dispose of any waste into the environment during the operations of the project. All waste shall be disposed of site at the Walvis Bay landfill site.

Petroleum, chemical, harmful and hazardous waste throughout the operational sites shall be stored in appropriate containers and disposed of at an appropriate hazardous waste disposal site.

5.3 PREVENTION OF SOIL, SURFACE-AND GROUNDWATER POLLUTION

The proponent (and its suppliers) shall take all reasonable precautions to prevent the pollution of the soil and nearby Atlantic Ocean as a result of his activities. Such pollution could result from the release, accidental or otherwise, of chemicals, oils and fuels, etc.

Both the proponent and contractors must obtain oil absorbent pads, booms and spill kits, or similar designed products or materials to soak up oil, petrol and diesel. All shall ensure that he is familiar with the correct use and disposal of any materials designed to soak up petroleum products. All oil, petrol, diesel-soaked soil must be disposed of immediately at hazardous waste disposal site.

5.4 COMPLIANCE MONITORING

5.4.1 ENVIRONMENTAL MONITORING

Periodic environmental monitoring must be taken on a regular basis. Monitoring should be done in order to ensure compliance with all aspects of the EMP. Findings should be liaised with to all responsible officers as chain command.

5.4.2 EMP ADMINISTRATION

Copies of this EMP shall be kept at both proponent and contractor's offices and should be distributed to all senior staff members of the project operations

5.4.3 EMP AMENDMENTS

The EMP amendments can only be made with the approval of the DEA. Amendments to the EMP should be liaised to all employees and contractors.

5.4.4 NON-COMPLIANCE

Problems may occur in carrying out mitigation measures or monitoring procedures that could result in non-compliance of the EMP. The responsible personnel should encourage staff to comply with the EMP, and address acts of non-compliance and penalties.

5.4.5 SITE MANAGEMENT

Areas outside this designated working zone or /operational areas shall be considered “no go” areas. The fuel transfer zones must be clearly demarcated when transferring from tanker truck to vessels/ships fuel to enhance safety around the proposed development.

5.4.6 FUEL TRANSPORT ROUTES AND WORK SITES

Management of fuel transport routes and work sites during fuel bunkering operations is crucial for ensuring safety, minimizing risks, and maintaining smooth operations.

As the proposed fuel bunkering operations involve the transfer of fuel from land-based tanker trucks to vessels / ships docked at the harbour. Fuel reaches the bunker stations via road tanker trucks. Dedicated areas at the bunkering location must be well maintained to allow good access and ease of movement of trucks and vessels at the harbour. Work sites shall be clearly demarcated and road signs erected were needed. The general public should not have unauthorised or uncontrolled access to the bunkering location during both operations.

Suitable signs must also be erected on the approach access roads and at bunkering sites, to direct drivers and to control speed. Furthermore, on-going controls, such as fencing and policing, must be implemented.

5.5 CONTINUOUS IMPROVEMENT

Based on monitoring results, any non-compliance, inefficiencies, or areas where goals are not being met must be addressed through corrective actions (e.g., modifying practices, replacing equipment, implementing new technologies).

As a component of an adaptive management approach, the monitoring process is dynamic. This entails continuously evaluating and enhancing procedures in light of results monitoring. The implementation tactics should be modified in the event that new information becomes available or circumstances change.

Providing regular updates on environmental performance to stakeholders (e.g., public, regulatory bodies, investors). Reports must include detailed data on progress toward environmental goals, compliance with regulations, and any corrective actions taken.

6| ENVIRONMENTAL MANAGEMENT MEASURES

The potential environmental impacts that might occur throughout the fuel retail facility's site maintenance, operation, and eventual site closure will be examined in this section. Activities related to maintenance and potential site closure have impacts that are comparable to those of construction activities.

6.1 MARINE TRAFFIC SAFETY

OPERATIONS / MAINTENANCE PHASE

Traffic safety during fuel bunkering requires strict adherence to safety protocols in order to prevent collisions, fires, and environmental disasters. Contamination to the environment may occur due to oil spills and hose failures as result traffic accidents around the bunkering location.

Proposed Mitigation Measures

- ❖ Ensure that the crew operating the vessels are qualified and licensed to do so in the Namibian waters.
- ❖ The vessels must be equipped with all necessary radio communication tools, radar etc. These systems must be maintained in operational condition, with backup power sources for emergency communications.
- ❖ Ensure that relevant crew personnel are trained in the use of the equipment, including emergency equipment and procedures when normal systems fail.
- ❖ Inform nearby vessels, passing ships, and the local Port Authority of the fuel transfer activities are being conducted from tanker truck to vessel/ship.
- ❖ Ensure all operations adhere to the Marine Traffic Amendment Act 15 of 1991.

Monitoring Strategy	Regular visual inspection
Responsible Party	Emono Fuel Supplies CC & Contractors

6.2 MARINE TRAFFIC SAFETY

OPERATIONS / MAINTENANCE PHASE

Traffic safety during fuel bunkering requires strict adherence to safety protocols in order to prevent collisions, fires, and environmental disasters. Contamination to the environment may occur due to oil spills and hose failures as result traffic accidents around the bunkering location.

Proposed Mitigation Measures

- ❖ Ensure that the crew operating the vessels are qualified and licensed to do so in the Namibian waters.
- ❖ The vessels must be equipped with all necessary radio communication tools, radar etc. These systems must be maintained in operational condition, with backup power sources for emergency communications.

- ❖ Ensure that relevant crew personnel are trained in the use of the equipment, including emergency equipment and procedures when normal systems fail.
- ❖ Inform nearby vessels, passing ships, and the local Port Authority of the fuel transfer activities are being conducted from tanker truck to vessel/ship.
- ❖ Ensure all operations adhere to the Marine Traffic Amendment Act 15 of 1991.

Monitoring Strategy	Regular visual inspection
Responsible Party	Emono Fuel Supplies CC & Contractors

6.3 AIR QUALITY

OPERATIONS / MAINTENANCE PHASE

Possible air pollution in the form of emissions from fuel tanker trucks and/or during fuel transfer activities could also deteriorate air quality in the area. Hydrocarbon vapours will be released during delivery and dispensing of fuel, as liquid displaces the gaseous mixture in the tanks.

Vapour emissions are wasteful in terms of product loss and also add volatile organic compounds (VOCs) to the atmosphere, which contribute to the formation of photochemical smog. This is the haze that can be seen over cities on a warm summer's day. Fuel vapours are also a significant source of benzene, a known carcinogen for humans.

Proposed Mitigation Measures

- ❖ Fuel delivery trucks should not be allowed to idle for unnecessarily long periods of time.
- ❖ Using control valves to maintain optimal pressure in tanks reduces vapor generation.
- ❖ Use vapour recovery equipment and techniques to avoid air pollution and minimise fuel loss.
- ❖ Regular air quality monitoring should be conducted at the bunkering location.
- ❖ Keep a complaints register regarding vapour smells at the site; and act on it if becomes a regular complaint.

Monitoring Strategy	Regular monitoring of fuel vapor emissions during refueling to prevent air pollution and ensure that vapor recovery systems are working effectively.
Responsible Party	Emono Fuel Supplies CC & Contractors

6.4 NOISE POLLUTION

OPERATIONS / MAINTENANCE PHASE

Vehicles, vessels and other equipment will be utilised during this phase, which may generate noise. It is expected that the noise generated will be localised and will not have a significant impact on any third parties.

Proposed Mitigation Measures

- ❖ Ensure the use of fuel delivery trucks, maintenance vehicles and equipment that emit reduced noise levels.
- ❖ Ensure proper maintenance is conducted on trucks, vehicles and equipment to ensure the reduction of noise emission.
- ❖ Where necessary, the operational staff should be equipped with ear protection equipment.
- ❖ During operations, audio equipment (if any) should not be played at levels considered intrusive by others.
- ❖ Maintain the grievance mechanism to capture public perceptions and complaints with regard to noise impacts, track investigation actions and introduce corrective measures for continuous improvement.

Monitoring Strategy	Monitor noise levels to ensure that they are within the regulatory limits.
Responsible Party	Emono Fuel Supplies CC & Contractors

6.5 HEALTH AND SAFETY

OPERATIONS / MAINTENANCE PHASE

Safety issues could arise from the trucks, equipment and tools during the operational activities. This increases the possibility of injuries and the proponent and contractors must ensure that all personnel are made aware of the potential risks of injuries on site.

Hydrocarbons are volatile under certain conditions and their vapors in specific concentrations are flammable. If precautions are not taken to prevent their ignition, fire and subsequent safety risks may arise.

Proposed Mitigation Measures

- ❖ Speed limit warning signs must be erected to minimise accidents.
- ❖ All fuel tanker trucks, maintenance vehicles and equipment must be tagged with reflective signs or tapes to maximise visibility and avoid accidents.
- ❖ Display telephone numbers of emergency services at the operational sites (i.e. bunkering stations, etc.).
- ❖ Enforce the use of appropriate Personal Protective Equipment (PPE) for the right task or duties at all times.
- ❖ Prevent illegal access to the bunkering station and any work sites, by implementing appropriate security measures. These security measures must not pose a threat to persons or motorists in the area.
- ❖ Ensure that first aid kits are available at all operational, at all times.
- ❖ Emergency response procedures should be in place so as to alert the employees on how to react to fire and explosions incidents.
- ❖ Operators must be properly trained on safety and health issues at the site.

- ❖ Signs such as 'NO SMOKING' must be prominently displayed around fuel bunkering stations.
- ❖ Ensure sufficient water is available all the time for fire-fighting purposes.
- ❖ Adequate lighting within bunkering location and around the site should be provided, when visibility becomes an issue.

Monitoring Strategy	▪ Ensure proper procedures for handling hazardous materials like fuel, oil, and chemicals. ▪ Make sure employees use proper personal protective equipment (PPE) during operations.
Responsible Party	Emono Fuel Supplies CC & Contractors

6.6 SURFACE WATER CONTAMINATION

OPERATIONS / MAINTENANCE PHASE

Spillages might occur during fuel delivery and fuel transfer activities. Spillages and leakages may also occur due to failure of reticulation pipelines, couplings, etc. Any release of pollution (product) to the environment may put the Atlantic Ocean at risk.

Proposed Mitigation Measures

- ❖ Adopt the Namibian National Oil Spill Contingency Plan.
- ❖ Use drip trays, linings or concrete floors when evidence of leaks are observed on fuel tanker trucks, maintenance vehicles and/or equipment.
- ❖ The presence of an emergency response plan and suitable equipment is advised, so as to react to any spillage or leakages properly and efficiently.
- ❖ Proper environmental awareness and remedial response training of all project personnel must be conducted on a regular basis.
- ❖ Proper monitoring of the product levels in the tanks (both fuel delivery tanker, and receiving vessel/ship) must take place to eliminate overfilling.
- ❖ Proper training of the operators on site is vital.

Monitoring Strategy	Regular visual inspection. Surface water quality monitoring in cases of evident pollution.
Responsible Party	Emono Fuel Supplies CC & Contractors

6.7 WASTE GENERATION

OPERATIONS / MAINTENANCE PHASE

Waste material will be generated during the operational and maintenance activities of the project. Waste in the form of oil spills or leakages of petroleum products might occur during this phase.

Proposed Mitigation Measures

- ❖ Ensure that sufficient waste collection containers are present at all operational areas for the disposal of solid waste.
- ❖ Waste must be appropriately collected and disposed of at an approved appropriate waste disposal site.
- ❖ Waste must be disposed of at a designated Walvis Bay landfill site.

Monitoring Strategy	Regular inspection and monitoring of housekeeping procedures
Responsible Party	Emono Fuel Supplies CC & Contractors

6.8 ECOLOGICAL IMPACTS

OPERATIONS / MAINTENANCE PHASE

The project location itself is free of conservation worthy vegetation.

Proposed Mitigation Measures

- ❖ The operational activities would not exceed the designated operational areas.

Monitoring Strategy	Regular site inspection
Responsible Party	Emono Fuel Supplies CC & Contractors

7| CONCLUSION

The Environmental Management Plan should be used as an on-site tool during all phases of the proposed marine fuel bunkering operations.

Environmental audits should be carried out to ensure compliance of the EMP and environmental regulations of Namibia. Parties responsible for non-conformances of the EMP will be held responsible for any rehabilitation that may need to be undertaken.

According to Environmental Management Act No. 7 of 2007, the environmental clearance is only valid for three years. Therefore, it is the proponent's responsibility to provide an updated EMP document and submit an application for permit renewal before the permit expires.