
Environmental Management Plan (EMP)

To Support an Application for an Environmental Clearance Certificate (ECC)
for the Operation of an Existing Fuel Retail Outlet and Related Amenities

Erf 646
124 Sam Nujoma Avenue
Walvis Bay



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APP006772

Final Report
December 2025

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INFORMATION SHEET

Project Title Name	An Environmental Management Plan (EMP) Report in Support of an Application for an Environmental Clearance Certificate (ECC) to Permit the Operation of an Existing Fuel Retail Outlet and Related Amenities Erf 646 124 Sam Nujoma Avenue Walvis Bay Erongo Region
MEFT Application No.	APP-006772
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Report Status	Final
Report Date	December 2025

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ABBREVIATIONS AND ACRONYMS

Acronyms	Expansion
EC	Environmental Commissioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act (Act No. 7 of 2007)
EMP	Environmental Management Plan
EMS	Environmental Management System
FRO	Fuel Retail Outlet
HDPE	High Density Polyethylene
HSSEQC	Health, Safety, Security, Environment, Quality – Management System
IAPs	Interested and Affected Parties
m ³	Cubic meter
MEFT	Ministry of Environment, Forestry and Tourism
MIME	Ministry of Industries, Mines and Energy
MSDS	Material Safety Data Sheet
NamRA	Namibia Revenue Authority
NSI	Namibia Standards Institute
OEC	Office of the Environmental Commissioner
PC	Petroleum Commissioner
PPE	Personal Protective Equipment
PPM	Parts Per Million
PV	Photovoltaic
SANS	South African National Standards
SAR	Scoping Assessment Report
SHE	Safety, Health & Environment
SME	Small and Medium Enterprises
ULP	Unleaded Petrol
USTs	Underground Storage Tank(s)
VOC	Vapour Organic Compounds
WHO	World Health Organisation
WC	Water Closet
UNESCO	United Nations Educational, Scientific and Cultural Organisation
GG	Government Gazette

DEFINITION OF TERMS

TERM	EXPANSION
Alternatives	Alternatives are different ways to achieve the same project objective, including options for location, design, technology, or scale, along with a 'no-action' alternative.
Construction Phase	The phase of a project which precedes the operational phase, during which project facilities and infrastructure are assembled and installed on their foundations, and connected and tested, to ensure that they operate as designed.
Cumulative Impacts	In relation to a project activity, means how the combined effects /impacts of a particular project interact and accumulate over time and space with other past, present or future actions to affect an ecosystem or community.
Emergency Plan	A plan in writing that on the basis of identified potential incidents at the installation together with their consequences, describes how such incidents, and their consequences should be dealt with, both on site and off site.
Environment	As definite in the Environmental Management Act means the complex of natural and anthropogenic factors and elements that are naturally interrelated and affect the ecological equilibrium and the quality of life, including – (a) the natural environment that is land, water, and air, all organic and inorganic matter and living organism and - (b) the human environment that is the landscape and the natural, cultural, historical, aesthetic, economic and social heritage and values.
Environmental Component/Aspect	An attribute or constituent of the environment (i.e. air quality; waste management, seismicity, soil, groundwater; terrestrial ecology, noise, traffic, socio-economic) that may be impacted by the proposed project.
Environmental Impact	A description of the potential effect or consequence of an aspect of the development on a specified component of the biophysical, social or economic environment within a defined time and space.
Environmental Management Plan (EMP)	A working document which contains site specific plans to ensure that environmental management practices to eliminate and control environmental impacts are followed during the developmental phases of that site, project and or facility and would normally consist of construction phase, operational phase and decommissioning phases.
Environmental Monitoring	Means collection, evaluation and summarization of environmental data by continuous or periodic monitoring of certain qualitative and quantitate indicators characterizing the state of environmental components and their modification as a result of the impact of natural and anthropogenic factors.
Hazardous Waste	Any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have detrimental impact on health and the environment.
Industrial Waste	Means waste generated as a result of business, commerce, trade, wholesale, retail, professional, manufacturing, maintenance, repair, fabricating, processing or dismantling activities, but does not include domestic waste, garden or bulky waste, builders' waste or health care risk waste.
Interested and Affected Parties	All persons who may be affected by the project either directly or indirectly, or who have an interest or stake in the area to be affected by the project, including neighbouring landowners & Road Fund Administration.
Material Safety Data Sheet	According to ISO 11014, a material safety data sheet (MSDS) is a document that contains information on the potential health effects of exposure to chemicals, or other potentially dangerous substances and on safe working procedures when handling chemical products. It is an essential starting point for development of a complete health and safety program. It contains hazard evaluations on the use, storage, handling and emergency procedures related to that material. The MSDS contains much more information about the material than the label and it is prepared by the supplier. It is intended to tell what the hazard of the product are, how to use the product safely, what to expect if the recommendations are not followed, what to do if accidents occur, how to recognise symptoms of overexposure and what to do if such incidents occur.
Mitigation	Measures designed to avoid, reduce or remedy adverse impacts.
Non-compliance	Issues that are in direct non-compliance with the requirements, commitments and/or management measures as approved in the EMP.
Operational Phase	The phase of a project during which the newly constructed facility/tanks, pipelines, gantries and associated facilities are operated.
Proponent	An organisation (private or public) or an individual who intends to implement a development proposal. As definite in the Environmental Management Act, the proponent is a person who proposes to undertake a listed activity.
Risk	Risk is the measure of the consequence of a hazard and the frequency with which it is likely to occur. Risk is expressed mathematically as: Risk = Consequence x Frequency of Occurrence.
Risk Assessment	The risk assessment is the process of collecting, organising, analysing, interpreting, communicating and implementing information in order to identify the probable frequency, magnitude and nature of any major incident which could occur at a major hazard installation, and the measures required to remove, reduce or control the potential causes of such an incident.

Scoping	The preliminary stage during which key environmental issues and impacts of a proposed project are defined. It involves identifying potential effects, deciding which topics need further assessment, and outlining the methodology for the assessment to focus the study on the most significant environmental issues and reduce uncertainty. The results of a scoping are frequently used to prepare Terms of Reference for the specialized input into the full EIA.
Sensitive Area	An area or environment where a unique ecosystem, habitat for plant and animal life, wetlands or conservation activity exists or where there is high potential for ecotourism
Significance Impact	Means an impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.
Stakeholder	Stakeholders are divided into two classes – statutory stakeholders (i.e. MEFT, Ministry of Labour, etc. and non-statutory stakeholders who could be interested and affected parties (IAPs). IAPs could be those public members whose interests may be positively or negatively affected by the project and/or who are concerned with the project/activities and its consequences.

1 BACKGROUND

1.1 Introduction

This Environmental Management Plan (EMP) is prepared to serve two purposes:

Firstly, to support an application for an Environmental Clearance Certificate (ECC) to allow and realign the continued operations of an existing fuel retail outlet (FRO) with the provisions of the Environmental Management Act (EMA) (Act No. 7 of 2007) and Environmental Impact Assessment (EIA) regulations as per GG No. 4878 of February 2012.

Secondly, to serve as an environmental management tool that is used to prescribe management actions to prevent or reasonably avoid adverse environmental impacts, and to enhance the positive environmental benefits associated with the operational activities of the aforesaid FRO. In the EMP, measures have been described that need to be taken to ensure that Duty of Care is bestowed upon those who cause or have caused or may in future cause pollution or degradation of the environment, as outlined in the provisions of EMA.

1.2 Particulars of the Applicant

The particulars of the ECC applicant are presented in Table 1 below:

Table 1: Particulars of the Applicant

Details of the Applicant / Promoter	
Registered Name	Tern Investment CC
Registration Number	CC/2005/1833
Trading Name	Alpha Services Station
Representative & Designation	Johannes Theron (Mr) Managing Member /Owner
Contact Details of the Representative	Mobile: 081 124 7582 Fax: 064 205 989 Email: alfomega@iway.na
Postal Address	Box 1430 WALVIS BAY Namibia
Physical Address	Erf 646 124 Sam Nujoma Avenue Walvis Bay
GPS Coordinators	S 22° 57' 38" E 13° 30' 05"

1.3 Listed Activity

Alpha Service Station (**Alpha**), the applicant of the ECC has been operating an FRO situated at the location as listed in Table 1 above for a number of years before the promulgation of EMA and EIA regulations. Section 9.5 of the EIA regulations states that:

"Construction of filling stations or any other facility for the underground and aboveground storage of dangerous goods, including petrol, diesel, liquid, petroleum, gas or paraffin"

At the commencement of EMA in February 2012, section 57 allowed any person, undertaking a listed activity for which an ECC is mandatory, a period of 12 months in which to comply with the Act. This was an oversight on the part of **Alpha**. It is therefore the intention of the applicant to urgently rectify the situation by becoming compliant with applicable

the legislations and regulations applicable to its sphere of operation. To this end, Alpha has appointed Ekwa Consulting to facilitate its ECC application with the Office of the Environmental Commissioner (OEC).

After consulting with OEC on the application for Alpha's ECC, a screening notice was issued indicating that an EMP for the FRO should be prepared. The application was allocated the number of **APP - 006772**.

The applicant is compliance with these regulations/laws:

A Fitness Certificate attached in **Appendix B** has been granted by the Walvis Bay Municipality which confirms compliance with Municipality bylaws.

A Fuel Retail Licence attached in **Appendix C** has been issued by the MIME in terms of the provisions of the Petroleum Products Regulations and Petroleum Products and Energy Act

1.4 Rationale for the EMP

The rationale of an EMP is, normally to translate the findings of the EIA into action, hence providing a roadmap on how to manage the negative impacts (mitigate or rehabilitate) and to enhance positive impacts associated with the implementation of a particular project. The EMP ensures that compliance with applicable laws is maintained throughout the various phases of the project (design, construction, operation and decommissioning).

The aim of an EIA is to protect the environment by ensuring that the OEC when deciding whether to grant an ECC does so with all the details of the likely significant effects on the environment, and takes this into account in the decision-making process.

In terms of EMA, the environment is defined 'as the complex of natural and anthropogenic factors and elements that are naturally interrelated and affect the ecological equilibrium and the quality of life, including –

- The natural environment that is land, water, and air, all organic and inorganic matter and living organism, and
- The human environment that is the landscape and the natural, cultural, historical, aesthetic, economic and social heritage and values.

1.5 Objectives of the EMP

This EMP is to serve as a standalone onsite source document focusing on the operational phase – the business phase of the FRO including any renovations, and routine maintenance that may be required from time to time, as well as the decommissioning should it become necessary.

In this regard, the EMP is to serve as a tool aimed at taking pro-active actions, by addressing potential problems before such problems actually occur. Amongst the goals and objectives of this EMP are therefore to:

- Avoid, minimise or correct disturbance of the ecosystems and loss of biodiversity.
- Avoid, minimise or correct pollution and degradation of the environment.
- Avoid or minimise waste, reuse or recycle waste where possible and to dispose of waste in a responsible manner.
- Apply a risk-averse and cautious approach.
- Anticipate and prevent negative impacts on the environment and on people's environmental rights. Where impacts cannot be prevented, such impacts must be minimised and mitigated.
- Maintain a high standard of housekeeping practices, and general neatness of the facility throughout its operational lifecycle.

2 APPROACH AND SCOPE

Given that there was no scoping assessment conducted prior to development of the FRO, the approach adopted in the preparation of the EMP has proceeded by taking the following aspects into consideration:

- Determine the policy and legislative context within which the activity is located and how the activity complies with, and responds to the relevant policies and legislations.
- Provide a brief overview of the receiving environment, i.e. biological, physical and socio-economic environments potentially impacted by the listed activity.
- Determine the significance, duration and probability of the impacts that has/will occur as a result of conducting the listed activity.
- Identify, assess and rank the significant impacts and risks that the listed activity will impose or has posed on the site through the lifetime of the activity.
- Identify suitable measures to avoid, reverse, mitigate or manage identified impacts.
- Identify a range of management actions which could mitigate the potential adverse impacts to acceptable levels. residual risks that need to be managed and monitored.
- Provide relevant information and recommendations to the OEC to make an informed decision when reviewing the ECC application and supporting documents.

3 DESCRIPTION OF THE DEVELOPMENT

3.1 Location of the FRO

The fuel retail outlet operated by Alpha is located on Erf 646 on 124 Sam Nujoma Avenue within the Walvis Bay Municipality as more or less depicted on Google earth image attached in **Appendix A**.

The site is situated on one of the busiest street roads in the heart of town with roads leading to the fishing factories, Nampont and to the light industrial area of the town. It is therefore strategically located to capture a significant volume of the traffic using adjacent street roads. It has created a competitive environment that encourages service of the highest standards.

3.2 The Development Footprint

The information in this section was provided by the staff of the FRO and from site observation. The facility has an overhead canopy and a set of pumps installed on an island. The pumps are connected to a network of pipelines and electrical wiring to aid in the dispersal of fuel.

Standard items such as a spill control infrastructure and vent pipes to allow the release of pressure from USTs, preventing the risk of explosion or tank rupture have been installed and are functional.

Table 2: The Initial Capacity of the FRO

Underground Storage Tanks (USTs)	Product	Capacity (liters)
UST #1	Automobile diesel (ADO) – 10 ppm & 50 ppm	23 000
UST #2	Automobile diesel – 10ppm & 50ppm	23 000
Total for ADO		46 000
UST #3	Unleaded Petrol (ULP)	23 000
UST #4	Unleaded Petrol	23 000
Total for ULP		46 000
Total Fuel Combined Storage Capacity		92 000

The FRO applies sophisticated forecourt management system which ensures the following:

- Spill and overflow controls

- Leak detection and response
- Tank integrity and equipment (pump) testing is done in accordance with the maintenance schedule, and
- Fire protection include an electronic shut-off system and fire extinguishers

3.3 Existing Support Services or Facilities

3.3.1 WASTE FACILITIES

General waste from the FRO is collected by the municipality (Walvis Bay Solid Waste) and transferred to a landfill site. The hazardous waste (which include oil waste such as rags, oil cans, soiled tissues or oily filters, etc.) is collected by a third party who is a registered hazardous waste transporter at the coastal towns. Waste is disposed of either by selling to recycling company or disposed at the hazardous landfill site operated by municipality.

3.3.2 POTABLE WATER

Water to the site is provided by the WVB municipality. The water is chlorinated and treated to meet health standards and guidelines.

3.3.3 SEWERAGE

Sewerage services on site is provided by the WVB municipality.

3.3.4 ELECTRICITY

Electricity at the site is provided by Erongo RED – the regional power distributor.

3.3.5 FACILITIES

The site has one frontage to the Sam Nujoma Avenue from where it is accessed. Sam Nujoma Avenue is the longest street in Walvis Bay running from south to the north. The forecourt includes four pump islands, a canopy and a convenience store. There is no car wash on the premises.

3.3.6 STORMWATER

Walvis Bay is extremely arid and receives less than 50mm of rain per year. The town has therefore no stormwater drainage systems and a slight downpour in excess of 20 mm can cause rainwater to pool in the streets.

Provision for cleaning water has been made during the construction of the facility and were noted throughout the site. Contaminated water reports to two separators on site; the separator sludge is treated as hazardous waste and removed by the third party responsible for hazardous waste removal and disposal.

3.4 Maintenance of the Tanks

The following pollution prevention measures were noted on site:

- Cleaning of oil separator tanks is undertaken at regular intervals the by a third party. During cleaning, water contaminated with oil and sludge is pumped out for safe disposal at a registered waste disposal facility of municipality.
- The site uses an automatic leak detection system. The system is live and therefore a leak detection report can be extracted from the system at any given time. In addition, the system automatically detects leaks in such a way that if there is a leak at any given time, the system triggers an alarm, and dispensing stops immediately.

4 REGULATORY FRAMEWORK

For development to take place on a sustainable basis, government has formulated laws, rules and policies that require the implementation of all those projects that considered to have an adverse impact on the environment, to be preceded by an environmental scoping assessment. Some of the laws that are applicable to the activity envisaged by the promoter are as listed in Table 3.

Table 3: Legal Framework

Legislation	Main Aspects
The Constitution of Namibia	<ul style="list-style-type: none"> • Supreme law of the land. • Encourages the welfare of the people. • Provides for environmental protection. • Recognises international agreements and corporations.
Environmental Management Act (Act. No. 7 of 2007)	<ul style="list-style-type: none"> • Provides for the definition of the environment. • Promotes and encourages sustainable management of the environment when natural resources are exploited/extracted for the benefit of the residents/citizens. • Provides for a process of assessment and control of activities that are likely to pose significant effects on the receiving environment.
Environmental Management Regulations (GG No. 4847 of February 2012)	<ul style="list-style-type: none"> • Heralded the implementation of the EMA almost five years after the Act was approved by the legislature; • Presents a list of activities that require an ECC prior to commencement, and • Regulates and provides guidelines on how EIAs must be conducted.
Petroleum Products Regulations and Petroleum Products and Energy Act (GG Notice 2000)	<p>The Act regulates the licensing and certification of fuel outlets including related facilities such as FROs, LGP bottling plants, etc.</p> <p>Section 3 (1) states that</p> <p>(1) No person shall</p> <ul style="list-style-type: none"> • operate a retail outlet or conduct the business of a wholesaler, unless authorised to do so under a retail license or wholesale license; • operate a consumer installation, unless authorised to do so under a certificate, and • shall possess or store any fuel. <p>(2) No person shall possess or store any fuel except under authority of a license or a certificate approved by the Minister of MIME.</p> <p>(3) The Minister of Mines and Energy has under regulation 44 of the Petroleum Products Regulations approved the use in Namibia of these specifications, standards and code of practice:</p> <ul style="list-style-type: none"> • the American Standards Institute (ASI); • the British Standards Institute (BSI); • the South African Bureau of Standards (SABS, and • the South African National Standards (SANS) and • <i>SABS 0131-1: 1977</i> – The storage and handling of liquid fuel Part 1 – Small consumer installations. <p><i>SABS 0131-2 : 1979</i> – Storage and handling of liquid fuel Part 2 – Large consumer installations;</p> <p><i>SABS 0131-3 : 1982</i> – The storage and handling of liquid fuel Part 3 – Bulk low-flash point fuel storage and allied facilities at large consumer installations, and</p> <p><i>SABS 0108</i> – Classification of hazardous locations and selection of apparatus for use in such locations.</p>
The Local Authority Act (No. 23 of 1992)	<ul style="list-style-type: none"> • Provides for the establishment of local authority councils to manage and handle the affairs of local government and defines the powers of the local councilors, duties and functions; • Outlines the structure of local authority councils, including membership, elections, and management, and • Addresses issues such as infrastructure, service provision, taxation, and financial management of local authorities.
Labour Act (Act 11 of 2007 as amended)	<ul style="list-style-type: none"> • The Act contains extensive and detailed provisions relating to the basic employment conditions, rules regarding termination of employment, dismissals and disciplinary action;

	<ul style="list-style-type: none"> • It also provides for the prevention of trade disputes, unfair labour practices, regulates and controls collective job action, employment agencies and all matters incidental thereto, and • The Act also provides the right to the employees to speak about work conditions, the right to say no to unsafe work, the right to be consulted about safety in the workplace and the right to workers compensation.
Occupational Safety and Health Act Act No. 11 of 2007;	<p>“Safety: the condition of being safe; freedom from danger, risk or injury.”</p> <p>Occupational safety and health is a cross-disciplinary area concerned with protecting the safety, health and welfare of people engaged in work or employment. The goal of all occupational safety and health programs is to foster a safe working environment. As a secondary effect, it may also protect co-workers, family members, employers, customers, suppliers, nearby communities, and other members of the public who are impacted by the workplace environment.</p> <p>By law, employers must provide their employees with a safe and healthy working environment.</p>
Public and Environmental Health Act (Act No. 1 of 2015)	<ul style="list-style-type: none"> • The Act provides for a legal framework for a structured more uniform public and environmental health system and for matters incidental thereto; • It deals and provides guidelines on noise generation and control thereof within an urban environment; • Also deals with waste management, handling or collection, waste disposal, waste recycling, sanitation, etc.;
Social Security Act Act 34 of 1994 Employees’ Compensation Act (as amended)	<ul style="list-style-type: none"> • Compels employers and employees to make equal contributions to the Social Security Fund. Contribution is based on 0.9% of an employee's basic earnings with a minimum of N\$2.70 and a maximum of N\$81.00 • Requires employers to contribute to an insurance fund which covers injuries and accidents on duties.
Hazardous Substances Ordinance (No. 14 of 1974)	<ul style="list-style-type: none"> • Provides for the control of hazardous substances with potential to cause harm, injuries and even death. • Also provides for the manufacture, handling, storage, sale, use, disposal, etc. of hazardous substances.
Atmospheric Pollution Prevention Ordinance (No. 11 of 1976)	<ul style="list-style-type: none"> • Provides control of noxious or offensive gases and matters incidental thereto. • Requires best practical means for preventing or reducing the escape into the atmosphere of noxious or offensive gases produced by the scheduled process.
Water Resource Management Act (2004)	<p>The following permits are required in terms of the Water Act:</p> <ul style="list-style-type: none"> • Water abstraction permits; • Domestic effluent discharge permits (site offices, construction camp); industrial effluent discharge permits; • Water use for dust suppression; and water reticulation permits (pipelines), and • Will be superseded by Water Resources Management Act 2013 once the regulations are implemented in the future.
National Heritage Act No. 27 of 2004	<p>No archaeological/heritage site or cultural remains may be removed, damaged, altered or excavated.</p> <ul style="list-style-type: none"> • Section 48 sets out the procedure for application and granting of permits, such as the permit required in the event of damage to a protected site occurring as an inevitable result of development. Section 51 (3) sets out the requirements for impact assessment. • Part VI Section 55 Paragraphs 3 and 4 require that any person who discovers an archaeological site should notify the National Heritage Council
Namibia Standard Act (Act No. 18 of 2005)	<p>Responsible for the promotion of standardization and quality assurance in the industry, commerce and the public sector in Namibia, with the aim of improving product quality, industrial efficiency and productivity and promoting trade so as to achieve optimum benefit for the people of Namibia.</p>

Table 4: Standards and Relevant Multilateral Environmental Agreements

Standard and or	Expansion of Key Aspects
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Agreements	
SANS	<p>The Petroleum Products and Energy Act prescribes SANS standards for construction, operations and demolition for petroleum facilities.</p> <p>SANS 10400 – regulates all buildings including fuel service stations</p> <p>SANS 10089-3: The installation, modification, and decommissioning of underground storage tanks, pumps/dispensers and pipework at service stations and consumer installations.</p>
National Development Plans	<p>The 6th NDP is government’s development footprint focusing on economic growth, inclusivity, and resilience targeted at tackling poverty, unemployment, and inequality. Economic Growth, Human Development, Environmental Sustainability, Good Governance are the four pillars of NDP 6.</p>
1972, Stockholm Declaration on the Human Environment	<p>A major global agreement recognizing the link between human well-being and environmental health, establishing 26 principles for sustainable development, emphasizing international cooperation, and leading directly to the creation of global environmental policy and action.</p> <p>It proclaimed humanity’s fundamental right to a healthy environment, stressed the sovereign duty of states to manage resources without harming others, and set the stage for future global environmental treaties</p>
1992, The Convention on Biological Diversity (CBD), Earth Summit in Rio de Janeiro	<p>A global framework for the conservation of biodiversity, the sustainable use of its components, and the fair and equitable sharing of benefits from genetic resources, recognizing biodiversity as a common concern for humanity and a key to sustainable development.</p> <p>It covers ecosystems, species, and genes, entering into force in 1993 and now with nearly universal participation.</p>
The Vienna Convention of 1985	<p>A landmark international treaty seeking the corporation of all nations/countries to work together to protect the ozone layer from depletion by phasing out harmful chemicals</p> <p>Encouraging all countries to adopt measures that regulate levels of greenhouse gas concentration in the atmosphere.</p>
1992, The United Framework Convention on Climate Change (UNFCCC)	<p>Promotes global efforts to combat climate change, aiming to stabilize greenhouse gas (GHG) concentrations to prevent dangerous human interference with the climate system.</p> <p>It provides the framework for subsequent agreements like the Kyoto Protocol and the Paris Agreement, setting a foundation for countries to cooperate on reducing emissions, adapting to impacts, and funding climate action, with its supreme governing body being the Conference of the Parties (COP)</p>

5 THE RECEIVING ENVIRONMENT

This section lists the pertinent baseline environmental characteristics of the study area within which the FRO exists and provides a statement on the potential environmental impacts on each.

5.1 Landscape and Surrounding Land Use

The general gradient of the project site has been determined as flatter than 1:10 with a plain landform. The FRO is in a buildup area of the town with these land uses occurring within a 300 m radius from the boundary of the FRO:

- A hotel is to the north the site
- A retail shop is to the south of the site
- A street road – Sam Nujoma Avenue is to the west
- Across Sam Nujoma Avenue are retail shops
- A workshop is to the east of the site.
- Commercial and warehousing.
- Another FRO is to the southwest about 250 m away.

5.2 Climatic Conditions

According to the Köppen-Geiger climatic classification, WVB is considered to have a desert climate with virtually no rainfall all year long.

5.2.1 TEMPERATURE

The average monthly temperatures are as presented in Figure 1. Throughout the year, there is a fluctuation in temperatures of 4.4 °C. The warmest months are December, January and February while June through to August are the coldest months.

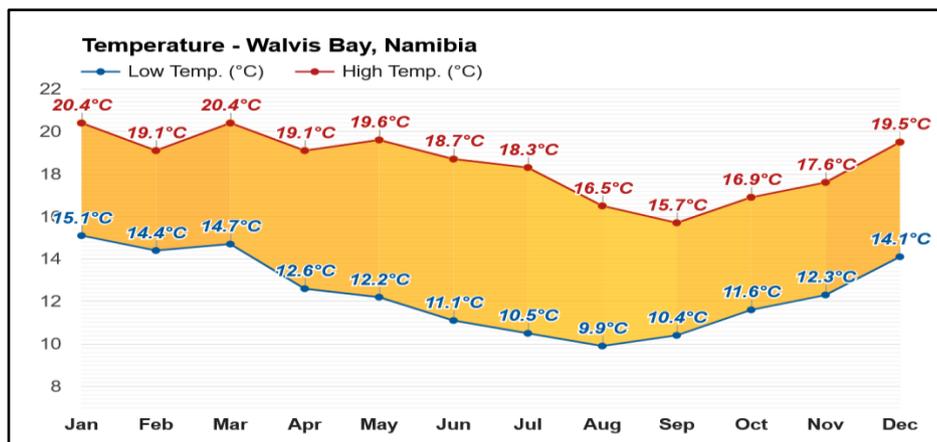


Figure 1: Average Temperature

5.2.2 RAINFALL

Precipitation on a yearly basis amounts to about 33 mm as per the meteorological records. The variation in the precipitation between the driest and wettest months is about 5 mm.

The project site experiences primarily arid conditions, with minimal fluctuations in temperatures and rainfall distributed sporadically throughout the year.

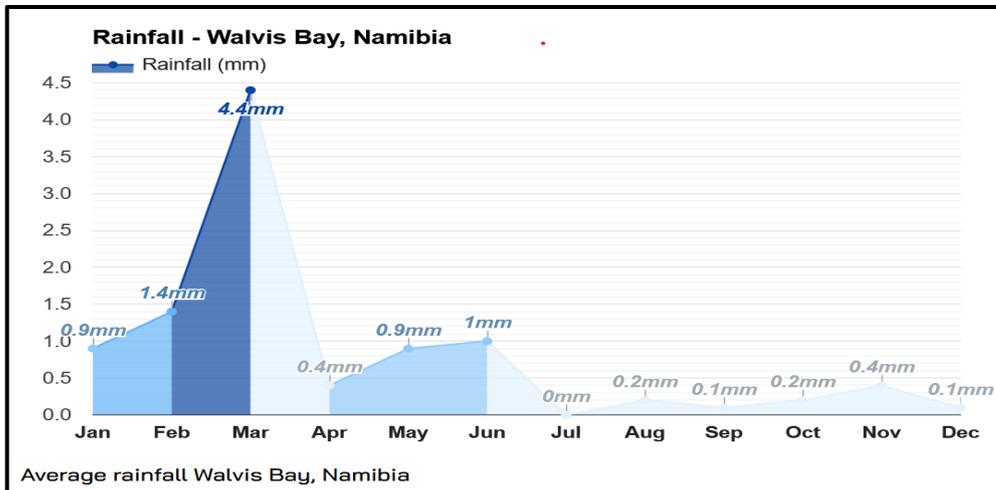


Figure 2: Average Rainfall

5.2.3 HUMIDITY

Air moisture content – or humidity is a measure of the amount of water vapour present. The temperature of the air affects its humidity since cold air can hold less water vapour than warm air before it condenses. Relative humidity is thus amount of water in the air in relation to what it can hold at a given temperature, and it is the percentage saturation that is used to compare air moisture levels. Relative humidity values are usually highest early in the morning when the air is cold.

From Figure 3, the months with the highest relative humidity are January and March (81%). December and June have the lowest humidity levels.

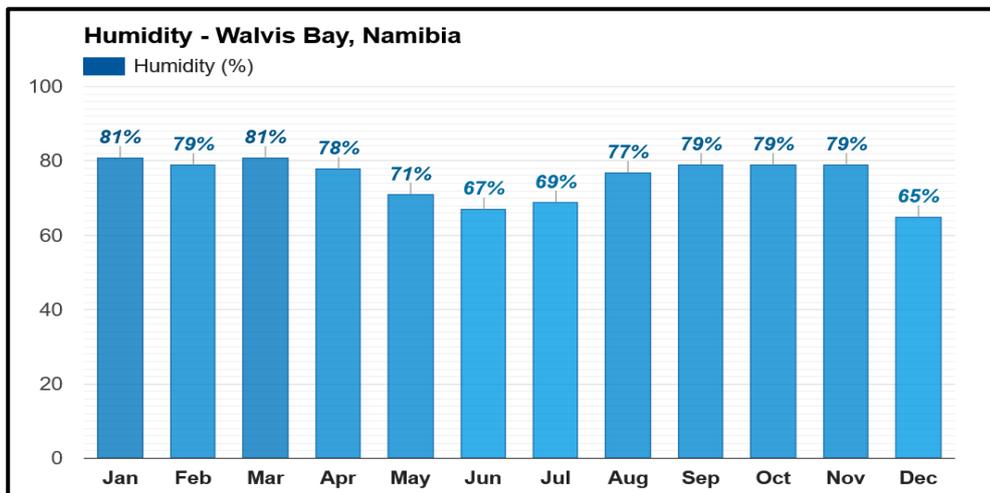


Figure 3: Humidity

5.2.4 SUNSHINE HOURS

In Walvis Bay, June is the month with the most daily hours of sunshine with an average of 8.76 hours of sunshine. In total there are 271.53 hours of sunshine throughout July.

The month exhibiting the least number of daily sunshine hours in Walvis Bay is January, presenting an average of only 8.22 hours per day. The total accumulation of sunlight during this period amounts to approximately 254.83.

Around 3012.18 hours of sunshine are counted in Walvis Bay throughout the year. On average there are 251.02 hours of sunshine per month.

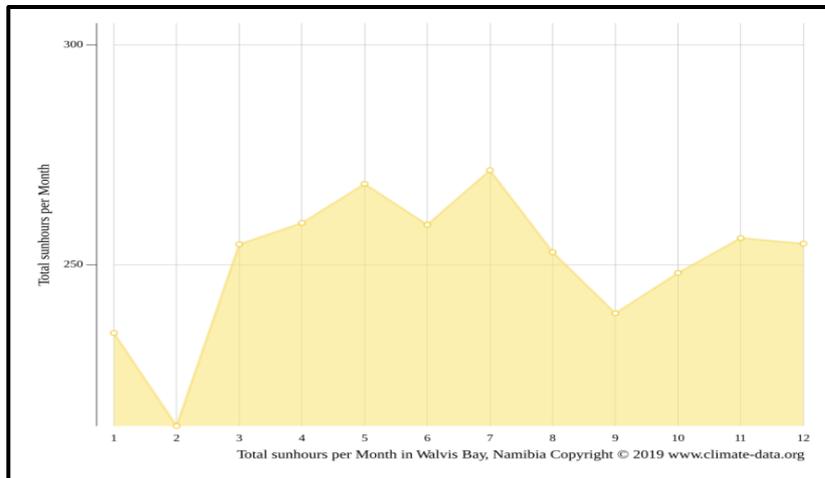


Figure 4: Average Monthly Sunshine Hours

5.2.5 GROUNDWATER

The groundwater level is quite shallow almost everywhere in the coastal town of Walvis Bay, which brings groundwater in constant contact with USTs, heightening the potential risk of contamination and pollution in the case of leaks from the buried tanks. However, this risk is effectively reduced by the construction of double walled tanks and a solid concrete floors. The excavation pits are impervious and thus prevent the potential seepage of the fuel into the soil.

5.2.6 POPULATION

During the 2023 national population census, the town of Walvis Bay had a population of 102 704 making it the third largest town by population size after Windhoek and Rundu. During the previous census of 2001 and 2011 the town's population was 43 611 and 62 096 respectively.

5.2.7 SOCIO-ECONOMIC ACTIVITIES

Walvis Bay is the economic heartbeat of Namibia, and its port is the trade gateway for neighbouring land locked countries of Botswana, Zambia, DRC and Zimbabwe. The local port is one of the busiest ports in the region in terms of cargo value and shipping activity.

6 ENVIRONMENTAL MANAGEMENT PLAN

Presented in this section are aspects related to:

- Raising of environmental awareness,
- An emergency preparedness plan
- Potential environmental emergencies
- Role players and their respective functions with respect to the EMP
- Presentation of the EMP

6.1 Environmental Awareness

The aspects presented in this section include the following:

- An Environmental Awareness plan.
- An Emergency Preparedness Plan.
- Breaches of the EMP.
- EMP review and amendments /updates.

6.1.1 AN ENVIRONMENTAL AWARENESS PLAN

An Environmental Awareness Plan (EAP) is a strategy aimed at educating and raising awareness about environmental issues and encouraging the personnel and the general public including company employees to adopt sustainable practices and to protect the natural world that we all share.

Training on environmental awareness should be provided to all FRO personnel from time to time. Potential incidents to the environment can be effectively minimised through effective training and raising of environmental awareness of the workforce through these methods:

- Toolbox talks (daily).
- Supervisory meetings (weekly).
- Induction training (at inception and thereafter bi-annually).
- External environmental and/or health and safety courses (when applicable).

These methods are briefly elaborated upon below:

6.1.1.1 TOOLBOX TALK

Toolbox talks are important actions aimed at cultivating a culture of safety amongst employees, especially those involved in workplaces that are hazardous with accidents and injuries able to happen at any time (like fuel service station). In the context of this project, these topics can be discussed during toolbox talks:

- *Hygiene*: Discuss how ablution facilities are to be kept neat and tidy.
- *Protective Equipment*: Discuss the importance of using protective equipment such as safety shoes, hard hats, gloves, and safety glasses.
- *Electrical Safety*: Discuss electrical hazards and how to properly use and maintain electrical equipment.
- *Workplace Hazards*: Identify commonly encountered hazards in the workplace such as slippery floors, sharp objects, and uneven surfaces.
- *Emergency Preparedness*: Discuss the importance of knowing emergency procedures.
- CO₂ emissions of Namibia per capita.

6.1.1.2 SUPERVISORY MEETINGS

Weekly supervisory meetings are ideal to facilitate awareness of specific environmental dangers pertaining to the day-to-day operation of the FRO. Various topics may be discussed during these meetings and must be recorded. All attendees at each meeting must sign an attendance register and the records kept on file. These topics can be included for discussions:

- General environmental awareness.
- Waste handling.
- Spillages and or leaks.
- Water saving measures.
- Greenhouse gas emissions (GHG)
- Global warming
- Impacts of climatic change
- Good Housekeeping practices.
- Complains received.

Should issues be identified by the ECO, these can also be addressed during weekly meetings.

6.1.1.3 TRAINING OF EMPLOYEES

Some of the topics that can be selected and discussed at training workshops during the operational phases may include the following:

- Hydrocarbon spillages.

- Noise/dust control.
- Waste management.
- Theft and/or vandalism
- Monitoring protocols.
- Safety topics.

6.1.1.4 INDUCTION TRAINING

All new employees are required to undergo induction training prior to commencement of construction activities or operation of the facility. Returning and existing employees must undergo repeat induction training at least bi-annually. Environmental awareness training should form part of the induction training and some of these topics can be discussed at such training sessions:

- The main environmental legislations (EMA, etc.).
- Constitutional right pertaining to the environment.
- Waste management hierarchy.
- Decarbonisation agenda.
- Environmental, social and economic concerns.
- Conflict between wild animals and humans in Namibia, etc.
- Prevention of poaching.

6.2 Emergence Response Plan

This is a generic framework for an Emergence Response Plan prepared to support the facility's specific emergency preparedness plan. Each FRO site operates under unique conditions, and as such, this overarching plan serves only as a foundational guide to ensure compliance. This plan must be supplemented with a site-specific emergency preparedness and response plan, tailored to the physical layout, operational activities, identified risks and environmental sensitivities of the site.

6.2.1 SITE-SPECIFIC EMERGENCY PLAN

Site-specific emergency preparedness and response plans are developed for the site to define these parameters:

- The emergency response arrangements and procedures for the site.
- Roles and responsibilities of designated personnel at the site.
- Specific emergency response equipment required and its locations.
- Site specific evacuation routes and assembly points.
- Contact details for internal personnel and external emergency services.
- Environmental protection measures and control applicable to potential site-specific hazards (fuel spill, chemical leaks, fire incidents, etc.).

6.2.2 POTENTIAL EMERGENCIES

Amongst the emergencies that can occur at the facility are:

- Environmental Incidents:
 - Fuel and hydrocarbon spillages.
 - Sewerage spillages from the ablution facilities and sewer pipelines.
 - Fire hazards.
 - Explosion.
- Safety Incidents:

- Injuries related to operation of construction plants.
- Driving related accidents/incidents.
- Fuel conveying pipeline burst.
- Criminal incidents such as sabotage, theft or potential violent crime.

6.2.3 EMERGENCY PROCEDURE

To manage potential emergencies effectively these procedures can be compiled and adopted for the FRO:

- Drill and evacuation procedure for emergency related incidents containing information on the following:
 - Reporting structure for all incidents.
 - Emergency contact information (e.g. telephone numbers of fire brigade, ambulance, police, etc.).
 - Procedure to be followed for the specific emergency.
 - First aid information.
- Spillage of fuel and hydrocarbons:
 - Immediate action plan (e.g. use of spill kits) to prevent spill from spreading.
 - Reporting of incident to the facility manager and supervisor to advise on next steps to be taken (Note that any spill in excess of 200 litres is a reportable incident).
- Procedure for theft and crime, e.g. cash heist:
 - Details on security system on site.
 - Emergency response units.
 - Panic alarm.
 - Details of police and community response unit.

6.2.4 EMERGENCY CONTACT INFORMATION

A list of potential emergency contact numbers specific to the area must be drawn up and displayed on a common notice board for all employees to access. These are:

- Nearest Police Station.
- Emergency Services (Ambulance, Fire Response, etc.).
- Nearest Health Facility/Clinic or Hospital.

The list must be checked and regularly updated to ensure that the information remains up to date.

6.3 Potential Environmental Emergencies

This incidents/emergencies will constitute environmental emergencies:

6.3.1 WATER LEAKS OR BURST PIPES

- Identify and shut off the water source.
- Remove equipment from flooded areas.
- Shut off electricity where applicable.
- Prevent contaminated water from entering the natural environment.
- Report to management and call a licensed plumber.

6.3.2 OIL, DIESEL, OR FUEL SPILLS FROM VEHICLES

- Use PPE when handling spills.

- Use spill kits for small volumes.
- For larger spills, isolate the area and contact a supervisor.
- Prevent entry into the natural environment; notify authorities if required.
- Ensure all incidents are reported and investigated.

6.3.3 FUEL SPILLAGE (DIESEL, PETROL & OIL)

6.3.3.1 SMALL SPILLS:

- Staff to wear appropriate Personal Protective Equipment (PPE).
- Use the spill kit to absorb and clean up immediately.
- Store contaminated material in leak-proof containers for offsite disposal at a licensed hazardous waste facility.

6.3.3.2 LARGE SPILLS:

- Prevent the spread using absorbent barriers (e.g., sand).
- Prevent entry into the natural environment.
- Employ a contractor/spill cleaning company to manage and clean the spill.
- Inform environmental authorities, if necessary.

6.3.3.3 INFRASTRUCTURE MEASURES:

- Delivery areas should be designed to drain into a fuel/water separator.
- Automatic Tank Gauge (ATG) system prevents tank overflow are to be installed.
- Leak detection systems installed in underground piping and containment areas.

6.3.3.4 VEHICLE FLUID LEAKS:

- Examples: engine oil, antifreeze, transmission fluid.
- Absorb small leaks immediately.
- Stop work and report larger leaks.
- Clean-up must follow environmental regulations.

6.4 EMP Review and Amendment

This is the first EMP in regard to the application for an ECC by the promotor. Future amendments, additions and changes may be made to the EMP. An adaptive strategy should be followed in terms of the EMP.

6.5 Recording Keeping

The FRO should develop an up-to-date filing system where aspects related to the following are clearly recorded, i.e. environmental incidents report, training records, audit reports, public complaints register, etc. The records should at least be kept for a minimum of three years.

6.6 Non-compliance and Penalties

Once the EMP is reviewed and approved by the OEC the conditions contained therein will become legally binding to the applicant, and any transgressions or wilful violations and or non-compliance thereof could lead to prosecution or payment of a fine. In cases of transgressions and non-compliance to the EMP, the transgressor should be liable to a penalty fine. Transgressions should be recorded in a dedicated register and be filed. The Proponent shall issue the penalties in terms of the severity of the environmental damages.

Adherence to this EMP will ensure that the environmental impacts associated with the FRO are mitigated to a greater extent thus promoting sustainable development. The commitment and co-operation of the identified responsible person(s) will ensure effective implementation of the EMP.

6.7 Role Players

Various role players - statutory and non-statutory have different roles and functions to play throughout the lifespan of the FRO. Some such role players as well as their roles and functions are provided in Tables 5 and 6:

6.7.1 ROLES OF STATUTORY STAKEHOLDERS

In Table 5 is the list of statutory stakeholders who have direct bearings on the specific project and some of the functions performed by key officials in such institutions.

Table 5: Roles and Responsibilities of Statutory Stakeholders

Stakeholder/ Party	Functions and Responsibilities
<p>The Environmental Commissioner (EC)</p>	<p>EMA is implemented by the EC within MEFT. Amongst the roles and functions of the EC are to:</p> <ul style="list-style-type: none"> • grant the ECC and renewals thereof; • ensure overall compliance with the provisions of the EMP; • review this document and any revisions thereof; • undertake site audits at their discretion; • review any environmental audit reports submitted to MEFT; • review any major environmental related incidents/accidents, and • enforce the legal mechanisms for contraventions to the EMP.
<p>The Petroleum Commissioner (PC)</p>	<p>The Petroleum Commissioner (PC) is responsible for ensuring the implementation and compliance of the provisions of the Petroleum Products and Energy Act. Amongst the roles and responsibilities of the PC are to:</p> <ul style="list-style-type: none"> • ensure adequate supply of petroleum products to the nation; • minimise negative impact of petroleum resources exploitation to the environment; • grant licenses to role-players in the petroleum subsector; • initiate policies and regulations for the development of petroleum products; • promote and encourage economic activities in the petroleum subsector; • create a conducive investment climate in the petroleum subsector both upstream and downstream; • regulate, adjust and equalise the prices of petroleum products on a regular basis • undertake inspections/visits to fuel service stations at his/her discretion; • ensure that the high standards of safety and health are upheld and maintained throughout the petroleum subsector, and • enforce the legal mechanisms for any contraventions of the Petroleum Products Act.
<p>Local Authority – Walvis Bay Municipality</p>	<p>The Walvis Bay Municipality has, amongst other things these roles to play:</p> <ul style="list-style-type: none"> • Ensures that FRO adheres to EMPs to prevent soil, water, and air pollution. This includes monitoring the effectiveness of pollution control measures, such as oil/water separators and proper hazardous waste management on a regular basis. • Issues Fitness Certificates to businesses in terms of the Local Authority Act • Enforces the overall compliance of EMA and ensures that FRO operates in compliance with their Environmental Clearance Certificate (ECC) conditions. • Reviews and approves site layouts, building plans for any renovations and upgrades, and structural changes to ensure they meet local authority standards, including proper traffic flow, safety, and parking. • Reviews biannual reports on environmental performance for the renewal of ECCs.

Stakeholder/ Party	Functions and Responsibilities
	<ul style="list-style-type: none"> Ensures that streets are well lit, waste is removed from business premises, street roads are safe, clean and hazardous free. Ensures that the land use for FRO is in alignment with urban planning scheme.

6.7.2 ROLES AND FUNCTIONS OF THE PROMOTER

The roles and responsibilities of the promoter and other stakeholders are presented in **Table 6**. The duties and functions of key personnel in relation to the proposed development, are also presented. It should be noted that the overall responsibility for the execution of the project, in terms of the Environmental Management Act, lies with the promoter and its technical partners.

Table 6: Roles and Functions of the Promoter

Person Responsible	Functions and Responsibilities
The Promotor (Alpha Service Station or Alpha)	<p>The promotor has to ensure that:</p> <ul style="list-style-type: none"> The necessary environment authorizations and permits are obtained and copies. The tender for the facility construction is given to a reputable and experienced construction company, and a copy of the EMP is provided. Adequate training on the EMP is provided to all prospective construction personnel as well as to any third party who may be hired for other trades, i.e. electrician, plumber, etc. Compliance is kept with all applicable legislations, regulations and policies pertaining to its sphere of operation, i.e. a fuel retail outlet. A competent Environmental Controller Officer (ECO) is appointed to take charge of all safety, health and environmental aspects of the facility during the construction and operational phase. Quarterly internal EMP compliance inspections are undertaken by the ECO and annual audits submitted to the OEC. A competent individual is appointed to handle the operational aspects of the FRO with the designation of a Service Manager (SM). An Emergency Response Plan for the facility is developed and implemented.
The Main Contractor (MC)	<p>The main contractors (MC) will be responsible for constructing the proposed facility and associated infrastructure. Amongst the responsibilities of the MC are:</p> <ul style="list-style-type: none"> To take full responsibility of construction activities at the site. Induct all its personnel including subcontractors on the EMP. Undertake daily site inspections to monitor environmental performance and compliance with the environmental specification. Notify the ECO as well as the Promotor immediately in the event of any accident or infringements of the environmental specifications and ensure that appropriate remedial action is taken.
An Environmental Control Officer (ECO)	<p>A competent person is to be appointed to serve as an ECO to oversee the environmental aspects of the project during the construction phases. Some of the roles of the ECO are:</p> <ul style="list-style-type: none"> To manage the environmental activities during the construction and operational and decommissioning phases of the project. To record environmental incidents (spills, impacts, legal transgressions, etc.) as well as to take corrective and preventive actions. To attend to any complaints from stakeholders and or IAPs by recording such complaint and taking corrective action. To prepare environmental compliance reports (e.g. audit/monitoring/compliance) for submission to OEC.
Fuel Service Manager (FSM)	<p>The duties and functions of a Service Manager (SM) are to take charge of the operational phase (the business phase) of the project:</p>

Person Responsible	Functions and Responsibilities
	<ul style="list-style-type: none"> • The day-to-day management of the facility which includes the EMP, the human resources and physical assets of the business. • Responsible for the overall activities that take place at the fuel facility and related activities including to plan, develop and implement strategy for the facility operation so as to meet agreed business performance plans within agreed budgets and timescales. • To establish and maintain appropriate systems for measuring output, accuracy, productivity, and operational efficiency of necessary aspects of facility operation management and development. • To direct and monitor the health and safety aspects in the business and to conduct identification of hazards and review of risks of activities, products and services on health and safety programme. • To resolve customer issues related to fuel operations.

7 PRESENTATION OF THE EMP

Since the project site is a brownfield one, mitigation measures for predicted environmental impacts have been presented in a table format covering the two phases - operation (including routine maintenance and renovations) and decommissioning (should it become necessary) – briefly described as follows.

7.1 EMP for the Operational Phase

The management measures recommended to deal with the environmental impacts associated with this phase of the facility are presented in Table 7 which comprises of four columns with these headings – potential impacts or aspects, environmental objectives, management actions and the party responsible for ensuring compliance.

7.2 The EMP for Decommissioning

Decommissioning is an important phase in the project cycle and comes last to wind up the operational activities of a particular project. It refers to the final disposal of the project and associated materials at the end of the project lifespan. If such a stage is reached, the proponent needs to remove all materials resulting from the demolition/decommissioning from the site.

Given that the facility has been operational for many years, it is not projected for decommissioning to happen within the three years which is the validity period of an ECC. However, the following measures are provided in the event of decommissioning occurring prematurely, by for instances, factors beyond the control of the promotor, such as recession. The EMP for decommissioning is presented in Table 8. For this specific project, decommissioning will cover these aspects:

- Removal of USTs from the site.
- Rehabilitation of the site to pre-construction conditions.
- Landscaping by flattening the mounds of soil and planting indigenous trees.
- Dismantling of all equipment (pipes, pumps, electrical cables, etc.).
- Removal of all dismantled equipment and disposing off in a responsible manner.
- Fencing and signposting unsaved areas until natural stabilisation occurs.
- Retrenching of employees, etc.

8 RECOMMENDATION

It is that an ECC be granted for the FRO operated by Alpha provided that the management measures as outlined in the EMP are adhered to.

Table 7: EMP for the Operational Phase

Potential Impacts/Aspects	Environmental Objective(s)	Management Measures	Responsible Party
Compliance Requirements and Documentation	Comply with all applicable statutory requirements.	<p><u>Licenses/Permits</u></p> <ul style="list-style-type: none"> • Fitness Certificate • Fuel Retail Licence • ECC • Water Abstraction Permit (where applicable) <p><u>Documents</u></p> <ul style="list-style-type: none"> • This EMP Report • Working Drawings (approved where applicable), • A Waste Management Plan, • An Emergency Response Plan, • A Spill Procedure Plan, • A Fire Procedure Plan, • An Environmental Awareness Training and, Manual. 	Promotor FSM
Communication with statutory stakeholders and IAPs	Provide regular communication to stakeholders and IAPs.	<ul style="list-style-type: none"> • Devise and implement an open and transparent communication strategy with stakeholders – statutory and IAPs • Record and report all incidents and accidents occurring at the facility. • Record complaints received from IAPs, investigate and take corrective actions. 	Promotor FSM
Underground fuel storage and handling (Spills, leaks, contamination of surface & groundwater sources, etc.)	Prevent potential contamination of soil and water sources	<ul style="list-style-type: none"> • Monitor fuel volumes in the USTs on a daily basis to detect unexplained losses due to leakages. • Inspect the condition of the tanks, piping and pumping systems on a regular basis. • Test tanks integrity at least five (5) years after installation, with repetition on a 5-year cycle thereafter. • The forecourt area and the filling points have to be concreted and graded so that any effluent run-off does not enter the natural environment, but passes through an oil water separator sump/s before discharging into a collection ditch. • The oil/water separator sump/s must be checked regularly and kept clean to prevent blockage and overflow. Regular monitoring and clearing of oil/water separator sump/s will prevent hydrocarbon liquids from discharging onto stormwater system. 	FSM ECO

Potential Impacts/Aspects	Environmental Objective(s)	Management Measures	Responsible Party
		<ul style="list-style-type: none"> • Ensure no spill or leaks occur during fuel offloading into USTs and during dispensing into the vehicles of clients. • Waste from the separator must be disposed of in a responsible manner and at an approved offsite licensed facility. 	
Fire Risk and Preparedness <i>(Potential impacts: asset destruction, personal injuries, loss of income, etc.)</i>	Prevent property damage, possibly injury to persons and financial losses caused by uncontrolled fires	<ul style="list-style-type: none"> • Develop a firefighting emergence response plan and train all employees accordingly. • Carry out firefighting drill on a regularly basis. • Ensure adequate firefighting equipment is provided, regularly maintained, serviced and inspected. • Ensure that all hazardous substances are stored and handled in accordance with MSDS and SANS specifications. • Fire hazard signs and directions to emergency exit, route to follow and assembly point in case of any fire incident. • All electrical appliances at the facility must be regularly inspected and repaired by a qualified electrician. • Any spills and or leaks that occur must be cleaned up with suitable tool kit equipment. 	SM ECO
Waste (Solid and Hazardous) (Impacts: littering, pollution, contamination, health issues, nuisance, odour, etc.)	Protect amenity values by ensuring waste (solid & hazardous) is managed properly.	<ul style="list-style-type: none"> • Develop a Waste Management Plan for the facility and enforce its compliance. • Promote good waste management practices of prevention (or reduction), re-use, recycle, recovery and disposal. • Store domestic waste in containers that are labelled, properly secured and covered to prevent scavengers from tipping them over. • Vermin / weatherproof bins to be provided in sufficient numbers and capacity to store domestic waste. • Store solid waste in a designated general waste storage area which is enclosed and impermeable. • Adequate refuse collection must occur to avoid build-up of refuse occurring at the facility. • Sludge from the oil separator must be disposed of at an offsite licensed landfill site. • All product spills within the bunded area must be effectively cleaned up. • No waste shall be buried or burned anywhere on the fuel premises. 	SM ECO
Stormwater, Sewage & Wastewater	Protect amenity values by ensuring that no impacts emanate from stormwater, sewage and wastewater	<ul style="list-style-type: none"> • Develop and implement a plan to deal with any stormwater and sewage at the facility. • Stormwater runoff from paved areas should be diverted into a stormwater treatment system or device capable of removing litter, sediments, and or oil products. • At first sign of erosion, correct procedure must be undertaken to manage, resolve and prevent from occurring. • Conduct inspections on ablution facilities and associated piping system for leakages, blockages or damage and have them fixed. • All waste generated from the site should be discharged into the onsite sewage system. 	SM ECO

Potential Impacts/Aspects	Environmental Objective(s)	Management Measures	Responsible Party
Air Pollution (Impact: prolonged exposure to VOC can cause cancer, etc.)	Promote amenity values and minimise gaseous emissions	<ul style="list-style-type: none"> • Fuel vapours are released into the atmosphere during dispensing into vehicles of patrons and during offloading from road tankers into USTs – prolonged exposure can have detrimental and harmful effects. • Vent pipes should be properly placed as per SANS specifications and regularly checked and inspected. • Install Volatile Organic Compound (VOC) vapour recovery system onto fuel dispensing nozzles at the refuelling and forecourt areas. • Provide suitable PPEs to personnel handling refuelling at the facility. • All equipment used must be manufactured to limit VOC vapour emissions. • Operational refuelling procedures must be put in place to limit vapour emissions during refuelling of vehicles and storage tanks. • Monitor gaseous emissions on a yearly basis measuring these parameters: <ul style="list-style-type: none"> o Particulate Matter (PM₁₀), o Sulphur dioxide (SO₂), o Nitrogen dioxide (NO₂), and o Carbon monoxide (CO); • Any complain received about air pollution must be recorded and investigated. 	SM ECO
Noise Pollution	Protect amenity values by ensuring that noise generated at the facility is kept below industry threshold;	<ul style="list-style-type: none"> • Establish noise level threshold consistent with WHO guidelines and comply accordingly. • The facility is located in an urban industrial setting in which ambient noise levels are relatively elevated from commercial activities taking place. • Equipment (pumps, etc.) used at the facility must comply with the manufacture's specifications on acceptable noise levels. • Air conditioners should be well maintained and regularly serviced to ensure minimal noise generation. • Workers must not produce any unnecessary noise, e.g. no loud music to be played, no whistles to be used, etc. • Display signs such "No hooting", "No idling" and "No Loud Noise" to inform patrons to comply. 	SM ECO
Visual Intrusion	Protect amenity values by minimising aesthetic impacts associated with the facility	<ul style="list-style-type: none"> • Cleaning, waste disposal, maintenance of the plants and landscaped surrounds will give the facility a good visually appeal. • Good housekeeping which includes routine maintenance of infrastructure will improve the aesthetic appeal of the facility. • Lights at the facility must be used for security purposes only and must point inwards and not outwards. • Lights may not offend the public using the adjacent roads or to disorientate birds that fly at night. 	SM ECO
Health, Safety and Security Risks	Maintain a high standard of housekeeping so as to	<ul style="list-style-type: none"> • Develop a health and safety management plan for the facility in compliance with industry specifications and standards. 	SM ECO

Potential Impacts/Aspects	Environmental Objective(s)	Management Measures	Responsible Party
	prevent injuries to personnel and or theft.	<ul style="list-style-type: none"> • Train employees on personal safety and disaster preparedness. • Provide sufficient and suitable sanitary conveniences which should be kept clean. • Maintain a well-stocked First Aid kit on the premises and have a qualified person on each shift in case of an accident or incident occurring. • Ensure that adequate lighting and an alarm system are installed at strategic points. • Smoking should be prohibited in the vicinity of all flammable substances and adequate signage should be displayed. • Records of all environmental and/or health and safety related incidents must be maintained and reported to the relevant authority. • A selected employees should be trained on First Aid. A trained First Aider must be present on site at all times. First Aid Kits that are adequately stocked must be available. • Conduct an annual Health, Safety and Security Audit. 	
Management of Resources	Manage resources wisely and sparingly	<p>The measures recommended are:</p> <ul style="list-style-type: none"> • Electricity: <ul style="list-style-type: none"> ○ Use electricity sparingly. ○ Use natural ventilation from windows and doors. ○ Measure electricity consumption monthly. • Water: <ul style="list-style-type: none"> ○ Use water sparing and wisely. ○ Detect leaking pipes and taps and get them fixed. ○ Enforce water saving strategies which include recycling and reuse. ○ Consider installing water conserving taps that turn of immediately when water is not in use. ○ Measure water consumption on a monthly basis. • Sanitation: <ul style="list-style-type: none"> ○ Monitor consumption. ○ Guard against misuse. ○ Maintain a high standard of housekeeping. 	SM ECO
Socio-economic Environments	Ensure that local communities benefit from the facility	<ul style="list-style-type: none"> • Recruitment should be done in line with the labour laws of Namibia. • Offer employment opportunities without prejudice, giving preference to women, people with disabilities and those from the marginalized communities. 	SM

Potential Impacts/Aspects	Environmental Objective(s)	Management Measures	Responsible Party
		<ul style="list-style-type: none"> • Where possible preference should be given to jobseekers from within Walvis Bay. • Develop a policy on employees' well-being, educating them on the dangers of social-ills such alcohol abuse, use of drugs and HIV infections. • Recruitment must be done in line with the labour laws of Namibia. • Hiring of non-Namibians for low skilled jobs is forbidden and acceptable justification must be provided to the authorities. 	
	Training and skills transfer	<ul style="list-style-type: none"> • Opportunity for the construction of the facility should be given to a local company with a good track record. Justification should be provided for contracting of non-local entities. • Ensure all construction personnel are inducted on the EMP. • Empower employees through on the job training and skills transfer. • Inform employees about the parameters and requirements for references on their employment. 	
	Support to local businesses	<ul style="list-style-type: none"> • Procure goods and services required for the construction of the facility from local business (bricks, sand, stones, steel products, etc.) • Make use of local SMEs for bush clearing and for security purposes. 	

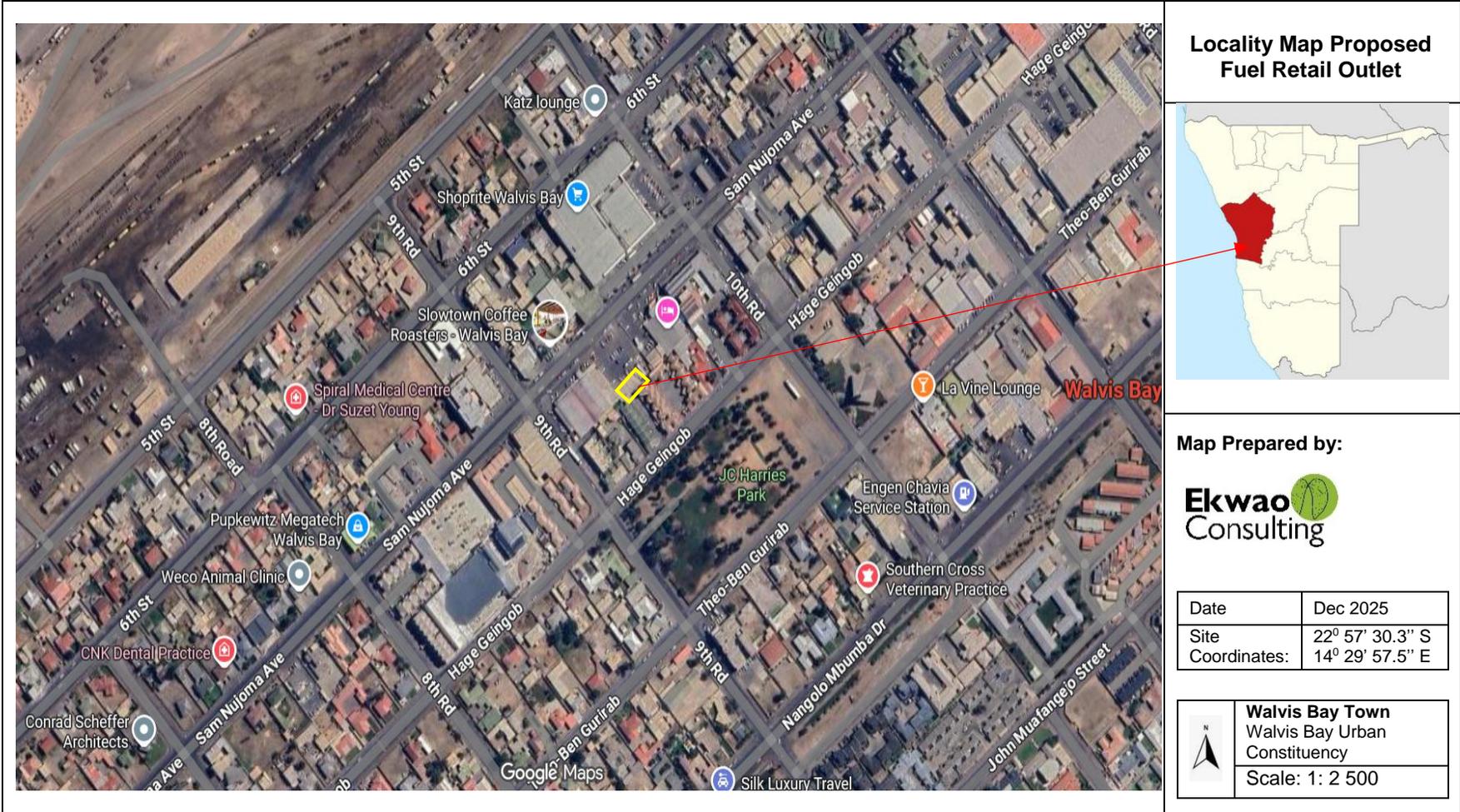
Table 8: EMP for Decommissioning Phase

Potential Impacts/Aspects	Environmental Objective(s)	Management Measures	Responsible Party
Communication	Provide information on decommissioning to relevant statutory stakeholders	<ul style="list-style-type: none"> • Inform the relevant government ministries and agencies (MIME, MEFT, Labour, NamRA, SSC, etc.) of the planned decommissioning. • Inform third parties creditors including the bulk fuel supplier. • Inform affected employees and their trade union representative giving notices as provided for in the Labour Act. • Hire a reputable company to carry out the decommissioning. 	SM Or Promotor
Disturbed physical environmental	Protect amenity and limit disturbance to the physical environment	<ul style="list-style-type: none"> • Develop a Decommissioning Plan. • Assign the work to a reputable company with a track record of dismantling hazardous plants. • Undertake a complete environmental restoration programme. 	SM Promotor
Fuel Tanks	Protect amenity values by ensuring no harm results from the retrieval of USTs.	<ul style="list-style-type: none"> • Ensure there is no spillage of any residual fuel during the emptying and removal of USTs. • Pumps and associated equipment to be removed by qualified personnel to ensure their safety. • Any fuel removed from the tanks and surrounding soil that maybe contaminated must be removed and disposed of at a licensed landfill site. 	Contractor ECO
Noise and air Pollution	Keep noise levels within allowed standards	<ul style="list-style-type: none"> • Maintain plant and equipment well during the decommissioning phase. • Demolition works to be carried out during daytime only. • Provide demolition personnel working in noisy areas with suitable PPEs. • Spray dusty areas. • Install dust trappers around the site where warranted. 	Contractor ECO
Solid Waste	Strive to minimise waste generation	<ul style="list-style-type: none"> • Demolished debris should be stored in a secure place and disposed of in a responsible manner. • Demolished waste should be re-used or backfilled. • All waste generated should be collected by a waste collection company. 	Contractor
Occupational Health and Safety	Maintain a high standard of housekeeping	<ul style="list-style-type: none"> • Provide suitable PPEs to employees. • Train the workers on personal safety and on how to handle equipment and machines. • Provide suitable sanitary conveniences which should be kept tidy and clean. 	SM ECO Contractor
Loss of Employment	Strive to limit social impacts by helping employees get rehired	<ul style="list-style-type: none"> • The safety of personnel should surpass all other objectives during the decommissioning process. • Adapt a project completion policy – identifying key issues to be considered. • Compensate the retrenched workers and assist them in seeking opportunities elsewhere. 	SM

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Appendix A

PROJECT GOOGLE EARTH SITE MAP



Locality Map Proposed Fuel Retail Outlet



Map Prepared by:



Date	Dec 2025
Site	22° 57' 30.3" S
Coordinates:	14° 29' 57.5" E

	Walvis Bay Town
	Walvis Bay Urban Constituency
	Scale: 1: 2 500

Figure 1: Site Map - Google Earth Image

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Appendix B

FITNESS CERTIFICATE

Municipality



Walvis Bay

REGISTRATION & FITNESS CERTIFICATE

NO. 2012/1838

ALPHA SERVICE STATION

is registered to carry on business as a

CAR WASH, SELECT STORE, SERVICE STATION

in accordance with the Local Authorities Act 1992 (Act 23 of 1992) and the General Health Regulations 1969 (GN121 of 1969)

Under the following conditions

Name of Owner: J THERON

Name of Manager: J THERON

Business Address: P O BOX 1430, WALVIS BAY, NAMIBIA, 13013

Street Address: 124, SAM NUJOMA AVENUE, WALVIS BAY

Erf No: W0643

Receipt No.:

Date of Registration:

Expiry Date:

MUNICIPALITY OF WALVIS BAY
BUSINESS REGISTRATION OFFICE
<i>J. HAQSES</i> 17 FEB 2025
ENVIRONMENTAL HEALTH SECTION
REGISTRATION OFFICER
PRIVATE BAG 5017 TEL: 064 2013288

2025/02/12

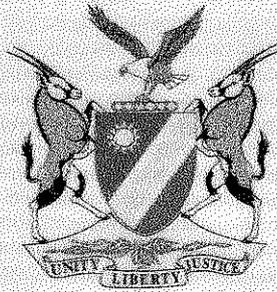
2026/02/11

Please note: This certificate does not exempt the holder of obtaining a permit or any other document which may be required by law imposed by other ministries. Any alteration of this certificate without the approval of the Registration Authority constitutes a criminal offence.

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Appendix C

FUEL RETAIL LICENCE



MINISTRY OF MINES AND ENERGY

**PETROLEUM PRODUCTS AND ENERGY ACT, 1990
PETROLEUM PRODUCTS REGULATIONS (2000)**

RETAIL LICENCE

[Regulation 5(4)]

RETAIL LICENCE		Licence No. R/160/2006
Name of licence-holder	Tern Investments Two CC	
Address of licence-holder	Physical address	Postal address
	Sam Nujoma Ave No. 183 Walvis Bay	Box 1430 Walvis Bay
Name of retail outlet	Alpha Service Station	
Name of supplying wholesaler	Shell Namibia Ltd	
Premises to which licence relates	Sam Nujoma Ave No. 183, Walvis Bay S 22° 57' 38" / E 14° 30' 05"	
Conditions applicable to licence <i>See next page for general and special conditions applicable to licence.</i>		
Date of issue of licence	20 June 2006	
Issued by the Minister of Mines and Energy in terms of regulation 5(4), on 20 June 2006, at Windhoek		
Minister: Mines and Energy		