

NANI IMPORT AND EXPORT CC

SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT

**THE PROPOSED CONSTRUCTION AND OPERATION
OF A GENERAL STORAGE FACILITY AND NON-
HAZARDOUS PUTTY POWDER
PROCESSING PLANT**

**LOCATED ON PORTION 8 OF REMAINDER OF FARM
38, WALVIS BAY, ERONGO REGION, NAMIBIA**

NOVEMBER 2025

**SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED THE CONSTRUCTION AND OPERATION OF
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DOCUMENT CONTROL	
REPORT TITLE	SCOPINF (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED CONSTRUCTION AND OPERATION OF A GENERAL STORAGE FACILITY AND NON-HAZARDOUS PUTTY POWDER PROCESSING PLANT, LOCATED ON PORTION 8 OF REMAINDER OF FARM 38, WALVIS BAY, ERONGO REGION, NAMIBIA
I.N.K PROJECT NO	JH792
ENVIRONMENTAL CONSULTANT	I.N.K ENVIRO CONSULTANTS CC
PROPONENT	NANI IMPORT AND EXPORT CC
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CONSULTANT'S EXPERTISE

I.N.K Enviro Consultants cc is the independent firm of consultants that has been appointed by Nani Import and Export cc to undertake the environmental impact assessment process.

Immanuel N. Katali, the EIA Lead Practitioner holds a B.Arts (Honors) in Geography, Environmental Studies and Sociology and has over ten years of relevant experience in conducting/managing Environmental Impact Assessments (EIAs), Socio-Economic Impact Assessments (SIA) and compiling Environmental Management Plans (EMPs) in Namibia. Immanuel is certified as an environmental practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

DECLARATION OF INDEPENDENCE AND DISCLAIMER

The consultant herewith declare that this report represents an independent, objective assessment of the environmental impacts associated with the activities of the proposed general storage and putty powder processing plant activities on the request of Nani Import and Export cc.

I.N.K has prepared this report based on an agreed scope of work and acts in all professional matters as an independent environmental consultant to Nani Import and Export cc and exercises all reasonable skill and care in the provision of its professional services in a manner consistent with the level of care and expertise exercised by members of the environmental profession.

DISCLAIMER

The information, statements and commentary contained in this Report have been prepared by I.N.K from information provided by Nani Import and Export cc and from discussions held with stakeholders. I.N.K does not express an opinion as to the accuracy or completeness of the information provided, the assumptions made by the party that provided the information, or any conclusions reached. I.N.K has based this Report on information received or obtained, on the basis that such information is accurate and, where it is represented to I.N.K as such, complete.

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LIST OF ACRONYMS, ABBREVIATIONS AND UNITS

Acronyms / Abbreviations / Units	Definition
BID	Background Information Document
DEA	Directorate of Environmental Affairs
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
I&APs	Interested and Affected Party
M ²	Square Metres
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism

1 INTRODUCTION

1.1 Background

Nani Import and Export cc, henceforth referred to as Nani, is in the process of securing an Environmental Clearance Certificate (ECC) for their proposed construction and operation of a general storage facility and non-hazardous putty powder processing plant, located on portion 8 of remainder of farm 38, Walvis Bay, Erongo Region, Namibia. The proposed land portion measures approximately 90, 013 square meters (sqm²). Refer to Figures 1 and 2.

The objective is to construct warehouses (ranging between 2000-3000 sqm²) designated for storage facilities, with one warehouse incorporating a processing plant dedicated to the production of putty powder. Putty powder, a calcium-based compound (referred to as Polyfilla in Namibia), is utilized to fill cracks in walls prior to the application of paint.

A Putty Powder Processing Plant is an automated system that mixes various raw materials like calcium carbonate, talcum powder, and emulsions into a high quality wall putty. Key components include a dust collector, mixer, storage silos, conveying systems, weighing systems and automated packaging machines, our capacity for small-scale (1-5 tons/hour).

The transportation of products, to and from landlocked countries involves significant quantities and volumes that necessitate temporary storage before onward shipment. Direct and immediate transportation of these materials to their final destinations, whether local, regional, or international, is not always feasible within short timeframes. Therefore, the temporary storage of these materials in Walvis Bay enables their gradual transport to various target locations over extended durations.

The project site infrastructure layout (Figure 2) consist of the following:

- ◆ Boundary Wall.
- ◆ 3 Warehouses (Total of 5600 m²)
- ◆ 1x Entry Point
- ◆ 1x Exit Point
- ◆ Ablution Facilities.
- ◆ Covered Yard
- ◆ Parking Bay
- ◆ Offices (200 m²)

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Prior to the construction and commencement of the project, obtaining environmental clearance is imperative, contingent upon an approved Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP). The document describes the EIA procedure being followed and presents a synopsis of the impacted environment. It encompasses an evaluation of the potential environmental impacts of the proposed undertakings and delineates the recommendations of the consultants. The Environmental Management Plan (EMP) comprehensively outlines the proposed strategies for managing and mitigating the impacts associated with the proposed activities.

I.N.K Enviro Consultants cc, an independent firm of environmental consultants based in Namibia, has been appointed by Nani to undertake and manage the EIA process.

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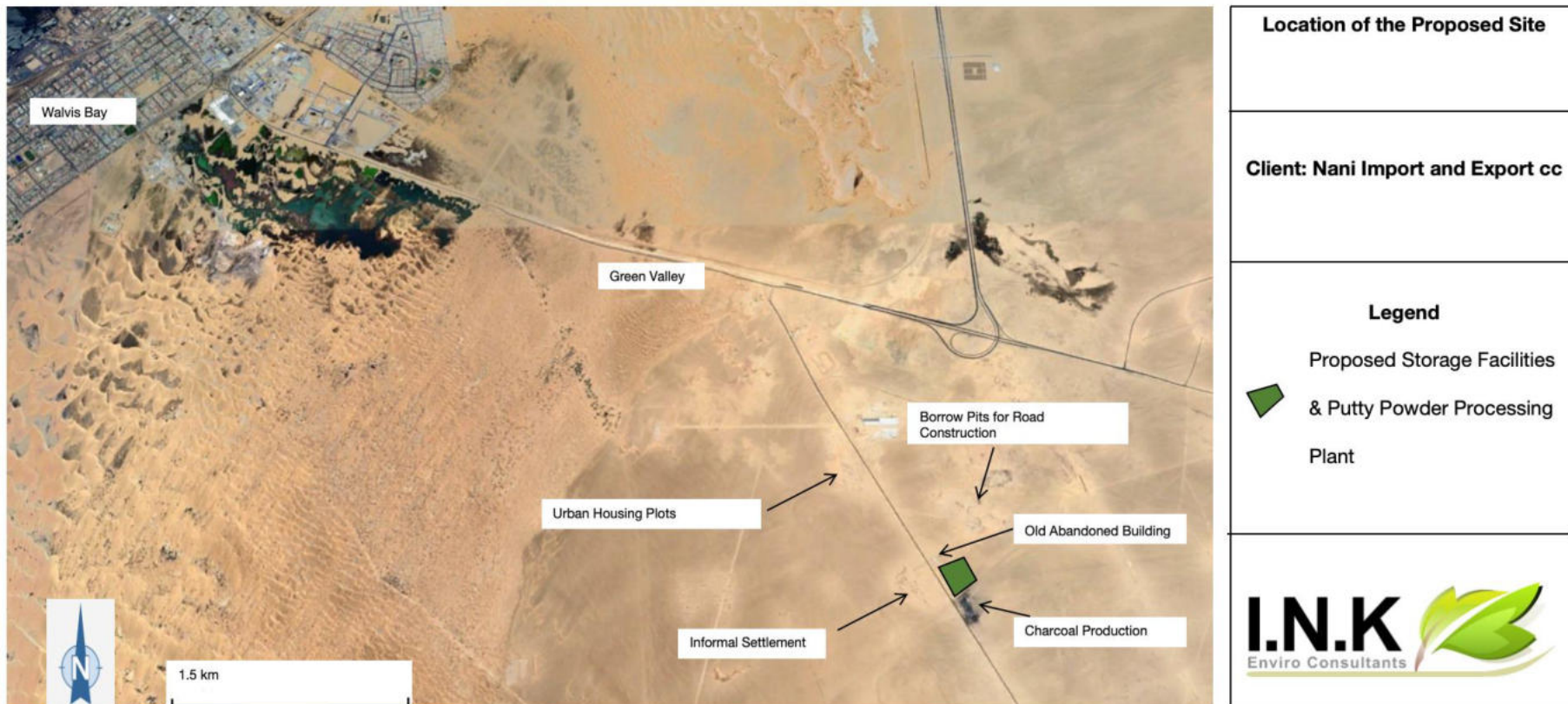


Figure 1: Site Locality Map

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Figure 2: Site Infrastructure Technical Layout

1.2 Motivation (Need and Desirability)

Namibia is investing significant resources in expanding its port in Walvis Bay to safeguard sea routes and establish itself as a maritime powerhouse in the region. This endeavor aims to leverage the increasing demands in shipping, rising cargo volumes, the oil and gas industries, commercial activities, recreational uses, and more. The development of the Walvis Bay port is part of Namibia's broader ambition to evolve into a pivotal logistics center for southern Africa. The current proximity of the port to residential areas on its periphery suggests that there is limited space for expansion and the creation of additional storage facilities to meet the escalating demands.

As noted in section 1.1 above, the substantial volumes of imported goods into and from landlocked nations require swift loading onto vessels. Directly transporting these materials to their destinations, whether local, regional, or international, within tight timeframes is impractical. Hence, temporary storage within Walvis Bay enables a more gradual distribution of these goods to various destinations.

The proposed project holds significant potential in enhancing Namibia's logistics capabilities by establishing crucial storage infrastructure, generating employment opportunities in the logistics sector, and elevating Walvis Bay's stature as a regional logistics hub.

1.3 Introduction to the Environmental Impact Assessment

Environmental Impact Assessments are overseen by the Ministry of Environment, Forestry, and Tourism (MEFT) in accordance with the Environmental Management Act, 7 of 2007. This Act was officially published on 27 December 2007 (Government Gazette No. 3966) and enforced on 6 February 2012. The Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) were proclaimed on 6 February 2012.

Prior to the initiation of the proposed activities, environmental clearance is mandatory from the Ministry of Environment, Forestry, and Tourism (MEFT): Department of Environmental Affairs (DEA) based on an approved EIA process.

The process encompasses a screening phase and a scoping phase, incorporating an impact assessment and an Environmental Management Plan (EMP).

This document serves as the Scoping Report, which includes the assessment. The primary objective of this report is to furnish details concerning the proposed activities and to specify the environmental aspects and potential impacts identified during the Screening and Scoping phases. This report comprises information derived from on-site observations. Consequently, the

potential impacts of the proposed activities (and associated ancillary infrastructure) can be evaluated, with the assessment also being integrated into this report.

It is anticipated that this Scoping Report (inclusive of an impact assessment), in conjunction with the attached EMP, will offer comprehensive information for the MEFT to render an informed decision regarding the proposed project, and whether an environmental clearance certificate may be granted.

1.4 EIA Process

The EIA Scoping process and corresponding activities are outlined in Table 1

Table 1: EIA Process

Objectives	Corresponding activities
Project initiation and Screening phase	
<ul style="list-style-type: none"> Initiate the screening process Initiate the environmental impact assessment process. 	<ul style="list-style-type: none"> Site Visit Identify Key Stakeholders Early identification of environmental aspects and potential impacts associated with the proposed project.
EIA Phase with combined Scoping and Assessment	
<ul style="list-style-type: none"> Notify the decision-making authority of the proposed project Identify interested and/or affected parties (I&APs) and involve them in the scoping process through information sharing. Identify potential environmental issues associated with the proposed project. Consider alternatives. Identify any fatal flaws. Determine the terms of reference for additional assessment work. Provide a detailed description of the potentially affected environment. Assessment of potential environmental impacts. Design requirements and management and mitigation measures. Receive feedback on application. 	<ul style="list-style-type: none"> Notify government authorities and I&APs of the project and EIA process. Conduct Public Participation Process Investigations by technical project team. Compilation of draft scoping (combined assessment) and EMP reports. Distribute draft scoping (combined assessment) and EMP reports to authorities and I&APs for review. Forward the final scoping (combined assessment) and EMP reports and I&APs comments to MET for review. MEFT review and Record of Decision.

1.5 EIA Team

I.N.K Enviro Consultants cc is the independent environmental firm appointed by Nani to conduct the environmental impact assessment process. Immanuel N. Katali, the EIA project manager and lead practitioner, possesses a B.Arts (Honours) Degree in Geography, Environmental Studies, and Sociology, and boasts over nine years of pertinent experience in overseeing EIAs, formulating EMPs, and conducting Socio-Economic Studies. Immanuel is accredited as an environmental practitioner by the Environmental Assessment Professionals Association of Namibia (EAPAN).



2 SCOPING METHODOLOGY

2.1 Information collection

I.N.K used various information sources to identify and assess the issues associated with the proposed project. These include:

- Site visits by I.N.K.
- Consultation with Project Technical Team.
- Consultation with MEFT via online application system.
- Consultation with I&APs.
- Google Earth.
- Internet sources.

2.2 Scoping Report

The main purpose of this Scoping Report is to indicate which environmental aspects relating to the proposed project might have an impact on the environment, to assess them and to provide management and mitigation measures to avoid or minimize these impacts.

Table 2 outlines the Scoping Report requirements as set out in Section 8 of the Environmental Impact Assessment Regulations that were promulgated in February 2012 in terms of the Environmental Management Act, 7 of 2007.

Table 2: Scoping report Requirements stipulated in the EIA regulations

Requirements for a Scoping Report in terms of the February 2012 regulations	Reference in report
(a) the curriculum vitae of the EAPs who prepared the report;	Attached separately
(b) a description of the proposed activity;	Section 4
(c) a description of the site on which the activity is to be undertaken and the location of the activity on the site;	Sections 4 & 6
(d) a description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed listed activity;	Sections 6, 7
(e) an identification of laws and guidelines that have been considered in the preparation of the Scoping Report;	Section 3
(f) details of the public consultation process conducted in terms of regulation 7(1) in connection with the application, including - (i) the steps that were taken to notify potentially interested and affected parties of the proposed application;	Section 2.3
(g) a description of the need and desirability of the proposed listed activity and any identified alternatives to the proposed activity that	Sections 1.2 and 5

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are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives have on the environment and on the community that may be affected by the activity;	
(h) a description and assessment of the significance of any significant effects, including cumulative effects, that may occur as a result of the undertaking of the activity or identified alternatives or as a result of any construction, erection or decommissioning associated with the undertaking of the proposed listed activity;	Sections 7
(i) terms of reference for the detailed assessment; and	Section 7
(j) a management plan, which includes - (i) information on any proposed management, mitigation, protection or remedial measures to be undertaken to address the effects on the environment that have been identified including objectives in respect of the rehabilitation of the environment and closure. (ii) as far as is reasonably practicable, measures to rehabilitate the environment affected by the undertaking of the activity or specified activity to its natural or predetermined state or to a land use which conforms to the generally accepted principle of sustainable development; and (iii) a description of the manner in which the applicant intends to modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation remedy the cause of pollution or degradation and migration of pollutants.	Separate Document

2.3 Public Participation Process

The public participation process for the proposed project is conducted to ensure that all persons and/or organizations that may be affected by, or interested in the proposed project, were informed of the project and could register their views and concerns. By consulting with relevant authorities and I&APs, the range of environmental issues to be considered in this Scoping Report (including the assessment of impacts) has been given specific context and focus.

Included below is a summary of the I&APs consulted, the process that was followed and the issues that were identified.

2.4 The Project I&APs

The table below provides a broad list of persons, group of persons or organizations that were informed about the project and were requested to register as I&APs should they be interested and/or affected.

Table 3: The Project Stakeholders


IAP Grouping	Organisation
Government Ministries	<ul style="list-style-type: none"> ♦ Ministry of Environment, Forestry and Tourism (MEFT). ♦ Ministry of Agriculture, Water and Land Reform. ♦ Ministry of Health and Social Services.
Local Authorities	<ul style="list-style-type: none"> ♦ Walvis Bay Municipality
Nearest Communities	<ul style="list-style-type: none"> ♦ Nearby Informal Community Members ♦ Surrounding/Neighbouring Businesses
Media	Newspaper adverts (24 and 31 October 2025): Die Republikein, The Namibian Sun and Allgemeine Zeitung.
Other interested and affected parties	Any other people with an interest in the proposed project or who may be affected by the proposed project.

2.5 Steps in the consultation process

The table below sets out the steps that were followed as part of the consultation process:

Table 4: Consultation process with I&APs and Authorities

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TASK	DESCRIPTION
Notification - regulatory authorities and IAPs	
Notification to MEFT	I.N.K submitted the Application Form (online system) as a form of project registration and notification to MEFT.
IAP identification	A stakeholder database was developed for the proposed project and EIA process. Additional I&APs will be updated during the EIA process as required.
Distribution of background information document (BID), flyers and stakeholders meeting invitation letters	<p>BIDs were made available to all I&APs on the project's stakeholder database and were available at the scoping meetings. Copies of the BID were available on request to I.N.K.</p> <p>Flyers and stakeholder meeting invitation were distributed.</p> <p>The purpose of the BID was to inform I&APs about the proposed project, the EIA process, possible environmental impacts and means of providing input into the EIA process. Attached to the BID was a registration and response form, which provided I&APs with an opportunity to submit their names, contact details and comments on the project.</p>
Public Meeting	<p>Public Meeting was held at the site - Thursday 6 November 2025.</p> 
Email	Key Stakeholders were notified about the EIA process via emails.
Newspaper Advertisements	<p>Block advertisements were placed as follows:</p> <ul style="list-style-type: none"> ♦ Die Republikein (24 and 31 October 2025)

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TASK	DESCRIPTION
Notification - regulatory authorities and IAPs	<ul style="list-style-type: none"> ◆ The Namibian Sun (24 and 31 October 2025) ◆ Allgemeine Zeitung (24 and 31 October 2025) <p>Newspaper Advertisement - 24 October 2025</p> <p>Newspaper Advertisement - 31 October 2025</p>

2.6 General Assumptions and Limitations

The key assumptions and limitations of this Report are detailed below.

- ◆ It is assumed that the information provided by Nani, relating to the project activities is accurate and that the project will be implemented and operated as described.



3 ENVIRONMENTAL LAWS AND POLICIES

The Republic of Namibia has five tiers of law and a number of policies relevant to environmental assessment and protection, which includes:

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

Relevant policies currently in force include:

- ♦ The EIA Policy (1995).
- ♦ Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation (1994).
- ♦ The National Climate Change Policy of Namibia (September 2010).
- ♦ Policy for the Conservation of Biotic Diversity and Habitat Protection (1994).

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

The management and regulation of the proposed activities falls within the jurisdiction of the Walvis Bay Municipality, with environmental regulations guided and implemented by the Department of Environmental Affairs (DEA) within the Ministry of Environment, Forestry and Tourism (MEFT).

The section below summarizes the various applicable laws and policies, international treaties and protocols.

3.1 Applicable Laws and Policies

In the context of the proposed activities, there are several laws and policies currently applicable. They are reflected in Table 5.

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Table 5: relevant legislation and policies

YEAR	NAME	Natural Resource Use (energy & water)	Emissions into the air (fumes, dust & odours)	Emissions to land (non-hazardous & hazardous)	Emissions to water (industrial & domestic)	Noise (remote only)	Visual	Vibrations	Impact on Land use	Impact on biodiversity	Impact on Archeology	Emergency situations	Socio-economic	Safety & Health	Other
1990	The Constitution of the Republic of Namibia of 1990	X	X	X	X	X	X	X	X	X	X	X	X	X	
1997	Namibian Water Corporation Act, 12 of 1997	X											X		
2013	Water Resources Management Act 11 of 2013	X			X								X		
2004	National Heritage Act 27 of 2004										X				
2007	Environmental Management, Act 7 of 2007	X	X	X	X	X	X	X	X	X	X		X	X	
2012	Regulations promulgated in terms of the Environmental Management, Act 7 of 2007	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1975	Nature Conservation Ordinance 14 of 1975	X			X					X	X				
1976	Atmospheric Pollution Prevention Ordinance 11 of 1976		X												
1995	Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation	X	X	X	X	X	X	X	X	X	X	X		X	
2004	Pollution Control and Waste Management Bill (3rd Draft September 2003)		X	X	X	X									
1990	Petroleum Products and Energy Act, No. 13 of 1990		X	X	X					X				X	X
1974	Hazardous Substance Ordinance No. 14 of 1974	X	X	X						X		X		X	

3.2 Line Ministries

The following line ministries are applicable:

3.2.1 Ministry of Environment, Forestry and Tourism.

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

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

3.2.2 Ministry of Agriculture, Water and Land Reform.

Promote, Develop, Manage and utilize Agriculture, Water and Land Resources sustainably.

3.3 National Policies and Plans

Namibia's policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies are used in providing support to legal interpretation. The following policies and plans are applicable:

3.3.1 The EIA Policy (1995).

This policy states that the principle of achieving and maintaining sustainable development must underpin all policies, programmes and projects undertaken within Namibia. In particular, the wise utilization of the country's natural resources, together with the responsible management of the biophysical environment, must be for the benefit of both present and future generations.

3.3.2 Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation (1995).

This policy promotes accountability and informed decision making through the requirement of EIAs for listed programmes and projects.

3.3.3 Namibia Vision 2030.

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

3.3.4 The Harambee Prosperity Plan II

The Harambee Prosperity Plan II (HPPII) (covering the period 2021 - 2025) builds on the solid foundation of the inaugural HPP 2016 - 2020. It continues to prioritize the implementation of targeted policy programme in order to enhance service delivery, contribute to economic recovery and engender inclusive growth. HPPII aims to increase local electricity generation capacity from 624 MW (2020) to 879 MW by 2025.

3.3.5 Policy for the Conservation of Biotic Diversity and Habitat Protection, 1994.

A comprehensive conservation policy that integrates sustainable practices and natural resource management.

3.3.6 National Solid Waste Management Strategy (2020).

It provides the framework for future directions, regulations, funding and action plans to improve solid waste management in order to achieve consistency and coordination

3.3.7 The National Climate Change Policy of Namibia (2010).

This policy identifies technology development and transfer to be a key issue for which strategies and action plans should be developed.

3.3.8 Atmospheric Pollution Prevention Ordinance of 1976.

Namibia has adopted the South African air pollution legislation for air quality control in the form of the

3.3.9 Atmospheric Pollution Prevention Act (Act No 45 of 1965) (APPA).

The Namibian Atmospheric Pollution Prevention Ordinance (No. 11 of 1976) does not include any ambient air standards with which to comply. Typically when no local ambient air quality criteria exist, or are in the process of being developed, reference is made to international criteria. This serves to provide an indication of the severity of the potential impacts from proposed activities. The most widely referenced international air quality criteria are those published by the World Bank Group (WB) and the World Health Organization (WHO). The newly promulgated South African ambient air quality standards can also be referenced since these have been developed recently after a thorough review of international criteria.

3.3.10 Hazardous Substance Ordinance of 1974.

To provide for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature

3.4 Summary of Applicable legislation and standards

The following legislation is applicable:

To provide a framework for a structured uniform public and environmental health system in Namibia.

3.4.1 Soil Conservation Act 76 of 1969.

covers the prevention and combating of soil erosion; the conservation, improvement and manner of use of the soil and vegetation; and the protection of water sources.

3.4.2 The Constitution of the Republic of Namibia of 1990.

The Constitution is the Supreme Law of Namibia.

3.4.3 Pollution Control and Waste Management Bill (3rd Draft September 2003).

This Act promote sustainable development; to provide for the establishment of a body corporate to be known as the Pollution Control and Waste Management Agency; to prevent and regulate the discharge of pollutants to the air, water and land; to make provision for the establishment of an appropriate framework for integrated pollution prevention and control; to regulate noise, dust and odor pollution; to establish a 'system of waste planning and management; and to enable Namibia to comply with its obligations under international law in this regard.

3.4.4 Labour Act, 2007 (No. 11 of 2007).

To establish a comprehensive labour law for all employers and employees; to entrench fundamental labour rights and protections; to regulate basic terms and conditions of employment; to ensure the health, safety and welfare of employees.

3.4.5 Environmental Management, Act 7 of 2007.

To enforce the policy on EIAs, the Environmental Management Act (EMA) (7 of 2007) has been compiled and is regulated by the Ministry of Environment and Tourism (MET). This Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and the Environmental Impact

Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) were promulgated on 6 February 2012. In terms of this legal framework certain identified activities may not commence without an Environmental Clearance - a certificate that is issued by MET. This environmental clearance can only be granted after consideration of an EIA.

3.4.6 Public and Environmental Health Act No. 1 of 2015.

To provide a framework for a structured uniform public and environmental health system in Namibia.

3.4.7 Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act No. 36 of 1947.

This Act makes provision for the control on the trade in and placing on the market and use of fertilizers, pesticides and biological control agents for use in agriculture, products for the feeding of domestic animals or livestock and substances used for the maintenance or improvement of health of domestic animals, livestock, poultry, birds, wild animals or fish.

3.4.8 Air Quality Act (No. 39 of 2004).

To reform the law regulating air quality in order to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development.

3.4.9 The Integrated Coastal Management Bill

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

3.4.10 Coastal Strategic Environmental Assessments

Two Namibian coastal Strategic Environmental Assessments (SEAs) were undertaken between 2006 and 2008, i.e. one for the northern regions of Kunene and Erongo and another for the southern regions of Karas and Hardap. These draw on international experience and were undertaken at a time of mounting production sector pressures within Namibia. Being an initiative

of the Namibian Government through MEFT, the two SEAs seek to inform political and technical decision makers at local, regional and national levels.

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

3.5 Applicable Listed activities

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

Table 6: Listed activities triggered by the proposed Project

LISTED ACTIVITY
2.2 Any activity entailing a scheduled process referred to in the Atmospheric Pollution prevention Ordinance, 1976.
2.3 The import, processing, use and recycling, temporary storage, transit or export of waste.

4 DESCRIPTION OF THE CURRENT ENVIRONMENT

This section was compiled utilizing the following sources of information:

- ♦ Visual observations during a site visit by I.N.K.
- ♦ Google Earth.
- ♦ Internet sources.

4.1 Climatic Conditions

The weather at the coast is significantly different from that to the inland. There is little rain at the coast, the average temperatures are much lower, radiation and sunshine is less and frost is absent. Yet, the winds are stronger and humidity is higher due to frequent fog. The climate of the area is mainly influenced by the Benguela Current and the South Atlantic Anticyclone. The Walvis Bay area experiences over 125 days of fog per year. February, which is the most humid month in Walvis Bay, can reach over 90% humidity whereas June is 60-70% humid.

4.1.1 Temperature

The average annual temperature is less than 16°C. The sites, as well as the rest of Walvis Bay are situated within the Coastal Fog Zone. This zone forms a band along the coast of approximately 20 km in width. As a result of this, the climate is predominantly cool and humid with frequent fog occurring.

4.1.2 Precipitation

The mean annual precipitation (MAP) at the coast is very low, with much of the precipitation being associated with fog (the Atlas of Namibia quotes the average number of fog days at Walvis Bay as 146) and only occasional rainfall events. The Meteorological Office had a rainfall station at Pelican Point for a number of years and the record from this shows the MAP is 9.5 mm, while the median is 3.8 mm. The monthly evaporation for all months is significantly higher than the rainfall, indicating that the area is a water negative area.

4.1.3 Wind

Wind is a dominating feature of the coast. The presence of the subtropical South Atlantic Anticyclone (SAA) off the coast of Namibia strongly influences the wind pattern, generating gale force winds along the coast in all seasons, but most frequently during mid-summer and spring. Although their strength decreases inland, their effect is noticeable for distances of up to 200 km from the coast. The daytime and night time wind roses for Walvis Bay are provided in Figure 5.

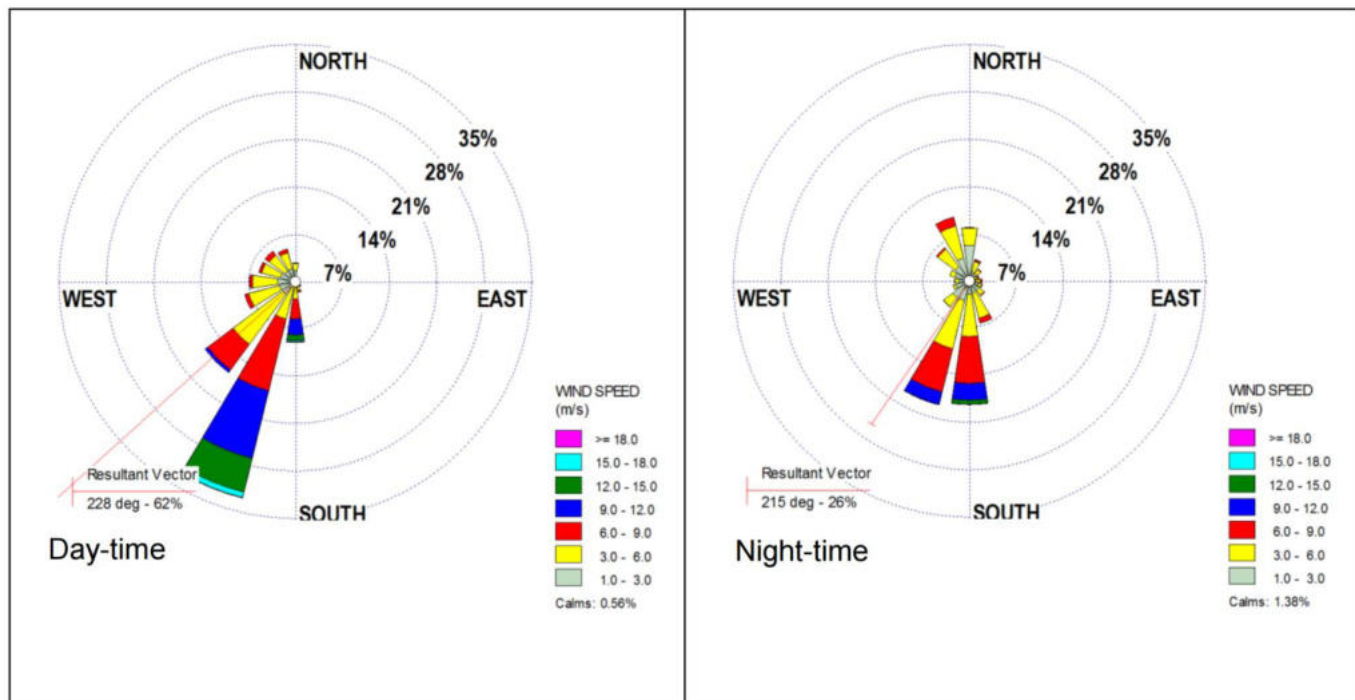


Figure 3: Day time and night time wind roses (SLR, 2016)

The prevailing wind direction at Walvis Bay is from the south-southwest, southwest and the south. During the day the south-southwesterly winds were more dominant with a shift to more frequent southerly winds during night-time. As is typical of night-time conditions the percentage calm conditions increase and the wind speeds decrease. Day-time wind speeds exceeding 5.4 m/s occurred for 32% of the time with the maximum recorded at 22.5 m/s.

4.2 Geology and Hydrogeology

The Walvis Bay area is underlain by Late Quaternary to Holocene unconsolidated sediments, which are a product of the modern Benguela Ecosystem and its interaction with the adjacent hinterland and the Kuiseb River and is therefore a product of fluvial, estuarine, coastal and aeolian processes. Bedrock of the Swakop Group, part of the Damara Sequence, is expected to be located approx. 60 m below ground level and hence any aquifer contained within the rocks is going to be as deep.

4.3 Surface Water

The study area is located in the lower part of the Kuiseb River catchment, but the Project site is located in a municipal zone which does not have any natural drainage pattern.

4.4 Noise

The only source of disturbance in the vicinity originates from the vehicles and trucks travelling on the roads and the routine industrial operations. The prevailing sources of noise within and in the proximity of the project site encompass natural sounds produced by the wind, the movement of vehicles and trucks on the public road network, and the noise from the day-to-day industrial activities. The potential recipients of noise are the neighboring enterprises. The receptiveness of noise recipients typically escalates during the night when the environment is tranquil, and ambient noise levels are at their minimum. The standard daytime noise levels in an industrial zone are recorded at 70 decibels (Safetch, 2009).

4.5 Fauna and Flora

The proposed site has already been disturbed through off-road driving, cleared and earmarked for future industrial development. Therefore, no Fauna and Flora are found within the proposed site (Figure 3).



Figure 4: The Proposed Site

4.6 Traffic

The traffic observed is the vehicles and trucks traveling on the gravel to and from the adjacent charcoal business and Rooikop.

4.7 Social and Economic Environment

4.7.1 Land-use

The surrounding terrain at the site consist of urban residential housing situated approximately 1 km to the southwest and an informal settlement located approximately 200 m to the south of the proposed site. Additional land use in the vicinity includes abandoned infrastructure along the western boundary of the site and a borrow pit for road construction, north east of the site. A

charcoal production enterprise, known as King Charcoal, operates at the eastern boundary, approximately 50 meters from the site. Refer to figure 1.

The charcoal production facility to the east, along with the residential communities to the south and southeast of the proposed site, warrants particular attention due to potential offsite risks stemming from the storage facilities or potential hazards posed to adjacent properties.

4.7.2 Health

Walvis Bay has a main district government hospital and a private hospital, the Kuisebmond health centre and three clinics – Narraville, Coastal and Walvis Bay clinics. The main health challenges as listed by the Ministry of Health and Social Services are HIV/AIDS, TB, substance abuse, respiratory system diseases and children in need of care.

4.7.3 Walvis Bay Economy

The economy of the town is largely built around fishing, the port, tourism and salt production.

5 DESCRIPTION OF THE PROPOSED STORAGE WAREHOUSES AND PUTTY POWDER PROCESSING PLANT

5.1 Primary Activities/Infrastructure

The proposed activities will include the following primary activities/infrastructure.

- ◆ Boundary Wall.
- ◆ 3 Warehouses (Total of 5600 m²)
- ◆ 1x Entry Point
- ◆ 1x Exit Point
- ◆ Ablution Facilities.
- ◆ Covered Yard (10000 m²)
- ◆ Parking Bay
- ◆ Offices (200 m²)

5.1.1 Boundary Wall

A concrete boundary wall measuring a height of 2.4 m, will be constructed. Figure 4 indicates the specifications of the concrete wall.

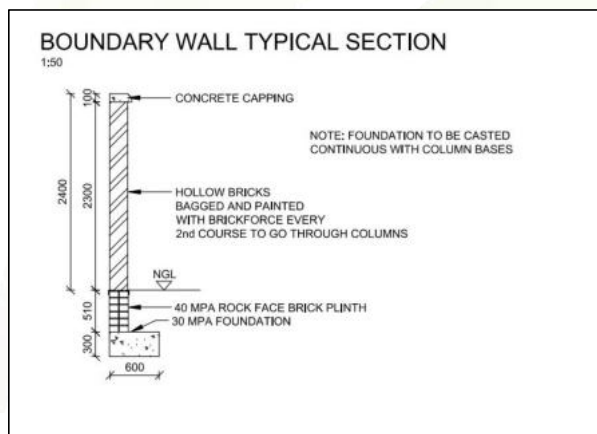


Figure 5: Concrete Boundary Wall Specifications

5.1.2 Three (3) Warehouses

Two (2) warehouses each measuring 1225 m², and one (1) warehouse measuring 3150 m² are planned for general storage and putty powder production.

5.1.3 Covered Yard

A covered yard measuring approximately 10 000 m² is proposed for the storage of products suitable for outside/open storage.

5.1.4 Interlocking

Interlocks will be installed on the ground, to contain and manage accidental hydrocarbon spillages and reduce potential for dust pollution.

5.1.5 2x Guard Houses (Entry and Exit Points)

Nani will engage with the Walvis Bay Municipality and Roads Authority to create an entry point and exit point from the facility into the main gravel road. Guard houses will be constructed at both the entry and exit points.

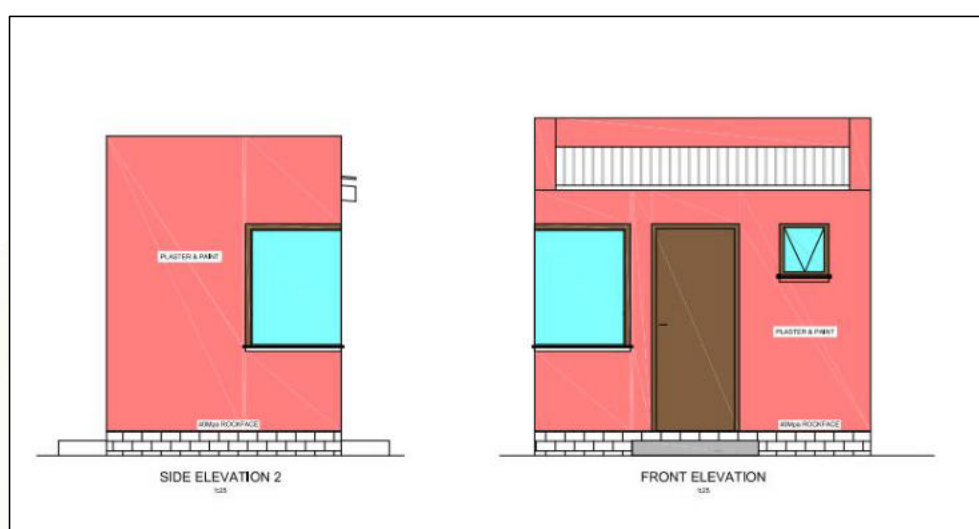


Figure 6: Proposed Guard House (For illustrative purposes only)

5.1.6 Ablution Facilities

An ablution facility (male and female toilets) will be constructed. Both the staff and visitors to the site (including truck drivers) will make use of these toilets.

5.2 Putty Powder Processing Plant

5.2.1 Plant specifications

Specifications vary by capacity and automation level, but typical plants share core components and general parameters:

Table 7: Plant Specifications

Composition/system	Function	Typical Details/Specifications
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SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED THE CONSTRUCTION AND OPERATION OF A GENERAL STORAGE FACILITY AND NON-HAZARDOUS PUTTY POWDER PROCESSING PLANT

Production Capacity	Overall output of finished powder	Ranges from 1-8 t/h (simple manual plants) to 10-40 t/h (fully automatic plants)
Control System	Automation of the process	Fully automated PLC (Programmable Logic Controller) control is common for precision and reduced labor
Mixing System	Homogeneous blending of ingredients	Dual-axis gravity-free mixers or horizontal ribbon mixers are standard, with capacities around 1000 kg/batch and mixing times of 5-10 minutes.
Batching System	Accurate weighing of materials	Automatic dosing systems with high accuracy (e.g., $\pm 0.1\%$) using weighing bins and screw feeders.
Material handling	Transporting materials between stages	Utilizes bucket elevators, screw conveyors, and pneumatic conveying systems with capacities around 5-10 tons/hour.
Data Collection	Environmental and safety control	Pulse-back dust systems (99.5% filtering efficiency) keep emissions within national standards.
Power Supply	Electrical requirements	Typically 380V, 50Hz (customizable).
Floor Area	Required physical space	Approximately 500-1000 m ² , depending on layout (station, ladder, or tower).
Manpower	Operators required	3-5 workers for a fully automated system.

5.2.2 Types of Emissions from Putty Powder Processing Plant

The primary emissions from a putty powder processing plant (which involves mixing dry materials like cement and calcium carbonate) are particulate matter (dust), along with lesser amounts of various gases. These emissions mainly originate from material handling, processing, and the combustion of fuels for energy.

The particles vary in size (PM₁₀, PM_{2.5}, etc.) and chemical composition, often containing compounds like calcium oxide (lime), aluminum oxide, crystalline silica, and trace metals. Fine particles (PM_{2.5}) are a particular health concern as they can penetrate deep into the lungs.

5.2.3 Odour

A typical modern putty powder processing plant, which primarily mixes dry, inorganic materials, produces very little, if any, inherent odor during normal operations. The raw materials themselves are generally odorless or have only a slight cement odor.

5.2.4 Operational Process

The manufacturing process is a continuous, closed-system workflow that ensures quality and efficiency:

Raw Material Unloading and Storage: Raw materials (white cement, calcium carbonate, dolomite, polymers, and additives) are delivered in bags or bulk and conveyed via pneumatic systems or bucket elevators to dedicated storage silos.

Weighing and Batching: An automatic batching system accurately weighs each component according to the specific formulation (e.g., 1 part white cement to 4 parts dolomite) using weighing hoppers and screw conveyors.

Mixing/Blending: The precisely measured raw materials are transported to a high-efficiency mixer (like a dual-axis gravity-free mixer) and blended for a specific duration (typically 5-15 minutes) to ensure a homogeneous final product.

Quality Control: Samples are often taken during or after mixing to test for consistency, fineness, and performance-related properties.

Packaging: The finished putty powder is transferred to a buffer hopper and then automatically packed into bags (usually valve bags for efficiency) using a valve bag filler.

Storage and Palletizing: The packaged products are moved to a finished goods storage area, often stacked by robotic palletizers in fully automated plants.



Figure 7: Putty Powder Processing Plant (For Illustrative Purposes Only)

5.3 Construction Phase

5.3.1 Construction Phase

The construction working areas include the following:

- ◆ mobile stores for storing the construction materials.
- ◆ temporary lay-down areas.
- ◆ mobile waste collection and storage areas.
- ◆ temporary parking area for cars and equipment.
- ◆ toilets facilities (preferably mobile toilets) that will be serviced regularly.

Construction activities will take place during the establishment and preparation of the sites. Therefore, it is expected that construction will involve the following activities:

- ◆ Appoint contractors, laborers, etc.
- ◆ Clearing and grubbing and other earth moving activities.
- ◆ Stockpiling topsoil and sub-soil.

- ◆ Foundation excavations.
- ◆ Setting up contractor's laydown areas.
- ◆ General building/construction activities including, amongst others: mixing of concrete; operation of construction vehicles and machinery; civil, mechanical and electrical works; painting; grinding; welding; etc.
- ◆ Disposal or treatment of potentially contaminated soil
- ◆ Water utilisation
- ◆ Operation and movement of construction vehicles and machinery
- ◆ Refueling of equipment
 - Hydrocarbon wastes
- ◆ Handling, storage and disposal of non-hazardous waste
 - Domestic waste
 - Other construction waste
- ◆ Transportation of fuel in small quantities
- ◆ Handling and storage of hazardous material
 - Fuel
 - Lubricants

5.3.2 Site preparations for infrastructure

Site preparation includes the demarcation of the 6-ha footprint of the ponds and the laydown area to be located ± 15 m for each of the proposed project component and infrastructure site, for the storage and partial assembly of the project material or equipment to be constructed.

5.3.3 Refueling of Construction Vehicles

The construction vehicles and machinery such as the graders and tipper trucks will be refueled in Walvis Bay. No refueling of vehicles will be taking place on site.

5.3.4 Topsoil Removal

Topsoil will be excavated to lay the foundation.

5.3.5 Employment and housing

The construction will be carried out by contractors. Contractors for the construction phase will be engaged on a short term, temporary basis. The construction workforce/contractors will

commute to the designated sites each day and will be accommodated in Walvis Bay. No accommodation or any permanent structures will be constructed on site.

5.3.6 Power Supply for Construction Activities

Mobile generators will supply power for the construction phase.

5.3.7 Sanitation during construction

Mobile toilets will be used. The septic tanks will be emptied on a regular basis and the effluent disposed of at a licensed facility in Walvis Bay.

5.3.8 Waste Management during Construction

Waste is anticipated to be generated on site during construction. The pilot project will make use of waste skips during the construction phase. These skips should be emptied on a regular basis.

Waste will be transported off site and disposed of at the nearest landfill site in Walvis Bay. No waste will be disposed of or burnt on site.

All hazardous waste, i.e., chemical containers, hydrocarbon contaminated materials, used hydrocarbons etc., will be separated from the general waste and removed from site and disposed of at a licensed hazardous waste disposal site in Walvis Bay.

5.3.9 Timeline

Construction commencement is subject to regulatory approval, i.e. approval of the EIA and issuing of an ECC by MEFT.

The construction phase would take approximately 6 months to complete before commissioning and subsequent operations can commence.

5.3.10 Rehabilitation of temporary construction sites and laydown area

The removal of all temporary construction equipment will be undertaken at the end of construction activities. This will be done as per Environmental Management Plan recommendations.

5.4 Operational phase

The main activities will include routine inspections and maintenance as required, as well as harvesting and water quality monitoring.

5.4.1 Housing and Accommodation

The workforce will be commuting daily from their regular residence. No permanent accommodation or dwellings will be established on site.

5.4.2 Waste Management

Domestic waste will be generated on site during operations. Waste will be transported off site and disposed of at the nearest landfill site. No waste will be disposed of or burnt on site.

All hazardous waste, i.e., chemical containers, hydrocarbon contaminated materials, used hydrocarbons etc., will be removed from site and disposed of at a licensed hazardous waste disposal in Walvis Bay.

5.4.3 Security

Security at the facility will be limited to perimeter fencing and CCTV, as well as 24/7 access/gate and perimeter control.

5.5 Decommissioning

At the end of the operations, the site including all linear infrastructure will be decommissioned and suitably rehabilitated. Where possible, rehabilitation will be undertaken progressively during operation as areas become available. This approach will allow the operational team to determine the best and most effective method of rehabilitation for the various areas disturbed by Project activities.

6 PROJECT ALTERNATIVES

Due to the nature and the scale of the proposed project, limited alternative options exist as described below.

6.1 Alternative Site Location

As indicated in section 1.2, The current proximity of the port to residential areas on its periphery suggests that there is limited space for expansion and the creation of additional storage facilities to meet the escalating demands. Thus, the identified land offers sufficient room to warehouse various products and address this escalating need.

Failing to execute the project at this particular site with favorable conditions would consequently impose constraints on the storage capacities of Walvis Bay.

6.2 The “no-go” option

Even though the proposed activity could result in potential negative environmental and social impacts which are discussed in detail in Sections 7 & 8 of this report, commencing with this proposed project will have benefits at the local, regional and national scale, which will result in significant positive social and economic impacts such as employment, investment, economic boost and procurement of goods and services.



7 IDENTIFICATION AND DESCRIPTION OF ASPECTS AND POTENTIAL ENVIRONMENTAL IMPACTS

7.1 Aspect and Impact identification

Table 7 provides a summary of all the operational activities/facilities and the potential impacts associated with the proposed fuel retail activities.

The relevance of the potential impacts (“screening”) is also presented in the tables below to determine if certain aspects need to be assessed in further detail (Section 8 of this report). Because of the existing baseline information obtained from the various studies conducted in the past; the detailed history of environmental applications; potential impacts of a similar nature have been assessed as part of this EIA process. Also, the relevant management and mitigation measures, to minimize or prevent the potential impacts, will be provided in Section 8 of this report.

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Table 8: environmental aspects and potential impacts

ACTIVITY/FACILITY	Applicable phase	POTENTIAL ENVIRONMENTAL IMPACT	RELEVANCE (SCREENING) OF POTENTIAL IMPACT	Ref
Land Preparation	Construction	<ul style="list-style-type: none"> ◆ Soil erosion ◆ Destruction of habitats and biodiversity 	<p>With respect to section 4.5, the designated site has already been disturbed and cleared, municipally serviced, duly approved by the Municipality, and designated for prospective industrial development. Therefore, no habitat or biodiversity is found on the site. The soil is to be compacted prior to the installation of black sheeting and dunnage covering the areas where chemical handling and storage will take place.</p> <p>Taking the aforementioned factors into consideration, the potential ramifications on soils and biodiversity are deemed negligible, therefore, soils and biodiversity will not undergo further evaluation. The corresponding management measures are outlined in the Environmental Management Plan (EMP).</p>	R01
		Impact on groundwater and surface water quality	Due to the nature of the project, there is a significant risk of hydrocarbon spillages. The proposed activities entail the potential contamination of water resources, primarily through inadvertent releases of hydrocarbons, among others. The potential impacts on surface and groundwater have been evaluated within the scope of this Environmental Impact Assessment (EIA). Please refer to Section 8 for the evaluation of the potential impacts concerning surface water and groundwater. The corresponding management and mitigation measures are outlined in the Environmental Management Plan (EMP).	R02
		Potential impacts on archaeology sites	<p>There's no evidence of archaeological remains in the area. Therefore, no impacts are expected for this issue. No further assessment is required.</p> <p>However, should there be any archaeological/heritage discoveries on site during the construction and operations, the related management and mitigation measures stipulated in the ESMP should be followed.</p>	
Putty Powder Processing Plant	Operations	<p>Increase in dust levels/health impacts</p> <ul style="list-style-type: none"> ◆ Nuisance / Air 	<p>The air quality impacts are expected to be low since the movement of trucks is projected to be 1 truck per day and the site will be interlocked.</p> <p>However, fine particles (PM2.5) from the putty powder are a particular health concern as they can penetrate deep into the lungs.</p>	R03

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		<p>pollution</p> <ul style="list-style-type: none"> ◆ Increased risk of respiratory illness 	<p>Taking the above into consideration, the potential impacts of dust have been further evaluated in section 8.</p>	
Movement of trucks in and out of facility	Construction and Operational	<p>Increase in disturbing noise levels (nuisance)</p> <ul style="list-style-type: none"> ◆ Noise pollution 	<p>The anticipated noise related impacts are expected to be less significant due to the existing high number and constant movement of trucks in the industrial area and other industrial activities. In addition, the activities are far away from any residential area.</p> <p>Taking the above into consideration, the potential impacts of noise are minimal, therefore noise pollution is not assessed further. The related management measures are stipulated in the EMP.</p>	R04
		<p>3rd party safety</p> <ul style="list-style-type: none"> ◆ Increased risk of accidents 	<p>With regard to section 4.6, the traffic observed consists of vehicles and trucks traveling on the gravel road to and from Rooikop and the adjacent charcoal production business. Consequently, it is not anticipated that the additional trucks on the road as a result of this project will cause a strain on the current traffic condition.</p> <p>Taking the above into consideration, the potential impacts of traffic are minimal, therefore traffic is not assessed further. The related management measures are stipulated in the EMP.</p>	R05
Visual conditions	Operational	<p>Changes in visual conditions.</p>	<p>The current charcoal operation is located on the outskirts of the residential houses and adjacent to (50 m east) the proposed project site.</p> <p>Visual impacts from the Wresidential viewpoint are not expected to be significant due to its distance (approximately 3km) and the presense of existing infrastructure . No further assessment was required. The visual management and mitigation measures are stipulated in the ESMP.</p>	
Fire and Explosion	Operational	<ul style="list-style-type: none"> ◆ 3rd party health and safety - fatality and injury to humans 	<p>For a typical putty powder processing plant using inorganic, dry-mix ingredients (calcium carbonate, cement, and mineral additives), the chances of a fire or a significant dust explosion are very low, as the primary raw materials are inherently non-combustible and non-flammable.</p> <p>In light of the potential impacts on health and safety, an in-depth assessment of fire and</p>	R06

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		<ul style="list-style-type: none"> ◆ Increased risk of fire and explosion 	explosion risks has not been conducted in section 8. The related management measures are stipulated in the EMP.	
Working with heavy industrial tools, equipment and machinery during construction	Construction	Potential health and safety risks and injuries to workers	<p>The excavation activities entail working with heavy industrial tools and equipment, that can potentially cause injuries if risks are not carefully mitigated and health and safety measures are not appropriately enforced. In addition, these activities could generate dust that can pose a health risk.</p> <p>Therefore, considering the significance and severity of the potential impact, the potential health and safety impacts are assessed further in section 8.</p>	
Hazardous waste generation	Construction and Operational	<p>Emissions to land, impact on biodiversity, environmental degradation and nuisance impacts.</p> <p>Health and Safety impacts on people.</p>	<p>The possibility of accidental hydrocarbon spillages exists. Any spillages must be promptly cleaned up and disposed of in a proper manner. All hazardous waste will be eradicated from the premises and disposed of at an authorized hazardous waste disposal facility in Walvis Bay.</p> <p>Given the substantial potential impact stemming from hydrocarbons and chemical spillages, pollution has been further evaluated in section 8 as waste management.</p>	R07
General operations, employment and resource management	Construction and Operational	<p>Impacts on local economy</p> <ul style="list-style-type: none"> ◆ Increased employment opportunities ◆ Opportunity for skills transfers ◆ Improvement in the business environment. 	<p>The proposed project holds significant potential in enhancing Namibia's logistics capabilities by establishing crucial storage infrastructure, generating employment opportunities in the logistics sector, and elevating Walvis Bay's stature as a regional logistics hub.</p> <p>Therefore, the potential positive socio-economic impacts have been assessed as part of this EIA. Refer to Section 8 for the assessment of these potential impacts. The related management and mitigation measures are stipulated in the updated EMP.</p>	R08

SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED THE CONSTRUCTION AND OPERATION OF A GENERAL STORAGE FACILITY AND NON-HAZARDOUS PUTTY POWDER PROCESSING PLANT

Adverse impacts on other economic activities in Walvis Bay (site neighbours)	Economic (Negative)	Impact on other businesses in the vicinity of the proposed Nani facility.	These potential impacts can be prevented through the implementation of the management measures included in the EMP.	

With reference to Table 7 above, the following issues were identified as requiring assessment.

- ◆ Groundwater.
- ◆ Air Quality.
- ◆ Waste Management.
- ◆ Socio-Economic.

Refer to Section 8 of this Scoping Report for an assessment of the above-mentioned issues.



8 ENVIRONMENTAL IMPACT ASSESSMENT

Table 8 shows the methodology used to conduct the qualitative assessment. Both the criteria used to assess the impacts and the method of determining significance of the impacts is outlined. This method complies with the Environmental Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) EIA regulations. Part A provides the approach for determining impact consequence (combining severity, spatial scale and duration) and impact significance (the overall rating of the impact). Impact consequences and significance are determined from Part B and C. The interpretation of the impact significance is given in Part D. Both mitigated and unmitigated scenarios are considered for each impact.

Table 9: Assessment Methodology and Criteria

PART A: DEFINITION AND CRITERIA					
Definition of SIGNIFICANCE		Significance = consequence x probability			
Definition of CONSEQUENCE		Consequence is a function of severity, spatial extent and duration			
Criteria for ranking of the SEVERITY/NATURE of environmental impacts	H	Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action. Irreplaceable loss of resources.			
	M	Moderate/ measurable deterioration (discomfort). Recommended level will occasionally be violated. Widespread complaints. Noticeable loss of resources.			
	L	Minor deterioration (nuisance or minor deterioration). Change not measurable/ will remain in the current range. Recommended level will never be violated. Sporadic complaints. Limited loss of resources.			
	L+	Minor improvement. Change not measurable/ will remain in the current range. Recommended level will never be violated. Sporadic complaints.			
	M+	Moderate improvement. Will be within or better than the recommended level. No observed reaction.			
	H+	Substantial improvement. Will be within or better than the recommended level. Favourable publicity.			
Criteria for ranking the DURATION of impacts	L	Quickly reversible. Less than the project life. Short term			
	M	Reversible over time. Life of the project. Medium term			
	H	Permanent. Beyond closure. Long term.			
Criteria for ranking the SPATIAL SCALE of impacts	L	Localised - Within the site boundary.			
	M	Fairly widespread – Beyond the site boundary. Within 20 km of the site boundary.			
	H	Widespread – Far beyond site boundary. Regional/ national			
PART B: DETERACTIVITIES CONSEQUENCE					
SEVERITY = L					
DURATION	Long term	H	Medium	Medium	Medium
	Medium term	M	Low	Low	Medium
	Short term	L	Low	Low	Medium
SEVERITY = M					
DURATION	Long term	H	Medium	High	High
	Medium term	M	Medium	Medium	High
	Short term	L	Low	Medium	Medium
SEVERITY = H					
DURATION	Long term	H	High	High	High
	Medium term	M	Medium	Medium	High
	Short term	L	Medium	Medium	High
			L	M	H
			Localised Within site boundary Site	Fairly widespread Beyond site boundary Local	Widespread Far beyond site boundary Regional/ national
SPATIAL SCALE					
PART C: DETERACTIVITIES SIGNIFICANCE					
PROBABILITY	Definite/ Continuous	H	Medium	Medium	High

**SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED THE CONSTRUCTION AND OPERATION OF A
GENERAL STORAGE FACILITY AND NON-HAZARDOUS PUTTY POWDER PROCESSING PLANT**

(of exposure to impacts)	Possible/ frequent	M	Medium	Medium	High
	Unlikely/ seldom	L	Low	Low	Medium
			L	M	H
CONSEQUENCE					
PART D: INTERPRETATION OF SIGNIFICANCE					
Significance	Decision guideline				
High	It would influence the decision regardless of any possible mitigation.				
Medium	It should have an influence on the decision unless it is mitigated.				
Low	It will not have an influence on the decision.				

8.1 Dust Emission from Putty Powder Processing Plant - Third Parties' health and safety

Issue: Impact on neighbouring industries'

Introduction

The potential for reagent spills and associated contamination of nearby site neighbour exist. The primary emissions from a putty powder processing plant (which involves mixing dry materials like cement and calcium carbonate) are particulate matter (dust), along with lesser amounts of various gases. These emissions mainly originate from material handling, processing, and the combustion of fuels for energy

Modern plants employ various control technologies, such as bag filters for dust and advanced gas scrubbers, to minimize these emissions and comply with environmental regulations.

Severity

Contamination of neighbouring industries' product could have far-reaching consequences for their operations. The severity of this impact is considered high in the unmitigated scenario (in which chemicals/reagents are spilled). The implementation of measures for the prevention of spills and immediate clean-up thereof would prevent this impact from occurring and therefore reduce its severity to low to medium.

Duration

Although the direct impacts on neighbouring industries' products would be short term, the implications for their operations would be long term. With mitigation this would reduce to low to medium.

Scale

In the unmitigated scenario, the impacts could be beyond the site boundary; therefore the spatial scale is medium. In the mitigated scenario, the impact could be contained and the spatial scale reduced to low to medium.

Consequence

The consequence in the unmitigated scenario will be high and with mitigation low to medium.

Probability

Although it is possible for spilled material to blow towards the neighbouring industries, the probability is regarded to be medium in the unmitigated scenario and low in the mitigated

scenario, also taking the distances from specifically the facility to potential of site risk neighbor into account.

Significance

The significance of this potential impact is high in the unmitigated and low in the mitigated scenario.

Summary of cumulative Positive Impacts on Socio-Economic Environment

Mitigation	Severity	Duration	Spatial Scale	Consequence	Probability Of Occurrence	Significance
Unmitigated	H	H	M	H	M	H
Mitigated	L-M	L-M	L-M	L-M	L	L

8.2 Socio-economic environment

Issue: Economic Contribution (Positive)

Introduction

The operating company, truck drivers, ships' crew, and consultants will spend money while in Walvis Bay during ship loading, audits, visits, normal operations, etc. Also, local companies will do maintenance of facilities, equipment and vehicles.

Severity

The proposed storage will have a small contribution to the GDP and will Increase government tax revenue. Also, additional revenue to the local economy will be generated as well as extra revenue for NamPort.

Duration

This will be for the duration of the operations (medium term).

Scale

This impact will extend to a regional spatial extent.

Consequence

The consequences can be rated as medium.

Probability

The likelihood of this impact occurring is medium in the unmitigated scenario and medium to high in the mitigated scenario.

.Significance

The significance of this potential benefit is medium positive in the unmitigated and mitigated scenarios. I.N.K's confidence level is high with regard to these predictions.

Summary of cumulative positive impacts on Socio-Economic Environment

Mitigation	Severity	Duration	Spatial Scale	Consequence	Probability Of Occurrence	Significance
Unmitigated	L	M	H	M	M	M+
Mitigated	L	M	H	M	M-H	M+

8.3 Groundwater

Issue: The potential impact of groundwater quality

The impact on groundwater quality would be an issue.

The groundwater quality depends on the hydrocarbon spillages and its containment, thereof.

Severity

The fact that the project will make use impermeable surface liners and wooden pallets, the severity of the impacts on groundwater will be medium (as opposed to high in the context of uncontrolled use thereof). This can however be reduced to low through further mitigation.

Spatial Scale

The impact would extend beyond the site boundary as contamination transport is expected to follow the groundwater flow patterns, hence medium influence in both the unmitigated and mitigated cases.

Duration

The duration of potential for pollution is longer than the operations, so the impact duration is high in both the unmitigated and the mitigated scenarios.

Consequence

Based on the above assessment the consequence is medium in the unmitigated case and medium in the mitigated case.

Probability

Probability of occurrence is medium in the unmitigated case and low in the mitigated case.

Significance

The significance of groundwater contamination is high in the unmitigated scenario but is low in the mitigated scenario.

Summary of cumulative impacts on groundwater quality

Mitigation	Severity	Duration	Spatial Scale	Consequence	Probability Of Occurrence	Significance
Unmitigated	M	M	M	M	M	M
Mitigated	L	M	M	L	L	L

8.4 Issue/Impact: Waste Management

Introduction

All hydrocarbon waste will be removed from site and disposed of at a licensed hazardous waste disposal site (Walvis Bay).

Assessment of impact

Severity

The potential for hydrocarbons to extend beyond the site exists, and pose a contamination risk. Therefore, the severity of the impact is medium in the unmitigated scenario and low in the mitigated scenario.

Duration

The waste management impact is reversible overtime therefore the duration in the unmitigated scenario is medium and low in the mitigated scenario.

Spatial Scale

The waste management impacts are not localised as it can extend beyond the site boundaries into Therefore, the spatial scale is rated high in the unmitigated scenario and low in the mitigated scenario.

Consequence

The impact of waste on site could have detrimental/cumulative effects, leading to the possible contamination of the surrounding area. Therefore, the consequence of this impact is medium in the unmitigated scenario and low in the mitigated scenario.

Probability

The probability of the waste management impact occurring is medium in the unmitigated scenario and low in the mitigated.

Significance

The perception of the land, in terms of its nature could potentially change in the unmitigated scenario. Therefore, the significance is rated high in the unmitigated scenario and could be reduced to low through mitigation.

Summary of cumulative impacts on groundwater quality

Mitigation	Severity	Duration	Spatial Scale	Consequence	Probability	Significance
Unmitigated	M	M	H	M	M	M
Mitigated	L	L	L	L	L	L

9 CONCLUSION

It is I.N.K's opinion that the environmental aspects and potential impacts relating to the proposed storage facility have been successfully identified.

The impact assessment presents the potential for positive and negative environmental and social impacts that can all be mitigated to acceptable levels. The most significant potential impacts (unmitigated) are:

- ◆ Groundwater
- ◆ Air Quality
- ◆ Waste Management.
- ◆ Socio-Economic.

The assessment found that the proposed project presents the potential for minimal additional risks and related impacts in the mitigated scenario. Relevant mitigation measures have been provided and are included in the EMP that accompanies this scoping report. I.N.K believes that a thorough assessment of the proposed project has been achieved and that an environmental clearance certificate could be issued.

10 REFERENCES

SLR, 2016. Scoping (Including Impact Assessment) for The Transportation, handling and Storage of Swakop Uranium's Chemicals and Reagents in the Various Manica Facilities. Swakopmund, Namibia

Mendelsohn, J., Jarvis, A., Roberts, C. and Roberts, T., 2002. Atlas of Namibia: A portrait of the land and its people. David Philip Publishers, Cape Town, RSA

