ENVIRONMENTAL SCOPING AND MANAGEMENT PLAN

TradePort Namibia's Proposed Import-Export Trading Operations via the Trans-Zambezi Corridor, Namibia

MAY 13

Compiled for: TradePort Namibia (Pty) Ltd P.O. Box 22458 Windhoek, Namibia

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executive summary

Project Overview

TradePort Namibia (Pty) Ltd is a registered Namibian company, which ventures in the Import and Export Trade Operations that mainly entails the transportation, handling and storage of fuel and mineral commodity (Copper, Sulphur, Manganese and Coal).

While their operations stimulate diversification in the national economic and development activities, consequently creating employment opportunities and trickling benefits to the larger Namibian population, it poses the risks of unprecedented negative environmental impacts.

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of dust and noise pollution especially during the handling (loading and off-loading) will be experienced.

To ensure that development activities are undertaken in an economic, social and environmental sound / sustainable manner, the Namibian Constitution and Environmental Management Act No. 7 of 2007 provides for an environmental assessment process. The purpose of the environmental assessment and therefore this report are to ensure compliance of the proposed operations with the environmental legislation in respect to managing potential impacts associated with TradePort Namibia's export operation by:

- Identifying potential socio-economic and environmental impacts
- Proposing management measures to avoid, prevent and of mitigate these
- Compile an Environmental Management for compliance monitoring and reporting on the implementation of the Environmental Clearance Certificate conditions

Need for the Project

The proposed activity responds to Namibia's strategic vision of being key player in the distribution and logistics sector within the Southern Africa Development Community (SADC) region. This desired outcome is stipulated in its Logistics Master Plan, which states that by 2022 Namibia shall have a world-class Logistics Hub connecting SADC to the International Markets.

On the other hand, extensive mining is undertaken in the Northern Cape Province with numerous volume of mineral commodity produced resulting in congestion of the in South Africa (JICA 2015). This offers an opportunity for the utilization of the Namibian Ports as alternative avenues for the export of various mineral commodities produced in South Africa. Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

TradePort Namibia (Pty) Ltd is a registered Namibian company, which ventures in the Import and Export Trade Operations that mainly entails the transportation, handling and storage of fuel and mineral commodity (Copper, Sulphur, Manganese and Coal). In particular to this assessment, TradePort Namibia (Pty) Ltd intends to export of fuel and mineral commodity (which includes copper, coal, manganese and sulphur) through the Walvis Bay Port.

Most of the fuel and mineral commodity shall be imported into Namibia from South Africa and will be export in bulk of between 80 000 and 100 000 tons per commodity (Coal, Sulphur, Copper and Manganese) on a monthly basis. The core activities proposed will be conducted at the Port in Walvis Bay and includes mainly the transportation (by truck / rail) from Grootfontein to Walvis Bay, handling and temporary storage under closed warehouse facilities of manganese commodity at Walvis Bay Port.

The project will ultimately consist of the following components:

- The construction of a new warehouse at Grootfontein and Walvis Bay
- Acquisition of more rail wagons with lids
- Import of fuel and mineral commodity (Copper, Sulphur, Manganese and Coal)from South Africa
- Haulage, Storage and Handling of the commodity at the Grootfontein and Walvis Bay warehouse facilities
- Loading of the commodities onto ships within the NamPort Harbour

Need for an Environmental Impact Assessment

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socioeconomic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition for TradePort Namibia (Pty) Ltd to undertake its operation in compliance with the environmental legislative requirements in Namibia.

Therefore, TradePort Namibia (Pty) Ltd has appointed Enviro-Leap Consulting cc to conduct an environmental assessment and facilitate the process of obtaining and Environmental Clearance Certificate.

Approach to the EIA Process

The assessment process consisted of a site visit to the project location and public consultation meetings with the Interested and Affected Parties (I&APs). An environmental scoping and management plan (EMP) were compiled and constitute the application for an Environmental Clearance Certificate submitted to the Ministry of Environment and Tourism (Office of Environmental Commissioner).

Overall Recommendation

Based on the findings of the environmental scoping assessment, which concludes that all potential negative impacts associated to the proposed TradePort Namibia's import and export operations are minimal and practical mitigation measures are available. Equally, the positive impacts can be harnessed to increase the net marginal benefits relating to the socio-economic aspects of the operations.

Enviro-Leap environmental practitioner confidently recommends that the proposed project can proceed and should be authorized by the DEA. The proposed operations is considered to have an overall low negative environmental impact and an overall moderate positive socio-economic impact (with the implementation of respective mitigation and enhancement measures).

Based on this, it recommended that the proponent must upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as may be stipulated in their EMP and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

Taking into consideration the findings of the environmental scoping assessment process and given the national and regional strategic requirements for infrastructure development and economic growth, it is the opinion of the EAP that the project benefits outweigh the costs and that the project will make a positive contribution towards steering Namibia on its pathway towards its vision of becoming a Logistic Hub. Provided that the specified mitigation measures are applied effectively, it is recommended that TradePort Namibia's operations receive an ECC in terms of the Section 32 of the EMA No. 7 of 2007 and it's EIA Regulations of 2012.

glossary

| AfDB | African Development Bank |
|------|--|
| BID | Background Information Document |
| BoN | Bank of Namibia |
| СА | Competent Authority |
| DEA | National Department of Environmental Affairs |
| EA | Environmental Authorization |
| ECC | Environmental Clearance Certificate |
| EAP | Environmental Assessment Practitioner |
| EIA | Environmental Impact Assessment |
| EMA | Environmental Management Act |
| GPS | Geographical Positioning System |
| IMF | International Monetary Fund |
| GPS | Geographical Positioning System |
| IMF | International Monetary Fund |
| OEC | Offcie of Environmental Commissioner |
| РРР | Public Participation Process |
| SADC | Southern African Development Community |

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1. INTRODUCTION

The Environmental Management Act No. 7 of 2007 (also referred to as the EMA) and its Regulations promulgated in the Government Gazette No. 4878 of 2012, stipulates that for each developmental activity, which is listed as those that may not be undertaken without obtaining and Environmental Clearance Certificate (ECC), an Environmental Assessment (EA) must be conducted. The proposed handling, storage and transportation of fuel and mineral commodities triggers some listed activities in terms of the EMA.

Therefore, an environmental assessment must be conducted with an aim to identify, assess and ascertain potential environmental impacts that may arise as a result of undertaking the proposed operations. Hence, the environmental assessment is a process by which the potential impacts, whether positive or negative are predicted / identified, findings interpreted and communicating to interested and affected parties (I&APs) for inputs.

Additionally, this report presents findings of an environmental scoping process that evaluates the likely socio-economic and environmental effects the proposed operation, and further identifies suitable mitigation measures for avoiding or minimizing the predicted impacts. The envisioned EIA process was undertaken in a holistic approach encompassing different elements as shown in *Figure 1*.



Figure 1: Anticipated Environmental Assessment Timeline

1.1. PROJECT APPLICANT AND PROJECT OVERVIEW

TradePort Namibia (Pty) Ltd is a registered Namibian company, which ventures in the Import and Export Trade Operations that mainly entails the transportation, handling and storage of fuel and mineral commodity (Copper, Sulphur, Manganese and Coal). In particular to this assessment, TradePort Namibia (Pty) Ltd intends to export of fuel and mineral commodity (which includes copper, coal, manganese and sulphur) through the Walvis Bay Port.

1.2. PROJECT MOTIVATION (INCLUDING NEED AND DESIRABILITY)

The Namibian domestic economy, the world's largest marine-diamond producer has been hit by a regional drought and a slump in South Africa, to whose currency the Namibian dollar is pegged.

The economy was projected (see *Figure 2*) to contract by 1.7 percent in 2019 before recovering to positive growth of 0.8 percent and 1.2 percent in 2020 and 2021, respectively (BoN, 2019). The projected contraction in 2019 was in line with anticipated contractions in major sectors such as diamond mining and wholesale and retail trade as well as the prevailing drought, which had a negative impact on the agricultural sector.



Figure 2: Projection of the Namibian Economic Outlook for the 2019 and 2020 fiscal year (source: AfDB, 2020)

However, with the absence structural reforms, growth is expected to converge to a long-term level of about 3%, which is too low to deliver meaningful improvements in per capita income and reduce unemployment (IMF, 2020).

Key steps required to nurture the economy to recovery includes lowering regulatory compliance costs for businesses, reducing electricity and transportation costs and containing public-sector salary dynamics by avoiding regulations that hamper domestic competition. Encouraging activities such as proposed by TradePort Namibia is crucial for stimulating increased economic

1.2.1. Need and Desirability

The proposed activity responds to Namibia's strategic vision of being key player in the distribution and logistics sector within the Southern Africa Development Community (SADC) region. This desired outcome is stipulated in its Logistics Master Plan, which states that by 2022 Namibia shall have a world-class Logistics Hub connecting SADC to the International Markets.

On the other hand, extensive mining is undertaken in the Northern Cape Province with numerous volume of mineral commodity produced resulting in congestion of the in South Africa (JICA, 2015). This offers an opportunity for the utilization of the Namibian Ports as alternative avenues for the export of various mineral commodities produced in South Africa. Critically, going ahead with the proposed activity creates potential for the following marginal net benefits:

- Contribution Taxes and Royalty
- Technological Skill and Knowledge transfer
- Creates the most needed employment opportunities

1.3. REQUIREMENTS FOR AN ENVIRONMENTAL IMPACT ASSESSMENT

While increased economic activities can stimulate demographic changes and alter social, economic and environmental practices in many ways. Adverse environmental and socioeconomic impacts have become a major area of concern for the business community, their customers, and other key stakeholders. As a result, companies seek to manage these impacts as part of their ethical and sustainable business conduct. Similarly, identifying, avoiding, mitigating and managing impacts, is a necessary condition for TradePort Namibia (Pty) Ltd to undertake its operation in compliance with the environmental legislative requirements in Namibia.

Therefore, TradePort Namibia (Pty) Ltd has appointed Enviro-Leap Consulting cc to conduct an environmental assessment and facilitate the process of obtaining and Environmental Clearance Certificate (see Table 1).

| EMA 2007 Legislation | Description of activity | Relevance to this project |
|--------------------------|--|-------------------------------------|
| The project is listed as | 9.1 "The manufacturing, storage, handling or | The project involves the haulage, |
| an activity requiring an | processing of a hazardous substance defined in the | storage and handling of a potential |
| environmental | Hazardous Substances Ordinance, 1974." | hazardous commodities (fuel and |
| clearance certificate as | | mineral commodity). |
| per the following points | 9.2 "Any process or activity which requires a permit, | The project involves the haulage, |
| from Regulation | licence or other form of authorisation, or the | storage and handling of a potential |
| 29(sub-regulation 9) of | modification of or changes to existing facilities for | hazardous commodities (fuel and |
| Government Notice No. | any process or licence, or authorisation in terms of a | mineral commodity). |
| 29 of 2012: | law governing the generation or release of | mineral commodity). |
| | emissions, pollution, effluent or waste." | |
| | 9.4 "The storage and handling of a dangerous goods, | The project involves the haulage, |
| | including petrol, diesel, liquid petroleum gas or | mineral and fuel commodity of up to |
| | paraffin, in containers with a combined capacity of | 30 000 tons |
| | more than 30 cubic meters at any one location." | |
| | 9.5 "Construction of filling stations or any other | Aspect of the project require the |
| | facility for the underground and aboveground | construction and maintenance of a |
| | storage of dangerous goods, including petrol, diesel, | warehouse facility particularly at |
| | liquid, petroleum, gas or paraffin." | Grootfontein and Walvis Bay. |

Table 1: List of activities identified in the EIA Regulations which apply to the proposed project

1.4. EIA TEAM

As previously noted, Enviro-Leap Consulting (see **Table 2** for the composition of ELC's team for this EA) has been appointed by TradePort Namibia (Pty) Ltd to undertake the EIA required for the proposed project. A public participation process (PPP) forms an integral part of the Environmental Assessment Process to aid in identifying issues and possible alternatives for consideration. Details on the PPP are included in section 4 of this Scoping Report.

Table 2: The EIA Management Team

| NAME | ORGANISATION | | ROLE/ SPECIALIST STUDY UNDERTAKEN | | | |
|--|--------------------------------------|--------------------------|-----------------------------------|--|--|--|
| Environmental Assessment Practitioners | | | | | | |
| Vilho Pendainge Mtuleni Enviro-Leap Consulting cc Environment Practitioner | | Environment Practitioner | | | | |
| Titus Shuuya | Shuuya Enviro-Leap Consulting cc Env | | Environment Practitioner | | | |

1.5. DETAILS AND EXPERTISE OF THE EAP

Over the past four years the Enviro-Leap Consulting has been involved in a multitude of Environmental Assessment projects across SADC and within Namibia. The Environmental Practitioners of Enviro-Leap Consulting has a combined of more than 35 years' experience in the environmental sector, ecological research and stakeholder engagement. Consequently, the team offers a wealth of experience and appreciation of the environmental and social priorities and national policies and regulations in Namibia.

1.6. OBJECTIVES OF THE ENVIRONMENTAL SCOPING ASSESSMENT

The primary objective of this EA Report is to present stakeholders, I&APs and the Competent Authority, the DEA, with an overview of the predicted impacts and associated management actions required to avoid or mitigate the negative impacts; or to enhance the benefits of the proposed TradePort Namibia operations.

In broad terms, the 2012 EMA EIA Regulations (GG 4878) stipulates that an EIA Process must be undertaken providing to determine the potential environmental impacts, mitigation and closure outcomes, as well as the residual risks of any listed activity. Therefore, based on these (EIA Regulations), the objectives of the EA Process is to:

- determine the policy and legislative context within which the activity is located and note how the proposed activity complies with and responds to the policy and legislative context;
- describe the need and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;
- identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;
- determine the nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and the degree to which these impacts (a) can be reversed; (b) may cause irreplaceable loss of resources, and (c) can be avoided, managed or mitigated; and
- identify suitable measures to avoid, manage or mitigate identified impacts;

In terms of legal requirements, a crucial objective of the EIA Report is to satisfy the requirements of EIA Regulations in respecting to obtaining an Environmental Clearance Certificate. This section regulates and prescribes the content of the Scoping Report and specifies the type of supporting information that accompany the submission of the ECC application to the Competent Authority.

2. PROJECT DESCRIPTION

This section provides an overview of the conceptual operational design and an overview of the sites and technology selection process for the proposed construction of two warehouse facilities at Grootfontein and Walvis Bay for TradePort Namibia's import and export operations (*Figure 3*, illustrates the proposed trading operation's process flow).



Figure 3: The proposed project's activity flow, detailing the initial activities at the mines in South Africa to the loading of the commodity onto the ship at the Walvis Bay Port in Namibia

The operational specific activities will be conducted within closed warehouse facilities at Grootfontein (these includes offloading and bulk storage of the various mineral commodity) and at the Walvis Bay Port (activities here includes the off-loading and bulk storage of the various fuel and mineral commodity, as well as loading the mineral onto the ship for export). Most of the mineral (Copper, Coal, Manganese and Sulphur) will be imported from Northern Cape Province in South Africa.

The haulage in particular, entails two options namely (see **Figure 4** for the routes illustration):

- **Option 1;** Direct Rail transportation of the fuel and mineral commodity from South Africa to the Walvis Bay (this is a future option, when export volume increases from 80000 tonnes to 100000 tonnes per month), and
- Option 2; "Truck/Road) transportation of the fuel and mineral commodity from South Africa to the TradePort Namibia's Warehouse in Grootfontein, from whence it shall be transferred onto Rail for the rest of the route to the Walvis Bay Port in Namibia (this is the preferred option for the immediate start of operations).

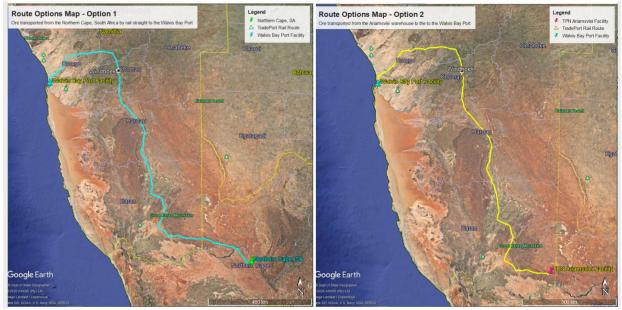


Figure 4: Illustration of the two Rail / Truck transportation routes proposed by TradePort Namibia

2.1. SITE SELECTION

The proposed route through town and to the port area is surrounded by mixed land-use. The route follows the existing railway and is intended to eliminate any potential implications on traffic within the two towns as it's transported to the warehouses. Along the way, the route passes initially through some residential areas to the right and some partially dormant semiindustrial on the left of the railway, and mixed use Walvis Bay CBD consisting of various institutions, residential properties, tourist accommodation, restaurants and various business.

On a site specific level, two site (one each) at the Walvis Bay (*Figure 5*) Port and in Grootfontein (*Figure 6*) were selected, on which the warehouse facilities will be constructed (corner GPS coordinates presented in **Table 3**). The site selection process took into consideration key site selection factors such as land availability, proximity to sensitive receptors, site accessibility, topography, risks, current land use.

| Tuble 3. Conter coordinates of the proposed development site | | | | | |
|--|-------------|------------|--|--|--|
| Corner point | Latitude | Longitude | | | |
| A – Grootfontein | -19.570032° | 18.093844° | | | |
| B – Grootfontein | -19.570311° | 18.093093° | | | |
| C – Grootfontein | -19.570712° | 18.093169° | | | |
| D – Grootfontein | -19.570376° | 18.094024° | | | |
| E – Walvis Bay | -22.959265° | 14.489111° | | | |
| F – Walvis Bay | -22.959899° | 14.489853° | | | |
| G – Walvis Bay | -22.958643° | 14.491517° | | | |
| H – Walvis Bay | -22.958464° | 14.490142° | | | |

 Table 3: Corner coordinates of the proposed development site

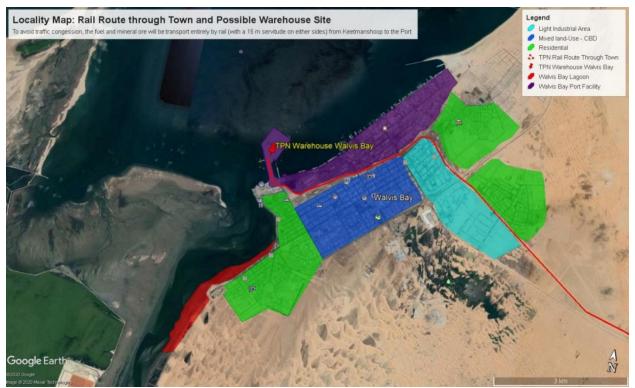


Figure 5: Haulage route along the existing railway line through different land uses in the Walvis Bay town

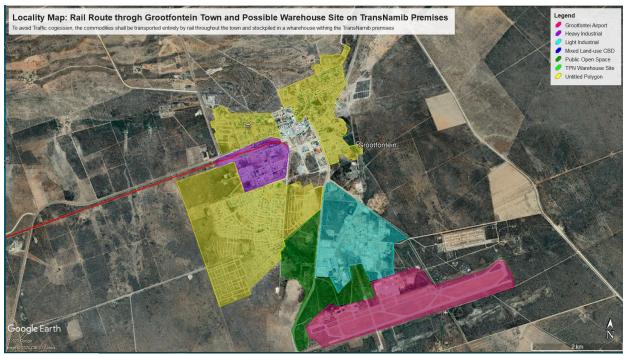


Figure 6: Haulage route along the existing railway line through different land uses in the Grootfontein town

2.2. KEY COMPONENTS OF TRADEPORT NAMIBIA'S OPERATIONS

Most of the fuel and mineral commodities originates from South Africa and will be mainly exported in bulk on an alternating basis but with a consistent volume of between 80 000 and 100 000 tons monthly. The core activities proposed will be conducted at the Port in Walvis Bay and includes mainly the transportation, handling and temporary storage under closed warehouse facilities of the various commodities at Grootfontein (rented TransNamib Premises) and Walvis Bay (rented NamPort premises).

The mineral commodity shall be mainly hauled by rail, unless during an emergency / or as a contingency measure where there is a temporal rail-line obstruction (in which-case trucks/road option shall be temporarily used) and fuel shall be hauled mainly by road in fuel tankers. The project will ultimately consist of the following components:

- The construction of a new warehouse at Grootfontein and Walvis Bay
- Acquisition of more rail wagons with lids
- Import of fuel and mineral commodities (Copper, Sulphur, Manganese and Coal) from South Africa
- Haulage, Storage and Handling of the commodity at the Grootfontein and Walvis Bay warehouse facilities
- Loading of the commodities onto ships within the NamPort Harbour

2.3. DESRCIPTION OF COMMODITIES

2.3.1. Fossil Fuel (Coal, Petrol and Diesel)

Fossil fuels consist of deposits of once living organisms and takes centuries to form. Fossil fuels principally consist of carbon and hydrogen bonds (Lenntech, 2020a). There are three types of fossil fuels which can all be used for energy provision; coal, oil and natural gas.

Coal is a solid fossil fuel formed over millions of years by decay of land vegetation. When layers are compacted and heated over time, deposits are turned into coal (Lenntech, 2020a). Oil on the other hand, is a liquid fossil fuel (from which Petrol and diesel are produced) that is formed from the remains of marine microorganisms deposited on the sea floor.

Coal is used in power generation plants and to a lesser degree for heating in domestic households, while crude oil which consists of many different organic compounds are transformed into petroleum products applied in cars, jets, roads and roofs and many other (Lenntech, 2020a).

2.3.1. Copper

Copper is a reddish metal with a face-centered cubic crystalline structure. It is found in the group *Ib* of the periodic table, together with silver and gold. Copper has low chemical reactivity. In moist air it slowly forms a greenish surface film called patina; this coating protects the metal from further attack (Lenntech, 2020b).

Most copper is used for electrical equipment (60%); construction, such as roofing and plumbing (20%); industrial machinery, such as heat exchangers (15%) and alloys (5%). Copper is ideal for electrical wiring because it is easily worked, can be drawn into fine wire and has a high electrical conductivity (Lenntech, 2020b).

2.3.1. Sulphur

Sulphur is a multivalent non-metal, abundant, tasteless and odorless. In its native form Sulphur is a yellow crystalline solid and occurs in nature as the pure element or as sulfide and sulfate minerals (Boone et.al, 2017). Although Sulphur is infamous for its smell, frequently compare to rotten eggs, that odor is actually characteristic of hydrogen sulphide (HS).

The major derivative of sulphur is sulphuric acid (H2SO4), one of the most important elements used as an industrial raw material (Boone et.al, 2017). Sulphur is also used in batteries, detergents, fungicides, manufacture of fertilizers, gun power, matches and fireworks. Other applications are making corrosion-resistant concrete which has.

2.3.1. Manganese

Manganese is a pinkinsh-gray, chemically active element. It is a hard metal and is very brittle. It is hard to melt, but easily oxidized **(Lenntech, 2020c)**. Manganese is reactive when pure, and as a powder it will burn in oxygen, it reacts with water (it rusts like iron) and dissolves in dilute acids.

Manganese is essential to iron and steel production, accounting for 85% to 90% of the total steel making demand (Lenntech, 2020c). Manganese is a key component of low-cost stainless steel formulations and certain widely used aluminium alloys. Manganese is used to decolorize glass and make violet coloured glass. Other compound that find application are Manganese oxide (MnO) which goes into fertilizers and ceramics) and manganese carbonate (MnCO) used for making other manganese compounds (Lenntech, 2020c).

2.3. PROJECT DEVELOPMENT CYCLE

2.3.1. Construction

The construction activities will take place subsequent to the issuing of an Environmental Clearance Certificate (ECC). The construction activities are proposed at both the Walvis Bay Port and Grootfontein Town, and is expected to extend over a period of between three and six months concurrently for the respective sites (see **Table 4** for technical specifications of the respective warehouse facilities). These assumes that normal daylight working hours shall be are adhered to in respect to the Labour Act provisions.

During the construction phase, both skilled and unskilled temporary employment opportunities will be created. It is difficult to specify the actual number of employment opportunities that will be created at this stage; however approximately 100 personnel in project support industries will be utilized during the construction phase.

| Component | | Description / Dimensions | | | |
|--------------------------------|-------------|---|---|--|--|
| Compo | onent | Grootfontein | Walvis Bay | | |
| Height of Warehouse facility | | 9,5 meter | 9,5 meter | | |
| Areas of Warehou | se facility | 426 m2 | 426 m2 | | |
| Area occupied by | buildings | XXX | XXX | | |
| Volume (tons) of | Copper | 10 000 ton | 15 000 ton | | |
| Fuel & Mineral | Coal | 100 000 ton | 100 000 ton | | |
| exported Monthly | Sulphur | - | 5000 ton | | |
| Montiny | Manganese | 180 000 ton | 180 000 ton | | |
| | Others | 10 000 ton | 10 000 ton | | |
| Power Requireme | nts | 1.5 Kw | 1.5 Kw | | |
| Water Requireme | nts | 500 liters | 500 liters | | |
| Size and number o | of vessels | Ultra and Supramax, 2 per Month | Ultra and Supramax, 2 per Month | | |
| Size and number of rail wagons | | 2.4m x 17m, 17 ton Tare, 61 ton Load, 200 oF | 2.4m x 17m, 17 ton Tare, 61 ton Load, 200 oF | | |
| Height of fencing | | 3 meter | 3 meter | | |
| Type of fencing | | Barbwire | Barbwire | | |

Table 4: Technical details of the proposed facility as required by the Competent Authority

The construction specific activities will involve the transportation of personnel, construction material and equipment to the site, and personnel away from the site. In terms of site establishment, laydown areas will be required at the outset of the construction phase, as well as dedicated access routes from the laydown areas to the working areas. Haul roads for construction traffic (for the delivery of concrete, paving materials and other construction materials) will be required.

All needed construction material (different sand and stone aggregate, cement, corrugated iron sheets, beams etc....) will be sourced from local suppliers, and most preferable within Grootfontein Town. Equally the basic / utility service shall be obtained from the relevant local authorities through both NamPort and TransNamib whose premises TradePort Namibia (Pty) Ltd intends to rent.

Both Water (~ 1000 liters per day) and Electricity (< 1.5 Kilowatt per Day) will be needed both for domestic and construction purpose during the construction phase. However, during the operation phase, even lesser water and energy will be required as the operations does not involve any process or manufacturing activities.

The layout (**Figure 7**) and design of the warehouse facility consists of mainly the warehouse, small administrative block which includes a First Aid Medical room, parking area (also used as an emergency assembly site and ablution facilities. The design intends to blend-in or incorporate the existing, either the TransNamib (rail) or NamPort's (Port) infrastructure. This was done intentionally to avoid, prevent and or mitigate further environmental impacts.

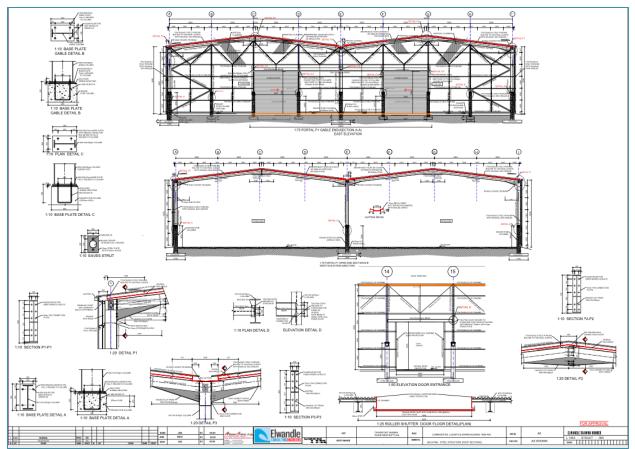


Figure 7: The technical specification and layout of the proposed warehouse facilities to be constructed at both NamPort and TransNamib premises in Walvis Bay and Grootfontein respectively

2.3.2. Operation and Maintenance

The TradePort Namibia's key operational activities revolves around the haulage (Rail or Truck), storage and handling of the commodity within closed-top warehouse facilities at Grootfontein (within TransNamib's premises, *Figure 8*) and Walvis Bay warehouse (within Namport's premises, *Figure 9*).

Haulage of the commodities requires different modes transportation i.e. for fuel (Petrol and Diesel) road transport by use appropriate "Fuel Tankers" or Truck (refined petroleum products such as lubricants, break fluids and engine oil) is considered the best option, while the mineral commodity (Coal, Sulphur, Copper and Manganese) shall be hauled by rail.

The handling and bulk storage is required at the proposed new warehouse facilities both at Grootfontein and Walvis for the bulk mineral commodity (Copper, Coal, Sulphur and Manganese). These includes, the off-loading and loading of the mineral commodity initially at the Grootfontein Warehouse, and loading it onto ships within the NamPort Harbour.

When ship arrives trucks with linked trailers will run 24 hours per day until ship is fully loaded. Each truck will be carrying skips that will be used to load the commodity directly into the ship with ships gear. During the operational phase, both skilled and unskilled employment opportunities will be created, as both TransNamib and NamPort will need more manpower to handle the additional volume resulting from TradePort Namibia's operations. It is difficult to specify the actual number of employment opportunities that will be created at this stage; however approximately 200 personnel in project support industries will be utilized during the construction phase.



Figure 8: A typical TradePort Namibia's supporting infrastructure with the TransNamib (Ariamsvlei) Premises, a similar setup will be established at Grootfontein



Figure 9: A Typical TradePort Namibia's closed-roof-top warehouse facility used for stockpile of commodities at the Ports (Lüderitz), a similar sized facility will be erected at the Walvis Bay Port

2.3.3. Decommissioning

The main aim of decommissioning is to return the land to its original, pre-construction condition. Should the unlikely need for decommissioning arise (i.e. if the facility becomes outdated or the land needs to be used for other purposes), the decommissioning procedures will be undertaken in line with the EMP and the site will be rehabilitated and returned to its pre-construction state.

A closure and rehabilitation plan shall be prepared and submitted to DEA for approval prior to the commencing with the on-ground de-commissioning activities. The process will entail consultations with all relevant stakeholder and consideration for alternatives uses of the facilities before demolition of the infrastructure.

3. DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter of the Scoping Report provides an overview of the affected environment for the proposed most especially the two key operational sites (Grootfontein and Walvis Bay) and other key receptors along the rail route across Namibia. The receiving environment is understood to include biophysical, socio-economic and heritage aspects which could be affected by the proposed development or which in turn might impact on the proposed development.

3.1 BIOPHYSICAL ENVIRONMENT

Namibia is characterized by four land type systems, the Namib, which runs along the entire west coast from the port town of Lüderitz, northwards into southern Angola; the Succulent Karoo which lies south of Lüderitz and extends across the Orange River into South Africa; the Nama Karoo which occurs immediately to the east of the previous two desert systems and covers most of the southern third of Namibia, tapering to a narrow belt from central Namibia northwards; and the Southern Kalahari which extends eastwards across to Botswana. However, the Trans-Zambezi route only crosses through three of these, namely the Namib Desert, Nama Karoo and the tree and shrub savannah.

3.1.1 Climatic Conditions

About 22% of Namibia's land is classified as desert (hyper-arid), 70% is classified as arid to semiarid and the remaining 8% is classed as dry sub-humid (Mendelsohn et al. 2003). Most of the country receives an annual average of more than nine hours of sunlight per day. The north and south of the country experience the highest temperatures with the average maximum for the hottest month being over 34° .

Rainfall is highly erratic and unpredictable with an inter-annual coefficient of variation that ranges from about 30% in the north-east to over 100% in the driest areas. Along the project route and across the different biomes (**Figure 10**).

The average maximum temperature at Grootfontein during the hottest month is $34 - 36^{\circ}$ C while in Windhoek it is $32 - 34^{\circ}$ C. Temperature averages about 20° C. In summer temperatures above 40° C are common (Mendelsohn et al. 2003).

Equally, Walvis Bay is in general dry and has a very low annual rainfall of around 15 - 20 mm/year. Average maximum temperatures at Walvis Bay ranges between 17.2 °C and 21.4 °C and minimums are 10.2 - 14.3 °C (Molloy, 1990 and Robertson et. al, 2012). The arid conditions are a result of dry descending air and upwelling of the cold Benguela Current (Robertson et. al, 2012).

All of Namibia, except for the coastal plains, experiences humidity of below 30% during the day for much of the year - in the north-east for about six months, the north-centre for seven months, the central area for eight months and in the south for all 12 months. High temperatures and low humidity result in high rates of evaporation. Evaporation rates from an

open body of water inland of the coastal plains range from about 2000 mm to over 2660 mm per annum (Olivier, 1995).

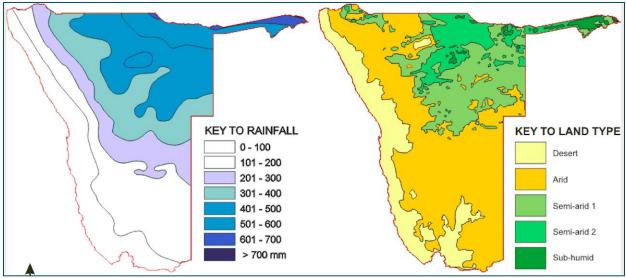


Figure 10: Shows the annual rainfall variation across west-to-east gradient a gradient and across the different biomes

With respect to the warehouse related activities, wind and rainfall has the greatest probability to affect the proposed operations as far as the handling of the fuel and mineral commodity may generate dust particulates. At Walvis Bay, offshore winds are characterized by homogeneous South South-East (SSE, see **Figure 11**) winds blowing parallel to the coast at speeds of 5 - 8 m / sec, the inshore winds are more variable, mainly in the north-south component (Robertson et. al, 2012).

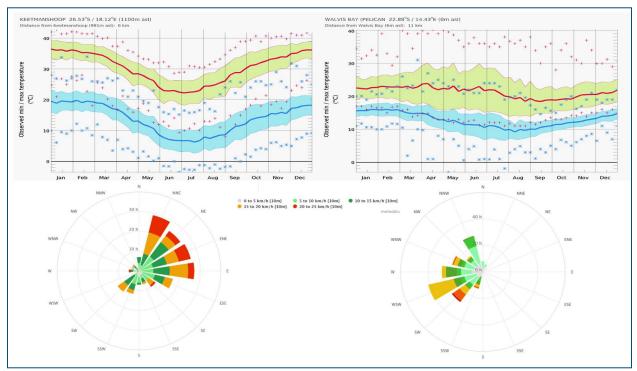


Figure 11: Observed climate data for minimum and maximum annual average temperatures and Wind-Rise Direction and Speed at Grootfontein and Walvis Bay Towns respectively

Contrary, the wind data for Grootfontein where the other storage warehouse will be constructed and core activities conducted, the predominant average hourly blows from the north for 5.6 months (March – September), with a peak percentage of 51% in July. The strongest wind is most often from the south for 6.4 months, from September 8 to March 19, with a peak percentage of 56% (25 km/hour) (Meteoblue, 2020).

3.1.2 Geology

Considering that TradePort Namibia's haulage component of their operations will transit along the Trans-Oranje (B1) and Walvis Bay (B2) Corridors, which runs through a variety of geological setups consisting of the Damara Sequence, Swakop Group, and Karoo Super-group (see **Figure 8**). The Damara orogen is made up of a 400 km-wide northeast-trending intracontinental arm and a north- south trending coastal arm (Williams, 1989).

The Damara Orogenic Belt is the most prominent geological feature of central Namibia, and it forms part of the network of Neoproterozoic orogenic belts that formed during the assembly of the supercontinent Gondwana about 550 million years ago (Deane, 1995).

| \$ | S Waterberg thrust | Northern Zone | North | ern Platform N |
|---------|-----------------------|-----------------|-----------------------------|-------------------------|
| 2000 - | K | The all and the | | |
| -2000 - | | | | Ne C Per |
| m.a.m. | s.l. | | | |
| | Karoo Supergroup | Abenab Subgroup | Swakop Group marbles undiff | . Nosib Group undiff. |
| | Mulden Group | Kuiseb Fm. | S Askevold Fm. | Damara Sequence undiff. |
| | Tsumeb Subgroup | Karibib Fm. | Nabis Fm. | , GMC |

Figure 12: Structural section across the Namibian geological formation across a west-to-east gradient

3.1.3 Terrestrial Ecology and Sensitivity

Namibia's vegetation and biomes are classified into five major types, shown in (**Figure 9**). These are, the Namib Desert, Nama Karoo, Succulent Karoo and the Trees and Shrub savannah. These biomes fall within the project area and thus key receptors of environmental impact particularly in case of tanker capsizing resulting into potential spillage of the fuels.

Overall terrestrial diversity of plants and animals is highest in the north-eastern parts of Namibia (Fig. 12, green map indicator), because of the higher rainfall and presence of wetlands and forest habitats that are not found elsewhere in the country. Many species in the north are also more tropical, with ranges that extend into neighbouring countries to the north and north-east. Species richness is highest in Namibia's mesic wetlands and woodlands in the vertebrate classes particularly (Barnard 1998).

Due to its low productivity, the south-west African arid zone is endowed with modest diversity of species compared to more mesic habitats. What is most distinctive about Namibian biodiversity is its high degree of endemism (Barnard 1998).

Unlike the concentration of biodiversity in the north-east, the great majority of Namibia's endemic species are found in the dry western and north-western regions (Fig. 12, brown map indicator) (Barnard 1998, Mendelsohn et al. 2002). The patterns of endemism reflect the importance of arid habitats in supporting unique and specially adapted species.

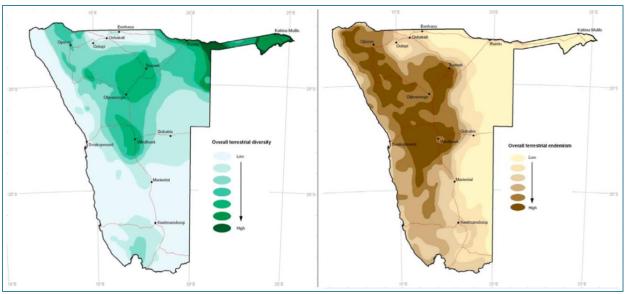


Figure 13: Shows a comparison of overall terrestrial species diversity (green) against overall endemism (brown), with the most endemism observed within operations route resulting in a "Red Flag" in terms of environmental risks.

Endemic species, particularly of birds, mammals and reptiles, are concentrated in the escarpment zone. In the Namib, endemics are associated with the dunes, rocky inselbergs and hills, and the sandy and gravel plains. For instance, approximately 60 reptile species (50% of all Namibian endemic reptiles) are endemic to, or found mainly in, Namibia's Namib Desert (Griffin 1998). In birds, the greatest diversity of southern African endemics is centred on the arid savannah and Karoo biomes and extends into the escarpment (Brown et al. 1998). Highland areas of the country, including Waterberg, Khomas Hochland, Karas Mountains, Brandberg, inselbergs in the Sperrgebiet and the karstveld are particularly important for many endemic plants (Mendelsohn et al. 2002).

In respect to the TradePort Namibia's operations, habitats of special ecological importance and therefore requiring special care for both richness of species generally and of endemic species include (Barnard 1998):

- The coastal zone;
- The Namib sand sea and adjacent gravel plains;
- The winter-rainfall desert zone

3.1.7 Protected Terrestrial Areas

Land uses outside of protected areas are still generally defined by broad farming practices. Within the project area in the northeast of Namibia, the important land-uses include timber and non-timber forest products, fish, wildlife and tourism benefits. About 14% of this area is

under conservancies and community forests, however, 82% of total household income comes from non-farming activities (MET, 2018).

Critically, an important outcome of Namibia's policy and legislative framework to devolve rights over wildlife, tourism and forestry to local land owners and custodians is that land adjacent to protected areas is often more suited and more profitable under wildlife and tourism than under conventional farming.

3.2 SOCIO-ECONOMICAL ENVIRONMENT

3.2.1 Demographic Profile

With a human population of about 2.4 million people, Namibia has one of the lowest population densities in the world, on average about 2.5 people per km² (NSA, 2013 and NPC, 2017). The population is unevenly distributed with about 35% living in towns and villages. Walvis Bay is a harbour Town in central west of Namibia in the Erongo Region and thus a Port Hub, with a population size of 62,096 people (NSA, 2014). On the other hand, the total population of the Grootfontein Urban Constituency/ town of Grootfontein in 2011 was 24878 (NSA, 2014).

The main source of income within the Grootfontein Urban Constituency is from wages and salaries (72.6%), and with 10% from old-age pension; 6.4% from business activities and 5.36% from cash remittances (NSA, 2013).

The private sector employees 49.9% of the employed sector within the //Karas Region, while the government sector employees 15.8% and the parastatal sector 13.5%. The main employment industry is the agriculture sector with roughly 32.4% employed in this sector; followed by public administration and defence with 8.5% (NSA, 2013). The Grootfontein Urban Constituency has an unemployment rate of 27.7% (NSA, 2013 and NSA, 2014).

3.2.2 Heritage Profile

The Archaeological consideration indicates that southern Namibia presents a marginal environment for human occupation, and may thus have been quite inimical to settlement. Grootfontein has a rich history and a number of architectural heritage buildings. These buildings form part of the history of the town and the uniqueness of the town which should be protected.

With respect to Walvis Bay, there are several national monuments in Walvis Bay, however these are within very safe distance from the Port and not within the NamPort premises. No other structures, sites or spheres of heritage of cultural significance was determined to be in very close proximity to the site.

Nonetheless, it must be noted that a search and find procedure should be followed in accordance with the stipulations of the Namibian National Heritage Act in the highly unlikely event that artefacts are found in the sand mining area.

3.3.11 Municipal Services

As part of the 2012 Basic Assessment Process, a Services Report for the Atlantis Industrial areas was conducted, and this report is attached as Appendix I. This highlights the services available in the area and what capacity the municipality has to take on services for a new development.

The following are an approximation of the Municipal services required for the proposed development, taking into consideration that final quantities will be applied for in the planning and design phase of the facility:

1. Water:

- a. <u>Walvis Bay</u>; high quality, potable water from aquifers in the Kuiseb River is available to both residents and industry. Occasional surface flow recharges the underground aquifers of the Kuiseb River, which has its headwaters in the central highlands of Namibia and is approximately 330 km long. Due to the increasing demand for water, a desalination plant was constructed near Swakopmund to upsurge the supply of water to the coast.
- b. <u>Grootfontein</u>; the water supply situation in the region is split between two key service providers: the Directorate of Water Supply and Sanitation Coordination, and NamWater. NamWater, as the bulk water supplier, operates different schemes in six constituencies provides portable water to the town in bulk and the municipality distributes it for the various industrial and residential users.

2. Electricity:

- a. <u>Walvis Bay</u>; There is an ample supply of electricity to serve the needs of Walvis Bay, as well as to accommodate new developments. Currently 29-Megawatt power is consumed, but 35 Megawatt is available (WBM, 2019). All erven in Walvis Bay have access to telecommunication services.
- b. <u>Grootfontein</u>; There are two service providers providing electricity in the region. The first, NamPower, has five substations of which two have a capacity of 132 Kv each, while the remaining three each operate at a capacity of 66 Kv. Secondly CENORED, has capacities for supplying more than 2 539 total customers with over 6 756.54 MwH of electricity per annum.

3. Solid Waste Removal

- a. <u>Walvis Bay; boosts a well</u> maintained sewage network ensures that waste water is removed from households and businesses. Some of this water is also purified for gardening purposes only. Municipal refuse teams collect refuse from the different suburbs as per the collection schedule. Each household and business is issued with large refuse bins.
- b. <u>Grootfontein</u>; seems to have a good track record of waste and garbage disposal with 96% disposing of waste and garbage through the regular municipal collection system. Unfortunately there are still a small percentage (1.4%) that illegal dump their garbage and rubbish on the roadside (NSA, 2014).

4. APPROACH TO EIA PROCESS AND PUBLIC PARTICIPATION

This chapter presents the approach to the Environmental Scoping Assessment process, for the proposed TradePort Namibia's trade operations and gives particular attention to the legal context and guidelines applicable to this assessment. The assessment approach and the steps in the Public Participation component of this scoping report were undertaken in accordance with Regulations 29 and 30 of Government Notice No. 30 of 2012. Overall, this section highlights information including the approach to stakeholder engagement, identification of issues, overview of relevant legislation, and key principles and guidelines that provide the context for this scoping assessment process. Hence, in a nutshell, the purpose of the environmental assessment is to:

- Address issues that have been identified through the Scoping Process;
- Assess alternatives to the proposed activity in a comparative manner;
- Assess all identified impacts and determine the significance of each impact; and
- Recommend actions to avoid/mitigate negative impacts and enhance benefits.

4.1 OVERVIEW OF APPROACH ADPTED FOR COMPILING THE SCOPING AND EMP REPORTS

The objectives of the environmental scoping assessment are noted in Section 1 of this Report. Section 6 of this Scoping Report includes a summary of the findings, the overall conclusions and the recommendations. The Scoping Report was made available for a 30-day I&AP and authority review period, as outlined in the EMA Regulations of 2012. Although adverts were put in two local newspapers (the New Era (**31 March** and **14 April 2020**) and Confidente (**02** and **16 April 2020**), no responses or inputs were received.

As previously noted, the Scoping Report includes an EMP (**Appendix C** of this Report). The EMP is based broadly on global environmental management principles and embodies an approach of continual improvement and mitigation actions.

These are drawn primarily based on the identified potential impacts for both the construction and operational phases of TradePort Namibia's proposed operations. If the project components are decommissioned or re-developed, this will need to be done in accordance with the relevant environmental standards and clean-up / remediation requirements applicable at the time.

4.2 LEGAL CONTEXT FOR THIS EIA

In accordance with the provisions of the Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 gazette and the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007), the activity to be undertaken by TradePort Namibia (Pty) Ltd may not be undertaken without an Environmental Clearance Certificate.

4.3 LEGISLATION AND GUIDELINES PERTINENT TO THIS ENVIRONMENTAL ASSESSMENT

Key acts and policies currently in force include:

- Namibia's Environmental Assessment (EIA) Policy for Sustainable Development and Environmental Conservation (1995);
- Environmental Management Act (No. 7 of 2007);
- Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012);
- Namibia Agriculture Policy of 2015;
- Namibia Vision 2030.

As the main source of legislation, the Namibian constitution makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws (those of relevant to this project are listed in Table 2) intended to protect the natural environment and to mitigate adverse environmental impacts.

Namibia's policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies can be and are used in providing support to legal interpretation when deciding cases.

4.3.1 Environmental Management Act No. 7 of 2007

The environmental management act No.7 of 2007 aims to promote the sustainable use of natural resources and provides the framework for the environmental and social impact assessment, demands precaution and mitigation of activities that may have negative impacts on the environment and provision for incidental matters. Furthermore, the act provides a list of activities that may not be undertaken without an environmental clearance certificate.

The purpose of the Environmental Management Act is:

- a) to ensure that people carefully consider the impact of developmental activities on the environment and in good time
- b) to ensure that all interested or affected people have a chance to participate in environmental assessments
- c) To ensure that the findings of environmental assessments are considered before any decisions are made about activities which might affect the environment see *Figure 14*.

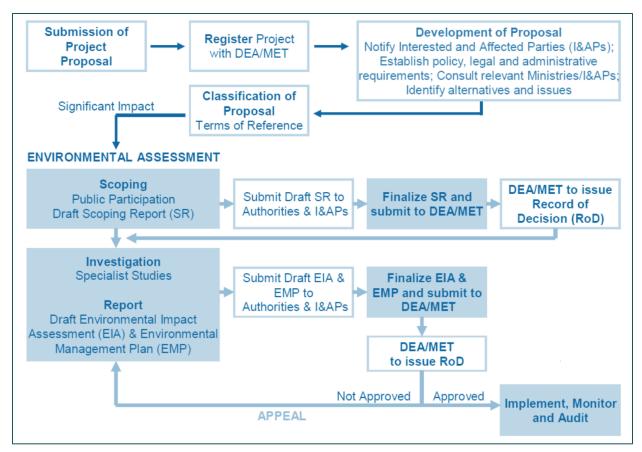


Figure 14: Illustration of the environmental assessment process in Namibia (Source: Risk Based Solution)

4.3.2 Environmental Assessment Policy (1995)

The Environmental Assessment Policy for Sustainable development and Environmental Conservation emphasize the importance of environmental assessments as a key tool towards implementing integrated environmental management. Sets an obligation to Namibians to prioritize the protection of ecosystems and related ecological processes.

The policy subjects all developments to environmental assessment and provides guideline for the Environmental Assessment. The policy advocates that Environmental Assessment take due consideration of all potential impacts and mitigations measures should be incorporated in the project design and planning stages (as early as possible).

4.3.3 Other Legal Requirements

In addition to the EMA and the Environmental Assessment Policy, there exist other regulatory frameworks that MDL must comply with. This is due to the supporting infrastructure that are needed to compliment the proposed logistics hub. As such, MDL will be required to obtain additional specific permits for the supporting infrastructure as listed in table 4 below. The process of obtaining the additional permits can be undertaken concurrently to the EIA process.

Furthermore, the proponent has the responsibility to ensure that the project activities conform to all other relevant legal documents and guidelines as listed in **Table 5** below).

| Legislation | elevance | | |
|---|---|--|--|
| Namibian Ports Authorities Act 2 of 1994 | Use of the Port services and facilities | | |
| National Transport Services Holding Company Act 29 of 1998 | Use of TransNamib services and facilities | | |
| Petroleum Products and Energy Act 13 of 1990, as amended | Disposal of used oil | | |
| Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990 | Exploitation of natural resources in the EEZ | | |
| Marine Resources Act 27 of 2000, and accompanying regulations | Discharges into the sea | | |
| Seashore Ordinance 37 of 1958 | Removal of living and non-living resources from seashore or seabed and depositing of rubbish within 3 nautical miles of the shore | | |
| Marine Traffic Act 2 of 1981, as amended | Right of innocent passage through the territorial sea, for all ships | | |
| Marine frame Act 2 of 1901, as amended | Regulation of marine traffic within the Namibia EEZ | | |
| Wreck and Salvage Act 5 of 2004 | Wrecks and salvaging | | |
| | Pollution prevention | | |
| Prevention and Combating of Pollution of the | Discharge of oil | | |
| Sea by Oil Act 24 of 1991 | Prevention/removal of marine pollution by oil | | |
| Immigrations Control Act 7 of 1002 | Employment/Work permits | | |
| Immigrations Control Act 7 of 1993 | Priority to be given to employment of Namibians | | |
| Merchant Shipping Act 57 of 1951 | Safety of vessels at sea | | |
| | • Control of dumping of substances in the sea within 12 nautical miles of the Low Water Mark. | | |
| Dumping at Sea Control Act 73 of 1980 | • Prevent pollution of the sea and marine life, damage to amenities and interference with other marine users. | | |
| Labour Act, 1992, (Act No. 6 of 1992) and | Lour matter | | |
| Regulations Related to Health and Safety of Employees | Health and Safety of Employees | | |

Table 5: Other relevant legislation and applicability thereof (Source: Risk Based Solution)

4.3.4 Precautionary and Polluter Pays Principles

The Precautionary Principle is worldwide accepted when there is a lack of sufficient knowledge and information about proposed development possible threats to the environment. Hence if the anticipated impacts are greater, then precautionary approach is applied.

Equally, the Polluter Pays Principle ensures that the proponent takes responsibility of their actions. Hence in cases of pollution, the proponent bears the full responsibility and cost to clean up the environment.

4.4 PRINCIPLES FOR PUBLIC PARTICIPATION / CONSULTATION

The PPP for this Scoping Process was driven by a stakeholder engagement process that includes inputs from authorities, I&APs and the project proponent. In respect to provisions of the EIA Regulations, "Public Consultation" means a process referred to in regulation 21, in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters. This stems from the requirement that people have a right to be informed about potential decisions that may affect them and that they must be afforded an opportunity to influence those decisions. Effective public participation also improves the ability of the Competent Authority (CA) to make informed decisions and results in improved decision-making as the view of all parties are considered.

Contrary, it is important to recognize and highlight two key aspects of public participation which must be considered at the outset:

- There are practical and financial limitations to the involvement of all individuals within a PPP. Hence, public participation aims to generate issues that are representative of societal sectors, not each individual. Consequently, the PPP is designed to be inclusive of a broad range of sectors relevant to the proposed activity.
- The PPP will aim to raise a diversity of perspectives and will not be designed to force consensus amongst I&APs. Certainly, diversity of opinion rather than consensus building is likely to enrich ultimate decision-making. Therefore, where possible, the PPP will aim to obtain an indication of trade-offs that all stakeholders (i.e. I&APs, technical specialists, the authorities and the development proponent) are willing to accept with regard to the ecological sustainability, social equity and economic growth associated with the project.

4.5 PUBLIC PARTICIPATION PROCESS

The key steps and or approach adopted for this particular Scoping assessment has been confirmed with the DEA through the registration of the proposed activity / operations on their Online EA system (*Figure 15*).

All advertisements, notification letters and emails etc. served to notify the public and organs of state, on both the call for registration as I&APs and of the availability of the Scoping and EMP reports for an opportunity to comment or provide input on the reports. Despite the national Lockdown due to the COVID19, which affected the possibility for public meetings, adverts were placed consecutively (at 14 days interval) in two local newspapers (the New Era (**31 March** and **14 April 2020**) and Confidente (**02** and **16 April 2020**) in order to notify and inform the public of the proposed projects and invite I&APs to register.

The correspondence sent to or received from I&APs during the Scoping Phase shall be included in Appendices and shall include a detailed comment-response record.

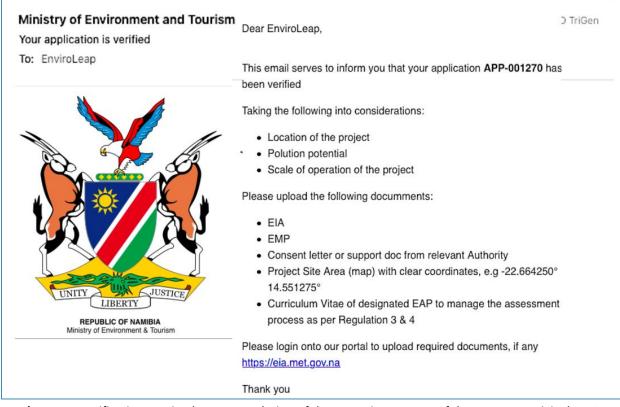


Figure 14: Notification received upon completion of the screening process of the propose activity by DEA

4.6 AUTHORITY CONSULTATION DURING THE EIA PHASE

Authority consultation is integrated into the PPP, with additional one-on-one meetings held with the lead authorities, where necessary. A pre-application meeting was scheduled with the relevant competent authorities prior to the Lock-down, however were later cancelled. It is proposed that the Competent Authority (DEA) as well as other lead authorities be consulted as necessary and at various stages during the application review process of the DEA. During the Scoping phase, the following authorities were identified and consulted (see **Appendix C**) for the purpose of consultation:

- Department of Environmental Affairs, Ministry of Environment, Forestry and Tourism
- Namibia Ports Authority, Ministry of Works and Transport
- TransNamib (Pty) Ltd Group, Ministry of Works and Transport
- Walvis Bay and Grootfontein Municipalities

4.8 APPROACH TO IMPACT ASSESSMENT AND SPECIALIST STUDIES

Potential environmental impacts were identified through both desktop literature review and consultation with I&APs, regulatory authorities, specialist and Enviro-Leap Consulting. In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The impacts are discussed under issue headings in this section. The discussion and impact assessment for each sub-section covers the construction, operational, decommissioning and closure phases where relevant. This is indicated in the table at the beginning of each sub-section. Included in the table is a list of project activities/infrastructure that could cause the potential impact per farming phase. The activities/infrastructure that are summarized in this chapter, link to the description of the proposed project (see Section 6 of the EIA report).

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the ERCP report that is attached in **Appendix C**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only.

| | | PART A: DEFINITION AND CRITERIA | |
|--|----|--|--|
| Definition of SIGNIFICANC | E | Significance = consequence probability | |
| Definition of CONSEQUENCE | | Consequence is a function of severity, spatial extent and duration | |
| Criteria for ranking of the SEVERITY/NATURE | н | Substantial deterioration (death, illness or injury). Recommended level will often be violated. Vigorous community action. Irreplaceable loss of resources. | |
| of environmental impacts | М | 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. | |
| | | 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. Favorable publicity. | |
| Criteria for ranking the | L | Quickly reversible. Less than the project life. Short-term | |
| DURATION of impacts | М | Reversible overtime. Life of the project. Medium-term | |
| | H | Permanent beyond closure – Long-term. | |
| Criteria for ranking the | L | Localized-Within the site boundary. | |
| SPATIAL SCALE of | М | Fairly widespread–Beyond the site boundary. Local | |
| Impacts | Н | Widespread – Far beyond site boundary. Regional/national | |

Table 6: Criteria for Assessing Impacts

Both the criteria used to assess the impacts and the method of determining the significance of the impacts is outlined in **Table 6**. This method complies with the method provided in the Namibian EIA Policy document and the draft 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 consequence 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.

| PART B: DETERMINING CONSEQUENCE | | | | | | | |
|---------------------------------|--------------|---|------------------|-------------------|-------------------|--|--|
| | SEVERITY = L | | | | | | |
| DURATION | Long-term | Н | Medium | Medium | Medium | | |
| | Medium term | М | Low | Low | Medium | | |
| | Short-term | L | Low | Low | Medium | | |
| | | | SEVERITY = M | | | | |
| DURATION | Long-term | Н | Medium | High | High | | |
| | Medium term | М | Medium | Medium | High | | |
| | Short-term | L | Low | Medium | Medium | | |
| | | | SEVERITY = H | | | | |
| DURATION | Long-term | н | High | High | High | | |
| | Medium term | м | Medium | Medium | High | | |
| | Short-term | L | Medium | Medium | High | | |
| | | | L | М | Н | | |
| | | | Localized Within | Fairly widespread | Widespread Far | | |
| | | | site boundary | Beyond site | beyond site | | |
| | | | Site | boundary | boundary | | |
| | | | | Local | Regional/national | | |
| | | | | SPATIAL SCALE | | | |

| PART C: DETERMINING SIGNIFICANCE | | | | | |
|----------------------------------|---------------------|---|--------|--------|--------|
| PROBABILITY | Definite/Continuous | Н | Medium | Medium | High |
| | Possible/frequent | М | Medium | Medium | High |
| impacts) | Unlikely/seldom | L | Low | Low | Medium |
| · · · | | | L | М | Н |
| 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. |

*H = high, M = medium and L = low and + denotes a positive impact.

This section outlines the assessment methodology and legal context for specialist studies, as recommended by the DEA 2006 Guideline on Assessment of Impacts. In addition to the above, the impact assessment methodology includes the following aspects:

Spatial extent – The size of the area that will be affected by the impact/risk:

- Site specific;
- Local (<10 km from site);
- Regional (<100 km of site);
- National; or
- International (e.g. Greenhouse Gas emissions or migrant birds).

Consequence – The anticipated consequence of the risk/impact:

- Extreme (extreme alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they permanently cease);
- Severe (severe alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Substantial (substantial alteration of natural systems, patterns or processes, i.e. where environmental functions and processes are altered such that they temporarily or permanently cease);
- Moderate (notable alteration of natural systems, patterns or processes, i.e. where the environment continues to function but in a modified manner); or
- Slight (negligible alteration of natural systems, patterns or processes, i.e. where no natural systems/environmental functions, patterns, or processes are affected).

Duration – The timeframe during which the impact/risk will be experienced:

- Very short term (instantaneous);
- Short term (less than 1 year);
- Medium term (1 to 10 years);
- Long term (the impact will cease after the operational life of the activity (i.e. the impact or risk will occur for the project duration)); or
- Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient (i.e. the impact will occur beyond the project decommissioning)).

Probability – The probability of the impact/risk occurring:

- Very likely;
- Likely;
- Unlikely;
- Very unlikely; and
- Extremely unlikely.

5. ASSESSMENT OF ALTERNATIVES AND IMPACTS

5.1 ASSESSMENT OF IMPACTS AND MITIGATION

This chapter discusses the alternatives, as well as the selection process of the preferred alternatives that have been considered and assessed as part of the Scoping Phase. The 2012 EIA Regulations (GG4878) define "alternatives", in relation to a proposed activity, "as different means of meeting the general purpose and requirements of the activity, which may include alternatives to the:

- property on which or location where the activity is proposed to be undertaken;
- type of activity to be undertaken;
- design or layout of the activity;
- technology to be used in the activity; or
- operational aspects of the activity; and
- includes the option of not implementing the activity".

The Scoping Report therefore provided a full description of the process followed to reach the proposed preferred activity, site and location within the site. It further includes the following as a minimum:

- The consideration of the no-go alternative as a baseline scenario;
- A comparison of the reasonable and feasible alternatives; and
- Providing a methodology for the elimination of an alternative.

5.1.1 NO-GO ALTERNATIVE

The no-go alternative assumes that the proposed project will not go ahead i.e. the proposed TradePort Namibia's trade operations (import and export of mineral and fuel commodity and the construction of associated facilities) does not realize. This alternative entails that the trade operations would not drive any environmental change and result in no additional environmental impacts on the warehouse sites and along the haulage route.

It favors the *status quo* or baseline against which other alternatives are compared and will be considered throughout the report. At present, the proposed sites is utilized for similar operations and thus no virgin natural environment shall be affected by the proposed operations.

The Namibian domestic economy, the world's largest marine-diamond producer has been hit by a regional drought and a slump in South Africa, to whose currency the Namibian dollar is pegged. Therefore, a need for enhanced trade activities to catalyze the economic recovery and improved micro-economic throughout the country exists.

Many other socio-economic benefits are expected to result from the development of this project such as a contribution to employment creation and local economic development. While, the development of the proposed trade operation will also result in negative

environmental impacts, the positive impacts of the proposed operations outweigh its negative impacts.

5.1.2 ALTERNATIVES FOR SITES SELECTION

The Port of Walvis Bay is selected as the preferred export site for the proposed project taking into account the following consideration of alternatives Location and suitable routing infrastructure i.e. rail or road network and the capacity of alternative port facilities.

While the Lüderitz Port is closer to Grootfontein, its capacity is saturated and thus unable within the current capacity (insufficient storage facilities / space) to handle additional, particularly the bulk mineral commodity. Therefore, the Grootfontein-to-Walvis Bay Port route is selected as the most suitable and available alternative.

The preferred sites location for the construction of the "Warehouse facilities" both at the Walvis Bay Port and in Grootfontein are within existing industrial areas used by similar operation of TransNamib and NamPort. These site's suitability over any other sites has been determined in terms of the site selection requirements associated with bulk import-export trading operations namely: (i) key environmental attributes; (ii) spatial character; and (iii) proximity to sensitive receptors (settlement or civil structures).

5.1.2.1 Key environmental attributes

Overall, the operations of TradePort Namibia (PTY) Ltd presents no potential for significant negative socio-economic and environmental impacts as the preferred transportation route, mode and storage infrastructure are based on industrial best practice principles and approach. The route and primary mode of transport which is "Rail" for the most operations, and to a lesser degree "Road" offers, a combined benefit (*Table 7*) of the least potential negative impacts on the receiving environments.

| ALTERNATIVE DESCRIPTION: TRANSPORT MODE | | | | | | |
|---|--|--|--|--|--|--|
| | Walvis Bay & Grootfontein Any Other e.g. Lüderitz | | | | | |
| Advantages | Has the Best capacity for bulk commodities storage Best railway network connection and thus minimum potential traffic impacts | Closest Route Possible, thus best option for cost saving The Port has potential for future expansion | | | | |
| Disadvantages | Farthest route from the Northern Cape, thus has the potential to raise operational costs Need for construction of Warehouse facility shall delay project commencement | Inadequate storage capacity, thus the construction of warehouse facility is required. Both road and rail haulage routes necessary | | | | |
| Preferred Alternative | Both rail and Closed-top Warehouse storage methods offers the least negative socio-environmental impacts | Combination of both haulage and storage methods has to be considered | | | | |

5.1.2.2 Spatial character

Both sites are located in an areas already zoned for industrial development (within TransNamib and NamPort's premises) and are appropriately serviced, thus providing the needed support infrastructure. As a result, the proposed operations conforms well to the existing development character and zoning of the area.

5.1.2.3 Proximity to sensitive human structures

Both sites (Walvis Bay and in Grootfontein), will impact less on potential sensitive receptors (biophysical features including local community structures, areas of natural conservation and or archaeological significance) present in the area, purely as a result of it being located further away from these structures.

This is a noteworthy consideration both in terms of potential noise and air emission, but also in terms of the inherent human health risk associated with the handling, transportation and storage of the different mineral and fuel commodities. Equally, the proposed operations of the project may have insignificant visual impact on sensitive visual receptors as the infrastructure or facilities to be constructed blends-in very well with most of the existing structures both at the Port and Rail stations.

5.1.3 ALTERNATIVES HAULAGE METHODS – RAIL VS. ROAD

The project / activity description as presented provides for two options or alternatives to be used, and these have their own positive and negative impacts. Table 8 presents a comparison of the options (Rail vs. Road) in terms of their advantages and disadvantages and suggest a preferred option based on the information presented.

| ALTERNATIVE DESCRIPTION: TRANSPORT MODE | | | | | | |
|---|--|--|--|--|--|--|
| | Rail | Road | | | | |
| Advantages | Excellent option for containment of traffic impacts, and reduced hauling frequency. | Excellent option for speedy transportation, but requires a convoy of truck moving at the same go | | | | |
| Disadvantages | More expensive than road, and limitation of rail axle capacity at sections or the rail- line resulting in slow shipment. | | | | | |
| Preferred Alternative | Best option for bulk container transportation and less frequency | Combination of methods has to be considered, preferable method as a contingency measure | | | | |

 Table 8: Comparison of both haulage and handling methods

Alternative Haulage method: the hauling options considered entails the transportation of both the fuel and mineral commodities both by "Rail" or "Road" and in trucks and tankers (Fuel and petroleum commodity), and closed containers for the bulk mineral commodity. In respect to haulage of the mineral commodity, the "Rail Option" is highly favorable against the "Road Option".

This is so, given that TransNamib already has a good railway connection between Grootfontein and Walvis Bay, which reduces potential road users-conflict. Also, the transportation and storage of the bulk commodity in closed containers drastically reduces all potential dust generation, surface and soil contamination impacts in case of an accident.

5.1.4 ALTERNATIVES STORAGE METHODS – OPEN / CLOSED WAREHOUSE VS. CONTAINERS

Consideration for alternatives in respect to storage of the commodities as presented in the "Projection Description" section, entails two most suitable options namely the "Closed-top Warehouse and Storage in Closed-containers, and the third and least desirable option being stockpiling the bulk on Concrete Slab. Table 9 presents a comparison of the different storage alternatives in terms of their advantages and disadvantages and suggest a preferred option based on the information presented.

| ALTERNATIVE DESCRIPTION: STORAGE FACILITY'S | | | | | | |
|---|---|--|--|--|--|--|
| | Closed-top Storage | Open Space | | | | |
| Advantages | Closed Warehouse, is excellent containment of dust impacts. Equally, closed containers are offers the most suitable for storage particularly given that the Port of Walvis Bay has sufficient storage space capacity | Offers greatest opportunity for cost cutting and allows for the proposed operations to commence immediately, by use of concrete slabs | | | | |
| Disadvantages | Possible delay in start of project as construction of warehouse facility is required, while in respect to containers the cost of containers may escalate operational costs | Has potential for significant dust impacts, consequently resulting in great health safety risks and visual nuisance | | | | |
| Preferred Alternative | While Containers allows for the direct delivery of commodity to the Port by rail, eliminating need for temporally storage at Grootfontein, it is not financially sustainable. Therefore, Close-top Warehouse storage is the most preferred option offering opportunity for use of facility for other uses on cessation of operation. | Not suitable for either sites in Walvis Bay and or in Grootfontein | | | | |

Table 9: Comparison of the two "Closed-top" storage methods against "Open Space" Stockpile

5.1.5 CONCLUDING STATEMENT ON ALTERNATIVES

Namibia has a huge potential to be an international logistics hub for the inland areas of Southern African Development Community (SADC). A milestone indicator of the realization of this goal, is the advanced expansion of the Port of Walvis Bay container trans-shipment hub aimed at ensuring that Namibia provides a gateway for export of bulk commodity to international markets.

The Port of Walvis Bay is thus selected as the preferred export site for the proposed project taking into account the following consideration of alternatives; Location, alternatives to the use of Grootfontein-to-Walvis Bay Port route was considered against the Grootfontein-to-Lüderitz Port.

Alternative Haulage method: the hauling options considered entails the transportation of the commodity from South Africa either by "Rail" or "Road" and in safely secured bulk bags or closed containers directly of the Walvis Bay Port. The "Rail Option" is highly favourable given that TransNamib already has a good railway connection between Grootfontein and Walvis Bay, which reduces potential users-conflict, should the road option be explored. The transportation and storage of the commodity in closed containers drastically reduces all potential dust generation, surface and soil contamination impacts.

Potential environmental impacts were identified by Enviro-Leap Consulting in consultation with I&APs, regulatory authorities, specialists and TradePort Namibia (Pty) Ltd. In case of social impacts, the assessment focused on third parties only (third parties include members of the public and other local and regional institutions) and did not assess health and safety impacts on workers because the assumption was made that these aspects are separately regulated by health and safety legislation, policies and standards.

The impacts are discussed under issue headings in this section. The discussion and impact assessment for each sub-section covers the construction, operational, decommissioning and closure phases where relevant. This is indicated in the table at the beginning of each sub-section. Included in the table is a list of project activities / infrastructure that could cause the potential impact in line specific operations aspect. The activities / infrastructure that are summarized in this section of the report, links to the description of the proposed TradePort Namibia's operations (see Section 2 of the Scoping report).

The No-Action Alternative - A comparative assessment of the environmental impacts of the 'no-action' alternative (a future in which the proposed import and exporting trading activities do not take place) has been undertake. An assessment of the environmental impacts of a future, in which the proposed activities do not take place, may be good for the receiving environment because there be no any potential negative environmental impacts associated with the proposed activities (import and exports trading).

The likely negative environmental impacts of other current and future user that may still happen in the absence of the proposed activities includes: Natural dust and generation of particulate matter during windy event particularly resulting from other regional economic activities such as construction, mining and tourism, pollution and environmental degradation associated with current land use around Walvis Bay and the Port.

Potential economic gains that may never be realized if the proposed project activities do not go-ahead include: loss in income for both TransNamib and NamPort, unemployment and the loss of socio-economic benefits derived from current and future export and import trading opportunities. Most importantly, is the reduced regional integration in terms of trade and

investment, loss of direct and indirect contracts and employment opportunities, export earnings, foreign direct investments and various taxes payable to the Government.

5.2 ASSESSMENT OF IMPACTS AND MITIGATION

Mitigation measures to address the identified impacts are discussed in this section and included in more detail in the ERCP report that is attached in **Appendix C**. In most cases (unless otherwise stated), these mitigation measures have been taken into account in the assessment of the significance of the mitigated impacts only

5.2.1 IMPACTS ON THE BIOPHYSICAL ENVIRONMENT

Potential impacts in respect to the Biophysical (Table 10) environment involves particularly the terrestrial and marine ecology (Table 11) environments and relate mainly to the handling and storage of the commodities both at the TransNamib and NamPort premises (both in Grootfontein Walvis Bay respectively).

| Impact Event | Disturbances to the terre | strial ecology including livest | ock and wildlife | | | |
|--------------------|---|--|------------------|--|--|--|
| Description | The Warehouse storage facilities shall be located in build-up environments, and within an industrial land-use zone and with little to no significant ecological sensitivity. However, the railway line earmarked for transportation of the commodity runs through parts of the country with a variety of land use zonation including farms, town and national parks. While the use of the rail transport does not present direct impacts, secondary impacts may be associated with the handling and haulage of manganese. | | | | | |
| Nature | Impacts in the terrestrial environment as a result of the project could result from the following: Generation of dust contaminating the environment Secondary impacts such as Fauna and Flora Poaching Train – animal (Wild / Livestock) collisions, where the railway passes through farms and national parks. Lighting impacts on Bird flying at night | | | | | |
| 5 | | ology impacts apply are high e which presents a long term | | | | |
| Construction Phase | Operational Phase | Decommissioning Phase | Post Closure | | | |
| N/A | Transportation of commodities by rail Handling of wagons / containers at the Port | N/A | N/A | | | |
| Severity | Taken together, the disturbances will have a high severity in the unmitigated scenario. In the mitigated scenario, many of these disturbances can be prevented or mitigated to acceptable levels, which reduces the severity to low. | | | | | |
| Duration | | otential impacts is subject to | | | | |

Table 10. Impact on the Terrestrial Ecology

| Spatial Scale | , | Low, localized although the affected environment extend the length of the transportation route | | | | | | |
|---|---|--|---------------|------------------|---------------------|----------------|--|--|
| Probability | - | v, most imp he rai-line | act are conta | ined by the buff | er fence (rail rese | rve) on either | | |
| Unmitigated | Severity M | | | | | | | |
| Mitigated | Severity L | DuratioSpatialConsequencProbability ofSeveritynScaleeOccurrenceSignificanceLLMLLM | | | | | | |
| Conceptual Description of Mitigation Measures | LLMLMThe consideration and choice of transporting the mineral and fuel commodity on rail instead of road, offers a great opportunity for significantly preventing potential secondary impacts relating to trucks-animal-collision, potential spills / contamination of soil and groundwater during road accident incidents. Hence, it is advisable that the proposed is implemented with strict use of the identified rail transport route and mode. | | | | | | | |

Table 11. Impact on the Marine Ecology

| Impact Event | Disturbances to the marin | e ecology including the fish s | tock and other marine life | | | |
|------------------------|--|--------------------------------|-----------------------------|--|--|--|
| | | arine Ecology relates manly | | | | |
| | | contamination of sea water | | | | |
| | | | - | | | |
| | chemical or biological oxy | gen demand (COD or BOD, r | espectively). | | | |
| Description | | | | | | |
| Description | | atters as a result handling | • | | | |
| | | in diminished oxygen levels | | | | |
| | mobile fauna to flee whil | e sessile and sediment-dwel | ling organisms die. When | | | |
| | oxygen is no more availa | able for the break-down of | discharged matter, other | | | |
| | microbial communities tal | ke over, leading to emissions | of sulphide. | | | |
| | The effects of both Sulp | hur and Manganese on the | immune response in the | | | |
| | studied animals vary, the | y are all affected in some w | ay. Overall, while certain | | | |
| | | d Manganese doses are esser | | | | |
| Nature | | kic. Manganese is abundant ir | | | | |
| | | d to the sediments it usual | | | | |
| | effects. However, hypoxia releases the manganese from the sediments, making | | | | | |
| | it a threat to the health of | · | | | | |
| - | which sources of marine ecol | | | | | |
| assessment was carried | out on the operational phase | | risk. | | | |
| Construction Dhase | On emotional Phase | Decommissioning | Deat Cleanne | | | |
| Construction Phase | Operational Phase | Phase | Post Closure | | | |
| | Transportation of commodities by rail | | | | | |
| N/A | Handling of wagons / | N/A | N/A | | | |
| | containers at the | NA | | | | |
| | Port | | | | | |
| | | rio, the potential risk for se | a water contamination is | | | |
| | | mmodity handling activities | | | | |
| | | on measures. However, in the | | | | |
| | | may be well contained by | | | | |
| Severity | | inuous dust management dui | ring the loading of ore on- | | | |
| | board the ship. | | | | | |
| | The Significance of the potential impacts is subject to the proposed operation's | | | | | |
| Duration | life-time, however duration is short-term. | | | | | |

| | Low, loo | Low, localized although the affected environment extend the length of the | | | | |
|---------------------|-----------|---|----------------|------------------|---------------------|----------------|
| Spatial Scale | transpor | tation route | 2 | | | |
| | Very Lov | v, most imp | act are contai | ined by the buff | er fence (rail rese | rve) on either |
| Probability | side of t | he rai-line | | <u>.</u> | | |
| | | Duratio | Spatial | Consequenc | Probability of | |
| Unmitigated | Severity | n | Scale | e | Occurrence | Significance |
| | М | М | М | н | М | Н |
| | | Duratio | Spatial | Consequenc | Probability of | |
| Mitigated | Severity | n | Scale | e | Occurrence | Significance |
| | L | L | М | L | L | М |
| | | - | | | ust by storage an | - |
| | | | | | ensuring that m | |
| | | | | | events of accide | |
| | | | | | d in small water | bodies when |
| Conceptual | combine | combined levels of iron and manganese exceed 10 mg/L. | | | | |
| Description of | | | | | | |
| Mitigation Measures | | | | | v dissolved iron ar | • |
| | into the | into the solid, oxidized forms that can then be easily filtered from the water. | | | | |
| | Althoug | h it might l | pe effective f | or larger water | bodies, the cos | t of doing so |
| | warrants | s strict com | pliance with t | he avoidance / p | revention measu | res. |

5.2.2 IMPACTS ON THE SOCIO-ECONOMIC ENVIRONMENT

п

| Impact Event | Disturbances to the human receptors including pets and other household animals | | | | |
|---------------------------|---|--|--------------|--|--|
| Description | Trace amounts of Sulphur and Manganese are essential to the health of human, wildlife and plants. However, these has a tendency to accumulate in some organisms and plants which could lead to higher levels presenting potentially harmful exposures further up the food chain. It is not considered likely that Manganese pollution has any effects on the global environment. | | | | |
| Nature | Both Sulphur and Manganese compounds can enter the body by either inhalation of air containing particulate matters, ingestion of water or food containing these compounds. Inhalation of air containing high levels of these compounds can lead to a range of adverse health effects. These include hallucinations, changes in behavior, weakness, speech problems headaches, tremors, stiffness, balance problems and bronchitis. | | | | |
| | vhich sources of Health and S out on the operational phase | | | | |
| | | Decommissioning | | | |
| Construction Phase | Operational Phase | Phase | Post Closure | | |
| N/A | Transportation of commodities by rail Handling of wagons / containers at the Port | N/A | N/A | | |
| Severity | The cumulative impact emanating from TradePort Namibia's operations and other operator shall be of high severity in the unmitigated scenario. In the mitigated scenario, many of these disturbances can be prevented or mitigated to acceptable levels, which reduces the severity to low. | | | | |
| Duration | | otential impacts is subject to y long-term impacts extend ated scenario. | | | |

| Spatial Scale | | Low, localized and mainly limited to the warehouse sites in Walvis Bay and Grootfontein | | | | | |
|---|--|---|--|---------------------------------|----------------------------|----------------|--|
| Probability | | • | | ained through the commodities i | ne preferred hand nvolved. | lling, storage | |
| Unmitigated | Severity H | DuratioSpatialConsequencProbability ofSeveritynScaleeOccurrenceSignificance | | | | | |
| Mitigated | Severity L | DuratioSpatialConsequencProbability ofSeveritynScaleeOccurrenceSignificance | | | | | |
| Conceptual Description of Mitigation Measures | LLMLMIn the unmitigated scenario, the greatest risk in respect to the proposed operations would entail mainly airborne exposure to dust particles generated during the handling activities. Hence, the most appropriate measures would be to enforce exposure limits through strict work-shifts and ensuring maximum dust suppression measures. Critically, in the mitigated scenario which entails adoption of precautionary measures as identified in the EMP including the avoidance approach of the mitigation hierarchy i.e. ensure a no dust operations. | | | | | | |

Table 13. Impact on the Traffic and Noise

| Impact Event | Disturbances to town inha | abitants | | | |
|----------------------------------|--|--|-----------------------------------|--|--|
| Description | Container handling related activities may result in temporary noise producing activities. Some noise will exist due to the train and other heavy motor vehicles accessing the port and moving through town for commodity delivery as well as the operations of front-end loaders and forklifts. | | | | |
| Nature | Temporary to long-term impact are anticipated, but these shall not be entirely or significantly influence by the proposed activity but from regular TransNamib and NamPort operational activities. For rail transport minor traffic impacts are expected and is limited to a number or rail level crossings along the rail route. Noise will be the major negative impact on both residents and the tourism sector, especially at accommodation establishments situated along or near the proposed transport route through | | | | |
| D harana Dharana dumin du | Namibia and the town. | - La section de la section | alata di balance Ciara (filana an | | |
| | vhich sources of terrestrial eco out on the operational phase | | | | |
| | | Decommissioning | | | |
| Construction Phase | Operational Phase | Phase | Post Closure | | |
| N/A | Transportation of commodities by rail N/A N/A Handling of wagons / containers at the Port | | | | |
| Severity | Potential impacts will not, be associated directly to activities of TradePort Namibia's operations and therefore, in this respect and across-board and scenarios the severity will be very low | | | | |
| Duration | The Significance of the potential impacts is subject to the proposed operation's life-time, however duration is short-term. | | | | |
| Spatial Scale | Low, localized although the affected environment extend the length of the transportation route | | | | |
| Probability | Very Low, most impact ar side of the rai-line | e contained by the buffer fer | nce (rail reserve) on either | | |

| | | Duratio | Spatial | Consequenc | Probability of | |
|---------------------|--|---------|---------|------------|----------------|--------------|
| Unmitigated | Severity | n | Scale | e | Occurrence | Significance |
| 8 | L | L | н | М | L | н |
| | | Duratio | Spatial | Consequenc | Probability of | |
| Mitigated | Severity | n | Scale | e | Occurrence | Significance |
| millaucu | L | L | L | L | L | L |
| | Conceptual discussion of the mitigation measures is provided below and detailed | | | | | |
| Conceptual | in the EMP. It is recommended that project activities relating to handling and | | | | | |
| Description of | transportation must adhere strictly to both the routes assessed, use or rail | | | | | |
| Mitigation Measures | transportation only and handling of the manganese commodity in closed containers. In a case of a contingency operation which my trigger deviation of actions from the approved mitigation measures, approval must be obtained from all relevant competent authorities prior to deviation with the approved condition. | | | | | |

Table 15. Impact on the Economic Aspect

| Impact Event | Disturba | nces to the | social a | ind ecc | nomic aspects o | of the | town popul | ation |
|------------------------|---|---|----------|-------------------|--|----------|--------------|----------------|
| Description | Potential economic gains that may never be realized if the proposed project | | | | | | | |
| | activities does not go-ahead include: loss in income for both TransNamib and | | | | | | | |
| | NamPort, unemployment and the loss of socio-economic benefits derived from | | | | | | | |
| | current and future export and import trading opportunities. | | | | | | | |
| Nature | | Impacts relating to the of the local socio-economic activities may arise from | | | | | | |
| | | | | | Port operation | | | |
| | export of mineral and fuel commodity through Walvis Bay resulting in employment (positively) and noise (potential negative on residence and tourism). | | | | | | | |
| | employr | nent (positiv | vely) an | d noise | e (potential nega | ative o | on residence | and tourism). |
| Phases: Phases during | | | | | | | | ; Significance |
| assessment was carried | out on the o | perational p | ohase v | | | | isk. | |
| | | | | De | ecommissioning | ; | | |
| Construction Phase | | tional Phase | e | | Phase | | Post Closure | |
| | Transp | | of | | | | | |
| N/A | commodities by rail | | | N/A | | N/A | | |
| | | ng of wagor | | | | | | |
| | containers at the Port | | | | | | | |
| | | | | | b, this implies in the case where the activity take not enefits shall realize hence, the severity in respect to | | | |
| Covority | | | | | | | | |
| Severity | unemployment shall be very high. However, with the implementation of the | | | | | | | |
| | proposed operations, the severity of unemployment shall be reduced to medium. The Significance of the potential impacts is subject to the proposed operation's | | | | | | | |
| Duration | life-time, with a long-term potential | | | | | | | |
| Spatial Scale | | | | | | | | |
| Spatial Scale | Low, localized and only limited to the two towns (Walvis Bay and Grootfontein) Medium to High probability in respect to job creation on both the temporary | | | | | | | |
| | during construction phase of warehouse facilities and long-term during operation | | | | | | | |
| Probability | phase | | | | | | | |
| | | | Spat | ial | Consequenc | Prol | oability of | |
| Unmitigated | Severity | Duration | Scal | e | e | Oc | currence | Significance |
| ommigated | н | L | | 1 | | | I | |
| | | | Spat | ial | Consequenc | Prol | pability of | _ |
| Mitigated | Severity | Duration | Scal | | e | | currence | Significance |
| Mitigated | | M+ | | 1+ | H+ | | H+ | H+ |
| Conceptual | It is crit | | | • • • • • • • • • | tinuous commu | inicati | | emination of |
| Description of | | | | | | | | |
| Mitigation Measures | information with the local community is ensured to alleviate potential sense of social marginalization, drive gender equality and enhance the understanding and | | | | | | | |
| | | | | | | | | |

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSIONS

The proposed import and export operations by TradePort Namibia (Pty) Ltd, the Proponent along the Trans-Oranje and through the Port of Walvis Bay offers Namibia a great opportunity to expand international trade endeavor.

However, while the proposed trading operations shall create employment opportunities and thus trickling benefits down to the larger population, it may also create opportunity for unprecedented negative impacts.

Potential impacts may vary in terms of scale (locality), magnitude and duration e.g. minor negative impacts in the form of visual intrusion, dust and noise pollution especially during the handling (loading and off-loading will be experienced. Below is a summary of the likely positive impacts that have been assessed for the different phases of the proposed TradePort Namibia's import and export operations:

- Raising awareness about the benefits of ecologically sustainable natural resource use (Likely impacts are high).
- Socio-economic development and capacity building through partnering with South African Operators, skills transfer and training the import / export industry shall be achieved (Likely impacts are high).

The following is a summary of the likely negative impacts that have been assessed for the different phases of the existing sand mining project:

- Ambient Air Quality (Likely impacts are high but localized and can employ dust suppressing measures).
- Traffic and Noise impact (Likely impacts are low for traffic congestion as the preferred haulage method is rail, a method currently under-utilized).
- Ecological and biodiversity loss (Likely impacts are localized and low).
- Health and safety (Overall likely impacts are low with handling of commodities in closed warehouse and use of correct PPE).
- Accidental Spill of Hazardous substance (Likely impacts are low with a contingency and environmental management plan in place).

Marine live and sea water pollution risks / impacts are likely low if the appropriate mitigation measures as detailed in the EMP Section of this report are implemented and monitored, the proposed activities can be integrated within the TransNamib and Port of Walvis Bay's NamPort strategic business operations.

6.2 **RECOMMENDATONS**

Based on the findings of the environmental scoping assessment, which concludes that all potential negative impacts associated to the proposed TradePort Namibia's import and export operations are minimal and practical mitigation measures are available. Equally, the positive impacts can be harnessed to increase the net marginal benefits relating to the socio-economic aspects of the operations.

Enviro-Leap environmental practitioner confidently recommends that the proposed project can proceed and should be authorized by the DEA. The proposed operations is considered to have an overall low negative environmental impact and an overall moderate positive socioeconomic impact (with the implementation of respective mitigation and enhancement measures).

Based on this, it recommended that the proponent must upon obtaining their Environmental Clearance Certificate (ECC), implement all appropriate management and mitigation measures and monitoring requirements as may be stipulated in their EMP and or as condition of the ECC. These measures must be undertaken to promote and uphold good practice environmental principles and adhere to relevant legislations by avoiding unacceptable impacts to the receiving environment.

Taking into consideration the findings of the environmental scoping assessment process and given the national and regional strategic requirements for infrastructure development and economic growth, it is the opinion of the EAP that the project benefits outweigh the costs and that the project will make a positive contribution towards steering Namibia on its pathway towards its vision of becoming a Logistic Hub. Provided that the specified mitigation measures are applied effectively, it is recommended that TradePort Namibia's operations receive an ECC in terms of the Section 32 of the EMA No. 7 of 2007 and it's EIA Regulations of 2012.

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APPENDIX A – BACKGROUND INFORMATION DOCUMENT

APPENDIX B – EAP RESUME

APPENDIX C – ENVIRONMENTAL CONTIGENCY PLAN

EMERGENCY RESPONSE / CONTIGENCY PLAN

TradePort Namibia's Proposed Import-Export Trading Operations via the Walvis Bay Port, Namibia



Compiled for: TradePort Namibia (Pty) Ltd P.O. Box 22458 Windhoek, Namibia

Authored by: Mr. Vilho Pendainge Mtuleni

P. O. Box 25874, Windhoek

+264 81 232 6843





eap.trigen@gmail.com

| | Environmental Scoping Assessment and Management Plan for | | | | |
|-------------------------------------|---|--|--|--|--|
| | | TradePort Namibia's Import and Export Operations through the | | | |
| Title | Walvis Bay Port, Erongo Re | gion Namibia | | | |
| ECC Application Reference number | | | | | |
| Location | Walvis Bay Port, through the Trans-Oranje and Walvis Bay Corridor Routes | | | | |
| Proponent | TradePort Namibia (Pty) Ltd P. O. Box Windhoek Namibia, 9000 | | | | |
| Author: (EAP) 1 | Signature | Date | | | |
| Mr. Vilho P. Mtuleni | | | | | |
| Approval – Client 2 | | | | | |
| Mr. Monty Ndjavera | Atta | | | | |
| | Monty Ndjavera | | | | |
| Copy Right: | 1 | | | | |

1.0 RESPONSE CONCEPT

Possible accidents involving spill of hazardous chemical substances may include:

- Release of hazardous chemicals as a result of tankers accidents
- Release as a result of capsized or damaged wagons, containers and or tankers carrying the respective commodity (Fuel, Copper, Coal, Sulphur and Manganese) of hazardous substance or dust particles
- Accompanied by fire, explosives, property damage and involving environmental pollution with corrosive or toxic products resulting from vehicle collision
- As a result of handling of hazardous substances while in transit

Road / Rail accidents may occur at point of section the Trans-Oranje corridor while transporting the commodities and such accident may impose threats on the health and lives of communities living along the route (should such occurs near/within inhabited areas) as well as on the natural environment.

Faulty automated or mechanical accessories safety measures on the wagons, trucks and or tankers used for the transportation of the commodity may also cause spills of dangerous amounts of hazardous substances.

When hazardous substances spills on the road (tar) or nearby environment, the liquid starts to evaporate / infiltrates into the ground while dust may also be generated. The evaporation rate is proportional to ambient temperature and the size of the opening/crack, which releases the liquid.

However, with large amount of spill on the natural environment i.e. vegetation alongside the road or railway, the impact is different depending on the commodity being transported but cause harm or disturbance to the vegetation or living microorganisms that it comes into contact with. Equally, if the spill occurs in large amount the tarred surface of the road some significant effect of corrosion night as well occur and cause damage to the road surface.

Objectives

The purpose of the emergency response plan for cases involving spill of hazardous substances is as follows:

- Provide the required means to protect people's health
- Make personnel familiar with the emergency procedures and response measures
- Provide the best organizational arrangements to support the operations
- Response tasks are efficiently coordinated and managed
- Provide a procedure for resuming the normal operations.

2.0 SETTING UP EMERGENCY RESCUE CREWS

TradePort Namibia (Pty) Ltd shall set up the following emergency response steps:

- Incident Alert and Mobilisation accident reported to key authorities for recourses mobilisation
- Emergency Response emergency response and first aid to injured employees and in case another vehicle(s), other casualties
- Reconnaissance and rescue team reconnaissance and rescue of injured persons
- First-aid team first aid to injured employees and other persons
- Emergency Rescue Service fire fighting

Manpower of the authorities providing a joint response to emergency situation according to its complexity:

- Manpower and equipment of the **Department of Environmental Affairs**
- Manpower and equipment of the Emergency Rescue Services
- Manpower and equipment of the Fire Safety Local Authority Department
- Manpower and equipment of the Regional Police Unit
- Manpower and equipment of the Emergency Medical Care

3.0 TASKS

3.1 Tasks of Officials Involved in the Emergency Response Operations. Method of Action

Operations Manager of TradePort Namibia (Pty) Ltd (accountable manager):

- Becomes familiar with the situation
- Arranges for accident notification to relevant national and regional level authorities
- Designates a location for meeting and directing the manpower and equipment
- Provides directions for the actions of the emergency response units
- Requests additional manpower and equipment, if necessary
- Specifies measures ensuring the safe performance of the emergency response operations
- Supervises the task performance

Independent Environmental Officer – TradePort Namibia:

- Receives information about the situation and suggests measures for emergency response and recovery of damaged equipment
- Ensures the availability of the equipment, materials and manpower required for conducting the emergency recovery works
- Assumes the duties of a person in charge of the emergency response
- Implements any instructions the accountable manager may give

Employees of TradePort Namibia (Pty) Ltd:

- Notify the appropriate persons and agencies as envisaged in the plan
- Take actions to rescue injured persons
- Apply preliminary emergency response measures to address the incident or limit the scope of the incident envisaged in the plan
- Inform the accountable manager about the measures implemented
- Follow the instructions of the accountable manager of the rescue operations.

3.2 Tasks of the Managing Authorities; Response to Fuels or Hazardous Substance Spills.

The overall management of the rescue operations on the site is a responsibility of the appointed emergency response service provider with supervision of TradePort Namibia's Operations Manager and in collaboration with relevant authorities.

The direct operational management of the rescue personnel is a responsibility of TradePort Namibia's accountable manager on the site who interacts with the emergency response forces at a regional and or local level (affected Regional / Town Council or Municipality), organizes the operations of the emergency teams for response to disasters, and accidents, rescue and emergency recovery operations and provides assistance to the Technical Supervision Authorities to establish the reason for the incident.

3.3 Tasks of the Company Teams. Response to Fuels or Chemical Spills

3.3.1 Tasks of the Service Personnel:

- Take measures as per the operating instructions
- Notification of authorities.

3.3.2 Tasks of the Emergency Response Units:

- Task of the reconnaissance-rescue team: Immediately start observation of the situation, notify all personnel about the evacuation order issued by the Manager along with any other instructions issued.
- Task of the first-aid team: Receive materials and medicines and immediately start to provide first aid to injured persons;
- Task of the **Emergency Rescue Service** (ERS) team: Immediately start fire suppression, evacuate any personnel from the premises close to fire, and rescue people from vehicle wreckages.
- The tools and equipment to be used for emergency response include: tools from the fire-extinguisher cabinets; other suitable tools and materials in place, including the first-aid kits with the Emergency Rescue Service.

4.0 EMERGENCY NOTIFICATION AND ALERT CALL

Any member of the Company personnel must immediately notify the site manager if an incident or fire occurs. Once an emergency notification is received, the Emergency Rescue team must be immediately notified by calling, the relevant nearest local authority and police departments.

5.0 ORGANIZATION

5.1 Clarify the Situation.

The emergency team will conduct visual inspection of the affected area in order to collect full and objective information about the type, scope and original location of the incident, and the impact (vehicle wreckage, victims, chemical spills etc.).

5.2 Protection of Employees and Population

Accidents involving spills of flammable liquids will require evacuation of victims from impact areas according to evacuation plans. Employees must be evacuated opposite the wind direction. Evacuation of accident victims must be done with care and by persons trained to provide first aid, hence all drivers must undergo a first aid train and at all time carry with them a valid first aid certificate.

PPEs must be used by rescue teams where high concentrations of hazardous substances are in place. PPEs will include breathing apparatus, skin protection, protective glasses, gloves, etc.

5.3 Isolation of the Accident Scene

Isolation will be applied to limit the impact of chemical spills as follows:

- Cease any handling of hazardous chemical substances
- Activate all shut off valves at the facility
- Isolate the spill with sand or lime, manually collect the spilled material, place in buckets or bins and if still usable, use accordingly. Any residual traces of the material will be treated with sand and sawdust to the point where the area is completely dry and clean. Any waste from the cleaning will be kept in bins at the temporary storage facility for later treatment.

These operations are a responsibility of the emergency team, emergency rescuers and manpower and equipment of the ERS, Fire Safety Department of any relevant local authority along the route and other forces and equipment involved in the rescue operations.

5.4 Rescue Operations

Rescue operations include:

- Search and evacuation of victims to a safe place. This is a task of the reconnaissance-rescue team of the Company, together with manpower and equipment of the ERS, Fire Safety Department of any relevant local authority along the route
 - , and other forces and equipment involved in the rescue operations;
- Administration of first aid task of the first-aid team together with manpower and equipment of the ERS Fire Safety Department of any relevant local authority along the route

- In case of hazardous substance spill, take the victims out, place comfortable and expose to fresh air; loosen any tight clothing. Apply CPR or oxygen breathing apparatus where necessary. Immediately remove any contaminated clothes. Rinse any affected body parts with plenty of water and soap. In case of eye contact, flush victim's eyes with water for 10-15 minutes while making sure the eye lids are kept open with the thumb and the index finger and eyeballs are rolling around. To transport a victim who is at risk of seizure, place them in a stable position sideways;
- Gas removal from rooms or sites task of the emergency team together with manpower and equipment of the ERS, Fire Safety Department of any relevant local authority along the route
- Fire suppression see FIRE PLAN.
- In case of hazardous chemical spill, if a source of ignition is in place, it may cause fire and/or explosion, which may take victims and damage property. This is mostly a responsibility of the Company's fire fighting unit and the Fire Safety Department of any relevant local authority along the route

5.5 Recovery and Construction Works

Include a full review of the status of any damaged facilities at their recovery following completion of the rescue operations. These works are a responsibility of the TradePort Namibia repair teams or external contractors.

6.0 MANAGEMENT

The overall management of the rescue operations on the site is a responsibility of the company with other relevant authorities. The immediate supervision over the rescue crew and other personnel involved in the emergency and rescue operations in case of chemical spills will be a responsibility of the accountable site manager, who will also interact with the Department of Environmental Affairs, and nearest local authority.

The accountable manager of the rescue operations at the base will report to the relevant affected authorities coordinating the rescue operations about:

- Changes to the situation immediately
- Commencement of emergency response actions
- Performed rescue operations every 2 hours
- Termination of the emergency situation.

7.0 SUPPORT

7.1 Re-reconnaissance

7.1.1 Reconnaissance Objectives

The purpose of the reconnaissance is to provide timely and valid information about the situation as required for making an informed decision about the performing adequate rescue and emergency response operations at the accident area.

7.1.2 Reconnaissance Tasks

Obtain valid information in real time in order to support the rescue operations. Determine and post signs at safe areas for evacuation of personnel and population from the source of impact.

7.1.3 Reconnaissance Concept

These efforts must be focused on clarifying the situation at the site, together with the site authorities, and on the direction of chemical spill dispersion. Later, safe areas must be established to evacuate the population and site personnel.

7.1.4 Reconnaissance Organization

This is a responsibility of the reconnaissance-rescue team with the relevant affected authorities. Reconnaissance data will be reported in a timely manner to the accountable manager of the rescue operations at the Company and the Permanent Site Committee for management of rescue operations with the relevant affected authorities.

Water control is a responsibility of the Environmental Affairs Department and the relevant affected authorities. Without their authorization, the site may not resume operations when the emergency response operation is completed. Following reconnaissance, the team will perform partial clean-up and treatment away from the impact area.

7.1.5 Reconnaissance Tasks

- Inspect, observe and constantly monitor the situation
- Identify shortest and safest access routes for the emergency teams and equipment to the impact area in order to perform emergency response and rescue operations
- Identify the direction of cloud dispersion, if generated, and impact area growth
- Identify impact boundaries.

7.2 Chemical Reconnaissance

7.2.1 Purpose of Chemical Support

The purpose of chemical support is to ensure timely clarification of the chemical situation, prevent any damage, ensure that employees are in good condition and enable the emergency and rescue operations.

7.2.2 Main Tasks of the Chemical Support

Protection of the population and employees who are at risk from uncontrolled release of hazardous substances. Chemical support to emergency and rescue teams.

7.2.3 Concept of Chemical Support - Organization and Performance

Terms of chemical support, the emergency and rescue teams must focus their efforts on notification about the chemical hazards, clarification of the situation and efforts to limit the dispersion of the chemical cloud.

7.2.4 Organization of Chemical Support

7.2.4.1 Notification of population and employees at risk

The emergency notification is a responsibility of the site personnel on duty. The person on duty will notify the accountable manager of TradePort Namibia and other relevant local, regional and or national authorities.

The Local Authority will evaluate the situation on the basis of the data provided by TradePort Namibia and depending on the spill/cloud's dispersion speed and direction the headquarters will make a decision to notify and or evacuate the population at risk.

7.2.4.2 Chemical reconnaissance

This reconnaissance will focus on identifying the scope of the spill/cloud dispersion and the boundaries of any concentrations in excess to the regulated limits.

7.2.4.3 Information gathering, prognoses and analyses

The independent environmental officer with the relevant affected authorities will set up groups (within the emergency team) of two persons whose task will be to gather information, analyze the situation and suggest options for the implementation of the emergency and rescue operations.

Provision of chemical protection equipment, chemical reconnaissance devices and gas neutralization substances. The Company keeps PPEs on stock - such as helmets, oxygen breathers, skin protection (boots and gloves), protective glasses etc. PPEs will be delivered by the store supervisor.

7.4 Engineering Support

7.4.1 Purpose of engineering support:

Enables the isolation of the accident scene and assists the emergency operations. Main tasks of the engineering support:

• Conducts engineering reconnaissance and assists the access of any emergency equipment and personnel to the accident scene to enable site isolation and emergency response.

7.4.2 Concept of engineering support:

The main focus will be on assisting the special teams in their efforts to rescue any victims of the accident, isolate and address the emergency.

7.4.3 Notification about the accident

This is a responsibility of the engineering teams for the purpose of providing timely information on the nature and scope of any property damage at the work areas. The engineering support will use the access route to the accident scene and immediately the source of damage. The engineering reconnaissance process will determine:

- Victims' location, number and pending risks, if any
- Shortest and safest access routes to victims trapped in collapsed structures, if any
- Nature and scope of property damage including buildings and facilities
- Amount and methods of the required engineering works, including any clean-up required to enable victims' evacuation
- Estimate number of personnel and equipment required for the emergency operations at a core damage area
- Status of water sources, contamination level, possibility to use such water for fire suppression and any other technical purposes

7.5 Information Support

Main tasks of the information support:

- Familiarize with the alert signals of various hazards/risks and performance of regular emergency drills in order to build behavior, habits and skills required in various critical situations
- Train employees to properly use PPE
- Exercise control to ensure proper emergency behavior
- Whenever an emergency situation occurs, will provide timely information to the managing authorities about the type and scale of the accident and the initiated actions.
- Whenever rescue operations are to take place in environment with flammable vapors, which involve risk of explosions, rescue teams need to use spark-free tools and explosive-safe lighting, apparatus and facilities.
- This task is a responsibility of the core rescue teams: TradePort Namibia emergency response teams, regional fire safety department, and any additional forces such as regional health inspection, teams of the power Distribution Company, water and sewage company etc.

7.6 Ensuring Order and Security

Order and security must be ensured throughout the site, along with securing the accident scene, an traffic control to support the effective emergency and rescue operations.

Order and security tasks:

- enhance the security
- secure/barricade the accident scene
- guide access of emergency personnel to the accident area
- establish the identity of any bodies
- Take part in the emergency and rescue operations.

These are tasks of the security personnel. More complicated situations may require involvement of the local police.

7.7 Medical Assistance

The purpose of the medical assistance is to provide first aid to any injured employees. The main task is to arrange for timely administration of first aid and any required medications.

These services will be provided by the first-aid teams of the ERS, the Emergency Medical Service and the hospitals will provide Civil Protection Dept. and Fire Safety Dept. Medical care. Medical specialists will take to the nearest medical centers the victims for treatment of injured persons.

7.8 Provision of Transport, Materials and Equipment

The purpose of this support is to enable the adequate and timely provision of any special equipment, PPE, food, drinking water, special automation and tools, communication devices, oil and fuel, medical supplies, engineering materials, supporting and construction materials in order to enable the timely and effective emergency response operations and resumption of the production process, transportation of the rescue teams' personnel, delivery of construction materials, food, water and other basic items for the employees, and rescue team members and also support the evacuation process.

Tasks:

- Supply of materials for the company employees and rescue teams
- Oil and fuel supply for the vehicles and special equipment
- Supply of medical equipment, neutralizing substances and provision of their transportation
- Transportation of employees away from the accident scene
- Transportation of food supplies for the emergency response teams
- Provision of vehicles for the emergency response teams
- Arrangements to accommodate regular vehicles for transportation of injured persons.

7.9 Financial Support

The purpose of the financial support is to provide funding for the purchase of any required inventory to support the emergency operations including employee life protection, rescue and emergency response operations.

Tasks:

- Provision of funds to ensure food supplies for the emergency and rescue teams
- Provision of funds for preventive measures and emergency preparedness for cases of natural disasters and industrial accidents.

8.0 COORDINATION

If, in the course of the rescue and emergency response operations, the emergency response team and other personnel establish that they cannot handle the situation without help, they must seek help from the nearest emergency support service provider and relevant affected authorities.

9.0 PROCEDURES FOR RESUMING NORMAL OPERATION OF THE SITE

Once the emergency response operations to address industrial accident are completed (including fire), a committee will be set to determine the required recovery and construction works. The committee inspects and assesses the condition of facilities, equipment, piping, ventilation, power lines, lighting and systems to check for the full compliance with the process and fire safety requirements.

The site commissioning will follow the process requirements following coordination with the fire safety and other special authorities.

10.0 FINAL PROVISIONS

The emergency response plan for cases of industrial accidents involving spill of hazardous substances will be coordinated with the Fire Safety Department (through their management or councils) of any relevant local authority along the route.

The site employees will review this Plan and will sign to confirm they are familiar with it.

APPENDIX D – PROOF PUBLIC CONSULTATIONS

COMMENT FORM

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED TRADEPORT NAMIBIA'S IMPORT-EXPORT TRADE OPERATIONS THROUGH THE WALVIS BAY PORT, ERONGO REGION

Please submit the comment form via e-mail or post by 31 March 2020.

| Attention: | Enviro-Leap Consulting cc | | | |
|-----------------|-----------------------------|--|--|--|
| Tel No: | 08181 232 6843 / 0853013777 | | | |
| Email: | <u>eap.trigen@gmail.com</u> | | | |
| Postal Address: | P.O. Box 25874, Windhoek | | | |

| TITLE | FIRST NAME | |
|-------------------|-------------|--|
| INITIALS | SURNAME | |
| ORGANISATION | E-MAIL | |
| POSTAL ADDRESS | POSTAL CODE | |
| TEL NO. | FAX NO. | |
| CELL NO. | | |

Please list any colleagues/friends or organizations that you feel should also be registered as Interested or Affected Party for the proposed project (with contact details if available).

| Name / Organisation | Postal Address | Tel No. | E-mail |
|---------------------|----------------|---------|--------|
| | | | |
| | | | |
| | | | |

1. Please provide your comments below 3, write a formal letter or simply send an e-mail to: <u>eap.trigen@gmail.com</u>

2. Your comment should not be limited by the space provided & you may submit as many pages, as necessary

Thank you for the comments

Business

This news is your business

IATA urges support for ailing airlines in face of COVID-19

Page 12

Tuesday 31 March 2020

Skorpion Zinc mine and refinery confirms 'care and maintenance'

Edgar Brandt

The Skorpion Zinc mine and refinery in southern Namibia has confirmed it will be placed in care and maintenance in April 2020, which will affect about 1 500 employees. This care and maintenance period overlaps with the lockdown to contain the spread of Covid-19; production ramp down at the mine and refinery will happen progressively during April.

Care and maintenance is a term used in the mining industry to describe processes and conditions when a mine is closed but where there is potential to recommence operations at a later date. During a care and maintenance phase, production is stopped but the site is managed to ensure itremains in a safe and stable condition.

Skorpion Zinc and the Mineworkers Union of Namibia branch areexpected to continue to engage in line with the Labour Act and based on existing agreements.

Skorpion Zinc, which belongs to Vedanta Zinc International (VZI), last year experienced a major open-pit failure that resulted in an ore gap of four months. This incident required the stoppage of the refinery from November 2019 to January 2020. VZI decided to temporarily

VZI decided to temporarily close the refinery, based on a substantial reduction of ore from its Pit 112, resulting in the operational and financial decision to close the refinery for a few months. According to the mine's spokesperson Nora Ndopu, the failure was safely and successfully mined out. "However, more (smaller) failures have since occurred, with the latest one in January 2020 sterilising a significant portion of the open pit. This has resulted in an ore gap in excess of 10 months. Further technical studies have indicated the existence of similar such failure structures at depth. Thesafety of all employees is our first value – as a result, the decision has been taken to cease all mining operations, while studies continue to look at feasible ways to make the pit safe for mining options, which would allow for the extraction of the remainder of the accessible ore," Ndopu explained in a statement.

Ndopu added that VZI remains focussed on prioritising growth projects to create a sustainable life for SZ and to shorten the care and maintenance gap. She continued that accelerated focus will now be on the Refinery Conversion Project to enable co-treatment of bothsulphide and oxide ore, which was originally announced in 2014 with the Gamsberg Phase 1 Project but was deferred due to the Pit 112 life extension. A feasibility study that was completed in 2015 is now being refreshed. VZI acquired SZ as part of the acquisition of Anglo American's zinc business in 2011. The envisaged life of mine of SZ was then 2014. Ndopu pointed out that SZ has invested significantly since Vedanta took over to extend the life of the pit and explore for mines in the nearby areas, with over US\$1.6 billion invested, including US\$25 million on exploration alone.

Said Ndopu: "When VZI

embarked on the SZ Pit 112 mine-lifeextension project in April 2017, the successful completion of the project and thus mine closure and refinery care and maintenance were envisaged for May 2020. However, significant events (pit stability) and inefficiencies (including labour disruptions) during this period have resulted in intermittent stoppages and/ or delays which have in turn unfavourably extended the project timeline and significantly eroded project value".

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No business... Informal livechicken traders at a usually bustling Katutura market sit amidst an empty lot, as customers were nowhere to be found on Saturday, which was day one of the lockdown to curb the spread of the deadly Covid-19. Namibia is currently under a partial lockdown, which includes Khomas (Okahandja and Rehoboth) and Erongo regions. The lockdown is wreaking havoc on informal traders and small businesses. Phate: Enumery Nuukua



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CONFIDENTE lifting the lid

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Covid-19 briefs

South Korea to ship coronavirus tests to US - report

SEOUL – South Korean firms will make their first shapment of coronavirus texts to the United States this week after a request by US President Donald Trainp, Towhap news agency reported Monday The US has none confirmed Covid-19 cases that

anywhere else in the world and also has the highest toll, with more than 22 000 deaths.

In contrast, South Korea was once the hardest-hit country outside China but appears to have brought its outbreak under control with a huge "trace, test and treat" strategy. It has tested more than balf a million people in a

It has tested more than half a million people in a process free to anyone referred by doctors or those who have links to a confirmed case.

The Tramp administration has been accused of being slow to respond to the outbreak, although the president now regularly re-iterates that the US has tested more individuals than any other country. After a phane coversation with bin Last nearth.

After a phone conversation with him last month, South Korean President Moon Jae in said Tramp had asked for test kits. – Nanpa/AFP

China coronavirus infections rise

SINGAPORE – Here are the latest developments related to the novel coronavirus pandemic. China reported 108 new view cases, 98 of which were imported from overseas, its highest figure since early March.

The country where the disease first emerged has largely brought its domestic outbreak under control, but it faces a firsh battle against umported infections, mostly. Chinese nationals returning home, – *Kampa/AEP*

'Medibot' to do rounds on Malaysian virus wards

Malaysian scientism have created a barrel-shaped robation wheels that they hope will make the rounda on hospital wards in check on corosavirus patients, reducing health workers' rais of infection. "Meddbot" is a 1.5 metric tall (5.0) white robot, equipped with a ramers and screen via which patients can coromunicate remotely with medica. The inversity Malaysia, is also fitted with a device to check patients' transperatures remotely.

It is aimed at helping nurses and doctors working on the words with social distancing, Zolkell Zamal Abidus, a member of the team behind the inversion, told AFP. - NamparAFP

Kavango West needs N\$20 million for Covid-19



Obrein Simasiku

O MUTHIYA - Kavango West Regional Council says it will need an approximate amount of N\$19.89 million to fully prepare for the fight against Covid-19 pandemic.

This figure, according to the council's senior sublic relations Salomo Tenga, is derived from the Regional Emergency Response Plan on Covid-19 developed by the region and handed over to the Office of the Prime Minister.

"Theresponse plan budgethighlights a number of categories including availing water, and the provision of medical equipment including logistics. There is a need to drill and install 24

OTJIWARONGO - A 47-year-old man

at Grootfontein succumbed to injuries on Saturday morning after he was

allegedly attacked by another man after

Spokesperson of the Namibian Police Force in the Otjozondjupa

region Inspector Maureen Mbeha in an interview with Nampa on Saturday said the deceased has been identified

an argument over a woman.



Salomo Tenga

Katwitvei Settlement, which borders Namibia and Angola on the western side of the region. Water remains crucial in the fight against Covid-19 hence the need for the regional council to make enough water available to ensure hygiene conditions," he added.

The Regional Emergencey Operational Centre has been established to advise the existing Regional Disaster Risk Management Committee Development on how best Kawango West can fight and contain Covid-19.

Activation of such committees at constituency and community levels has taken place.

– osimasiku@nepc.com.na

Man killed over woman at Grootfontein

as David Koreab

Mbeha said the attack on Koreab tookplace in the early hours of Saturday morning at Berg Aukas Youth Skills Training Centre situated about 20 kilometres northeast of Grootfontein. The police officer said the deceased

water points, and about two water tank

trucks all valued at about N\$14 million. Other health necessities include mobile

toilets, Personal Protective Equipment

(PPE) suits and hospitals beds, amongst others, valued at close to N\$2 million dollars. Other logistics that cover up

the remaining figures are for water pipes, pumps and operational costs," elaborated Tenga.

is very essential, as the region has no

single care facility for the virus, although it has identified isolation and quarantine

units for any outbreak likely to occur.

belonging to Namibian Industrial Development Agency - NIDA at

The two units are warehouses

Tenga said the material budgeted for

was allegedly involved in a heated argument with a 34-year-old man (suspect) over a woman.



a weak state, some onlookers then transported him to the Grootfinitein State Hospital, where he succumbed to injuries shortly upon arrival.

The suspect has been arrested and is expected to appear in the Grootfonetin Magistrate's Court on Tuesday on a charge of murder. Police investigations continue. - Numo



